Catalogue – 2018
Electrical installation solutions for buildings

Product description, quick and easy selection of product codes

- DIN-rail products
- Light switches and wiring accessories
- Building automation
- Enclosures
- EV charging

Electrical installation solutions for buildings

MINIATURE CIRCUIT BREAKERS 1
RESIDUAL CURRENT DEVICES 2
ARC FAULT DETECTION DEVICES 3
ACCESSORIES FOR MCBS AND RCDS 4
PROTECTION AND SAFETY 5
COMMAND AND SIGNALING 6
CONTROL AND AUTOMATION 7
ENERGY EFFICIENCY 8
PLUG-IN SYSTEMS 9
INDUSTRIAL PLUGS AND SOCKETS 10
LIGHT SWITCHES AND SOCKET OUTLETS 11
INSTALLATION MATERIAL 12
INTELLIGENT BUILDING SOLUTIONS 13
ABB-FREE@HOME® 14
DOOR ENTRY SYSTEM 15
INTRUSION ALARM SYSTEMS 16
SUBDISTRIBUTION BOARDS 17
CONSUMER UNITS 18
AUTOMATION BOARDS 19
JUNCTION BOXES 20
EV CHARGING 21
QUICK PRODUCT REFERENCES 22

Two volumes, one objective: to always find the best solution

From a single catalogue with two complementary volumes: streamline to simplify, analyse to choose.

The catalog Electrical installation solutions for buildings comes in two separate but integrated volumes: one dedicated to the description and easy selection of products code and one for professionals searching for in-depth details and specifications, installation examples and special technical solutions.

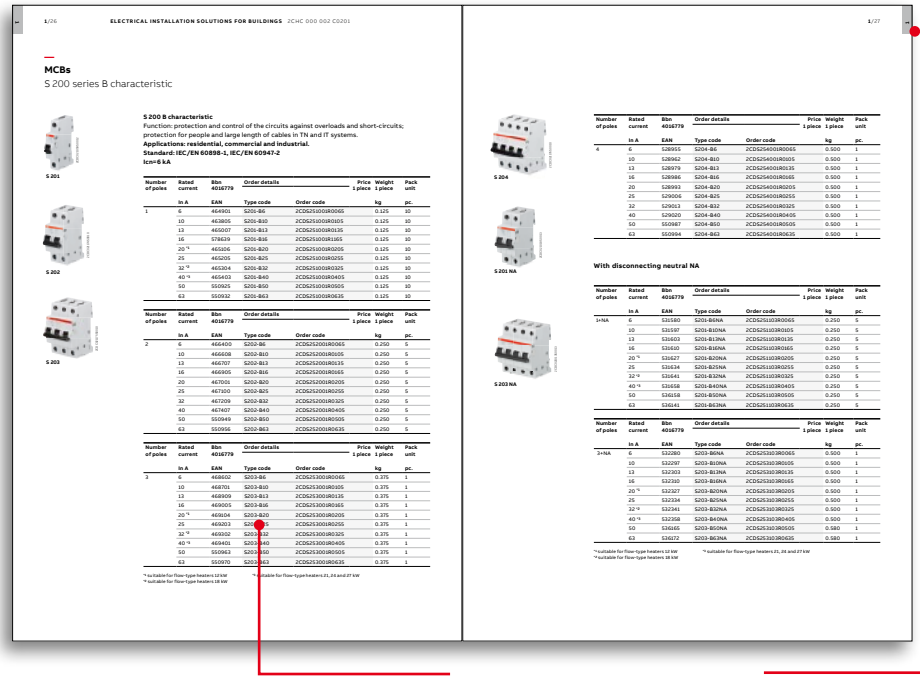
Electrical installation solutions for buildings
An indispensable tool for those who are looking for easy selection of a completely reliable range of products

The main catalogue summarizes all the technical-commercial characteristics of the products, allows one to navigate between the main characteristics, descriptions, specifications, accessories, product pictures, illustrations and information about the individual codes.
The catalogue is a helpful product guide, which makes easier the orientation in a very complex product range of ABB products for electrical installation in buildings.

Electrical installation solutions for buildings - Technical details
Technical details and information, application examples, installation solutions: the complete ABB know how at the service of professionals

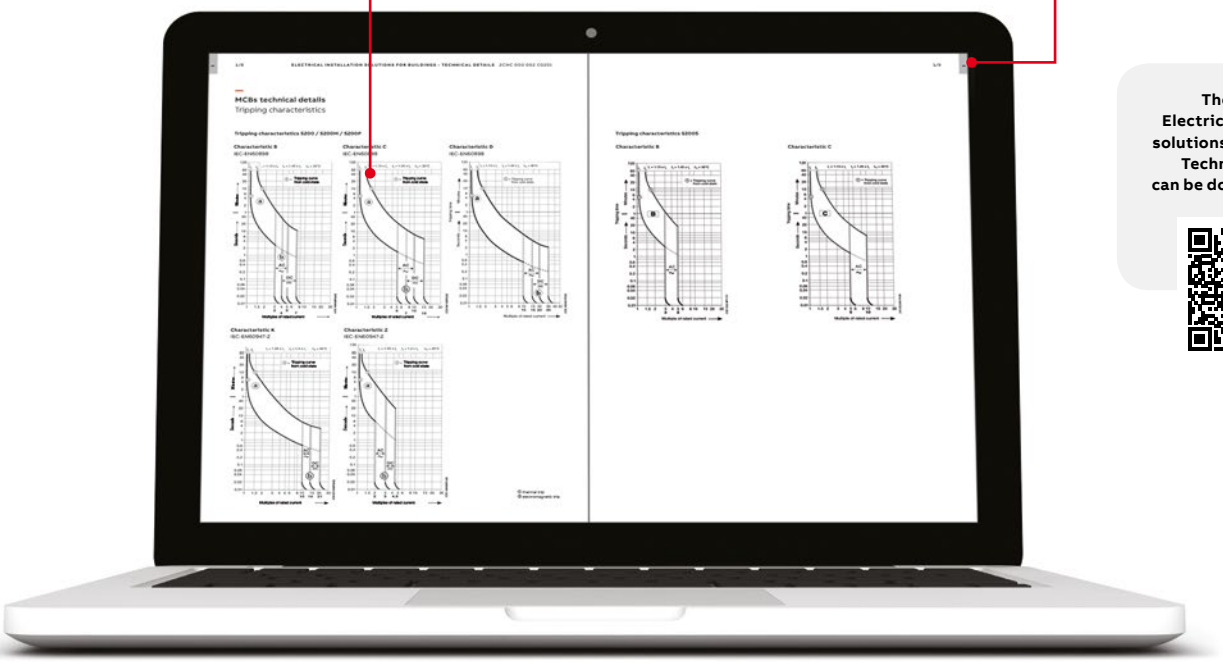
The technical addendum dedicated to technical-applicative details provides professionals with a series of specialized information such as the operating curve, selectivity tables, connection diagrams, etc. The numbers of chapters in the technical addendum match with the same chapters in the main catalog.

Two volumes that reference each other, which are manageable and easily consultable, designed for those who wish to find the clearest solution in the least possible time.



Arguments developed in the same logical sequence

Same reference heading



The volume Electrical installation solutions for buildings can be downloaded here

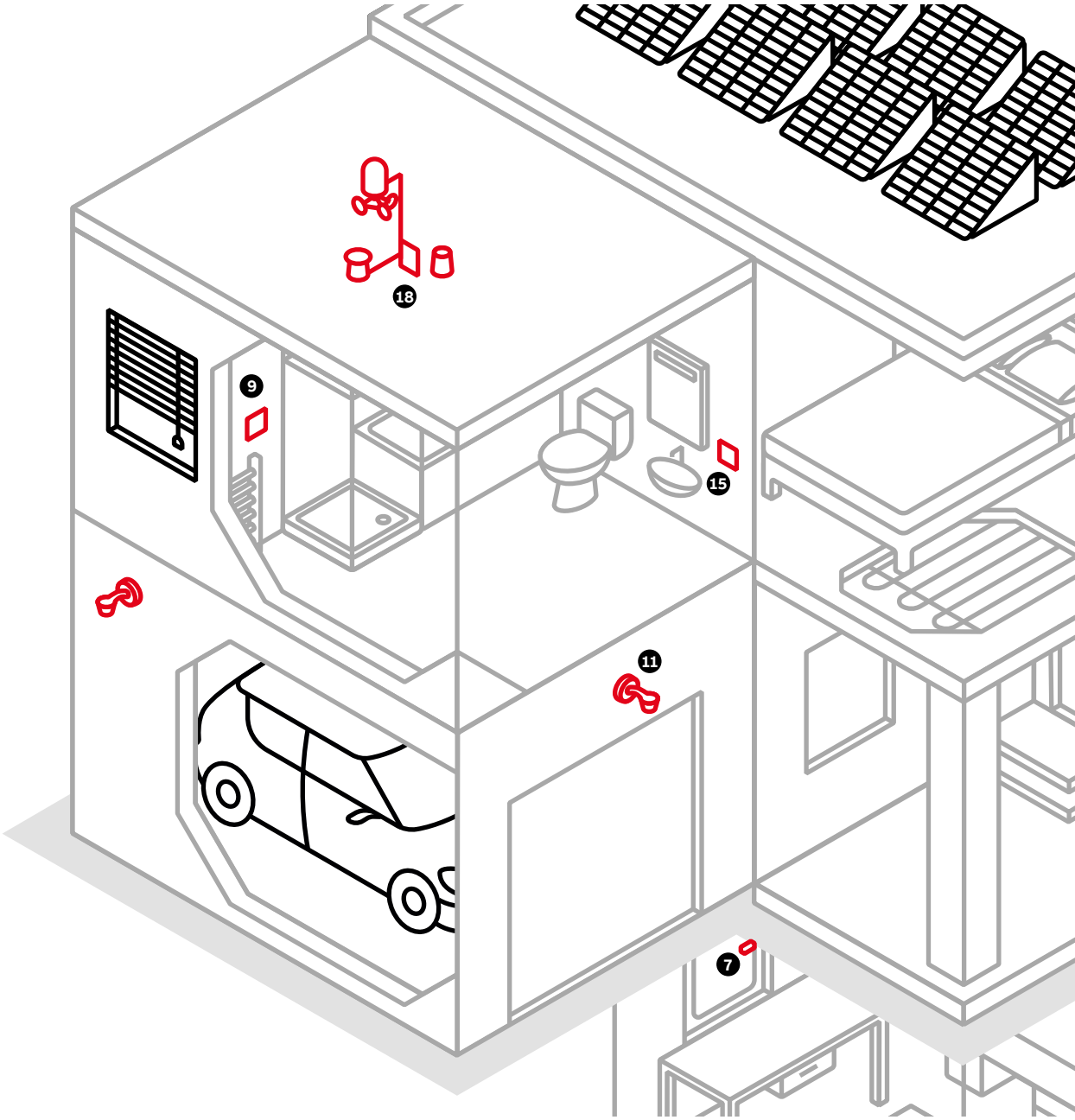
TIP:
You can always find a detailed online information about the particular product item:

Just type down this URL address: **http://new.abb.com/products/** and add the product order code at the end like e.g. http://new.abb.com/products/**2CDS274337R0158**)

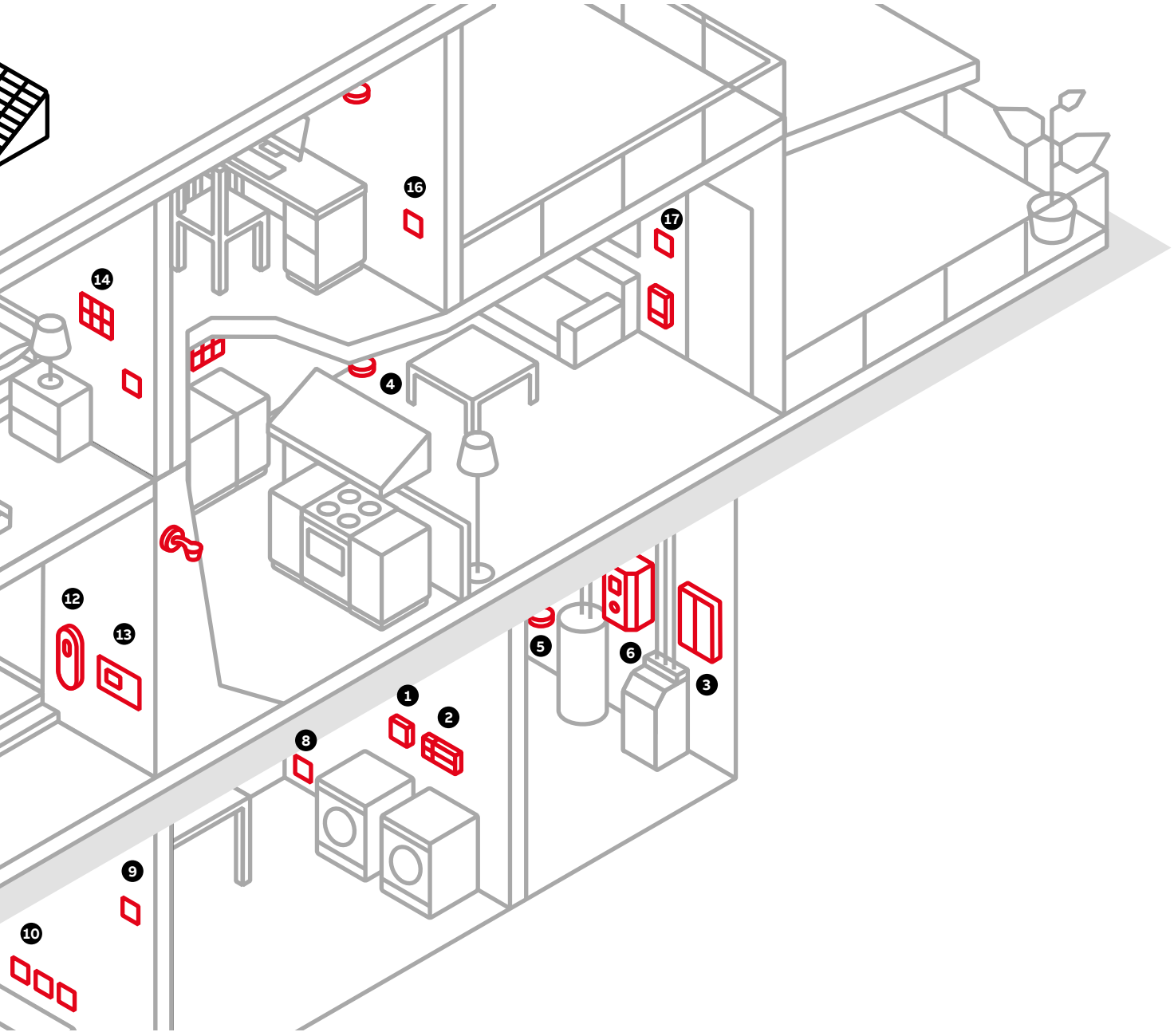
The volume Electrical installation solutions for buildings - Technical details can be downloaded here

Electrical installation solutions for buildings

Quality of life, living comfort and safety



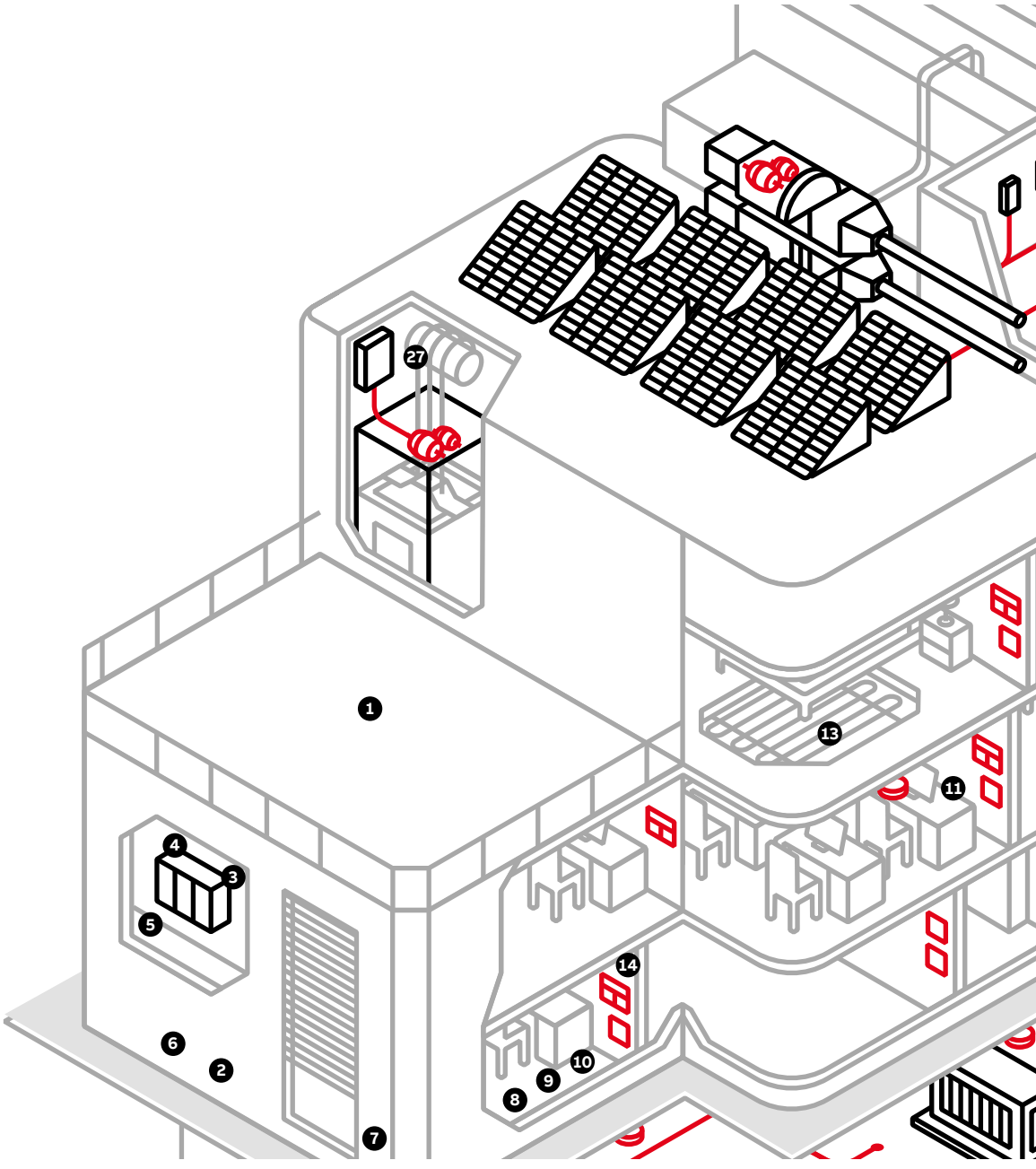
1. Safety switch
2. Energy meter
3. Small and home distributor
4. Smoke detectors
5. Movement detectors
6. Photovoltaic inverter
7. CO2 indoor air sensor
8. Switches and socket outlets
9. Room temperature controller with venetian blind control unit
10. Busch-DigitalRadio
11. Movement detector
12. Access control systems
13. Burglar alarm systems
14. ABB i-bus® KNX touch panel
15. Safety socket outlets
16. Communications socket outlets



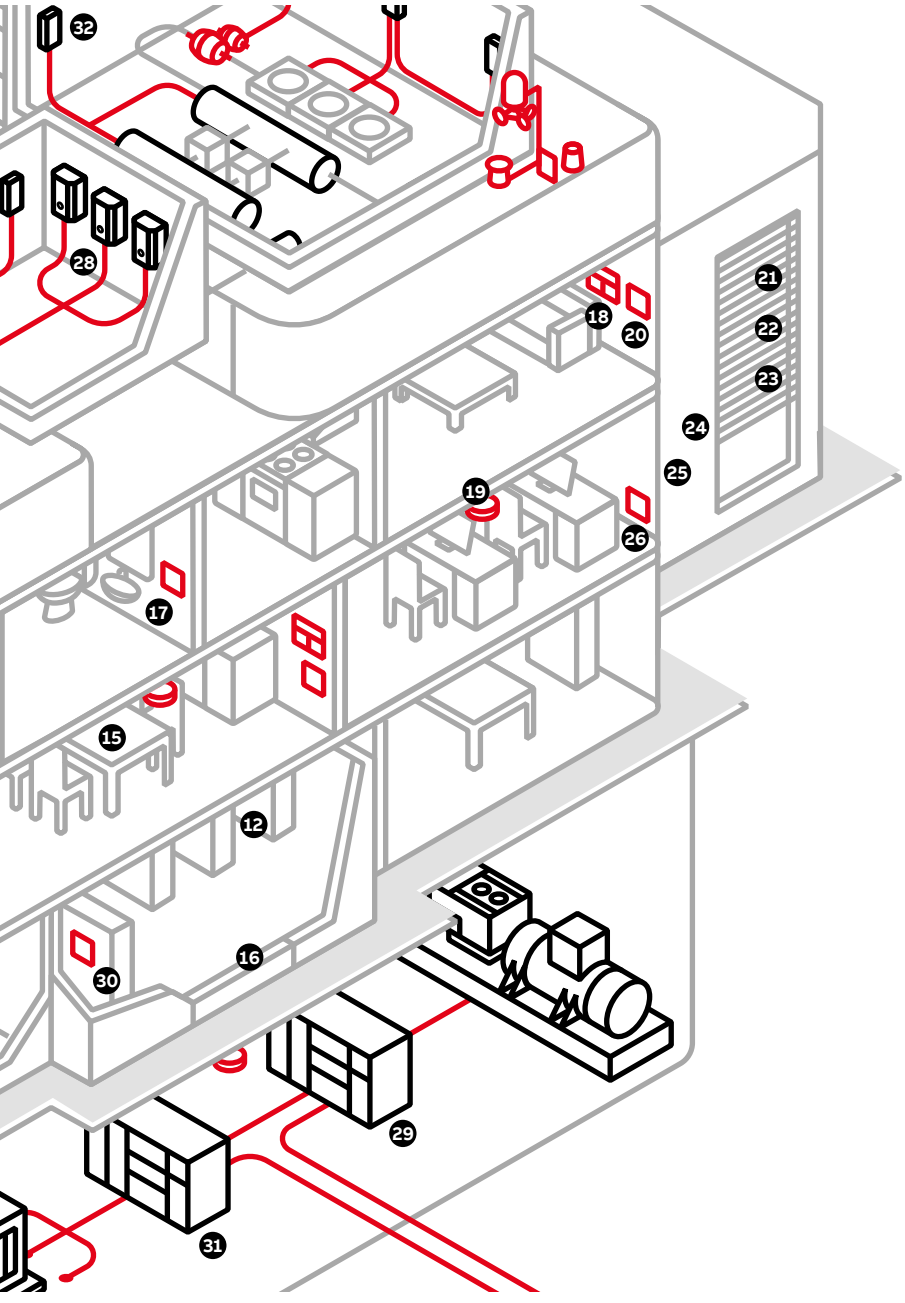
17. Switches and socket outlets for outdoor and wet areas
18. Weather sensor unit

Electrical installation solutions for buildings

Solutions for commercial and industrial buildings



1. Lightning protection
2. Circuit breakers
3. Central battery systems
4. Cable ties and accessories
5. Cable connections
6. Distributors
7. Energy meter
8. Industrial connectors
9. Terminal blocks
10. Push-button
11. Non-metallic, flexible cable ducts
12. Cable duct, cable ties
13. Protection relay
14. AC & DC switches in housing
15. Bus modules
16. Overvoltage protection devices
17. Earth-fault relay
18. Door communication



19. Emergency lighting
20. Timers
21. Electrical and grounding connections
22. Safety components
23. Electrical distribution systems
24. Motor starter combinations, soft starters
25. Energy distribution unit
26. Cable connections & accessories
27. EMC safety switch
28. DC load-break switches
29. Tmax XT power circuit breaker
30. OT load-break switches
31. XLP safety load-break switch
32. Safety switches for aeration or air-conditioning systems

Electrical installation solutions for buildings
Product highlights

UK600 consumer units and media enclosures
The new UK600 range offers consumer units, media enclosures and combination of both for residential and small commercial applications. With stylish units, which provide a smarter space for your installation ideas. Available as flush or hollow wall version with a variety of accessories, the UK600 guarantees simple, safe and flexible installation. The variety of available design doors allows the UK600 to be easily integrated into individual living spaces.

TwinLine S55 sub-distribution enclosure
The new welded TwinLine S 55 range completes the TwinLine power distribution cabinets and is available as the 225mm-deep TwinLine-G and the 275mm TwinLine-L models. The robust welded construction and high Ingress Protection (IP) 55 rating make TwinLine S55 the most robust and quickest to install on the market. The variety of innovative features include cable flange entry with handy “push and lock” technology as well as CombiLine S (hook-in and ¼-turn quick-lock) interior fittings.

SMISSLINE TP Power Bar System 250A
The SMISSLINE TP finger-safe plug-in socket system ensures that load-free devices and components can be snapped on and off under voltage without the need for additional personal protection equipment. A powerful 250 A system is now available in the shape of the SMISSLINE TP power bar system. The power bars have a rated amperage of 250 A and therefore allow a side feed of 250 A. This extends the spectrum of potential applications, particularly for applications with high-current devices.

S-ARC1
The S-ARC1 is a new 1P+N Arc Fault Detection Device (AFDD) with an integrated Miniature Circuit Breaker (MCB). Besides the overcurrent protection of the MCB, the S-ARC1 provides additional protection against parallel and series arc faults. Combinated with a Residual Current Circuit Breaker (RCCB) as upstream device, the S-ARC1 provides the best solution for complete protection in a switchboard.

Installation contactors
ABB’s hum-free installation contactor designs now offer a wider range of ratings from 16 A to 100 A. With an innovative AC / DC coil design that eliminates hum, a broad selection of common accessories as well as manual and automatic versions, installation contactors offer peace of mind in noise-sensitive applications.

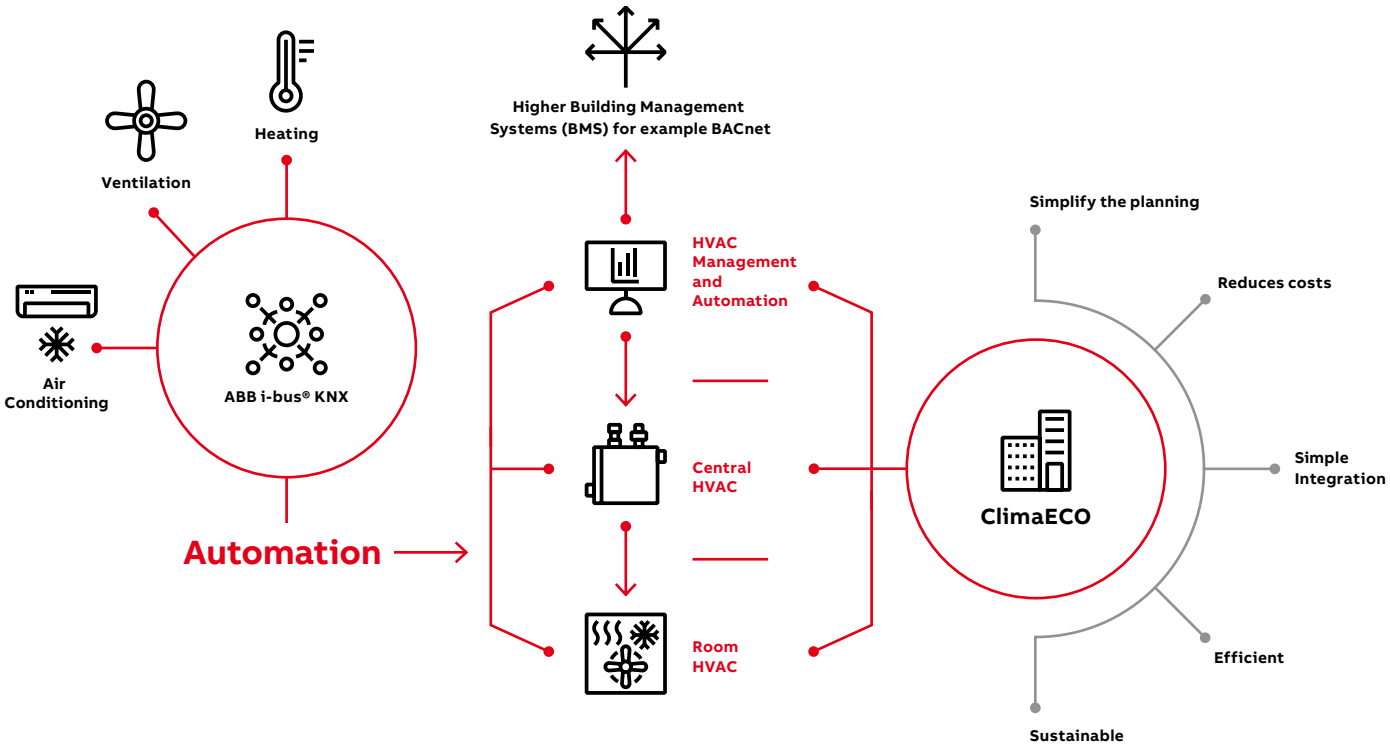
Busch-SmartTouch
The Busch-SmartTouch is a free programmable KNX touch display with a 7" touch screen. It control various KNX functions and can be used as an indoor video station for the door communication system ABB-Welcome.

ABB-tacteo® KNX Sensor
The ABB-tacteo® KNX Sensor is an individually-configurable control element for intelligent building management of luxury hotels, public buildings and high class residential buildings. This makes each sensor unique in design and function. **abb.com/tacteo**

Busch-powerDock
Busch-powerDock is the convenient solution for fast charging of the mobile terminal device. The flush mounted charging station is suitable for iPod and iPhone with lightning connection or a USB-C connection. Available in light switch ranges: carat®, Busch-dynasty®, future® linear, Busch-axcent®, solo® and basic55®.

Busch-Presence detectors
The new Busch-Presence detector has been designed for the highest demands made on high-performance technology. With innovations such as “e-contact” – a noiseless electronic switching output especially for LEDs. ABB offers also a comfortable remote control via a smart app per Bluetooth.

HVAC automation from the room to the management level



Electrical installation solutions for buildings
A world of advantages

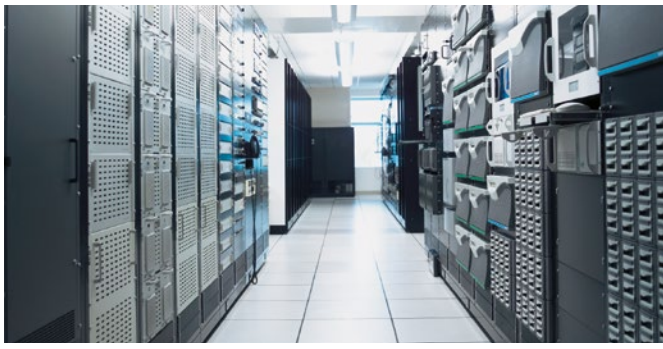
Residential, tertiary and industrial sector
Our extensive range of modular DIN Rail components, with protection, command, control and measurement functions, is perfect for meeting all the current requirements of electrical installations, in residential, tertiary and industrial sector. The wide range of metallic and plastic enclosures complete the ABB offer.

Railways
The breadth of our product portfolio has allowed us to become leader in the railway sector. This is thanks to the high-performance S200M-UC AC and DC circuit breaker, as well as the S200MT series, particularly suitable for conditions of fire and smoke, in compliance with the French NF F 16-101/102 standard.

Solutions for solar energy
At ABB we provide products specifically designed for protection and operation of AC and DC circuits in solar power plants. These include circuit breakers and switch disconnectors such as S800PV up to 1,200 V DC, E90PV fuseholders, E9F PV fuses, OVR-PV surge protective devices, etc. They can be perfectly housed inside enclosures suitable for outdoors and PV installation, such the GEMINI switchboards.
ABB offers also PV combiners „ready-to-install“ and designed for various number of strings with or without monitoring system.

Wind power
The outstanding performance of our high voltages devices and our constant innovation have allowed us to become world leader in electrical switchgear for wind-energy sector. The high performance of our S800 circuit breaker series, characterized by the high breaking capacity of 690 V AC, and their combination with the new S800-SCL-SR self-resetting short-circuit current limiter make our range of modular DIN Rail components perfect for the needs of the sector.

Critical Power/Data Centres
In electrical installations such as data centres, banks, hospitals and airports where service continuity is critical, a system that allows the switchgear to connect and disconnect voltages in a totally safe manner is required. The SMISSLINE Touch Proof pluggable socket system ensures an installation safe, flexible and without interruptions.



UL/CSA standards for US and Canada
In order to meet international certification requirements, our modular DIN Rail product portfolio is compliant with a large number of standards from all over the world, with the highly sought-after UL certification met by the S200U, S200UP and S800U circuit breakers and the F200 residual current devices. Furthermore the portfolio is widened by the metallic SR2 switchboard and now, by the new thermoplastic switchboard GEMINI UL.

Electrical installation solutions for buildings
A world of advantages

Miniature circuit-breakers

1 S200 Series
Circuit breakers up to 63 A
S200, S200M and S200P:
For residential, commercial and industrial use up to 25 kA.
S200U, S200UP and SU200PR with certification acc. to:
Certification UL489/CSA 22.2 No. 5 (US and Canada).

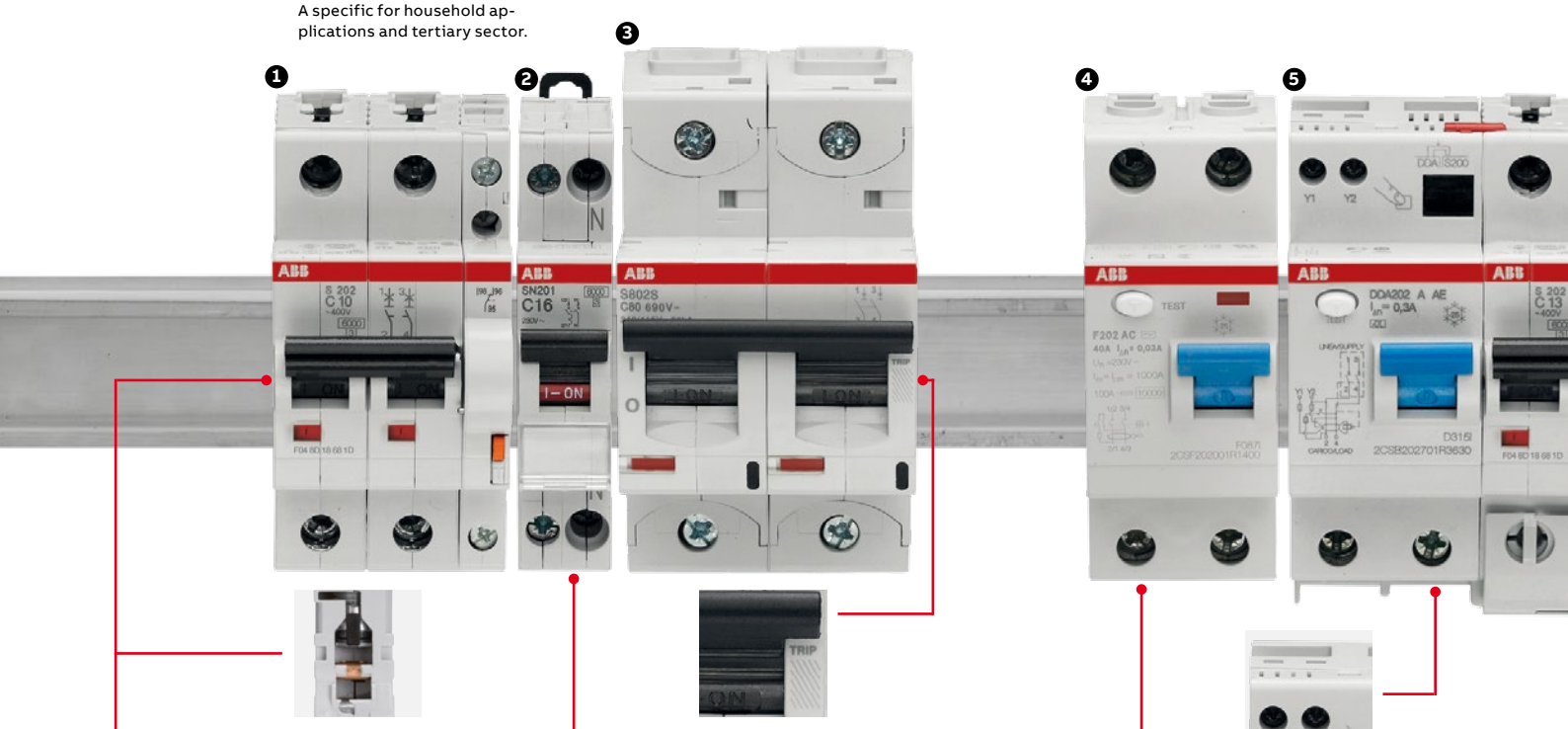
2 SN201 Series
SN201 series circuit breakers including one pole and neutral in one module width up to 40 A specific for household applications and tertiary sector.

3 S800 Series
S800 circuit breakers with high breaking capacity up to 125 A
S800B : 16 kA breaking capacity.
S800C : 25 kA breaking capacity.
S800N : 36 kA breaking capacity.
S800S : 50 kA breaking capacity.

Residual current protection

4 F200 Series
Residual current devices up to 125 A
F200: Residential, tertiary and industrial.

5 DDA200 and DDA800 Series
RCD blocks adaptable to the S200 and S800 circuit-breaker series up to 63 A and 100 A respectively.



Increased terminal opening for higher wire gauges up to 35 mm². For conductors with or without connector sleeves.
Fulfills still the requirements for protection degree IP20 (finger safe) acc. to IEC/EN 60529.
Integrated plate protecting flexible cables from damage and homogenous pressure in the terminal opening.

Multiple certification marks visible on the upper and lower face of the S200 circuit breakers.
Laser marking for reliable readability. Real contact position indication, directly connected to the moving contact, for more comfort and safety. Individual identification code for each MCB on the front.

Switch with intermediate trip position (TRIP).
S800 circuit breakers differentiate manual actuation from over-current trip.

Label-holder built into SN200 circuit breakers.
Easy identification of protected circuits.
One pole plus neutral in a width of just 17.6 mm.

The green/red switch colour clearly indicates the connected/disconnected status.

Terminal on the front face for fail-safe function.

Failsafe bi-directional cylinder-lift terminal at top and bottom (available for the entire System pro M compact® range). Ideal for connection of cables and busbars simultaneously.

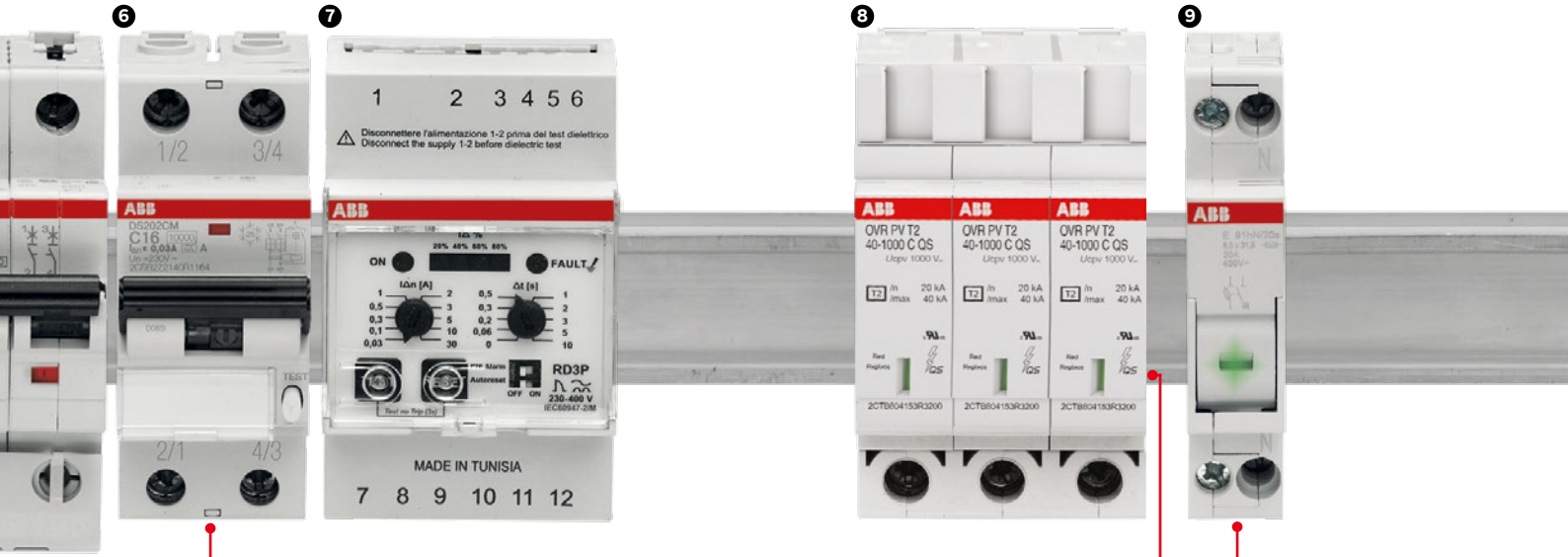
6 DS200 Series
Overcurrent and residual current protection in a single device, just two modules width. Suitable for residential, tertiary and industrial applications.

7 RD3 residual current relays
Residual current relays with the possibility to set sensitivity and intervention time. Ideal to obtain time and sensitivity combinations and to achieve selectivity with other residual current devices.

Other protection devices

8 OVR series surge protective devices
Protection of electrical equipment against surges caused by lightning or other grid disruptions.

9 E90 fuseholders and fuse disconnectors
E90: Disconnector series up to 32 A.
E90h: Compact series up to 32 A.
E90 50/125: Series up to 125 A.



Displays the cause of the trip of the DS200 residual current breaker.
Blue (residual currentl trip) or black (over-current trip indications).

Includes RFID label. Prevents forgeries through the inclusion of a serial number in compliance with the ISO/IEC FCD 15693-3 standard.

Contact position indicator visible on the front of the DS200 residual current breaker.

Visual indicator of the remaining life of the OVR surge protective device. Option to include remote signalling contacts of the OVR status.

Blown fuse indicator light on the front part of the E90 fuseholder.

Electrical installation solutions for buildings
A world of advantages

Command and control

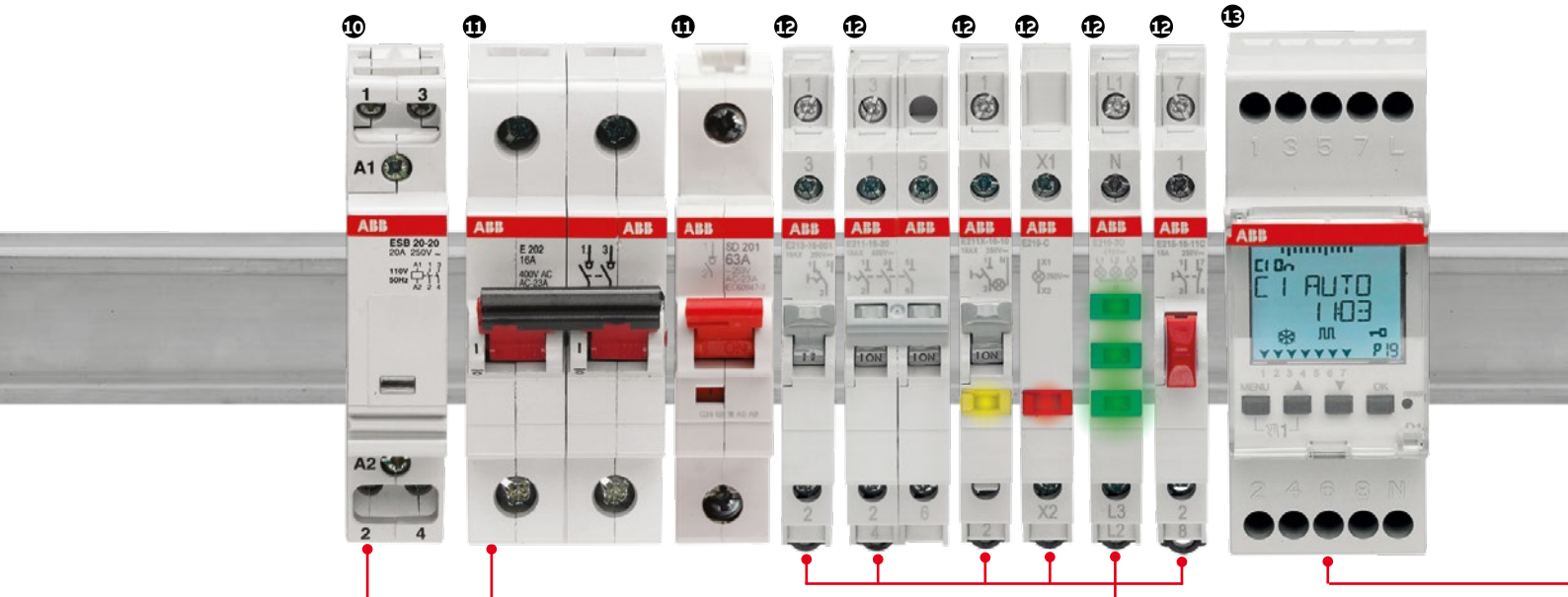
10 Contactors, latching relays and installation relays
ESB/EN..N series installation contactors.
E297 series installation relays.
E290 and E260 series latching relays.

11 Switch disconnectors
E200 series
switch disconnectors
From 1 to 4 poles.
Up to 125 A.

SD200 switch disconnectors
From 1 to 4 poles.
Up to 63 A.
Fully compatible with
MCB accessories.

12 E210 series on-off switches, push buttons and indicator lamps
E211 and E218 series on-off switches.
E213 series change over switches.
E214 series group switches.
E215 and E217 series push buttons.
E219 series single, double and
triple indicator lights.

13 D-Line digital and AT analogue time switches
D1 and D2 weekly digital time switches.
D365 yearly digital time switches.
AT analogue time switches.



Currents up to 125 A.
From 1 to 4 poles.
Option to include an add-on of
up to 3 auxiliary contacts.

Multiple command and control functions in the ultra-compact design (9 mm width) of the E210 series.

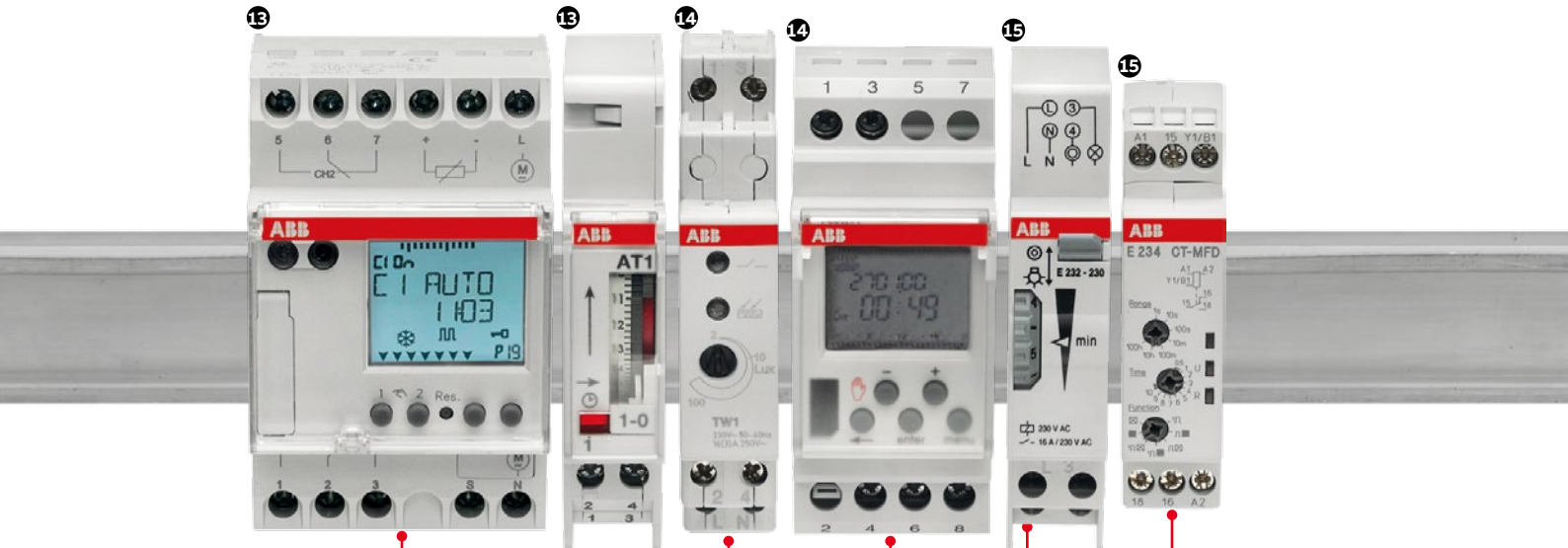
Extremely quiet.
Variety of control voltages.
Multiple combinations of NO and NC contacts.
Function modes selector:
Automatic/Manual/Disconnected (EN series).

Up to 3 E219 LED indicator lights in a width of just 9 mm. LED indicators guarantee an optimal illumination with very low consumption.

14 TWA astronomical switches and TW twilight switches
TWA astronomical switches to activate lighting systems according to the rising and setting of the sun.
TW twilight switches to control lighting devices according to the level of the ambient light.

15 E234 series electronic timers and E232 series staircase switches
Wide range of E234.
E232 staircase timers for household applications.

16 CP-D primary switch mode power supplies



D-Line series weekly and annual digital time switches.
Multiple communication options.
Wide range of programs: standard, cyclic, casual and holiday.
White backlit LCD display.

Connection and disconnection time delays.
Continuous and impulse signals among multiple options.

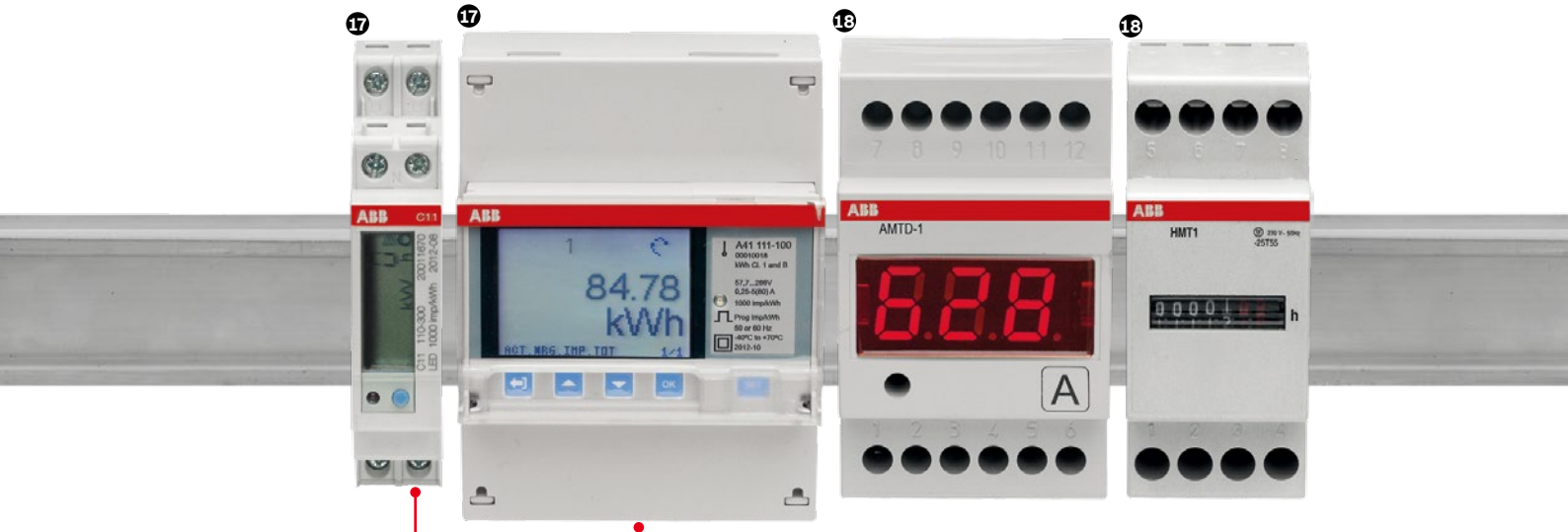
Easy to program.
Ideal for public lighting, stores lighting, monuments, etc.

Electrical installation solutions for buildings
A world of advantages

Measurement

17 EQ digital electricity meters
C series, extremely compact meters.
B series, compact with communication features.
A series, functionality beyond comparison.
Functionalities associated to a “metal scale” assigned to each model (steel, bronze, silver, gold and platinum).

18 Digital and analogue measuring instruments
AMTD and AMT ammeters.
VLMD and VLM voltmeters.
FRZ frequency meters.
DMTME multimeters.
E233 and HTM hour counters.
Current and voltage transformers.

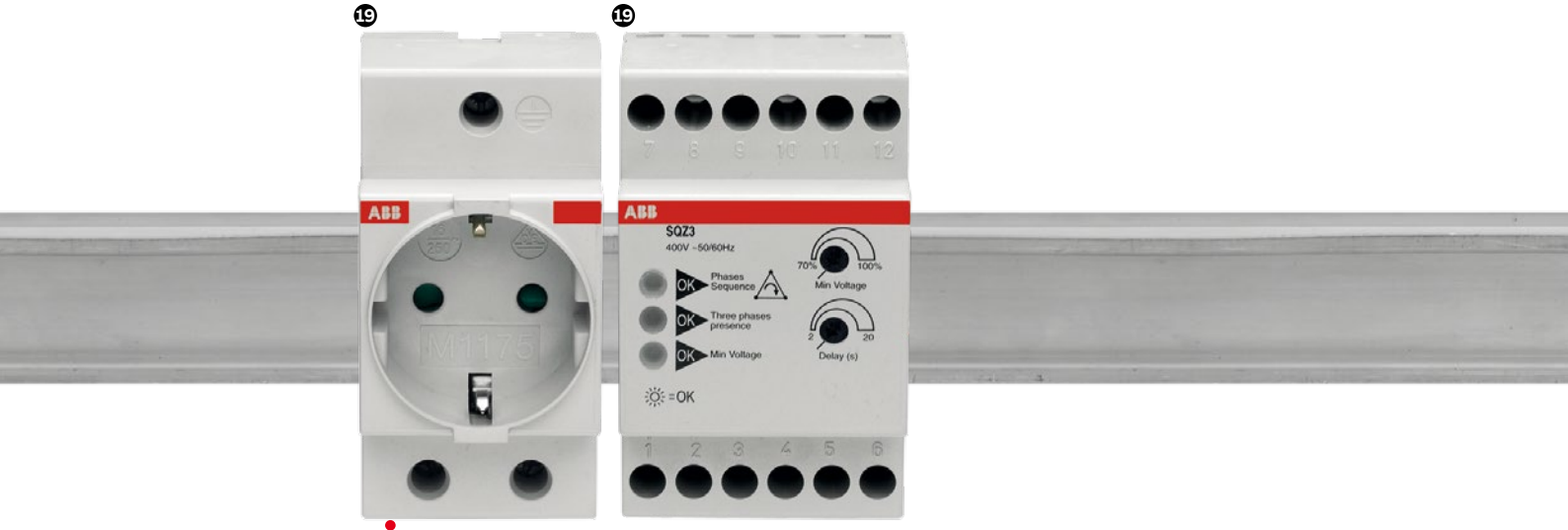


Single-phase and three-phase metering.
Direct reading up to 80A or indirect reading through current and/or voltage transformers.
High precision with an accuracy class up to 0.5 S.
Reading of generated/consumed and active/reactive energy.
Up to four tariffs.
Up to eight channels of load profiles.
Previous values for several quantities.
Possibility of built-in serial communication interfaces, Modbus and M-Bus.
Connect up to 32 meters to Ethernet gateway, JSON protocol, including inbuilt webserver. Possibility of internal clock for advanced functionalities.

C11 single-phase digital electricity meter with ultra-compact design just one module wide.
C13 three-phase digital meter with ultra-compact design just three modules wide.
Both unique on the market.

Other functions

⑲ **Extensive range of other modular devices**
Modular sockets.
Light dimmers.
Priority switches and overload relays.
Control, isolating and safety transformers.
etc.



The range includes products complying with the most widespread standards (German, Italian, French...). Safety shutters and optional cover.

Electrical installation solutions for buildings
A world of advantages

Intelligent Building Solutions

ABB i-bus® KNX
ABB i-bus® KNX is the intelligent building solution that meets the highest requirements for applications in modern home and building control. It is based on the simple, yet proven KNX technology which is accepted as the world's first open standard for the control of all types of intelligent buildings - industrial, commercial or residential.

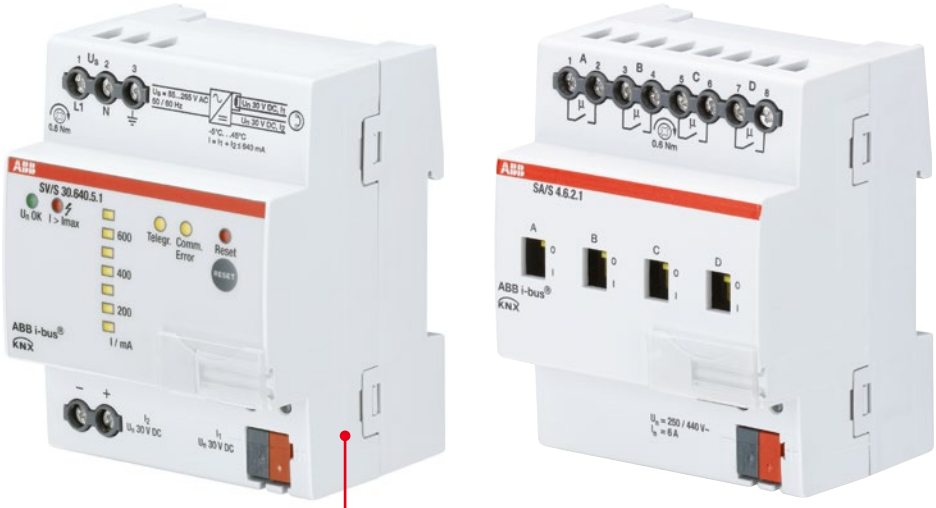


ABB i-bus® KNX offers a complete product range for automation and control in today's modern buildings:
- Lighting control and regulation
- Heating, ventilation, cooling
- Blinds and shutter control
- Security and monitoring
- Energy and load management
- Visualization and operation
- Central automation and control
- Remote control / maintenance

Consumer units

Mistral
The new MISTRAL® series of consumer units offers ample internal space and high flexibility in term of possible internal configurations, making your job quicker and easier. Flush-fit and wall-mounted versions offer elegant design.
And with IP41 and IP65 ratings, you can install the units in any kind of environment of residential and commercial building

UK600 consumer units and media enclosures
The new UK600 range offers consumer units, media enclosures and combination of both for residential and small commercial applications. Available as flush or hollow wall version with a variety of accessories, the UK600 guarantees simple, safe and flexible installation. The variety of available design doors allows the UK600 to be easily integrated into individual living spaces.

The new MISTRAL® series come in three versions:

System pro E comfort MISTRAL41F
Elegant flush-mounting consumer unit that includes an elegant and thin frontal cover, ample internal space and unique features such as the innovative cable entry flanges.

System pro E comfort MISTRAL41W
IP41 rated consumer unit for wall mounting installation, conceived to be installed in commercial buildings, but extremely versatile thanks to the smart features and to a perfect balance between internal space and overall dimensions.

System pro E comfort MISTRAL65
IP65 rated consumer unit designed for harsh environments, where high performances are required.

Electrical installation solutions for buildings
A world of advantages

Sub distribution boards

TwinLine wall-mounting and floor-standing cabinets
With the TwinLine system, STRIEBEL & JOHN has set another milestone in the field of modern power distribution. TwinLine has been tested according to IEC 61439, DIN EN 61439-1/-2/-3. Continuity is the guiding principle for these new wall-mounting and floor-standing cabinets for distribution board assembly – from their different degrees of protection and their ease of installation to a portfolio which can meet all requirements in the field.

The benefits: comprehensive product selection, high quality, quick and easy internal configuration. A simplified accessories concept guarantees full flexibility while reducing inventory levels. Are you looking for a modern, user-optimised and future-proof cabinet for distribution board assembly? Then you will surely find it with TwinLine. System intelligence comes standard with the new wall-mounting and floor-standing cabinets because in combination with CombiLine modules, TwinLine offers you unlimited possibilities for the internal configuration.

Compact distribution boards
The compact distribution boards, which have been developed in close cooperation with technicians from the field, stand out by total solutions. Flexibility and speed will support the users in their daily tasks.

Be it for commercial, industrial or domestic uses - this broad range of products offers a solution to any type of mounting - from flush-mounting and wall-mounting up to hollow-wall mounting applications. All enclosures are double insulated. An earthing set is available as accessory. Depending on the version, degrees of protection between IP31 and IP43 are available.

TwinLine N 55
TwinLine the welded wall-mounting
and floor-standing cabinets IP55

The TwinLine N 55 system is a fully comprehensive welded product range, available in both protection classes and three cabinet depths, and all with the high IP55 degree of protection. Continuity is the guiding principle for these new wall-mounting and floor-standing cabinets for distribution board assembly – from their high degree of protection and their ease of installation to a portfolio which can meet all requirements in the field.

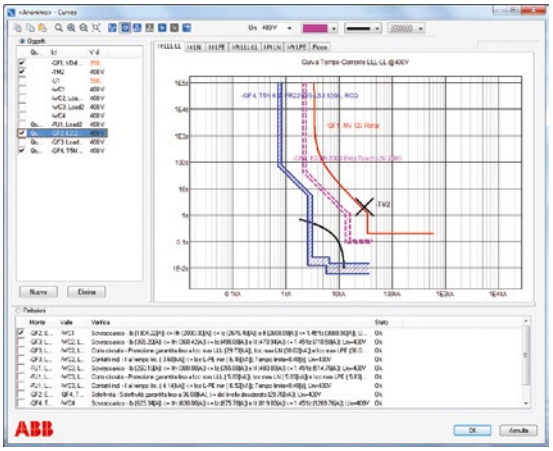
TwinLine S 43
The complete modular cabinet system in all sizes

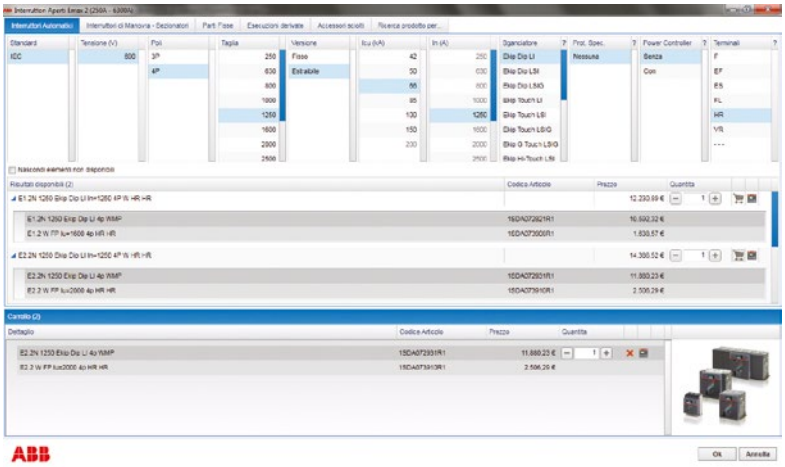
With the new TwinLine S 43 system, ABB offers a tailored and future-proof concept of modular wall-mounting and floor-standing cabinets. This fully comprehensive product range includes two cabinet types TwinLine-G (depth of 225 mm) and TwinLine-L (depth of 275 mm) and provides a solution for every application.

A brief introduction to ...
Enclosures, Sub distribution boards

E-Design software
ABB presents e-Design, the new engineering software suite launched as a tool to meet the needs of electrical sector professionals working in a constantly changing market.
e-Design makes it possible to design an electrical system, optimizing production times to the maximum, thanks to the ability to access a product portfolio to be used in synergy through intuitive and simple functionalities.The suite's appealing and brand-new look, combined with a general optimization of the functionalities that have always characterised ABB software, make it an innovative tool in step with the technologies currently available in the sector.

ABB's experience in a single suite
ABB's commitment in developing engineering software has always been driven by the rigorous preparation of its engineers and its sharp focus on the needs of professionals working in the sector. In such a rapidly changing context as exists today, it is essential to support the supply of increasingly technologically complex equipment with solutions that ensure that such equipment is simple to use.
Conscious of market requirements, ABB is capitalizing on its own experience and presents the new e-Design suite as a practical response to every critical aspect of the design process.





Products from other catalogues
You may also be interested in ...

The ABB range of products doesn‘t fit in only one catalogue.

System pro E power
Main distribution switchgear
The ABB’s new System pro E Power switchboard provides a complete solution for electric power main distribution in infrastructures and industries that complies with the latest international standards and guarantees perfect synergy with all the other ABB low voltage apparatus, such as Tmax T and XT moulded-case circuit-breakers, Emax 2 air circuit-breakers and of course, all the DIN rail components of System pro M compact® range.

These and many other ABB’s devices can be installed in this innovative switchboard since, a wide range of accessories, ensures that all components are perfectly compatible with each other, with extremely easy assembly and wiring operations.

A brief introduction to ...
Enclosures, Sub distribution boards

System pro E control
Enclosure for automation and control
With SR2, AM2 and IS2, ABB proposes a wide range of enclosures extremely versatile and performing that fit all the requirements in automation applications: on-board machine switchboards, automated production lines, control and operation panel boards for industrial plant.
The System pro E control series includes EMC versions (ElectroMagnetic Compatibility) and enclosures made in stainless steel AISI304 to be used outdoor and in applications where high standards of hygiene resistance are required such as food industries, chemical and pharmaceutical sectors.
Thanks to the availability of a wide range of accessories, the System pro E control allows the easy installation of front panel devices and the DIN rail components of the System pro M compact® range.

Gemini
Gemini is the ABB range of switchboards in thermoplastic, made with innovative co-injection molding technique that gives to this product robustness and high mechanical performances. Furthermore Gemini has a IP66 degree of protection and a very high resistance to chemical and atmospheric agents. This is the reason why Gemini guarantees excellent performances even in particularly severe operating conditions both in indoor and outdoor installations.
The Gemini switchboard is designed to be fitted with all the System pro M compact® devices and the ABB moulded-case circuit breakers.
Gemini switchboards are also perfectly compatible with other ABB low voltage components for control, monitoring and signaling devices, thereby creating a truly integrated automation system.

SACE Tmax T

The SACE Tmax T range consists of 9 circuit breaker sizes, all available in 3-pole and 4-pole versions, in fixed execution from T1 to T9, plug-in from T2 to T5 and extractable from T4 to T7.
The following ranges are designed to meet all the various application requirements: circuit breakers for power distribution in alternating and direct current, circuit breakers for advanced zone selectivity, circuit breakers for motor protection, circuit breakers for applications up to 1150V in alternating current and 1000 V in direct current, PV switchdisconnectors for photovoltaic systems.

SACE Tmax XT

The SACE Tmax XT range fully meets all system needs, from the most basic to the most advanced, thanks also to its completeness (offering four sizes from 160 A to 250 A).
These items are distinguished by their excellent capacity to limit peak currents and specific let-through energy, thereby ensuring optimum sizing of the circuits and the devices downstream. The SACE Tmax XT circuit breakers are fitted with thermomagnetic and electronic releases to guarantee protection against both overloads and short-circuiting, and against earth faults and indirect contact in the low voltage distribution network.
The SACE Tmax XT moulded-case circuit breakers can be equipped with thermomagnetic releases to offer protection for networks in direct and alternating current (by exploiting the physical properties of a bimetal and an electromagnet, they can detect overloads and short- circuits), or electronic releases to protect alternating current networks. These releases use microprocessor technology to obtain highly reliable protection functions with accurate intervention.

Electrical installation solutions for buildings

Miniature circuit-breakers

Index

Quick selection of MCBs	1/2

MCBs S 200

S 200 technical features	1/20
S 200 series, 6 kA	1/26
S 200 M series, 10 kA	1/40
S 200 MR series, 10kA	1/54
S 200 M UC series, 10 kA	1/56
S 200 P series, 15/25 kA	1/65
S 200 S screwless series, 6 kA	1/80
SU 200 MR series, 10kA	1/93
S 200 UDC series, 60 V DC	1/95

MCBs SN 201

SN 201 L series, 4.5 kA	1/102
SN 201 series, 6 kA	1/103
SN 201 M series, 10 kA	1/105

MCBs S 200 80-100A

S 200 80-100A series, 6 kA	1/108

SMCBs S 750 DR

S 750 DR series	1/110

SMCBs S 700

S 700 series	1/114
S 700 + H2WR series	1/118
WT63	1/122

CBs S 800

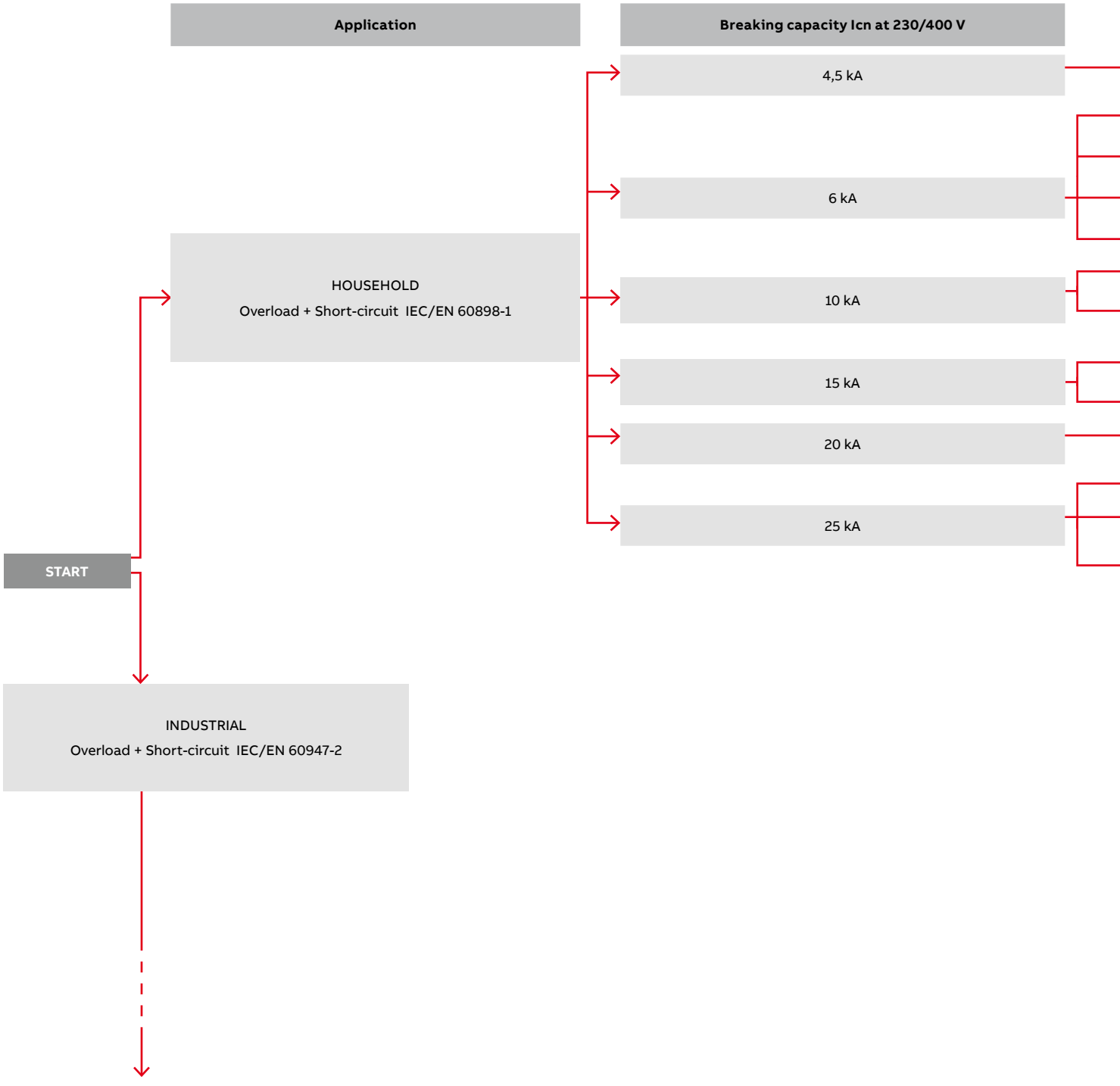
S800S series, 50 kA	1/132
S800N series, 36 kA	1/157
S800C series, 25 kA	1/163
S800B series, 16 kA	1/171
S800HV series, 4 kA	1/175
S800U series, 50 kA	1/178
S804U-UCZ series, 10 kA	1/186
S800PV series, 5 kA, DC	1/188
S800PV-SD series	1/191

MCBs S 500

S500 series	1/198
S500UC series	1/200
S500HV series	1/203

System pro M compact®
Quick selection of MCBs for household and industrial applications

Easy! Find the right range and the corresponding catalogue page at a glance using this selection chart.

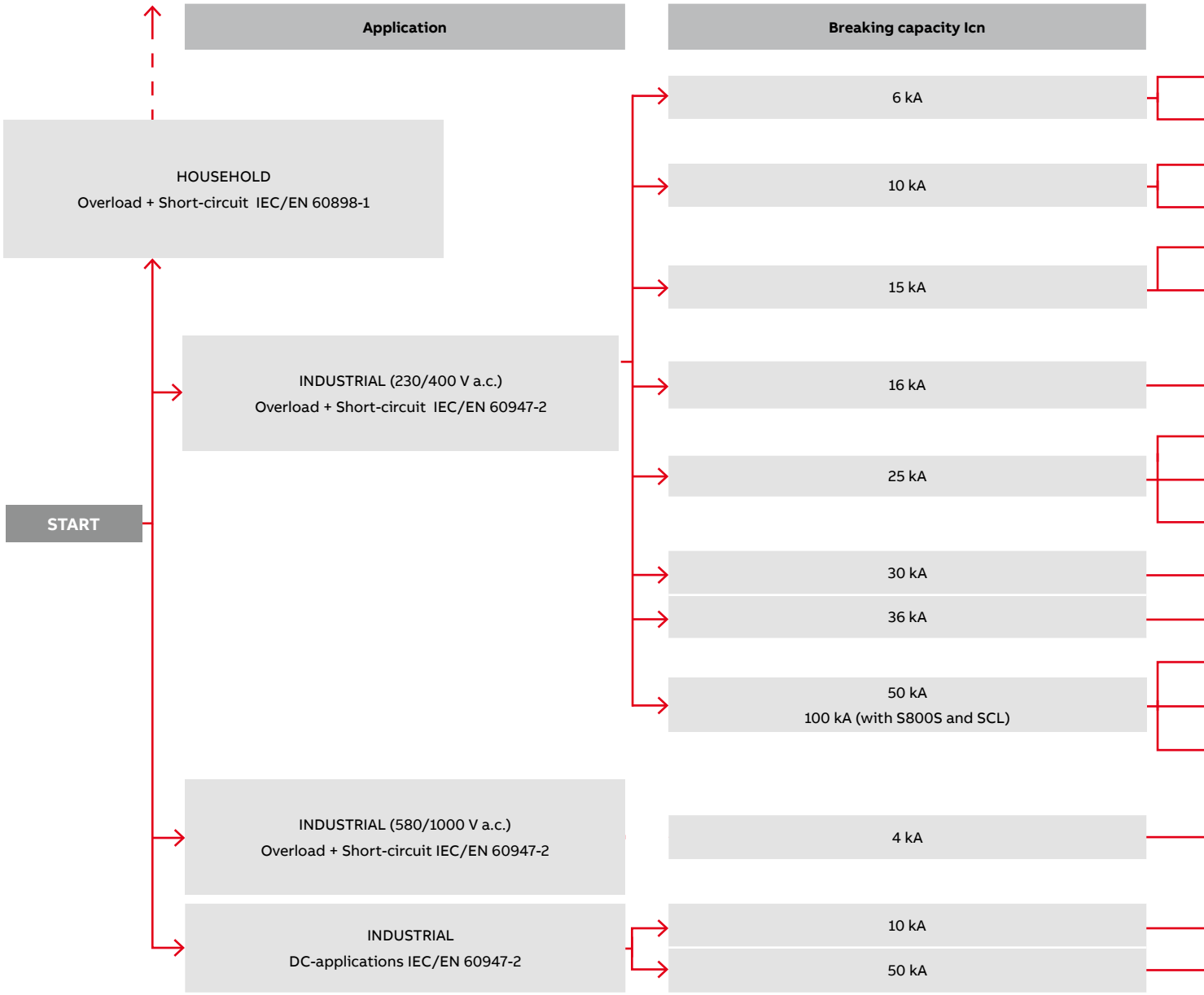


Rated current	Poles	Solution	Page
Up to 40 A	1P+N	SN 201 L	1/102
Up to 40 A	1P+N	SN 201	1/103
Up to 20 A	1P, 3P	S 200 S	1/80
Up to 63 A	All poles	S 200	1/26
Up to 100 A	All poles	S 200	1/108
Up to 40 A	1P+N	SN 201 M	1/105
Up to 63 A	All poles	S 200 M	1/40
Up to 63 A	All poles	S 200 P	1/65
Up to 125 A	All poles	S800C	1/163
Up to 80 A	All poles	S800N	1/157
Up to 25 A	All poles	S 200 P	1/65
Up to 63 A/100 A	All poles	S 750 DR/S 700 *1	1/114, 1/118
Up to 80 A	All poles	S800S	1/132

*1 with specific short-circuit selectivity function

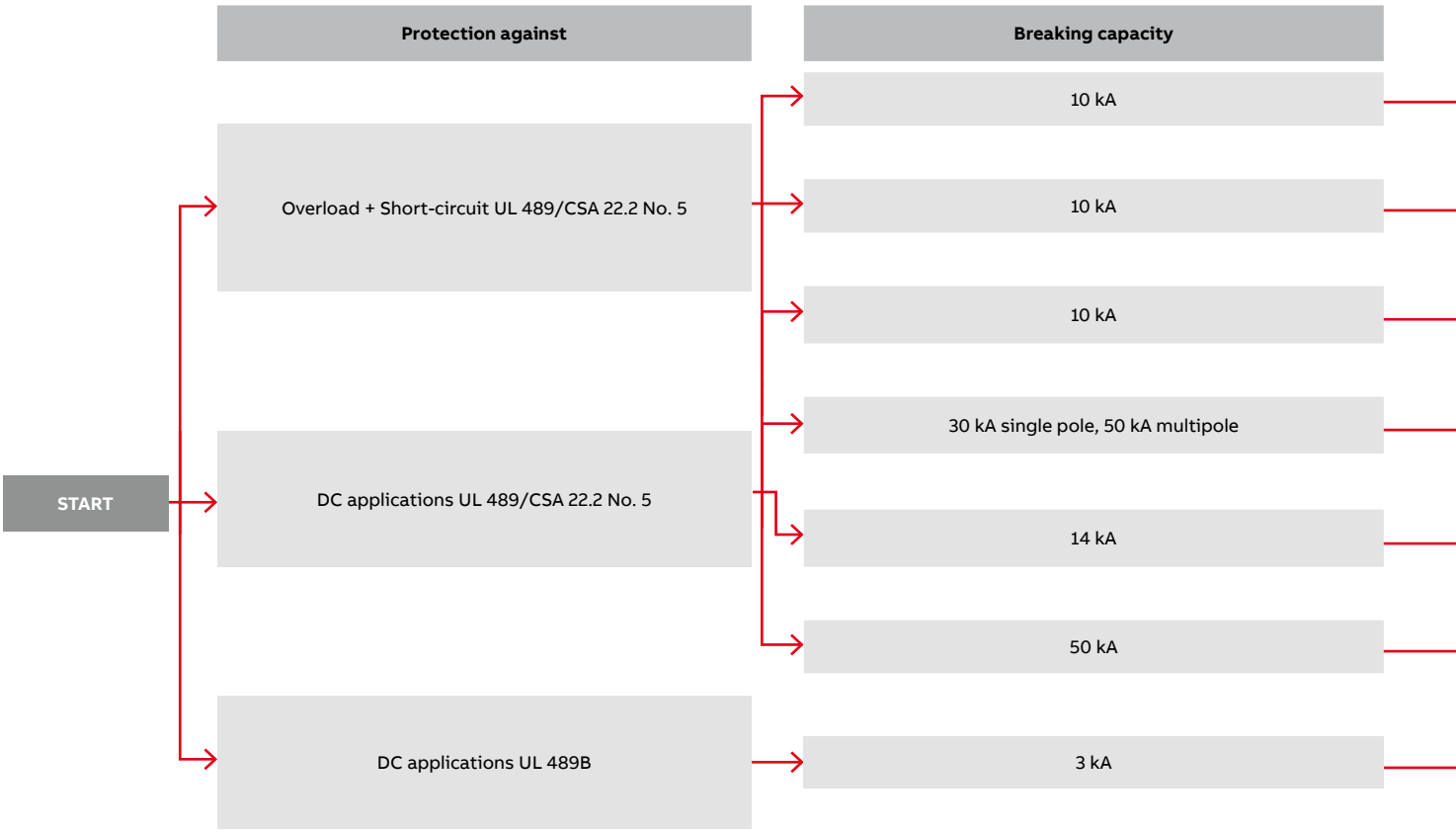
System pro M compact®

Quick selection of MCBs for household and industrial applications



Rated current	Poles	Solution	Page
Up to 40 A	1P+N	SN 201 L	1/102
Up to 100 A	All poles	S 200	1/102
Up to 40 A	1P+N	SN 201, SN 201 M	1/103, 1/105
Up to 63 A	All poles	S 200, S 200 M	1/26, 1/40
Up to 40 A	All poles	S 200 M	1/40
Up to 63 A	All poles	S 200 P	1/65
Up to 125 A	All poles	S800B	1/171
Up to 25 A	All poles	S 200 P	1/65
Up to 63 A/100 A	All poles	S 750 DR/S 700 *1	1/114, 1/118
Up to 125 A	All poles	S800C	1/163
Up to 45 A	All poles	S500	1/198
Up to 125 A	All poles	S800N	1/157
Up to 125 A	All poles	S800S	1/132
Up to 125 A	All poles	S800SCL + S800S	1/63, 1/132
Up to 11 A	All poles	S500	1/198
Up to 125 A	1P, 2P, 3P	S800HV	1/175
Up to 63 A	1P, 2P, 3P, 4P	S 200 M UC	1/56
Up to 125 A	All poles	S800S-UC	1/149

System pro M compact®
Quick selection of MCBs for UL applications (UL 489/CSA 22.2 No. 5)



Rated current	Remark	Poles	Solution	Page
Up to 63 A		1P, 2P, 3P, 4P	SU 200 M	1/83
Up to 40 (35) A		1P, 2P, 3P, 4P	SU 200 M	1/83
Up to 63 A	Ring Tongue	1P, 2P, 3P, 4P	SU 200 MR	1/93
Up to 100 A		All poles	S 800 U	1/182
Up to 63 A		1P, 2P	S 200 UDC	1/95
Up to 100 A		1P, 2P, 3P, 4P	S 800 U	1/182
5 A		4P	S804U-PVS5	1/187

1

Miniature circuit-breakers

Selection table

Series				S200	S200 M	S200 M UC	S200 P			S200 MR	S200 S
Characteristics				B,C,D, K,Z	B,C,D, K,Z	B,C, K, Z	B,C,D, K,Z	B,C,D, K,Z	B,C,D, K,Z	K	B,C
Rated current	[A]			0.5 ≤ In ≤ 63	0.5 ≤ In ≤ 63	0.2 ≤ In ≤ 63	0.2 ≤ In ≤ 25	32 ≤ In ≤ 40	50 ≤ In ≤ 63	0.2 ≤ In ≤ 63	6 ≤ In ≤ 20
Breaking capacity	[kA]										
Reference standard		Nr. poles	Ue[V]								
IEC/EN 60898	Icn		230/400	6	10	10	25	15	15		6
IEC/EN 60947-2 Alternating current	Icu	1, 1P+N	133	20	25		40	25	25		
			230	10	15		25	15	15	15	
			253								
		2, 3, 4	230	20	25	10 *17/6 *18	40	25	25		
			400	10	15		25	15	15	15	
			440	10	15	10 *17/6 *18					
		2, 3, 4	500								
			690								
	Ics	1, 1P+N	133	15	18.7 *8		20	18.7	18.7		
			230	7.5	11.2 *8		12.5	11.2	7.5		
			253			7.5 *17/6 *18				7.5 *18 11.2 *17	
		2, 3, 4	230	15	18.7 *8		20	18.7	18.7		
			400	7.5	11.2 *8		12.5	11.2	7.5		
			440	7.5	11.2 *8	7.5 *17/6 *18				7.5 *18 11.2 *17	
		2, 3, 4	500								
			690								
IEC/EN 60947-2 Direct current T=I/R≤5ms for all series, except S280 UC and S800S-UC, where T=I/R<15ms	Icu	1, 1P+N	24	20							
			60	10	10		15	10	10		
			125								
			220			10					
			250								
		2	48	20							
			125	10	10		15	10	10		
			250								
			440			10					
			500								
			800								
		3,4	375								
			500								
			750								
			1200								

*1 only up to 40 A; 10 kA up to 50/63 A
*2 only for "D" characteristic
*3 values are not for all rated currents
*4 600 V DC for 100, 125 A
*5 1000 V DC for 100, 125 A
*6 3 poles
*7 4 poles
*8 max. values. Detailed values on page 2/12
*9 relevant product standard: E DIN VDE 0645 (based on IEC/EN 60898-1 and IEC/EN 60947-2)
*10 by 250 V DC 1-pole, 600 V 3- and 4-pole
*11 by 600 V DC 2-pole
*12 ≤ 25 A
*13 > 25 A
*14 char. B, C
*15 only 2 poles (connection in series)
*16 UL 1077 only
*17 ≤ 40 A
*18 > 40 A
*19 ≤ 35 A
*20 10-80 A

		SU 200 M		SU 200 MR	S 200 UDC	SN 201 L	SN 201	SN 201 M	S200 80-100A	
C,Z	K	C,Z	K	K	K,Z	B,C	B,C,D	B,C	B,C	
0.2 ≤ In ≤ 40	0.2 ≤ In ≤ 35	50 ≤ In ≤ 63	40 ≤ In ≤ 63	0.2 ≤ In ≤ 63	1 ≤ In ≤ 63	2 ≤ In ≤ 40	2 ≤ In ≤ 40	2 ≤ In ≤ 40	80 ≤ In ≤ 100	
						4.5	6	10	6	
						10	15	20	20	
15	15	15	15	15		6	10	10	6	
									20	
15	15	15	15	15					6	
						6	10	10	10	
11.25	11.25	7.5	7.5			4.5	6	7.5	6	
				7.5 *18 11.2 *17						
									10	
11.25	11.25	7.5	7.5						6	
				7.5 *18 11.2 *17						
15	15	10	10			10	15	15		
15	15	10	10			10	15	15		

1

Miniature circuit-breakers

Selection table

Series				S 200	S 200 M	S 200 M UC	S 200 P			S 200 MR	S 200 S
Characteristics				B,C,D, K,Z	B,C,D, K,Z	B,C, K, Z	B,C,D, K,Z	B,C,D, K,Z	B,C,D, K,Z	K	B,C
Rated current [A]				0.5 ≤ In ≤ 63	0.5 ≤ In ≤ 63	0.2 ≤ In ≤ 63	0.2 ≤ In ≤ 25	32 ≤ In ≤ 40	50 ≤ In ≤ 63	0.2 ≤ In ≤ 63	6 ≤ In ≤ 20
IEC/EN 60947-2 Direct current T=I/R≤5ms for all series, except S280 UC and S800S-UC, where T=I/R<15ms	Ics	1, 1P+N	24	20							
			60	10	10		15	10	10		
			125								
			220			10					
			250								
		2	48	20							
			125	10	10		15	10	10		
			250								
			440			10					
			500								
			800								
		3,4	375								
			500								
			750								
			1200								
UL 1077/ C22.2 No 235 Alternating current	Int. cap.	1, 1P+N	120	10 *16			10	6	6		
			240								
			277	6 *16	6	6	10	6	6	10	
		2, 3, 4	240	10 *16			10	6	6		
			480 Y/277	6 *16	6	6	10	6	6	10	
UL 1077/ C22.2 No 235 Direct current	Int. cap.	1, 1P+N	60	10 *16	10						
			125								
			250			10					
		2, 3, 4	125		10						
			250								
			500			10					
UL 489/ C22.2 No 5 Alternating current	Int. cap.	1	240								
			277								
		2, 3, 4	240								
			480 Y/277								
UL 489/ C22.2 No 5 Direct current	Int. cap.	1	48								
			60								
		2	96								
			125								

*1 only up to 40 A; 10 kA up to 50/63 A
*2 only for "D" characteristic
*3 values are not for all rated currents
*4 600 V DC for 100, 125 A
*5 1000 V DC for 100, 125 A
*6 3 poles
*7 4 poles
*8 max. values. Detailed values on page 2/12
*9 relevant product standard: E DIN VDE 0645 (based on IEC/EN 60898-1 and IEC/EN 60947-2)
*10 by 250 V DC 1-pole, 600 V 3- and 4-pole
*11 by 600 V DC 2-pole
*12 ≤ 25 A
*13 > 25 A
*14 char. B, C
*15 only 2 poles (connection in series)
*16 UL 1077 only
*17 ≤ 40 A
*18 > 40 A
*19 ≤ 35 A
*20 10-80 A

		SU 200 M		SU 200 MR	S 200 UDC	SN 201 L	SN 201	SN 201 M	S200 80-100A	
C,Z	K	C,Z	K	K	K,Z	B,C	B,C,D	B,C	B,C	
0.2 ≤ In ≤ 40	0.2 ≤ In ≤ 35	50 ≤ In ≤ 63	40 ≤ In ≤ 63	0.2 ≤ In ≤ 63	1 ≤ In ≤ 63	2 ≤ In ≤ 40	2 ≤ In ≤ 40	2 ≤ In ≤ 40	80 ≤ In ≤ 100	
15	15	10	10			10	15	15		
15	15	10	10			10	15	15		
		10	10	10						
10	10			10 *19						
		10	10	10						
10	10			10 *19						
10	10	10	10							
					14					
10	10	10	10							
					14 *15					

1

High performance circuit-breakers

Selection table

Series				S 750 DR	S 700	S800S					S800N	S800C
Characteristics				E selective, K selective	E selective, K selective	B,C,D	K	KM	UCB	UCK	B,C,D	B,C,D,K
Rated current	[A]			16 ≤ In ≤ 63	10 ≤ In ≤ 100	6 ≤ In ≤ 125	6 ≤ In ≤ 125	20 ≤ In ≤ 80	10 ≤ In ≤ 125	10 ≤ In ≤ 125	6 ≤ In ≤ 125	10 ≤ In ≤ 125
Breaking capacity	[kA]											
Reference standard		Nr. poles	Ue[V]									
IEC/EN 60898	Icn		230/400		25 *9	25 *20					20 *20	15
IEC/EN 60947-2 Alternating current	Icu	1, 1P+N	133									
			230	25								
			240			50	50	50 *6			36	25
			253									
			254			30	30	30 *6			20	15
			400			6 (up to 80 A) 4.5 (100…125 A)	6 (up to 80 A) 4.5 (100…125 A)	6 *6			4.5	
			580									
		2, 3, 4	230									
			400	25								
			415			50	50	50 *6			36	25
			440								20	15
			500									
			580									
			690			6 (up to 80 A) 4.5 (100…125 A)	6 (up to 80 A) 4.5 (100…125 A)				4.5	
			1000									
	Ics	1, 1P+N	133									
			230	12.5	12.5 *9							
			240			40	40				30	18
			253									
			254			22.5 (up to 80 A) 15 (100…125 A)	22.5 (up to 80 A) 15 (100…125 A)				15 (up to 80 A) 10 (100…125 A	10
			400			4 (up to 80 A) 3 (100 … 125 A)	4 (up to 80 A) 3 (100 … 125 A)				3	
			580									
		2, 3, 4	230									
			400	12.5	12.5 *9	40	40					
			415					22.5 40 *6			30	18
			440									15
			500									
			690			4 *3	4 *3	4			3	
			1000									

*1 only up to 40 A; 10 kA up to 50/63 A
*2 only for "D" characteristic
*3 values are not for all rated currents
*5 1500 V DC for 4P
*6 3 poles
*7 4 poles
*8 max. values. Detailed values on page 2/12
*9 relevant product standard: E DIN VDE 0645 (based on IEC/EN 60898-1 and IEC/EN 60947-2)
*10 by 250 V DC 1-pole, 600 V 3- and 4-pole
*11 by 600 V DC 2-pole
*12 ≤ 25 A

	S800B	S800HV	S800U	S804U-UCZ	S804U-PVS	S800PV-SP	S500		S500UC
	B, C, D, K	C, K	Z, K	UCZ	PVS	PV-SP	K adjustable		K adjustable
	32 ≤ In ≤ 125	C: 10 ≤ In ≤ 32 K: 6 ≤ In ≤ 125	10 ≤ In ≤ 100	10-80	5	5 ≤ In ≤ 125	0.1 ≤ In ≤ 11	10 ≤ In ≤ 45	0.1 ≤ In ≤ 45
	10								
	16						50	30	
			30						
		4 (6 ... 63 A) 3 (80 ... 125 A)							
	16						50	30	
			50						
							20	15	
							6	6	
		4 (6 ... 63 A) 3 (80 ... 125 A)							
	10								
			25						
		2.5 (6 ... 63 A) 2 (80 ... 125 A)							
							30	25	
	10						30	25	
			40						
							15	11	
							3	3	
		2.5 (6 ... 63 A) 2 (80 ... 125 A)							

*13 > 25 A
*14 char. B, C
*15 only 2 poles (connection in series)
*16 UL 1077 only
*17 ≤ 40 A
*18 > 40 A
*19 ≤ 35 A
*20 10-80 A
*21 for S804U-UCZ only
*22 for S804U-PVS only

High performance circuit-breakers

Selection table

Series				S 750 DR	S 700	S800S				S800N	S800C
Characteristics				E selective, K selective	E selective, K selective	B,C,D	K	KM	UCB	UCK	B,C,D	B,C,D,K
Rated current	[A]			16 ≤ In ≤ 63	10 ≤ In ≤ 100	6 ≤ In ≤ 125	6 ≤ In ≤ 125	20 ≤ In ≤ 80	10 ≤ In ≤ 125	10 ≤ In ≤ 125	6 ≤ In ≤ 125	10 ≤ In ≤ 125
Breaking capacity	[kA]											
Reference standard		Nr. poles	Ue[V]									
IEC/EN 60947-2 Direct current T=I/R≤5ms for all series, except S280 UC and S800S-UC, where T=I/R<15ms	Icu	1, 1P+N	24									
			60									
			75									
			125			30	30				20	10
			220									
			250						50	50		
		2	48									
			125									
			150									
			250			30	30				20	10
			440									
			500						50	50		
			800									
		3,4	225									
			300									
			375			30 *6	30 *6	30 *6			20 *6	10 *6
			500			30 *7	30 *7				20 *7	10 *7
			750						50 *6 50 (63 ... 125 A) *7	50 *6 50 (63 ... 125 A) *7		
			1000						50 (10 ... 50 A) *7	50 (10 ... 50 A) *7		
			1200									

*1 only up to 40 A; 10 kA up to 50/63 A
*2 only for "D" characteristic
*3 values are not for all rated currents
*5 1500 V DC for 4P
*6 3 poles
*7 4 poles
*8 max. values. Detailed values on page 2/12
*9 relevant product standard: E DIN VDE 0645 (based on IEC/EN 60898-1 and IEC/EN 60947-2)
*10 by 250 V DC 1-pole, 600 V 3- and 4-pole
*11 by 600 V DC 2-pole
*12 ≤ 25 A
*13 > 25 A
*14 char. B, C
*15 only 2 poles (connection in series)
*16 UL 1077 only
*17 ≤ 40 A
*18 > 40 A
*19 ≤ 35 A
*20 10-80 A
*21 for S804U-UCZ only
*22 for S804U-PVS only

	S800B	S800HV	S800U	S804U-UCZ	S804U-PVS	S800PV-SP	S500		S500UC
	B, C, D, K	C, K	Z, K	UCZ	PVS	PV-SP	K adjustable		K adjustable
	32 ≤ In ≤ 125	C: 10 ≤ In ≤ 32 K: 6 ≤ In ≤ 125	10 ≤ In ≤ 100	10-80	5	5 ≤ In ≤ 125	0.1 ≤ In ≤ 11	10 ≤ In ≤ 45	0.1 ≤ In ≤ 45
	10								
									30
	10								
									30
						5			
	10 *6								
	10 *7								
									30
						5 *5			

1

High performance circuit-breakers

Selection table

Series				S 750 DR	S 700	S800S			S800N	S800C
Characteristics				E selective, K selective	E selective, K selective*9	B, C, D	K	KM	UCB	UCK	B, C, D	B, C, D, K
Rated current	[A]			16 ≤ In ≤ 63	10 ≤ In ≤ 100	6 ≤ In ≤ 125	6 ≤ In ≤ 125	20 ≤ In ≤ 80	10 ≤ In ≤ 125	10 ≤ In ≤ 125	6 ≤ In ≤ 125	10 ≤ In ≤ 125
IEC/EN 60947-2 Direct current T=I/R≤5ms for all series, except S280 UC and S800S-UC, where T=I/R<15ms	Ics	1, 1P+N	24									
			60									
			125			30	30				20	10
			220									
			250						50	50		
		2	48									
			125									
			250			30	30				20	10
			440									
			500						50	50		
			800									
		3,4	375			30 *6	30 *6	30 *6			20 *6	10 *6
			500			30 *7	30 *7				20 *7	10 *7
			750						50 *6 50 (63 ... 125 A) *7	50 *6 50 (63 ... 125 A) *7		
			1000						50 (10 ... 50 A) *7	50 (10 ... 50 A) *7		
			1200									
UL 1077/ C22.2 No 235 Alternating current	Int. cap.	1, 1P+N	120									
			240			30 (6...63 A)	30 (6...63 A)					20 (≤ 100 A)
			277			14 (6...63 A)	14 (6...63 A)					
			347			6 (6...63 A)	6 (6...63 A)					10 (≤ 100 A)
		2, 3, 4	240									
			480 Y/277			14 (6...63 A) *27	14 (6...63 A) *27					10 (≤100 A)
			600Y/347			6 (6...63 A)	6 (6...63 A)					
UL 1077/ C22.2 No 235 Direct current	Int. cap.	1, 1P+N	60									
			125									10 (≤ 100 A)
			250									
		2, 3, 4	125									
			250									10 (2P, ≤ 100 A)
			375									10 (3P, ≤ 100 A)
			500									10 (4P, ≤ 100 A)
UL 489/ C22.2 No 5 Alternating current	Int. cap.	1	240									
			277									
		2, 3, 4	240									
			480 Y/277									
UL 489/ C22.2 No 5 Direct current	Int. cap.	1	60									
		2	125									
		4	600									
UL489B Direct current		4	1000									

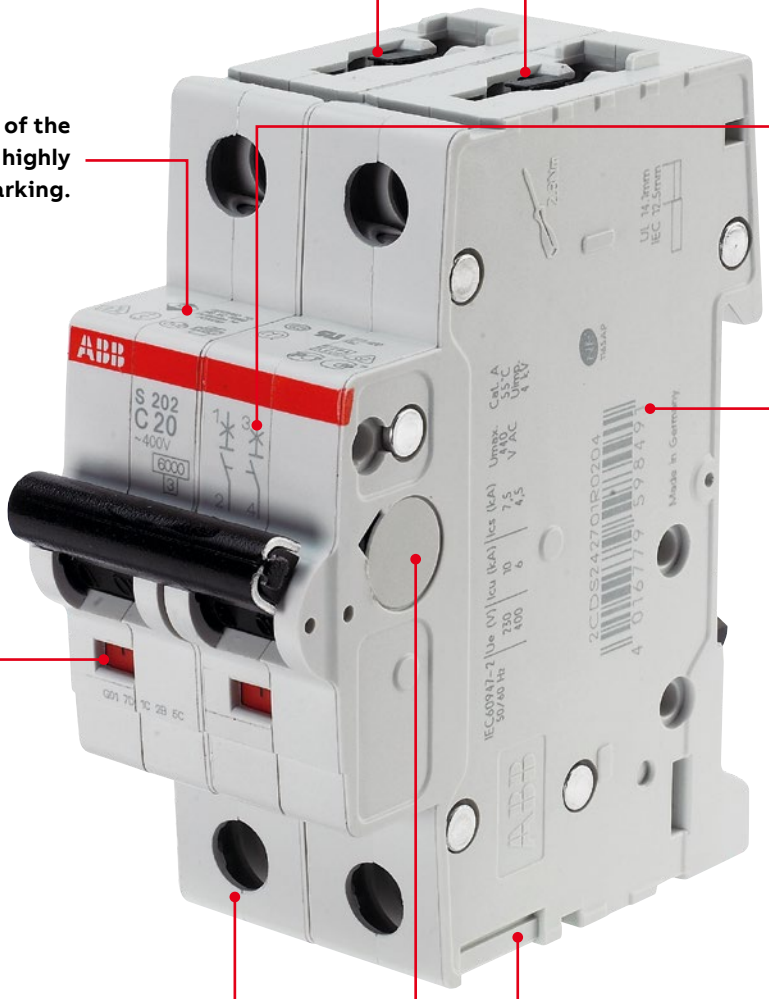
*1 only up to 40 A; 10 kA up to 50/63 A
*2 only for "D" characteristic
*3 values are not for all rated currents
*5 1500 V DC for 4P
*6 3 poles
*7 4 poles
*8 max. values. Detailed values on page 2/12
*9 relevant product standard: E DIN VDE 0645 (based on IEC/EN 60898-1 and IEC/EN 60947-2)
*10 by 250 V DC 1-pole, 600 V 3- and 4-pole
*11 by 600 V DC 2-pole
*12 ≤ 25 A

	S800B	S800HV	S800U	S804U-UCZ	S804U-PVS	S800PV-SP	S500		S500UC
	B, C, D, K	C, K	Z, K	UCZ	PVS	PV-SP	K adjustable		K adjustable
	32 ≤ In ≤ 125	C: 10 ≤ In ≤ 32 K: 6 ≤ In ≤ 125	10 ≤ In ≤ 100	10-80	5	5 ≤ In ≤ 125	0.1 ≤ In ≤ 11	10 ≤ In ≤ 45	0.1 ≤ In ≤ 45
						5			
						5 *5			
							30 *12	18 *13	
							14 *12	14 *13	
							30 *12	18 *13	
							14 *12	14 *13	
		15 (3P, 10 ... 32 A) *28							
									30 *10
									30 *11
			30						
			50						
				10					
					3				

*13 > 25 A
*15 only 2 poles (connection in series)
*16 UL 1077 only
*17 ≤ 40 A
*18 > 40 A
*19 ≤ 35 A
*20 10-80 A
*23 by 75V DC 1-pole
*24 by 150V DC 2-pole
*25 by 225V DC 3-pole
*26 by 300V DC 4-pole
*27 certification 50A ongoing
*28 3P, 10 ... 32 A - only valid with XT2L 125 TMF 35-400

MCB S 200. The details make the difference

A range designed to ensure efficiency and protection

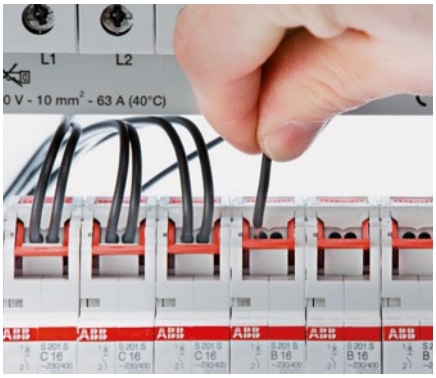


Contact position indication
All System pro M compact® MCBs are suited with a contact position indication (CPI) on the toggle. You can easily identify, if the MCB is in the ON or the OFF position – easy and safe maintenance work is possible.

Approvals printed on the dome
S 200 MCBs comply to IEC/EN 60898-1 and IEC/EN 60947-2 and carry all relevant approval marks for each market and segment they are destined to. The certification markings are also printed on the dome of the MCB. Thus make it possible to see the markings also in the mounted position. For control and acceptance procedure – certification marks visible on fitted devices on the dome.

Housing material
By using the state-of-the-art housing material, ABB is taking care of the environment. With the latest generation of thermoplastics it's possible to recycle the MCBs – especially the thermoplastic housing-material can be re-used. By using the latest generation of thermoplastics the material stability of all System pro M compact® MCBs is improved. S200 are 100% free of halogens – no environmental pollution.

Laser printing
All printings of the S 200 and S 200 M MCBs, like the approvals on the dome and the product identification, are printed by a laser. The laser printing ensures a friction, scratch and solvent resistant marking on the MCBs.
Easy identification of the products in case of maintenance or replacements due to safe laser printing.



Screwless terminals
With its unique terminal screwless technology the S 200 S provides maximum flexibility in usage of cables. The screwless load side terminal enables fast installation. High forces in the screwless terminal safe time for re-tightening after transport of the assembled enclosure. If the wiring has to be changed only a soft push on the lever is required. S 200 S provides the highest standard of safety for installer. IP20 / IPXXB (finger safe) highest standard of touch protection.

IP 20 - finger safe terminals
The System pro M compact® MCB's are equiped with 35 mm² + 10 mm² cylinder lift twin terminals, a well proven and reliable technology - designed for sopisticated industrial use.
The cross wiring can easily be done by inserting the System pro M compact® busbars into the rear terminal part and then the incoming wires into the front part of the terminal.

MCBs

S 200 technical features

S 200

			S 200	S 200 M
General Data	Standards		IEC/EN 60898-1, IEC/EN 60947-2	IEC/EN 60898-1, IEC/EN 60947-2
			UL 1077	UL 1077, CSA 22.2 No. 235
	Poles		1P, 2P, 3P, 4P, 1P+N, 3P+N	
	Tripping characteristics		B, C, D, K, Z	
	Rated current I_n	A	0.5…63 A	
	Rated frequency f	Hz	50 / 60 Hz	
	Rated insulation voltage U_i acc. to IEC/EN 60664-1	V	440 V AC (phase to phase)	
	Overvoltage category		III	
	Pollution degree		3	
Data acc. to IEC/EN 60898-1 (except S 200 M UC data acc. to IEC/EN 60898-2)	Rated operational voltage U_n	V	1P: 230/400 V AC; 1P+N: 230 V AC ; 2...4P: 400 V AC; 3P+N: 400 V AC	
	Max. power frequency recovery voltage (U_{max})	V	1P: 253 V AC; 1P+N: 253 V AC; 2P: 440 V AC; 3...4P: 440 V AC; 3P+N: 440 V AC; 1P: 72 V DC; 2P: 125 V DC	
	Min. operating voltage	V	12 V AC - 12 V DC	
	Rated short-circuit capacity I_{cn}	kA	6 kA	10 kA
	Energy limiting class (B, C up to 40 A)		3	
	Rated impulse withstand voltage Uimp. (1.2/50µs)	kV	4 kV (test voltage 6.2 kV at sea level, 5 kV at 2,000 m)	
	Dielectric test voltage	kV	2 kV (50 / 60Hz, 1 min.)	
	Reference temperature for tripping characteristics	°C	B, C, D: 30°C	
	Electrical endurance	ops.	In < 32A: 20,000 ops (AC), In ≥ 32A: 10,000 ops. (AC); 1,000 ops. (DC); (1 cycle 2s - ON, 13s - OFF, In ≤ 32A), (1 cycle 2s - ON, 28s - OFF, In > 32A)	
Data acc. to IEC/EN 60947-2	Rated operational voltage U_e	V	1P: 230 V AC; 1P+N: 230 V AC; 2...4P: 440 V AC; 3P+N: 440 V AC	
	Max. power frequency recovery voltage (U_{max})	V	1P: 253 V AC; 1P+N: 253 V AC; 2P...4P: 462 V AC; 3P+N: 462 V AC; 1P: 72 V DC; 2P: 125 V DC	
	Min. operating voltage	V	12 V AC - 12 V DC	
	Rated ultimate short-circuit breaking capacity I_{cu}	kA	10 kA	15 kA
	Rated service short-circuit breaking capacity I_{cs}	kA	7.5 kA	≤ 40 A: 11.2 kA 50, 63 A: 7.5 kA
	Rated impulse withstand voltage Uimp. (1.2/50µs)	kV	4 kV (test voltage 6.2 kV at sea level, 5 kV at 2,000 m)	
	Dielectric test voltage	kV	2 kV (50 / 60Hz, 1 min.)	
	Reference temperature for tripping characteristics	°C	B, C, D: 55°C; K, Z: 20°C	
	Electrical endurance	ops.	In < 32A: 20,000 ops (AC), In ≥ 32A: 10,000 ops. (AC); 1,000 ops. (DC); (1 cycle 2s - ON, 13s - OFF, In ≤ 32A), (1 cyle 2s - ON, 28s - OFF, In > 32A)	

Note:
* Only acc. to IEC/EN 60898-1

S 200 M UC	S 200 P	S 200 MR	S 200 S	SU 200 M		SU 200 MR	S 200 UDC
IEC/EN 60898-2, IEC/EN 60947-2	IEC/EN 60898-1, IEC/EN 60947-2	IEC/EN 60947-2	IEC/EN 60898-1	IEC/EN 60947-2		IEC/EN 60947-2	
	UL 1077, CSA 22.2 No. 235	UL 1077, CSA 22.2 No. 235		UL 489, CSA22.2 No.5		UL 489, CSA22.2 No.5	UL 489
1P, 2P, 3P, 4P	1P, 2P, 3P, 4P, 1P+N, 3P+N	1P, 2P, 3P, 4P	1P, 3P	1P, 2P, 3P, 4P		1P, 2P, 3P, 4P	1P, 2P
B, C, K, Z	B, C, D, K, Z	K	B, C	C, K, Z		K	
0.2…63 A			6…20 A	0.2…63 A	0.2…25 A	0.2…63 A	1…63 A
0 / 50 / 60 Hz	50 / 60 Hz	50 / 60 Hz					DC
440 V AC (phase to phase)							
							--
2							--
1P: 230 V AC, 220 V DC 2P: 400 V AC, 440 V DC 3...4P: 400 V AC*			1P: 230 V AC, 3P: 440 V AC	--			
1P: 253 V AC, 250 V DC 2P: 440 V AC, 500 V DC 3...4P:440 V AC*			1P: 253 V AC, 3P: 440 V AC	--			
			12 V AC	--			
10 kA	≤ 25 A: 25 kA > 25 A: 15 kA		6 kA	--			
				--			
				--			
				--			
30 °C			B, C: 30 °C	--			
			20,000 ops.	--			
1P: 253 V AC, 220 V DC 2...4P: 440 V AC, 440 V DC	1P: 230 V AC; 1P+N: 230 V AC; 2...4P: 400 V AC; 3P+N: 400 V AC	1P: 230 V AC 2...4P: 400 V AC		1P: 230 V AC 2...4P: 400 V AC		1P: 230 V AC 2...4P: 400 V AC	--
1P: 266 V AC, 250 V DC 2...4P: 462 V AC, 500 V DC	1P: 253 V AC; 1P+N: 253 V AC; 2P...4P: 440 V AC; 3P+N: 440 V AC; 1P: 72 V DC; 2P: 125 V DC	1P: 253 V AC 2...4P: 440 V AC		1P: 253/440 V AC; 2...4P: 440 V AC		1P: 253 V AC 2...4P: 440 V AC	--
		12 V AC		12 V AC			--
≤ 40 A: 10 kA AC; 10 kA DC > 40 A: 6 kA AC; 10 kA DC	≤ 25 A: 25 kA ≥ 32 A: 15 kA	15 kA		10 kA		15 kA	--
≤ 40 A: 7,5 kA AC; 10 kA DC > 40 A: 6 kA(AC; 10 kA DC	≤ 25 A: 12.5 kA ≤ 32…40 A: 11.2 kA 50, 63 A: 7.5 kA	≤ 40 A: 11.2 kA; > 40 A: 7.5 kA AC;		7.5 kA		≤ 40 A: 11.2 kA; > 40 A: 7.5 kA (AC);	--
							--
							--
B, C: 55 °C; K, Z: 20 °C		20 °C		C, K, Z: 20°C		20 °C	--
In < 32A: 20,000 ops (AC), In ≥ 32A: 10,000 ops. (AC); 1,500 ops. (DC);	In < 32A: 20,000 ops (AC), In ≥ 32A: 10,000 ops. (AC); 1,000 ops. (DC); (1 cycle 2s - ON, 13s - OFF, In ≤ 32A), (1 cyle 2s - ON, 28s - OFF, In ≥ 32A)	In < 25A: 20,000 ops (AC), In ≥ 25A: 10,000 ops. (AC);				In < 25A: 20,000 ops (AC), In ≥ 25A: 10,000 ops. (AC);	--

MCBs

S 200 technical features

S 200

			S 200	S 200 M
Data acc. to UL / CSA	Rated voltage	V	480Y / 277 V AC;	480Y / 277 V AC;
			1P: 60 V DC; 2P...4P: 110 V DC	1P: 60 V DC; 2P...4P: 125 V DC
	Rated interrupting capacity acc. to UL 1077	kA	6 kA AC; 10 kA DC	
	Short-circuit current rating acc. to UL 489		--	
	Application		Suppl. prot. for general use. Application Codes: TC2, OL0, SC: U1	
	Reference temperature for tripping characteristics	°C	B, C, D, K, Z: 25°C	
	Electrical endurance	ops.	6,000 ops (AC), 6,000 ops. (DC); 1 cycle (1s - ON, 9s - OFF)	
Mechanical Data	Housing		Insulation group II, RAL 7035	
	Toggle		Insulation group II, black, sealable	
	Contact position indication		Marking on toggle (I ON / 0 OFF), Real CPI (red ON / green OFF)	
	Protection degree acc. to EN 60529		IP20*, IP40 in enclosure with cover	
	Mechanical endurance	ops.	20,000 ops.	
	Shock resistance acc. to IEC/EN 60068-2-27		25 g - 2 shocks - 13 ms	
	Vibration resistance acc. to IEC/EN 60068-2-6		5g - 20 cycles at 5...150...5 Hz with load 0.8In	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/ RH	28 cycles with 55°C/90-96% and 25°C/95-100%	
	Ambient temperature	°C	-25 ... +55°C	
	Storage temperature	°C	-40 ... +70°C	

Note:
* Also fulfilling the requirement acc. to the protection degree IPXXB
** Only with accessory: IP20 terminal clip

	S 200 M UC	S 200 P	S 200 MR	S 200 S	SU 200 M		SU 200 MR	S 200 UDC
	480Y / 277 V AC	480Y / 277 V AC	480Y / 277 V AC		240 V AC	480 Y / 277 V AC	1P: ≤ 35 A: 277 V AC; > 35 A: 240 V AC 2...4P: ≤ 35 A: 480 / 277 V AC; > 35 A: 240 V AC	
	1P: 250 V DC 2...4P: 500 V DC		480 / 277 V AC					1P: 60 V DC 2P: 125 V DC
		≤ 25 A: 10 kA > 25 A: 6 kA	10 kA		--			
					10 kA		10 kA	14 kA (UL)
	TC1, 0L0, SC: U1	TC2, 0L0, SC: U1	Ring tongue terminal, not for general use				Ring tongue terminal, not for general use	
			25 °C		C, K, Z: 25 °C		25 °C	
							6,000 ops. (1 cycle 1s - ON, 9s - OFF)	
	Insulation group I, RAL 7035			Insulation group II, RAL 7035			Insulation group I, RAL 7035	
					IP20**, IP40 in enclosure with cover			
		30 g - 3 shocks - 11 ms	25 g - 2 shocks - 13 ms	25 g - 2 shocks - 13 ms	30 g - 3 shocks - 11 ms		25 g - 2 shocks - 13 ms	

MCBs

S 200 technical features

S 200

				S 200	S 200 M
Installa-tion	Terminal			Failsafe bi-directional cylinder-lift terminal	
	Cross-section of conductors *1 (top / bottom)	Solid / Stranded	mm²	35 mm² / 35 mm²	
		Flexible	mm²	25 mm² / 25 mm²	
			AWG	18 - 4 AWG	14 - 4 AWG
	Cross-section of busbars (top / bottom)		mm²	10 mm² / 10 mm²	
			AWG	18 - 8 AWG	14 - 8 AWG
	Tightening Torque *2		Nm	2.8 Nm	
			in-lbs.	18 in-lbs.	
	Screwdriver			No. 2 Pozidrive	
	Mounting			On DIN rail 35 mm acc. to EN 60715 by fast clip	
	Mounting position			any	
	Supply			optional	
Dimensi-ons and weight	Mounting dimensions acc. to DIN 43880			Mounting dimension 1	
	Pole dimensions (H x D x W)		mm	88 x 69 x 17.5 mm	
	Pole weight		g	approx. 115 g	
Combi-nation with aux. elements	Auxiliary contact			Yes	
	Signal contact			Yes	
	Shunt trip			Yes	
	Undervoltage release			Yes	
	Motor Operating Device			Yes	
	Integrated auxiliary switch			Yes	

*1 Prior to connection of aluminium conductors (>= 4 mm2) ensure that their contact points are cleaned, brushed and coated with grease.
Connection of aluminium conductors is not specifically approved by third party.
All approvals according to the product standards are carried out with copper conductors.
*2 Nm-values acc. IEC / in-lbs.-values acc. UL

	S 200 M UC	S 200 P	S 200 MR	S 200 S	SU 200 M		SU 200 MR	S 200 UDC
			Ring Tongue Terminal	Failsafe bi-directional cylinder-lift terminal			Ring Tongue Terminal	--
		25 mm² / 25 mm²		35 mm² / 35 mm²				--
		16 mm² / 16 mm²	25 mm² / 25 mm²	25 mm² / 25 mm²				--
		18 - 4 AWG					18 - 4 AWG	--
								--
		18 - 8 AWG						--
		2.8 Nm						--
		25 in-lbs.						
	Please note polarity of device	optional		bottom	optional		top or bottom	Please note polarity of device
					--		Mounting dimension 1	
	85 x 69 x 17.5 mm	88 x 69 x 17.5 mm	100 x 69 x 17.5 mm	89 x 69 x 17.5 mm	92 x 71 x 17.5 mm	100 x 71 x 17.5 mm	115 x 69 x 17.5 mm	92 x 71 x 17.5 mm
	approx. 125 g	approx. 140 g	approx. 125 g	approx. 100 g	approx. 140g	approx. 140g	approx. 125 g	
					No			
			No	No	Yes	No	No	
			No	Yes	No			

1

MCBs

S 200 series B characteristic

S 201

S 202

S 203

S 200 B characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for people and large length of cables in TN and IT systems.
Applications: residential, commercial and industrial.
Standard: IEC/EN 60898-1, IEC/EN 60947-2
Icn=6 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	464901	S201-B6	2CDS251001R0065		0.125	10
	10	463805	S201-B10	2CDS251001R0105		0.125	10
	13	465007	S201-B13	2CDS251001R0135		0.125	10
	16	578639	S201-B16	2CDS251001R1165		0.125	10
	20 *1	465106	S201-B20	2CDS251001R0205		0.125	10
	25	465205	S201-B25	2CDS251001R0255		0.125	10
	32 *2	465304	S201-B32	2CDS251001R0325		0.125	10
	40 *3	465403	S201-B40	2CDS251001R0405		0.125	10
	50	550925	S201-B50	2CDS251001R0505		0.125	10
	63	550932	S201-B63	2CDS251001R0635		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	466400	S202-B6	2CDS252001R0065		0.250	5
	10	466608	S202-B10	2CDS252001R0105		0.250	5
	13	466707	S202-B13	2CDS252001R0135		0.250	5
	16	466905	S202-B16	2CDS252001R0165		0.250	5
	20	467001	S202-B20	2CDS252001R0205		0.250	5
	25	467100	S202-B25	2CDS252001R0255		0.250	5
	32	467209	S202-B32	2CDS252001R0325		0.250	5
	40	467407	S202-B40	2CDS252001R0405		0.250	5
	50	550949	S202-B50	2CDS252001R0505		0.250	5
	63	550956	S202-B63	2CDS252001R0635		0.250	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	468602	S203-B6	2CDS253001R0065		0.375	1
	10	468701	S203-B10	2CDS253001R0105		0.375	1
	13	468909	S203-B13	2CDS253001R0135		0.375	1
	16	469005	S203-B16	2CDS253001R0165		0.375	1
	20 *1	469104	S203-B20	2CDS253001R0205		0.375	1
	25	469203	S203-B25	2CDS253001R0255		0.375	1
	32 *2	469302	S203-B32	2CDS253001R0325		0.375	1
	40 *3	469401	S203-B40	2CDS253001R0405		0.375	1
	50	550963	S203-B50	2CDS253001R0505		0.375	1
	63	550970	S203-B63	2CDS253001R0635		0.375	1

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

S 204

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	528955	S204-B6	2CDS254001R0065		0.500	1
	10	528962	S204-B10	2CDS254001R0105		0.500	1
	13	528979	S204-B13	2CDS254001R0135		0.500	1
	16	528986	S204-B16	2CDS254001R0165		0.500	1
	20	528993	S204-B20	2CDS254001R0205		0.500	1
	25	529006	S204-B25	2CDS254001R0255		0.500	1
	32	529013	S204-B32	2CDS254001R0325		0.500	1
	40	529020	S204-B40	2CDS254001R0405		0.500	1
	50	550987	S204-B50	2CDS254001R0505		0.500	1
	63	550994	S204-B63	2CDS254001R0635		0.500	1

S 201 NA

With disconnecting neutral NA

S 203 NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	6	531580	S201-B6NA	2CDS251103R0065		0.250	5
	10	531597	S201-B10NA	2CDS251103R0105		0.250	5
	13	531603	S201-B13NA	2CDS251103R0135		0.250	5
	16	531610	S201-B16NA	2CDS251103R0165		0.250	5
	20 *1	531627	S201-B20NA	2CDS251103R0205		0.250	5
	25	531634	S201-B25NA	2CDS251103R0255		0.250	5
	32 *2	531641	S201-B32NA	2CDS251103R0325		0.250	5
	40 *3	531658	S201-B40NA	2CDS251103R0405		0.250	5
	50	536158	S201-B50NA	2CDS251103R0505		0.250	5
	63	536141	S201-B63NA	2CDS251103R0635		0.250	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	6	532280	S203-B6NA	2CDS253103R0065		0.500	1
	10	532297	S203-B10NA	2CDS253103R0105		0.500	1
	13	532303	S203-B13NA	2CDS253103R0135		0.500	1
	16	532310	S203-B16NA	2CDS253103R0165		0.500	1
	20 *1	532327	S203-B20NA	2CDS253103R0205		0.500	1
	25	532334	S203-B25NA	2CDS253103R0255		0.500	1
	32 *2	532341	S203-B32NA	2CDS253103R0325		0.500	1
	40 *3	532358	S203-B40NA	2CDS253103R0405		0.500	1
	50	536165	S203-B50NA	2CDS253103R0505		0.580	1
	63	536172	S203-B63NA	2CDS253103R0635		0.580	1

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

MCBs

S 200 series C characteristic

S 201

S 202

S 200 C characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for resistive and inductive loads with low inrush current.
Applications: residential, commercial and industrial.
Standard: IEC/EN 60898-1, IEC/EN 60947-2
Icn=6 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	523295	S201-C0.5	2CDS251001R0984		0.125	10
	1	523318	S201-C1	2CDS251001R0014		0.125	10
	1.6	523301	S201-C1.6	2CDS251001R0974		0.125	10
	2	523325	S201-C2	2CDS251001R0024		0.125	10
	3	523332	S201-C3	2CDS251001R0034		0.125	10
	4	523349	S201-C4	2CDS251001R0044		0.125	10
	6	464000	S201-C6	2CDS251001R0064		0.125	10
	8	464109	S201-C8	2CDS251001R0084		0.125	10
	10	464208	S201-C10	2CDS251001R0104		0.125	10
	13	464307	S201-C13	2CDS251001R0134		0.125	10
	16	464406	S201-C16	2CDS251001R0164		0.125	10
	20 *1	464505	S201-C20	2CDS251001R0204		0.125	10
	25	464604	S201-C25	2CDS251001R0254		0.125	10
	32 *2	464703	S201-C32	2CDS251001R0324		0.125	10
	40 *3	464802	S201-C40	2CDS251001R0404		0.125	10
	50	551007	S201-C50	2CDS251001R0504		0.125	10
	63	551014	S201-C63	2CDS251001R0634		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	523356	S202-C0.5	2CDS252001R0984		0.250	5
	1	523363	S202-C1	2CDS252001R0014		0.250	5
	1.6	523370	S202-C1.6	2CDS252001R0974		0.250	5
	2	523387	S202-C2	2CDS252001R0024		0.250	5
	3	523394	S202-C3	2CDS252001R0034		0.250	5
	4	523400	S202-C4	2CDS252001R0044		0.250	5
	6	465502	S202-C6	2CDS252001R0064		0.250	5
	8	465601	S202-C8	2CDS252001R0084		0.250	5
	10	465700	S202-C10	2CDS252001R0104		0.250	5
	13	465809	S202-C13	2CDS252001R0134		0.250	5
	16	465908	S202-C16	2CDS252001R0164		0.250	5
	20 *1	466004	S202-C20	2CDS252001R0204		0.250	5
	25	466103	S202-C25	2CDS252001R0254		0.250	5
	32 *2	466202	S202-C32	2CDS252001R0324		0.250	5
	40 *3	466301	S202-C40	2CDS252001R0404		0.250	5
	50	551045	S202-C50	2CDS252001R0504		0.250	5
	63	551052	S202-C63	2CDS252001R0634		0.250	5

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

S 203

S 204

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	1	523424	S203-C1	2CDS253001R0014		0.375	1
	1.6	523431	S203-C1.6	2CDS253001R0974		0.375	1
	2	523448	S203-C2	2CDS253001R0024		0.375	1
	3	523455	S203-C3	2CDS253001R0034		0.375	1
	4	523462	S203-C4	2CDS253001R0044		0.375	1
	6	467506	S203-C6	2CDS253001R0064		0.375	1
	8	467605	S203-C8	2CDS253001R0084		0.375	1
	10	467803	S203-C10	2CDS253001R0104		0.375	1
	13	467902	S203-C13	2CDS253001R0134		0.375	1
	16	468008	S203-C16	2CDS253001R0164		0.375	1
	20 *1	468107	S203-C20	2CDS253001R0204		0.375	1
	25	468206	S203-C25	2CDS253001R0254		0.375	1
	32 *2	468305	S203-C32	2CDS253001R0324		0.375	1
	40 *3	468404	S203-C40	2CDS253001R0404		0.375	1
	50	551069	S203-C50	2CDS253001R0504		0.375	1
	63	551076	S203-C63	2CDS253001R0634		0.375	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	529112	S204-C0.5	2CDS254001R0984		0.500	1
	1	529129	S204-C1	2CDS254001R0014		0.500	1
	1.6	529136	S204-C1.6	2CDS254001R0974		0.500	1
	2	529143	S204-C2	2CDS254001R0024		0.500	1
	3	529150	S204-C3	2CDS254001R0034		0.500	1
	4	529167	S204-C4	2CDS254001R0044		0.500	1
	6	529174	S204-C6	2CDS254001R0064		0.500	1
	8	529181	S204-C8	2CDS254001R0084		0.500	1
	10	529198	S204-C10	2CDS254001R0104		0.500	1
	13	529204	S204-C13	2CDS254001R0134		0.500	1
	16	529211	S204-C16	2CDS254001R0164		0.500	1
	20 *1	529228	S204-C20	2CDS254001R0204		0.500	1
	25	529235	S204-C25	2CDS254001R0254		0.500	1
	32 *2	529242	S204-C32	2CDS254001R0324		0.500	1
	40 *3	529259	S204-C40	2CDS254001R0404		0.500	1
	50	551106	S204-C50	2CDS254001R0504		0.500	1
	63	551113	S204-C63	2CDS254001R0634		0.500	1

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

MCBs

S 200 series C characteristic

S 201 NA

S 203 NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	531665	S201-C0.5NA	2CDS251103R0984		0.250	5
	1	531672	S201-C1NA	2CDS251103R0014		0.250	5
	1.6	531689	S201-C1.6NA	2CDS251103R0974		0.250	5
	2	531696	S201-C2NA	2CDS251103R0024		0.250	5
	3	531702	S201-C3NA	2CDS251103R0034		0.250	5
	4	531726	S201-C4NA	2CDS251103R0044		0.250	5
	6	531733	S201-C6NA	2CDS251103R0064		0.250	5
	8	531740	S201-C8NA	2CDS251103R0084		0.250	5
	10	531757	S201-C10NA	2CDS251103R0104		0.250	5
	13	531764	S201-C13NA	2CDS251103R0134		0.250	5
	16	531771	S201-C16NA	2CDS251103R0164		0.250	5
	20 *1	531788	S201-C20NA	2CDS251103R0204		0.250	5
	25	531795	S201-C25NA	2CDS251103R0254		0.250	5
	32 *2	531801	S201-C32NA	2CDS251103R0324		0.250	5
	40 *3	531818	S201-C40NA	2CDS251103R0404		0.250	5
	50	551021	S201-C50NA	2CDS251103R0504		0.290	5
	63	551038	S201-C63NA	2CDS251103R0634		0.290	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	532365	S203-C0.5NA	2CDS253103R0984		0.500	1
	1	532372	S203-C1NA	2CDS253103R0014		0.500	1
	1.6	532389	S203-C1.6NA	2CDS253103R0974		0.500	1
	2	532402	S203-C2NA	2CDS253103R0024		0.500	1
	3	532419	S203-C3NA	2CDS253103R0034		0.500	1
	4	532426	S203-C4NA	2CDS253103R0044		0.500	1
	6	532433	S203-C6NA	2CDS253103R0064		0.500	1
	8	532440	S203-C8NA	2CDS253103R0084		0.500	1
	10	532457	S203-C10NA	2CDS253103R0104		0.500	1
	13	532464	S203-C13NA	2CDS253103R0134		0.500	1
	16	532471	S203-C16NA	2CDS253103R0164		0.500	1
	20 *1	532488	S203-C20NA	2CDS253103R0204		0.500	1
	25	532495	S203-C25NA	2CDS253103R0254		0.500	1
	32 *2	532501	S203-C32NA	2CDS253103R0324		0.500	1
	40 *1	532518	S203-C40NA	2CDS253103R0404		0.500	1
	50	551083	S203-C50NA	2CDS253103R0504		0.580	1
	63	551090	S203-C63NA	2CDS253103R0634		0.580	1

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

MCBs

S 200 series D characteristic

S 201

S 202

S 200 D characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for circuits which supply loads with high inrush current at the circuit closing (LV/LV transformers, breakdown lamps).
Applications: residential, commercial and industrial.
Standard: IEC/EN 60898-1, IEC/EN 60947-2
Icn=6 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	529938	S201-D0.5	2CDS251001R0981		0.125	10
	1	529945	S201-D1	2CDS251001R0011		0.125	10
	1.6	529952	S201-D1.6	2CDS251001R0971		0.125	10
	2	529969	S201-D2	2CDS251001R0021		0.125	10
	3	529976	S201-D3	2CDS251001R0031		0.125	10
	4	529983	S201-D4	2CDS251001R0041		0.125	10
	6	529990	S201-D6	2CDS251001R0061		0.125	10
	8	530002	S201-D8	2CDS251001R0081		0.125	10
	10	530019	S201-D10	2CDS251001R0101		0.125	10
	13	530026	S201-D13	2CDS251001R0131		0.125	10
	16	530033	S201-D16	2CDS251001R0161		0.125	10
	20 *1	530040	S201-D20	2CDS251001R0201		0.125	10
	25	530057	S201-D25	2CDS251001R0251		0.125	10
	32 *2	530064	S201-D32	2CDS251001R0321		0.125	10
	40 *3	530071	S201-D40	2CDS251001R0401		0.125	10
	50	551991	S201-D50	2CDS251001R0501		0.125	10
	63	552004	S201-D63	2CDS251001R0631		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	530484	S202-D0.5	2CDS252001R0981		0.250	5
	1	530491	S202-D1	2CDS252001R0011		0.250	5
	1.6	530507	S202-D1.6	2CDS252001R0971		0.250	5
	2	530514	S202-D2	2CDS252001R0021		0.250	5
	3	530521	S202-D3	2CDS252001R0031		0.250	5
	4	530538	S202-D4	2CDS252001R0041		0.250	5
	6	530545	S202-D6	2CDS252001R0061		0.250	5
	8	530552	S202-D8	2CDS252001R0081		0.250	5
	10	530583	S202-D10	2CDS252001R0101		0.250	5
	13	530606	S202-D13	2CDS252001R0131		0.250	5
	16	530613	S202-D16	2CDS252001R0161		0.250	5
	20	530637	S202-D20	2CDS252001R0201		0.250	5
	25	530644	S202-D25	2CDS252001R0251		0.250	5
	32	530651	S202-D32	2CDS252001R0321		0.250	5
	40	530668	S202-D40	2CDS252001R0401		0.250	5
	50	552035	S202-D50	2CDS252001R0501		0.250	5
	63	552042	S202-D63	2CDS252001R0631		0.250	5

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

MCBs

S 200 series D characteristic

S 203

S 204

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	530811	S203-D0.5	2CDS253001R0981		0.375	1
	1	530828	S203-D1	2CDS253001R0011		0.375	1
	1.6	530835	S203-D1.6	2CDS253001R0971		0.375	1
	2	530842	S203-D2	2CDS253001R0021		0.375	1
	3	530859	S203-D3	2CDS253001R0031		0.375	1
	4	530866	S203-D4	2CDS253001R0041		0.375	1
	6	530880	S203-D6	2CDS253001R0061		0.375	1
	8	530897	S203-D8	2CDS253001R0081		0.375	1
	10	530903	S203-D10	2CDS253001R0101		0.375	1
	13	530910	S203-D13	2CDS253001R0131		0.375	1
	16	530927	S203-D16	2CDS253001R0161		0.375	1
	20 *1	530934	S203-D20	2CDS253001R0201		0.375	1
	25	530941	S203-D25	2CDS253001R0251		0.375	1
	32 *2	530958	S203-D32	2CDS253001R0321		0.375	1
	40 *3	530965	S203-D40	2CDS253001R0401		0.375	1
	50	552059	S203-D50	2CDS253001R0501		0.375	1
	63	552066	S203-D63	2CDS253001R0631		0.375	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	531122	S204-D0.5	2CDS254001R0981		0.500	1
	1	531139	S204-D1	2CDS254001R0011		0.500	1
	1.6	531146	S204-D1.6	2CDS254001R0971		0.500	1
	2	531153	S204-D2	2CDS254001R0021		0.500	1
	3	531160	S204-D3	2CDS254001R0031		0.500	1
	4	531177	S204-D4	2CDS254001R0041		0.500	1
	6	531184	S204-D6	2CDS254001R0061		0.500	1
	8	531191	S204-D8	2CDS254001R0081		0.500	1
	10	531207	S204-D10	2CDS254001R0101		0.500	1
	13	531214	S204-D13	2CDS254001R0131		0.500	1
	16	531221	S204-D16	2CDS254001R0161		0.500	1
	20	531238	S204-D20	2CDS254001R0201		0.500	1
	25	531290	S204-D25	2CDS254001R0251		0.500	1
	32	531306	S204-D32	2CDS254001R0321		0.500	1
	40	531313	S204-D40	2CDS254001R0401		0.500	1
	50	552097	S204-D50	2CDS254001R0501		0.500	1
	63	552103	S204-D63	2CDS254001R0631		0.500	1

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

S 201 NA

S 203 NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	531979	S201-D0.5NA	2CDS251103R0981		0.250	5
	1	531986	S201-D1NA	2CDS251103R0011		0.250	5
	1.6	531993	S201-D1.6NA	2CDS251103R0971		0.250	5
	2	532006	S201-D2NA	2CDS251103R0021		0.250	5
	3	532013	S201-D3NA	2CDS251103R0031		0.250	5
	4	532020	S201-D4NA	2CDS251103R0041		0.250	5
	6	532037	S201-D6NA	2CDS251103R0061		0.250	5
	8	532044	S201-D8NA	2CDS251103R0081		0.250	5
	10	532051	S201-D10NA	2CDS251103R0101		0.250	5
	13	532068	S201-D13NA	2CDS251103R0131		0.250	5
	16	532099	S201-D16NA	2CDS251103R0161		0.250	5
	20 *1	532105	S201-D20NA	2CDS251103R0201		0.250	5
	25	532112	S201-D25NA	2CDS251103R0251		0.250	5
	32 *2	532129	S201-D32NA	2CDS251103R0321		0.250	5
	40 *3	532136	S201-D40NA	2CDS251103R0401		0.250	5
	50	552011	S201-D50NA	2CDS251103R0501		0.290	5
	63	552028	S201-D63NA	2CDS251103R0631		0.290	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	532761	S203-D0.5NA	2CDS253103R0981		0.500	2
	1	532778	S203-D1NA	2CDS253103R0011		0.500	2
	1.6	532785	S203-D1.6NA	2CDS253103R0971		0.500	2
	2	532792	S203-D2NA	2CDS253103R0021		0.500	2
	3	532808	S203-D3NA	2CDS253103R0031		0.500	2
	4	532815	S203-D4NA	2CDS253103R0041		0.500	2
	6	532822	S203-D6NA	2CDS253103R0061		0.500	2
	8	532839	S203-D8NA	2CDS253103R0081		0.500	2
	10	532846	S203-D10NA	2CDS253103R0101		0.500	2
	13	532860	S203-D13NA	2CDS253103R0131		0.500	2
	16	532877	S203-D16NA	2CDS253103R0161		0.500	2
	20 *1	532884	S203-D20NA	2CDS253103R0201		0.500	2
	25	532891	S203-D25NA	2CDS253103R0251		0.500	2
	32 *2	532907	S203-D32NA	2CDS253103R0321		0.500	2
	40 *3	532914	S203-D40NA	2CDS253103R0401		0.500	2
	50	552073	S203-D50NA	2CDS253103R0501		0.580	2
	63	552080	S203-D63NA	2CDS253103R0631		0.580	2

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

MCBs

S 200 series K characteristic

S 201

S 202

S 200 K (power) characteristic
Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits.
Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=10 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	507196	S201-K0.5	2CDS251001R0157		0.125	10
	1	507202	S201-K1	2CDS251001R0217		0.125	10
	1.6	507219	S201-K1.6	2CDS251001R0257		0.125	10
	2	507226	S201-K2	2CDS251001R0277		0.125	10
	3	507233	S201-K3	2CDS251001R0317		0.125	10
	4	507240	S201-K4	2CDS251001R0337		0.125	10
	6	507257	S201-K6	2CDS251001R0377		0.125	10
	8	507264	S201-K8	2CDS251001R0407		0.125	10
	10	496117	S201-K10	2CDS251001R0427		0.125	10
	13	507271	S201-K13	2CDS251001R0447		0.125	10
	16	496124	S201-K16	2CDS251001R0467		0.125	10
	20	507288	S201-K20	2CDS251001R0487		0.125	10
	25	507295	S201-K25	2CDS251001R0517		0.125	10
	32	496131	S201-K32	2CDS251001R0537		0.125	10
	40	507301	S201-K40	2CDS251001R0557		0.125	10
	50	551120	S201-K50	2CDS251001R0577		0.125	10
	63	551137	S201-K63	2CDS251001R0607		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	507318	S202-K0.5	2CDS252001R0157		0.250	5
	1	507325	S202-K1	2CDS252001R0217		0.250	5
	1.6	507332	S202-K1.6	2CDS252001R0257		0.250	5
	2	507349	S202-K2	2CDS252001R0277		0.250	5
	3	507356	S202-K3	2CDS252001R0317		0.250	5
	4	507363	S202-K4	2CDS252001R0337		0.250	5
	6	507370	S202-K6	2CDS252001R0377		0.250	5
	8	507387	S202-K8	2CDS252001R0407		0.250	5
	10	507394	S202-K10	2CDS252001R0427		0.250	5
	13	507400	S202-K13	2CDS252001R0447		0.250	5
	16	507417	S202-K16	2CDS252001R0467		0.250	5
	20	507424	S202-K20	2CDS252001R0487		0.250	5
	25	507431	S202-K25	2CDS252001R0517		0.250	5
	32	507448	S202-K32	2CDS252001R0537		0.250	5
	40	507455	S202-K40	2CDS252001R0557		0.250	5
	50	551168	S202-K50	2CDS252001R0577		0.250	5
	63	551175	S202-K63	2CDS252001R0607		0.250	5

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

S 203

S 204

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	507462	S203-K0.5	2CDS253001R0157		0.375	1
	1	507479	S203-K1	2CDS253001R0217		0.375	1
	1.6	507486	S203-K1.6	2CDS253001R0257		0.375	1
	2	507493	S203-K2	2CDS253001R0277		0.375	1
	3	507509	S203-K3	2CDS253001R0317		0.375	1
	4	507516	S203-K4	2CDS253001R0337		0.375	1
	6	507523	S203-K6	2CDS253001R0377		0.375	1
	8	507530	S203-K8	2CDS253001R0407		0.375	1
	10	496148	S203-K10	2CDS253001R0427		0.375	1
	13	507547	S203-K13	2CDS253001R0447		0.375	1
	16	496155	S203-K16	2CDS253001R0467		0.375	1
	20	507554	S203-K20	2CDS253001R0487		0.375	1
	25	507561	S203-K25	2CDS253001R0517		0.375	1
	32	496162	S203-K32	2CDS253001R0537		0.375	1
	40	507578	S203-K40	2CDS253001R0557		0.375	1
	50	551182	S203-K50	2CDS253001R0577		0.375	1
	63	551199	S203-K63	2CDS253001R0607		0.375	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	529266	S204-K0.5	2CDS254001R0157		0.500	1
	1	529273	S204-K1	2CDS254001R0217		0.500	1
	1.6	529280	S204-K1.6	2CDS254001R0257		0.500	1
	2	529297	S204-K2	2CDS254001R0277		0.500	1
	3	529303	S204-K3	2CDS254001R0317		0.500	1
	4	529310	S204-K4	2CDS254001R0337		0.500	1
	6	529327	S204-K6	2CDS254001R0377		0.500	1
	8	529334	S204-K8	2CDS254001R0407		0.500	1
	10	529341	S204-K10	2CDS254001R0427		0.500	1
	13	529358	S204-K13	2CDS254001R0447		0.500	1
	16	529365	S204-K16	2CDS254001R0467		0.500	1
	20	529372	S204-K20	2CDS254001R0487		0.500	1
	25	529389	S204-K25	2CDS254001R0517		0.500	1
	32	529396	S204-K32	2CDS254001R0537		0.500	1
	40	529402	S204-K40	2CDS254001R0557		0.500	1
	50	551229	S204-K50	2CDS254001R0577		0.500	1
	63	551236	S204-K63	2CDS254001R0607		0.500	1

1

MCBs

S 200 series K characteristic

S 201 NA

S 203 NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	531825	S201-K0.5NA	2CDS251103R0157		0.250	5
	1	531832	S201-K1NA	2CDS251103R0217		0.250	5
	1.6	531849	S201-K1.6NA	2CDS251103R0257		0.250	5
	2	531856	S201-K2NA	2CDS251103R0277		0.250	5
	3	531863	S201-K3NA	2CDS251103R0317		0.250	5
	4	531870	S201-K4NA	2CDS251103R0337		0.250	5
	6	531887	S201-K6NA	2CDS251103R0377		0.250	5
	8	531894	S201-K8NA	2CDS251103R0407		0.250	5
	10	531900	S201-K10NA	2CDS251103R0427		0.250	5
	13	531917	S201-K13NA	2CDS251103R0447		0.250	5
	16	531924	S201-K16NA	2CDS251103R0467		0.250	5
	20	531931	S201-K20NA	2CDS251103R0487		0.250	5
	25	531948	S201-K25NA	2CDS251103R0517		0.250	5
	32	531955	S201-K32NA	2CDS251103R0537		0.250	5
	40	531962	S201-K40NA	2CDS251103R0557		0.250	5
	50	551144	S201-K50NA	2CDS251103R0577		0.250	5
	63	551151	S201-K63NA	2CDS251103R0607		0.250	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	532617	S203-K0.5NA	2CDS253103R0157		0.500	1
	1	532624	S203-K1NA	2CDS253103R0217		0.500	1
	1.6	532631	S203-K1.6NA	2CDS253103R0257		0.500	1
	2	532648	S203-K2NA	2CDS253103R0277		0.500	1
	3	532655	S203-K3NA	2CDS253103R0317		0.500	1
	4	532662	S203-K4NA	2CDS253103R0337		0.500	1
	6	532679	S203-K6NA	2CDS253103R0377		0.500	1
	8	532686	S203-K8NA	2CDS253103R0407		0.500	1
	10	532693	S203-K10NA	2CDS253103R0427		0.500	1
	13	532709	S203-K13NA	2CDS253103R0447		0.500	1
	16	532716	S203-K16NA	2CDS253103R0467		0.500	1
	20	532723	S203-K20NA	2CDS253103R0487		0.500	1
	25	532730	S203-K25NA	2CDS253103R0517		0.500	1
	32	532747	S203-K32NA	2CDS253103R0537		0.500	1
	40	532754	S203-K40NA	2CDS253103R0557		0.500	1
	50	551205	S203-K50NA	2CDS253103R0577		0.500	1
	63	551212	S203-K63NA	2CDS253103R0607		0.500	1

MCBs

S 200 series Z characteristic

S 201

S 202

S 200 Z characteristic
Function: protection and control of the electronic circuits against lower and long duration overloads and short-circuits.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=10 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	530309	S201-Z0.5	2CDS251001R0158		0.125	10
	1	530330	S201-Z1	2CDS251001R0218		0.125	10
	1.6	530347	S201-Z1.6	2CDS251001R0258		0.125	10
	2	530354	S201-Z2	2CDS251001R0278		0.125	10
	3	530361	S201-Z3	2CDS251001R0318		0.125	10
	4	530378	S201-Z4	2CDS251001R0338		0.125	10
	6	530408	S201-Z6	2CDS251001R0378		0.125	10
	8	530415	S201-Z8	2CDS251001R0408		0.125	10
	10	530422	S201-Z10	2CDS251001R0428		0.125	10
	16	530439	S201-Z16	2CDS251001R0468		0.125	10
	20	530446	S201-Z20	2CDS251001R0488		0.125	10
	25	530453	S201-Z25	2CDS251001R0518		0.125	10
	32	530460	S201-Z32	2CDS251001R0538		0.125	10
	40	530477	S201-Z40	2CDS251001R0558		0.125	10
	50	551915	S201-Z50	2CDS251001R0578		0.125	10
	63	551922	S201-Z63	2CDS251001R0608		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	530682	S202-Z0.5	2CDS252001R0158		0.250	5
	1	530675	S202-Z1	2CDS252001R0218		0.250	5
	1.6	530699	S202-Z1.6	2CDS252001R0258		0.250	5
	2	530705	S202-Z2	2CDS252001R0278		0.250	5
	3	530712	S202-Z3	2CDS252001R0318		0.250	5
	4	530729	S202-Z4	2CDS252001R0338		0.250	5
	6	530736	S202-Z6	2CDS252001R0378		0.250	5
	8	530743	S202-Z8	2CDS252001R0408		0.250	5
	10	530750	S202-Z10	2CDS252001R0428		0.250	5
	16	530767	S202-Z16	2CDS252001R0468		0.250	5
	20	530774	S202-Z20	2CDS252001R0488		0.250	5
	25	530781	S202-Z25	2CDS252001R0518		0.250	5
	32	530798	S202-Z32	2CDS252001R0538		0.250	5
	40	530804	S202-Z40	2CDS252001R0558		0.250	5
	50	551939	S202-Z50	2CDS252001R0578		0.250	5
	63	551946	S202-Z63	2CDS252001R0608		0.250	5

MCBs

S 200 series Z characteristic

S 203

S 204

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	530972	S203-Z0.5	2CDS253001R0158		0.375	1
	1	530989	S203-Z1	2CDS253001R0218		0.375	1
	1.6	530996	S203-Z1.6	2CDS253001R0258		0.375	1
	2	531009	S203-Z2	2CDS253001R0278		0.375	1
	3	531016	S203-Z3	2CDS253001R0318		0.375	1
	4	531023	S203-Z4	2CDS253001R0338		0.375	1
	6	531030	S203-Z6	2CDS253001R0378		0.375	1
	8	531047	S203-Z8	2CDS253001R0408		0.375	1
	10	531054	S203-Z10	2CDS253001R0428		0.375	1
	16	531061	S203-Z16	2CDS253001R0468		0.375	1
	20	531078	S203-Z20	2CDS253001R0488		0.375	1
	25	531085	S203-Z25	2CDS253001R0518		0.375	1
	32	531092	S203-Z32	2CDS253001R0538		0.375	1
	40	531108	S203-Z40	2CDS253001R0558		0.375	1
	50	551953	S203-Z50	2CDS253001R0578		0.375	1
	63	551960	S203-Z63	2CDS253001R0608		0.375	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	530248	S204-Z0.5	2CDS254001R0158		0.500	1
	1	531320	S204-Z1	2CDS254001R0218		0.500	1
	1.6	531443	S204-Z1.6	2CDS254001R0258		0.500	1
	2	531436	S204-Z2	2CDS254001R0278		0.500	1
	3	531337	S204-Z3	2CDS254001R0318		0.500	1
	4	531344	S204-Z4	2CDS254001R0338		0.500	1
	6	531351	S204-Z6	2CDS254001R0378		0.500	1
	8	531368	S204-Z8	2CDS254001R0408		0.500	1
	10	531375	S204-Z10	2CDS254001R0428		0.500	1
	16	531382	S204-Z16	2CDS254001R0468		0.500	1
	20	531399	S204-Z20	2CDS254001R0488		0.500	1
	25	531405	S204-Z25	2CDS254001R0518		0.500	1
	32	531412	S204-Z32	2CDS254001R0538		0.500	1
	40	531429	S204-Z40	2CDS254001R0558		0.500	1
	50	551977	S204-Z50	2CDS254001R0578		0.500	1
	63	551984	S204-Z63	2CDS254001R0608		0.500	1

S 201 NA

S 203 NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	532143	S201-Z0.5NA	2CDS251103R0158		0.260	5
	1	532150	S201-Z1NA	2CDS251103R0218		0.260	5
	1.6	532167	S201-Z1.6NA	2CDS251103R0258		0.260	5
	2	532174	S201-Z2NA	2CDS251103R0278		0.260	5
	3	532181	S201-Z3NA	2CDS251103R0318		0.260	5
	4	532198	S201-Z4NA	2CDS251103R0338		0.260	5
	6	532204	S201-Z6NA	2CDS251103R0378		0.260	5
	8	532211	S201-Z8NA	2CDS251103R0408		0.260	5
	10	532228	S201-Z10NA	2CDS251103R0428		0.260	5
	16	532235	S201-Z16NA	2CDS251103R0468		0.260	5
	20	532242	S201-Z20NA	2CDS251103R0488		0.260	5
	25	532259	S201-Z25NA	2CDS251103R0518		0.260	5
	32	532266	S201-Z32NA	2CDS251103R0538		0.260	5
	40	532273	S201-Z40NA	2CDS251103R0558		0.260	5
	50	552127	S201-Z50NA	2CDS251103R0578		0.320	5
	63	552134	S201-Z63NA	2CDS251103R0608		0.320	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	53292 1	S203-Z0.5NA	2CDS253103R0158		0.520	1
	1	53293 8	S203-Z1NA	2CDS253103R0218		0.520	1
	1.6	53294 5	S203-Z1.6NA	2CDS253103R0258		0.520	1
	2	53295 2	S203-Z2NA	2CDS253103R0278		0.520	1
	3	53297 6	S203-Z3NA	2CDS253103R0318		0.520	1
	4	53298 3	S203-Z4NA	2CDS253103R0338		0.520	1
	6	53299 0	S203-Z6NA	2CDS253103R0378		0.520	1
	8	53300 3	S203-Z8NA	2CDS253103R0408		0.520	1
	10	53301 0	S203-Z10NA	2CDS253103R0428		0.520	1
	16	53302 7	S203-Z16NA	2CDS253103R0468		0.520	1
	20	53305 8	S203-Z20NA	2CDS253103R0488		0.520	1
	25	53306 5	S203-Z25NA	2CDS253103R0518		0.520	1
	32	53307 2	S203-Z32NA	2CDS253103R0538		0.520	1
	40	53308 9	S203-Z40NA	2CDS253103R0558		0.520	1
	50	55214 1	S203-Z50NA	2CDS253103R0578		0.640	1
	63	55216 5	S203-Z63NA	2CDS253103R0608		0.640	1

MCBs

S 200 series M-B characteristic

S 201 M

S 202 M

S 203 M

S 204 M

S 200 M-B characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for people and large length of cables in TN and IT systems.
Applications: residential, commercial and industrial.
Standard: IEC/EN 60898-1, IEC/EN 60947-2
Icn=10 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	549424	S201M-B6	2CDS271001R0065		0.125	10
	10	549431	S201M-B10	2CDS271001R0105		0.125	10
	13	549448	S201M-B13	2CDS271001R0135		0.125	10
	16	549455	S201M-B16	2CDS271001R0165		0.125	10
	20 *1	549462	S201M-B20	2CDS271001R0205		0.125	10
	25	549479	S201M-B25	2CDS271001R0255		0.125	10
	32 *2	549486	S201M-B32	2CDS271001R0325		0.125	10
	40 *3	549493	S201M-B40	2CDS271001R0405		0.125	10
	50	543811	S201M-B50	2CDS271001R0505		0.125	10
	63	543828	S201M-B63	2CDS271001R0635		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	549585	S202M-B6	2CDS272001R0065		0.250	5
	10	549592	S202M-B10	2CDS272001R0105		0.250	5
	13	549608	S202M-B13	2CDS272001R0135		0.250	5
	16	549615	S202M-B16	2CDS272001R0165		0.250	5
	20	549622	S202M-B20	2CDS272001R0205		0.250	5
	25	549639	S202M-B25	2CDS272001R0255		0.250	5
	32	549646	S202M-B32	2CDS272001R0325		0.250	5
	40	549653	S202M-B40	2CDS272001R0405		0.250	5
	50	543859	S202M-B50	2CDS272001R0505		0.250	5
	63	543866	S202M-B63	2CDS272001R0635		0.250	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	549660	S203M-B 6	2CDS273001R0065		0.375	1
	10	549677	S203M-B10	2CDS273001R0105		0.375	1
	13	549684	S203M-B13	2CDS273001R0135		0.375	1
	16	549691	S203M-B16	2CDS273001R0165		0.375	1
	20 *1	549707	S203M-B20	2CDS273001R0205		0.375	1
	25	549714	S203M-B25	2CDS273001R0255		0.375	1
	32 *2	549721	S203M-B32	2CDS273001R0325		0.375	1
	40 *3	549738	S203M-B40	2CDS273001R0405		0.375	1
	50	543873	S203M-B50	2CDS273001R0505		0.375	1
	63	543880	S203M-B63	2CDS273001R0635		0.375	1

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

S 201 M NA

S 203 M NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	549820	S204M-B 6	2CDS274001R0065		0.500	1
	10	549837	S204M-B10	2CDS274001R0105		0.500	1
	13	549844	S204M-B13	2CDS274001R0135		0.500	1
	16	549851	S204M-B16	2CDS274001R0165		0.500	1
	20	549868	S204M-B20	2CDS274001R0205		0.500	1
	25	549875	S204M-B25	2CDS274001R0255		0.500	1
	32	549882	S204M-B32	2CDS274001R0325		0.500	1
	40	549899	S204M-B40	2CDS274001R0405		0.500	1
	50	543910	S204M-B50	2CDS274001R0505		0.500	1
	63	543927	S204M-B63	2CDS274001R0635		0.500	1

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	6	549509	S201M-B6NA	2CDS271103R0065		0.250	5
	10	549516	S201M-B10NA	2CDS271103R0105		0.250	5
	13	549523	S201M-B13NA	2CDS271103R0135		0.250	5
	16	549530	S201M-B16NA	2CDS271103R0165		0.250	5
	20 *1	549547	S201M-B20NA	2CDS271103R0205		0.250	5
	25	549554	S201M-B25NA	2CDS271103R0255		0.250	5
	32 *2	549561	S201M-B32NA	2CDS271103R0325		0.250	5
	40 *3	549578	S201M-B40NA	2CDS271103R0405		0.250	5
	50	543835	S201M-B50NA	2CDS271103R0505		0.250	5
	63	543842	S201M-B63NA	2CDS271103R0635		0.250	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	6	549745	S203M-B6NA	2CDS273103R0065		0.500	1
	10	549752	S203M-B10NA	2CDS273103R0105		0.500	1
	13	549769	S203M-B13NA	2CDS273103R0135		0.500	1
	16	549776	S203M-B16NA	2CDS273103R0165		0.500	1
	20 *1	549783	S203M-B20NA	2CDS273103R0205		0.500	1
	25	549790	S203M-B25NA	2CDS273103R0255		0.500	1
	32 *2	549806	S203M-B32NA	2CDS273103R0325		0.500	1
	40 *3	549813	S203M-B40NA	2CDS273103R0405		0.500	1
	50	543897	S203M-B50NA	2CDS273103R0505		0.500	1
	63	543903	S203M-B63NA	2CDS273103R0635		0.580	1

*1 suitable for flow-type heaters 12 kW

*2 suitable for flow-type heaters 18 kW

*3 suitable for flow-type heaters 21, 24 and 27 kW

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MCBs

S 200 series M-C characteristic

S 201 M

S 202 M

S 200 M-C characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for resistive and inductive loads with low inrush current.
Applications: residential, commercial and industrial.
Standard: IEC/EN 60898-1, IEC/EN 60947-2
Icn=10 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	549905	S201M-C0.5	2CDS271001R0984		0.125	10
	1	549929	S201M-C1	2CDS271001R0014		0.125	10
	1.6	549912	S201M-C1.6	2CDS271001R0974		0.125	10
	2	549936	S201M-C2	2CDS271001R0024		0.125	10
	3	549943	S201M-C3	2CDS271001R0034		0.125	10
	4	549950	S201M-C4	2CDS271001R0044		0.125	10
	6	549967	S201M-C6	2CDS271001R0064		0.125	10
	8	549974	S201M-C8	2CDS271001R0084		0.125	10
	10	549981	S201M-C10	2CDS271001R0104		0.125	10
	13	549998	S201M-C13	2CDS271001R0134		0.125	10
	16	550000	S201M-C16	2CDS271001R0164		0.125	10
	20 *1	550017	S201M-C20	2CDS271001R0204		0.125	10
	25	550024	S201M-C25	2CDS271001R0254		0.125	10
	32 *2	550031	S201M-C32	2CDS271001R0324		0.125	10
	40 *3	550048	S201M-C40	2CDS271001R0404		0.125	10
	50	543934	S201M-C50	2CDS271001R0504		0.125	10
	63	543941	S201M-C63	2CDS271001R0634		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	550208	S202M-C0.5	2CDS272001R0984		0.250	5
	1	550222	S202M-C1	2CDS272001R0014		0.250	5
	1.6	550215	S202M-C1.6	2CDS272001R0974		0.250	5
	2	550239	S202M-C2	2CDS272001R0024		0.250	5
	3	550246	S202M-C3	2CDS272001R0034		0.250	5
	4	550253	S202M-C4	2CDS272001R0044		0.250	5
	6	550260	S202M-C6	2CDS272001R0064		0.250	5
	8	550277	S202M-C8	2CDS272001R0084		0.250	5
	10	550284	S202M-C10	2CDS272001R0104		0.250	5
	13	550291	S202M-C13	2CDS272001R0134		0.250	5
	16	550307	S202M-C16	2CDS272001R0164		0.250	5
	20	550314	S202M-C20	2CDS272001R0204		0.250	5
	25	550321	S202M-C25	2CDS272001R0254		0.250	5
	32	550338	S202M-C32	2CDS272001R0324		0.250	5
	40	550345	S202M-C40	2CDS272001R0404		0.250	5
	50	543972	S202M-C50	2CDS272001R0504		0.250	5
	63	543989	S202M-C63	2CDS272001R0634		0.250	5

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

S 203 M

S 204 M

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	550352	S203M-C0.5	2CDS273001R0984		0.375	1
	1	550376	S203M-C1	2CDS273001R0014		0.375	1
	1.6	550369	S203M-C1.6	2CDS273001R0974		0.375	1
	2	550383	S203M-C2	2CDS273001R0024		0.375	1
	3	550390	S203M-C3	2CDS273001R0034		0.375	1
	4	550406	S203M-C4	2CDS273001R0044		0.375	1
	6	550413	S203M-C6	2CDS273001R0064		0.375	1
	8	550420	S203M-C8	2CDS273001R0084		0.375	1
	10	550437	S203M-C10	2CDS273001R0104		0.375	1
	13	550444	S203M-C13	2CDS273001R0134		0.375	1
	16	550451	S203M-C16	2CDS273001R0164		0.375	1
	20 *1	550468	S203M-C20	2CDS273001R0204		0.375	1
	25	550475	S203M-C25	2CDS273001R0254		0.375	1
	32 *2	550482	S203M-C32	2CDS273001R0324		0.375	1
	40 *3	550499	S203M-C40	2CDS273001R0404		0.375	1
	50	543996	S203M-C50	2CDS273001R0504		0.375	1
	63	544009	S203M-C63	2CDS273001R0634		0.375	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	550659	S204M-C0.5	2CDS274001R0984		0.500	1
	1	550673	S204M-C1	2CDS274001R0014		0.500	1
	1.6	550666	S204M-C1.6	2CDS274001R0974		0.500	1
	2	550680	S204M-C2	2CDS274001R0024		0.500	1
	3	550697	S204M-C3	2CDS274001R0034		0.500	1
	4	550703	S204M-C4	2CDS274001R0044		0.500	1
	6	550710	S204M-C6	2CDS274001R0064		0.500	1
	8	550727	S204M-C8	2CDS274001R0084		0.500	1
	10	550734	S204M-C10	2CDS274001R0104		0.500	1
	13	550741	S204M-C13	2CDS274001R0134		0.500	1
	16	550758	S204M-C16	2CDS274001R0164		0.500	1
	20	550765	S204M-C20	2CDS274001R0204		0.500	1
	25	550772	S204M-C25	2CDS274001R0254		0.500	1
	32	550789	S204M-C32	2CDS274001R0324		0.500	1
	40	550796	S204M-C40	2CDS274001R0404		0.500	1
	50	544030	S204M-C50	2CDS274001R0504		0.500	1
	63	544047	S204M-C63	2CDS274001R0634		0.500	1

*1 suitable for flow-type heaters 12 kW

*2 suitable for flow-type heaters 18 kW

*3 suitable for flow-type heaters 21, 24 and 27 kW

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MCBs

S 200 series M-C characteristic

S 201 M NA

S 203 M NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	550055	S201M-C0.5NA	2CDS271103R0984		0.250	5
	1	550079	S201M-C1NA	2CDS271103R0014		0.250	5
	1.6	550062	S201M-C1.6NA	2CDS271103R0974		0.250	5
	2	550086	S201M-C2NA	2CDS271103R0024		0.250	5
	3	550093	S201M-C3NA	2CDS271103R0034		0.250	5
	4	550109	S201M-C4NA	2CDS271103R0044		0.250	5
	6	550116	S201M-C6NA	2CDS271103R0064		0.250	5
	8	550123	S201M-C8NA	2CDS271103R0084		0.250	5
	10	550130	S201M-C10NA	2CDS271103R0104		0.250	5
	13	550147	S201M-C13NA	2CDS271103R0134		0.250	5
	16	550154	S201M-C16NA	2CDS271103R0164		0.250	5
	20 *1	550161	S201M-C20NA	2CDS271103R0204		0.250	5
	25	550178	S201M-C25NA	2CDS271103R0254		0.250	5
	32 *2	550185	S201M-C32NA	2CDS271103R0324		0.250	5
	40 *3	550192	S201M-C40NA	2CDS271103R0404		0.250	5
	50	543958	S201M-C50NA	2CDS271103R0504		0.250	5
	63	543965	S201M-C63NA	2CDS271103R0634		0.250	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	550512	S203M-C0.5NA	2CDS273103R0984		0.500	1
	1	550529	S203M-C1NA	2CDS273103R0014		0.500	1
	1.6	550505	S203M-C1.6NA	2CDS273103R0974		0.500	1
	2	550536	S203M-C2NA	2CDS273103R0024		0.500	1
	3	550543	S203M-C3NA	2CDS273103R0034		0.500	1
	4	550550	S203M-C4NA	2CDS273103R0044		0.500	1
	6	550567	S203M-C6NA	2CDS273103R0064		0.500	1
	8	550574	S203M-C8NA	2CDS273103R0084		0.500	1
	10	550581	S203M-C10NA	2CDS273103R0104		0.500	1
	13	550598	S203M-C13NA	2CDS273103R0134		0.500	1
	16	550604	S203M-C16NA	2CDS273103R0164		0.500	1
	20 *1	550611	S203M-C20NA	2CDS273103R0204		0.500	1
	25	550628	S203M-C25NA	2CDS273103R0254		0.500	1
	32 *2	550635	S203M-C32NA	2CDS273103R0324		0.500	1
	40 *3	550642	S203M-C40NA	2CDS273103R0404		0.500	1
	50	544016	S203M-C50NA	2CDS273103R0504		0.580	1
	63	544023	S203M-C63NA	2CDS273103R0634		0.580	1

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

MCBs

S 200 series M-D characteristic

S 201 M

S 202 M

S 200 M-D characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for circuits which supply loads with high inrush current at the circuit closing (LV/LV transformers, breakdown lamps).
Applications: residential, commercial and industrial.
Standard: IEC/EN 60898-1, IEC/EN 60947-2
Icn=10 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	599832	S201M-D0.5	2CDS271001R0981		0.125	10
	1	500313	S201M-D1	2CDS271001R0011		0.125	10
	1.6	599825	S201M-D1.6	2CDS271001R0971		0.125	10
	2	599337	S201M-D2	2CDS271001R0021		0.125	10
	3	599351	S201M-D3	2CDS271001R0031		0.125	10
	4	599357	S201M-D4	2CDS271001R0041		0.125	10
	6	599399	S201M-D6	2CDS271001R0061		0.125	10
	8	599405	S201M-D8	2CDS271001R0081		0.125	10
	10	599429	S201M-D10	2CDS271001R0101		0.125	10
	13	663267	S201M-D13	2CDS271001R0131		0.125	10
	16	599450	S201M-D16	2CDS271001R0161		0.125	10
	20 *1	500467	S201M-D20	2CDS271001R0201		0.125	10
	25	599498	S201M-D25	2CDS271001R0251		0.125	10
	32 *2	599566	S201M-D32	2CDS271001R0321		0.125	10
	40 *3	599610	S201M-D40	2CDS271001R0401		0.125	10
	50	599702	S201M-D50	2CDS271001R0501		0.125	10
	63	599818	S201M-D63	2CDS271001R0631		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	600880	S202M-D0.5	2CDS272001R0981		0.250	5
	1	600361	S202M-D1	2CDS272001R0011		0.250	5
	1.6	600873	S202M-D1.6	2CDS272001R0971		0.250	5
	2	600385	S202M-D2	2CDS272001R0021		0.250	5
	3	600408	S202M-D3	2CDS272001R0031		0.250	5
	4	600422	S202M-D4	2CDS272001R0041		0.250	5
	6	600446	S202M-D6	2CDS272001R0061		0.250	5
	8	600453	S202M-D8	2CDS272001R0081		0.250	5
	10	600477	S202M-D10	2CDS272001R0101		0.250	5
	13	663274	S202M-D13	2CDS272001R0131		0.250	5
	16	600507	S202M-D16	2CDS272001R0161		0.250	5
	20	600514	S202M-D20	2CDS272001R0201		0.250	5
	25	600545	S202M-D25	2CDS272001R0251		0.250	5
	32	600613	S202M-D32	2CDS272001R0321		0.250	5
	40	600668	S202M-D40	2CDS272001R0401		0.250	5
	50	600750	S202M-D50	2CDS272001R0501		0.250	5
	63	600866	S202M-D63	2CDS272001R0631		0.250	5

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

MCBs

S 200 series M-D characteristic

S 203 M

S 204 M

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	601412	S203M-D0.5	2CDS273001R0981		0.375	1
	1	600897	S203M-D1	2CDS273001R0011		0.375	1
	1.6	601405	S203M-D1.6	2CDS273001R0971		0.375	1
	2	600910	S203M-D2	2CDS273001R0021		0.375	1
	3	600934	S203M-D3	2CDS273001R0031		0.375	1
	4	600958	S203M-D4	2CDS273001R0041		0.375	1
	6	600972	S203M-D6	2CDS273001R0061		0.375	1
	8	600989	S203M-D8	2CDS273001R0081		0.375	1
	10	601009	S203M-D10	2CDS273001R0101		0.375	1
	13	663281	S203M-D13	2CDS273001R0131		0.375	1
	16	601030	S203M-D16	2CDS273001R0161		0.375	1
	20 *1	601047	S203M-D20	2CDS273001R0201		0.375	1
	25	601078	S203M-D25	2CDS273001R0251		0.375	1
	32 *2	601146	S203M-D32	2CDS273001R0321		0.375	1
	40 *3	601191	S203M-D40	2CDS273001R0401		0.375	1
	50	601283	S203M-D50	2CDS273001R0501		0.375	1
	63	601399	S203M-D63	2CDS273001R0631		0.375	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	602143	S204M-D0.5	2CDS274001R0981		0.500	1
	1	601634	S204M-D1	2CDS274001R0011		0.500	1
	1.6	602136	S204M-D1.6	2CDS274001R0971		0.500	1
	2	601658	S204M-D2	2CDS274001R0021		0.500	1
	3	601672	S204M-D3	2CDS274001R0031		0.500	1
	4	601696	S204M-D4	2CDS274001R0041		0.500	1
	6	601719	S204M-D6	2CDS274001R0061		0.500	1
	8	601726	S204M-D8	2CDS274001R0081		0.500	1
	10	601740	S204M-D10	2CDS274001R0101		0.500	1
	13	663298	S204M-D13	2CDS274001R0131		0.500	1
	16	601771	S204M-D16	2CDS274001R0161		0.500	1
	20	601788	S204M-D20	2CDS274001R0201		0.500	1
	25	601818	S204M-D25	2CDS274001R0251		0.500	1
	32	601887	S204M-D32	2CDS274001R0321		0.500	1
	40	601931	S204M-D40	2CDS274001R0401		0.500	1
	50	602013	S204M-D50	2CDS274001R0501		0.500	1
	63	602129	S204M-D63	2CDS274001R0631		0.500	1

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

S 201 M NA

S 203 M NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	600354	S201M-D0.5NA	2CDS271103R0981		0.250	5
	1	599849	S201M-D1NA	2CDS271103R0011		0.250	5
	1.6	600347	S201-MD1.6NA	2CDS271103R0971		0.250	5
	2	599863	S201M-D2NA	2CDS271103R0021		0.250	5
	3	599887	S201M-D3NA	2CDS271103R0031		0.250	5
	4	599900	S201M-D4NA	2CDS271103R0041		0.250	5
	6	599924	S201M-D6NA	2CDS271103R0061		0.250	5
	8	599931	S201M-D8NA	2CDS271103R0081		0.250	5
	10	599948	S201M-D10NA	2CDS271103R0101		0.250	5
	13	663304	S201M-D13NA	2CDS271103R0131		0.250	5
	16	599979	S201M-D16NA	2CDS271103R0161		0.250	5
	20 *1	599986	S201M-D20NA	2CDS271103R0201		0.250	5
	25	600019	S201M-D25NA	2CDS271103R0251		0.250	5
	32 *2	600088	S201M-D32NA	2CDS271103R0321		0.250	5
	40 *3	600132	S201M-D40NA	2CDS271103R0401		0.250	5
	50	600224	S201M-D50NA	2CDS271103R0501		0.290	5
	63	600330	S201M-D63NA	2CDS271103R0631		0.290	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	663311	S203M-D0.5NA	2CDS273103R0981		0.500	1
	1	663328	S203M-D1NA	2CDS273103R0011		0.500	1
	1.6	663335	S203M-D1.6NA	2CDS273103R0971		0.500	1
	2	663342	S203M-D2NA	2CDS273103R0021		0.500	1
	3	663359	S203M-D3NA	2CDS273103R0031		0.500	1
	4	663366	S203M-D4NA	2CDS273103R0041		0.500	1
	6	663373	S203M-D6NA	2CDS273103R0061		0.500	1
	8	663380	S203M-D8NA	2CDS273103R0081		0.500	1
	10	663397	S203M-D10NA	2CDS273103R0101		0.500	1
	13	663403	S203M-D13NA	2CDS273103R0131		0.500	1
	16	663410	S203M-D16NA	2CDS273103R0161		0.500	1
	20 *1	663427	S203M-D20NA	2CDS273103R0201		0.500	1
	25	663434	S203M-D25NA	2CDS273103R0251		0.500	1
	32 *2	663441	S203M-D32NA	2CDS273103R0321		0.500	1
	40 *3	663458	S203M-D40NA	2CDS273103R0401		0.500	1
	50	663465	S203M-D50NA	2CDS273103R0501		0.580	1
	63	663472	S203M-D63NA	2CDS273103R0631		0.580	1

*1 suitable for flow-type heaters 12 kW
*2 suitable for flow-type heaters 18 kW
*3 suitable for flow-type heaters 21, 24 and 27 kW

MCBs

S 200 series M-K characteristic

S 201 M

S 202 M

S 200 M-K (power) characteristic
Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits.
Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=15 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	599436	S201M-K0.5	2CDS271001R0157		0.125	10
	1	599474	S201M-K1	2CDS271001R0217		0.125	10
	1.6	599504	S201M-K1.6	2CDS271001R0257		0.125	10
	2	599528	S201M-K2	2CDS271001R0277		0.125	10
	3	599542	S201M-K3	2CDS271001R0317		0.125	10
	4	599573	S201M-K4	2CDS271001R0337		0.125	10
	6	599597	S201M-K6	2CDS271001R0377		0.125	10
	8	599627	S201M-K8	2CDS271001R0407		0.125	10
	10	599641	S201M-K10	2CDS271001R0427		0.125	10
	13	659390	S201M-K13	2CDS271001R0447		0.125	10
	16	599665	S201M-K16	2CDS271001R0467		0.125	10
	20	599689	S201M-K20	2CDS271001R0487		0.125	10
	25	599719	S201M-K25	2CDS271001R0517		0.125	10
	32	599733	S201M-K32	2CDS271001R0537		0.125	10
	40	599757	S201M-K40	2CDS271001R0557		0.125	10
	50	599771	S201M-K50	2CDS271001R0577		0.125	10
	63	599795	S201M-K63	2CDS271001R0607		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	600484	S202M-K0.5	2CDS272001R0157		0.250	5
	1	600521	S202M-K1	2CDS272001R0217		0.250	5
	1.6	600552	S202M-K1.6	2CDS272001R0257		0.250	5
	2	600576	S202M-K2	2CDS272001R0277		0.250	5
	3	600590	S202M-K3	2CDS272001R0317		0.250	5
	4	600620	S202M-K4	2CDS272001R0337		0.250	5
	6	600644	S202M-K6	2CDS272001R0377		0.250	5
	8	600675	S202M-K8	2CDS272001R0407		0.250	5
	10	600699	S202M-K10	2CDS272001R0427		0.250	5
	13	659406	S202M-K13	2CDS272001R0447		0.250	5
	16	600712	S202M-K16	2CDS272001R0467		0.250	5
	20	600736	S202M-K20	2CDS272001R0487		0.250	5
	25	600767	S202M-K25	2CDS272001R0517		0.250	5
	32	600781	S202M-K32	2CDS272001R0537		0.250	5
	40	600804	S202M-K40	2CDS272001R0557		0.250	5
	50	600828	S202M-K50	2CDS272001R0577		0.250	5
	63	600842	S202M-K63	2CDS272001R0607		0.250	5

S 203 M

S 204 M

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	601016	S203M-K0.5	2CDS273001R0157		0.375	1
	1	601054	S203M-K1	2CDS273001R0217		0.375	1
	1.6	601085	S203M-K1.6	2CDS273001R0257		0.375	1
	2	601108	S203M-K2	2CDS273001R0277		0.375	1
	3	601122	S203M-K3	2CDS273001R0317		0.375	1
	4	601153	S203M-K4	2CDS273001R0337		0.375	1
	6	601177	S203M-K6	2CDS273001R0377		0.375	1
	8	601207	S203M-K8	2CDS273001R0407		0.375	1
	10	601221	S203M-K10	2CDS273001R0427		0.375	1
	13	659413	S203M-K13	2CDS273001R0447		0.375	1
	16	601245	S203M-K16	2CDS273001R0467		0.375	1
	20	601269	S203M-K20	2CDS273001R0487		0.375	1
	25	601290	S203M-K25	2CDS273001R0517		0.375	1
	32	601313	S203M-K32	2CDS273001R0537		0.375	1
	40	601337	S203M-K40	2CDS273001R0557		0.375	1
	50	601351	S203M-K50	2CDS273001R0577		0.375	1
	63	601375	S203M-K63	2CDS273001R0607		0.375	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	601757	S204M-K0.5	2CDS274001R0157		0.500	1
	1	601795	S204M-K1	2CDS274001R0217		0.500	1
	1.6	601825	S204M-K1.6	2CDS274001R0257		0.500	1
	2	601849	S204M-K2	2CDS274001R0277		0.500	1
	3	601863	S204M-K3	2CDS274001R0317		0.500	1
	4	601894	S204M-K4	2CDS274001R0337		0.500	1
	6	601917	S204M-K6	2CDS274001R0377		0.500	1
	8	601948	S204M-K8	2CDS274001R0407		0.500	1
	10	601962	S204M-K10	2CDS274001R0427		0.500	1
	13	659420	S204M-K13	2CDS274001R0447		0.500	1
	16	601986	S204M-K16	2CDS274001R0467		0.500	1
	20	602006	S204M-K20	2CDS274001R0487		0.500	1
	25	602020	S204M-K25	2CDS274001R0517		0.500	1
	32	602044	S204M-K32	2CDS274001R0537		0.500	1
	40	602068	S204M-K40	2CDS274001R0557		0.500	1
	50	602082	S204M-K50	2CDS274001R0577		0.500	1
	63	602105	S204M-K63	2CDS274001R0607		0.500	1

1

MCBs

S 200 series M-K characteristic

S 201 M NA

S 203 M NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	599955	S201M-K0.5NA	2CDS271103R0157		0.250	5
	1	599993	S201M-K1NA	2CDS271103R0217		0.250	5
	1.6	600026	S201M-K1.6NA	2CDS271103R0257		0.250	5
	2	600040	S201M-K2NA	2CDS271103R0277		0.250	5
	3	600064	S201M-K3NA	2CDS271103R0317		0.250	5
	4	600095	S201M-K4NA	2CDS271103R0337		0.250	5
	6	600118	S201M-K6NA	2CDS271103R0377		0.250	5
	8	600149	S201M-K8NA	2CDS271103R0407		0.250	5
	10	600163	S201M-K10NA	2CDS271103R0427		0.250	5
	13	659437	S201M-K13NA	2CDS271103R0447		0.250	5
	16	600187	S201M-K16NA	2CDS271103R0467		0.250	5
	20	600200	S201M-K20NA	2CDS271103R0487		0.250	5
	25	600231	S201M-K25NA	2CDS271103R0517		0.250	5
	32	600255	S201M-K32NA	2CDS271103R0537		0.250	5
	40	600279	S201M-K40NA	2CDS271103R0557		0.250	5
	50	600293	S201M-K50NA	2CDS271103R0577		0.250	5
	63	600316	S201M-K63NA	2CDS271103R0607		0.250	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	659444	S203M-K0.5NA	2CDS273103R0157		0.500	1
	1	650451	S203M-K1NA	2CDS273103R0217		0.500	1
	1.6	659468	S203M-K1.6NA	2CDS273103R0257		0.500	1
	2	659475	S203M-K2NA	2CDS273103R0277		0.500	1
	3	659482	S203M-K3NA	2CDS273103R0317		0.500	1
	4	659499	S203M-K4NA	2CDS273103R0337		0.500	1
	6	659505	S203M-K6NA	2CDS273103R0377		0.500	1
	8	659512	S203M-K8NA	2CDS273103R0407		0.500	1
	10	659529	S203M-K10NA	2CDS273103R0427		0.500	1
	13	659536	S203M-K13NA	2CDS273103R0447		0.500	1
	16	659543	S203M-K16NA	2CDS273103R0467		0.500	1
	20	659550	S203M-K20NA	2CDS273103R0487		0.500	1
	25	659567	S203M-K25NA	2CDS273103R0517		0.500	1
	32	659574	S203M-K32NA	2CDS273103R0537		0.500	1
	40	659581	S203M-K40NA	2CDS273103R0557		0.500	1
	50	659604	S203M-K50NA	2CDS273103R0577		0.500	1
	63	659611	S203M-K63NA	2CDS273103R0607		0.500	1

MCBs

S 200 series M-Z characteristic

S 201 M

S 202 M

S 200 M-Z characteristic
Function: protection and control of the electronic circuits against lower and long duration overloads and short-circuits.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=15 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	599443	S201M-Z0.5	2CDS271001R0158		0.125	10
	1	599481	S201M-Z1	2CDS271001R0218		0.125	10
	1.6	599511	S201M-Z1.6	2CDS271001R0258		0.125	10
	2	599535	S201M-Z2	2CDS271001R0278		0.125	10
	3	599559	S201M-Z3	2CDS271001R0318		0.125	10
	4	599580	S201M-Z4	2CDS271001R0338		0.125	10
	6	599603	S201M-Z6	2CDS271001R0378		0.125	10
	8	599634	S201M-Z8	2CDS271001R0408		0.125	10
	10	599658	S201M-Z10	2CDS271001R0428		0.125	10
	16	599672	S201M-Z16	2CDS271001R0468		0.125	10
	20	599696	S201M-Z20	2CDS271001R0488		0.125	10
	25	599726	S201M-Z25	2CDS271001R0518		0.125	10
	32	599740	S201M-Z32	2CDS271001R0538		0.125	10
	40	599764	S201M-Z40	2CDS271001R0558		0.125	10
	50	599788	S201M-Z50	2CDS271001R0578		0.125	10
	63	599801	S201M-Z63	2CDS271001R0608		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	600491	S202M-Z0.5	2CDS272001R0158		0.250	5
	1	600538	S202M-Z1	2CDS272001R0218		0.250	5
	1.6	600569	S202M-Z1.6	2CDS272001R0258		0.250	5
	2	600583	S202M-Z2	2CDS272001R0278		0.250	5
	3	600606	S202M-Z3	2CDS272001R0318		0.250	5
	4	600637	S202M-Z4	2CDS272001R0338		0.250	5
	6	600651	S202M-Z6	2CDS272001R0378		0.250	5
	8	600682	S202M-Z8	2CDS272001R0408		0.250	5
	10	600705	S202M-Z10	2CDS272001R0428		0.250	5
	16	600729	S202M-Z16	2CDS272001R0468		0.250	5
	20	600743	S202M-Z20	2CDS272001R0488		0.250	5
	25	600774	S202M-Z25	2CDS272001R0518		0.250	5
	32	600798	S202M-Z32	2CDS272001R0538		0.250	5
	40	600811	S202M-Z40	2CDS272001R0558		0.250	5
	50	600835	S202-MZ50	2CDS272001R0578		0.250	5
	63	600859	S202M-Z63	2CDS272001R0608		0.250	5

1

MCBs

S 200 series M-Z characteristic

S 203 M

S 204 M

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	601023	S203M-Z0.5	2CDS273001R0158		0.375	1
	1	601061	S203M-Z1	2CDS273001R0218		0.375	1
	1.6	601092	S203M-Z1.6	2CDS273001R0258		0.375	1
	2	601115	S203M-Z2	2CDS273001R0278		0.375	1
	3	601139	S203M-Z3	2CDS273001R0318		0.375	1
	4	601160	S203M-Z4	2CDS273001R0338		0.375	1
	6	601184	S203M-Z6	2CDS273001R0378		0.375	1
	8	601214	S203M-Z8	2CDS273001R0408		0.375	1
	10	601238	S203M-Z10	2CDS273001R0428		0.375	1
	16	601252	S203M-Z16	2CDS273001R0468		0.375	1
	20	601276	S203M-Z20	2CDS273001R0488		0.375	1
	25	601306	S203M-Z25	2CDS273001R0518		0.375	1
	32	601320	S203M-Z32	2CDS273001R0538		0.375	1
	40	601344	S203M-Z40	2CDS273001R0558		0.375	1
	50	601368	S203M-Z50	2CDS273001R0578		0.375	1
	63	601382	S203M-Z63	2CDS273001R0608		0.375	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	601764	S204M-Z0.5	2CDS274001R0158		0.500	1
	1	601810	S204M-Z1	2CDS274001R0218		0.500	1
	1.6	601832	S204M-Z1.6	2CDS274001R0258		0.500	1
	2	601856	S204M-Z2	2CDS274001R0278		0.500	1
	3	601870	S204M-Z3	2CDS274001R0318		0.500	1
	4	601900	S204M-Z4	2CDS274001R0338		0.500	1
	6	601924	S204M-Z6	2CDS274001R0378		0.500	1
	8	601955	S204M-Z8	2CDS274001R0408		0.500	1
	10	601979	S204M-Z10	2CDS274001R0428		0.500	1
	16	601993	S204M-Z16	2CDS274001R0468		0.500	1
	20	659628	S204M-Z20	2CDS274001R0488		0.500	1
	25	602037	S204M-Z25	2CDS274001R0518		0.500	1
	32	602051	S204M-Z32	2CDS274001R0538		0.500	1
	40	602075	S204M-Z40	2CDS274001R0558		0.500	1
	50	602099	S204M-Z50	2CDS274001R0578		0.500	1
	63	602112	S204M-Z63	2CDS274001R0608		0.500	1

*1 U_{Bmax} 125 V ⎓ with 2 poles connected in series

S 201 M NA

S 203 M NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	599962	S201M-Z0.5NA	2CDS271103R0158		0.260	5
	1	600002	S201M-Z1NA	2CDS271103R0218		0.260	5
	1.6	600033	S201M-Z1.6NA	2CDS271103R0258		0.260	5
	2	600057	S201M-Z2NA	2CDS271103R0278		0.260	5
	3	600071	S201M-Z3NA	2CDS271103R0318		0.260	5
	4	600101	S201M-Z4NA	2CDS271103R0338		0.260	5
	6	600125	S201M-Z6NA	2CDS271103R0378		0.260	5
	8	600156	S201M-Z8NA	2CDS271103R0408		0.260	5
	10	600170	S201M-Z10NA	2CDS271103R0428		0.260	5
	16	600194	S201M-Z16NA	2CDS271103R0468		0.260	5
	20	600217	S201M-Z20NA	2CDS271103R0488		0.260	5
	25	600248	S201M-Z25NA	2CDS271103R0518		0.260	5
	32	600262	S201M-Z32NA	2CDS271103R0538		0.260	5
	40	600286	S201M-Z40NA	2CDS271103R0558		0.260	5
	50	600309	S201M-Z50NA	2CDS271103R0578		0.320	5
	63	600323	S201M-Z63NA	2CDS271103R0608		0.320	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	601474	S203M-Z0.5NA	2CDS273103R0158		0.520	1
	1	601481	S203M-Z1NA	2CDS273103R0218		0.520	1
	1.6	601498	S203M-Z1.6NA	2CDS273103R0258		0.520	1
	2	601504	S203M-Z2NA	2CDS273103R0278		0.520	1
	3	601511	S203M-Z3NA	2CDS273103R0318		0.520	1
	4	601528	S203M-Z4NA	2CDS273103R0338		0.520	1
	6	601535	S203M-Z6NA	2CDS273103R0378		0.520	1
	8	601542	S203M-Z8NA	2CDS273103R0408		0.520	1
	10	601559	S203M-Z10NA	2CDS273103R0428		0.520	1
	16	601566	S203M-Z16NA	2CDS273103R0468		0.520	1
	20	601573	S203M-Z20NA	2CDS273103R0488		0.520	1
	25	601580	S203M-Z25NA	2CDS273103R0518		0.520	1
	32	601597	S203M-Z32NA	2CDS273103R0538		0.520	1
	40	601603	S203M-Z40NA	2CDS273103R0558		0.520	1
	50	601610	S203M-Z50NA	2CDS273103R0578		0.640	1
	63	601627	S203M-Z63NA	2CDS273103R0608		0.640	1

MCBs

Supplementary protector S 200 MR series, 10kA

The S200 MR is a high-performance supplementary protector with ring cable lug connections conforming to UL 1077; CSA 22.2. No. 235 and IEC/EN 60947-2 standards. The integrated captive connecting screws simplify the connection of electric lines, provides extra protection and saves time.

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.2	954181	S201MR-K0.2	2CDS271437R0087		0.140	10
	0.3	956697	S201MR-K0.3	2CDS271437R0117		0.140	10
	0.5	956710	S201MR-K0.5	2CDS271437R0157		0.140	10
	0.75	956734	S201MR-K0.75	2CDS271437R0187		0.140	10
	1	956758	S201MR-K1	2CDS271437R0217		0.140	10
	1.6	956772	S201MR-K1.6	2CDS271437R0257		0.140	10
	2	956796	S201MR-K2	2CDS271437R0277		0.140	10
	3	956819	S201MR-K3	2CDS271437R0317		0.140	10
	4	956833	S201MR-K4	2CDS271437R0337		0.140	10
	5	956857	S201MR-K5	2CDS271437R0357		0.140	10
	6	956871	S201MR-K6	2CDS271437R0377		0.140	10
	8	956895	S201MR-K8	2CDS271437R0407		0.140	10
	10	956918	S201MR-K10	2CDS271437R0427		0.140	10
	13	956932	S201MR-K13	2CDS271437R0447		0.140	10
	15	956956	S201MR-K15	2CDS271437R0457		0.140	10
	16	956970	S201MR-K16	2CDS271437R0467		0.140	10
	20	956994	S201MR-K20	2CDS271437R0487		0.140	10
	25	957014	S201MR-K25	2CDS271437R0517		0.140	10
	30	957038	S201MR-K30	2CDS271437R0527		0.140	10
	32	957052	S201MR-K32	2CDS271437R0537		0.140	10
	35	957076	S201MR-K35	2CDS271437R0547		0.140	10
	40	957090	S201MR-K40	2CDS271437R0557		0.140	10
	50	957113	S201MR-K50	2CDS271437R0577		0.140	10
	60	957137	S201MR-K60	2CDS271437R0587		0.140	10
	63	957151	S201MR-K63	2CDS271437R0607		0.140	10
2	0.2	957670	S202MR-K0.2	2CDS272437R0087		0.280	5
	0.3	957694	S202MR-K0.3	2CDS272437R0117		0.280	5
	0.5	957717	S202MR-K0.5	2CDS272437R0157		0.280	5
	0.75	957731	S202MR-K0.75	2CDS272437R0187		0.280	5
	1	957755	S202MR-K1	2CDS272437R0217		0.280	5
	1.6	957779	S202MR-K1.6	2CDS272437R0257		0.280	5
	2	957793	S202MR-K2	2CDS272437R0277		0.280	5
	3	957816	S202MR-K3	2CDS272437R0317		0.280	5
	4	957830	S202MR-K4	2CDS272437R0337		0.280	5
	5	957854	S202MR-K5	2CDS272437R0357		0.280	5
	6	957878	S202MR-K6	2CDS272437R0377		0.280	5
	8	957892	S202MR-K8	2CDS272437R0407		0.280	5
	10	957915	S202MR-K10	2CDS272437R0427		0.280	5
	13	957939	S202MR-K13	2CDS272437R0447		0.280	5
	15	957953	S202MR-K15	2CDS272437R0457		0.280	5
	16	957977	S202MR-K16	2CDS272437R0467		0.280	5
	20	957991	S202MR-K20	2CDS272437R0487		0.280	5
	25	958011	S202MR-K25	2CDS272437R0517		0.280	5
	30	958035	S202MR-K30	2CDS272437R0527		0.280	5
	32	958059	S202MR-K32	2CDS272437R0537		0.280	5
	35	958073	S202MR-K35	2CDS272437R0547		0.280	5
	40	958097	S202MR-K40	2CDS272437R0557		0.280	5
	50	958110	S202MR-K50	2CDS272437R0577		0.280	5
	60	958134	S202MR-K60	2CDS272437R0587		0.280	5
	63	958158	S202MR-K63	2CDS272437R0607		0.280	5

2CDC021007S0015

2CDC021008S0015

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.2	958677	S203MR-K0.2	2CDS273437R0087		0.420	3
	0.3	958691	S203MR-K0.3	2CDS273437R0117		0.420	3
	0.5	958714	S203MR-K0.5	2CDS273437R0157		0.420	3
	0.75	958738	S203MR-K0.75	2CDS273437R0187		0.420	3
	1	958752	S203MR-K1	2CDS273437R0217		0.420	3
	1.6	958776	S203MR-K1.6	2CDS273437R0257		0.420	3
	2	958790	S203MR-K2	2CDS273437R0277		0.420	3
	3	958813	S203MR-K3	2CDS273437R0317		0.420	3
	4	958837	S203MR-K4	2CDS273437R0337		0.420	3
	5	958851	S203MR-K5	2CDS273437R0357		0.420	3
	6	958875	S203MR-K6	2CDS273437R0377		0.420	3
	8	958899	S203MR-K8	2CDS273437R0407		0.420	3
	10	958912	S203MR-K10	2CDS273437R0427		0.420	3
	13	958936	S203MR-K13	2CDS273437R0447		0.420	3
	15	958950	S203MR-K15	2CDS273437R0457		0.420	3
	16	958974	S203MR-K16	2CDS273437R0467		0.420	3
	20	958998	S203MR-K20	2CDS273437R0487		0.420	3
	25	959018	S203MR-K25	2CDS273437R0517		0.420	3
	30	959032	S203MR-K30	2CDS273437R0527		0.420	3
	32	959056	S203MR-K32	2CDS273437R0537		0.420	3
	35	959070	S203MR-K35	2CDS273437R0547		0.420	3
	40	959094	S203MR-K40	2CDS273437R0557		0.420	3
	50	959117	S203MR-K50	2CDS273437R0577		0.420	3
	60	959131	S203MR-K60	2CDS273437R0587		0.420	3
	63	959155	S203MR-K63	2CDS273437R0607		0.420	3
4	0.2	959674	S204MR-K0.2	2CDS274437R0087		0.560	2
	0.3	959698	S204MR-K0.3	2CDS274437R0117		0.560	2
	0.5	959711	S204MR-K0.5	2CDS274437R0157		0.560	2
	0.75	959735	S204MR-K0.75	2CDS274437R0187		0.560	2
	1	959759	S204MR-K1	2CDS274437R0217		0.560	2
	1.6	959773	S204MR-K1.6	2CDS274437R0257		0.560	2
	2	959797	S204MR-K2	2CDS274437R0277		0.560	2
	3	959810	S204MR-K3	2CDS274437R0317		0.560	2
	4	959834	S204MR-K4	2CDS274437R0337		0.560	2
	5	959858	S204MR-K5	2CDS274437R0357		0.560	2
	6	959872	S204MR-K6	2CDS274437R0377		0.560	2
	8	959896	S204MR-K8	2CDS274437R0407		0.560	2
	10	959919	S204MR-K10	2CDS274437R0427		0.560	2
	13	959933	S204MR-K13	2CDS274437R0447		0.560	2
	15	959957	S204MR-K15	2CDS274437R0457		0.560	2
	16	959971	S204MR-K16	2CDS274437R0467		0.560	2
	20	959995	S204MR-K20	2CDS274437R0487		0.560	2
	25	960014	S204MR-K25	2CDS274437R0517		0.560	2
	30	960038	S204MR-K30	2CDS274437R0527		0.560	2
	32	960052	S204MR-K32	2CDS274437R0537		0.560	2
	35	960076	S204MR-K35	2CDS274437R0547		0.560	2
	40	960090	S204MR-K40	2CDS274437R0557		0.560	2
	50	960113	S204MR-K50	2CDS274437R0577		0.560	2
	60	960137	S204MR-K60	2CDS274437R0587		0.560	2
	63	960151	S204MR-K63	2CDS274437R0607		0.560	2

MCBs

S 200 series M UC B characteristic
Universal current range

S 201 M UC

S 202 M UC

S 200 M UC B characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for people and big length cables in TN and IT systems; version dedicated to application
in direct current circuits for voltages up to 220 V DC 1 pole and 440 V DC 2, 3 and 4 poles.
Applications: Industrial.
Standard: IEC/EN 60898-2, IEC/EN 60947-2, UL1077, CSA 22.2 No. 235
(for DC applications, please note polarity of device)
Icu=10 kA

Number of poles	Rated current	Bbn 401361	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	4430596	S201M-B6UC	2CDS271061R0065		0.125	10
	10	4430602	S201M-B10UC	2CDS271061R0105		0.125	10
	13	4430619	S201M-B13UC	2CDS271061R0135		0.125	10
	16	4430626	S201M-B16UC	2CDS271061R0165		0.125	10
	20	4430633	S201M-B20UC	2CDS271061R0205		0.125	10
	25	4430640	S201M-B25UC	2CDS271061R0255		0.125	10
	32	4430657	S201M-B32UC	2CDS271061R0325		0.125	10
	40	4430664	S201M-B40UC	2CDS271061R0405		0.125	10
	50	4430671	S201M-B50UC	2CDS271061R0505		0.125	10
	63	4430688	S201M-B63UC	2CDS271061R0635		0.125	10

Number of poles	Rated current	Bbn 401361	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	4432811	S202M-B6UC	2CDS272061R0065		0.250	5
	10	4432828	S202M-B10UC	2CDS272061R0105		0.250	5
	13	4432835	S202M-B13UC	2CDS272061R0135		0.250	5
	16	4432842	S202M-B16UC	2CDS272061R0165		0.250	5
	20	4432859	S202M-B20UC	2CDS272061R0205		0.250	5
	25	4432866	S202M-B25UC	2CDS272061R0255		0.250	5
	32	4432873	S202M-B32UC	2CDS272061R0325		0.250	5
	40	4432880	S202M-B40UC	2CDS272061R0405		0.250	5
	50	4432897	S202M-B50UC	2CDS272061R0505		0.250	5
	63	4432903	S202M-B63UC	2CDS272061R0635		0.250	5

S 203 M UC

Number of poles	Rated current	Bbn 401361	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	4435034	S203M-B6UC	2CDS273061R0065		0.375	1
	10	4435041	S203M-B10UC	2CDS273061R0105		0.375	1
	13	4435058	S203M-B13UC	2CDS273061R0135		0.375	1
	16	4435065	S203M-B16UC	2CDS273061R0165		0.375	1
	20	4435072	S203M-B20UC	2CDS273061R0205		0.375	1
	25	4435089	S203M-B25UC	2CDS273061R0255		0.375	1
	32	4435096	S203M-B32UC	2CDS273061R0325		0.375	1
	40	4435102	S203M-B40UC	2CDS273061R0405		0.375	1
	50	4435119	S203M-B50UC	2CDS273061R0505		0.375	1
	63	4435126	S203M-B63UC	2CDS273061R0635		0.375	1

S 204 M UC

Number of poles	Rated current	Bbn 401361	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	4437250	S204M-B6UC	2CDS274061R0065		0.500	1
	10	4437267	S204M-B10UC	2CDS274061R0105		0.500	1
	13	4437274	S204M-B13UC	2CDS274061R0135		0.500	1
	16	4437281	S204M-B16UC	2CDS274061R0165		0.500	1
	20	4437298	S204M-B20UC	2CDS274061R0205		0.500	1
	25	4437304	S204M-B25UC	2CDS274061R0255		0.500	1
	32	4437311	S204M-B32UC	2CDS274061R0325		0.500	1
	40	4437328	S204M-B40UC	2CDS274061R0405		0.500	1
	50	4437335	S204M-B50UC	2CDS274061R0505		0.500	1
	63	4437342	S204M-B63UC	2CDS274061R0635		0.500	1

MCBs

S 200 series M UC C characteristic
Universal current range

S 201 M UC

S 202 M UC

S 200 M UC C characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for people and big length cables in TN and IT systems; version dedicated to application
in direct current circuits for voltages up to 220 V DC 1 pole and 440 V DC 2, 3 and 4 poles.
Applications: Industrial.
Standard: IEC/EN 60898-2, IEC/EN 60947-2, UL1077, CSA 22.2 No. 235
(for DC applications, please note polarity of device)
Icu=10 kA

Number of poles	Rated current	Bbn 401361	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	4430695	S201M-C0.5UC	2CDS271061R0984		0.125	10
	1	4430701	S201M-C1UC	2CDS271061R0014		0.125	10
	1.6	4430718	S201M-C1.6UC	2CDS271061R0974		0.125	10
	2	4430725	S201M-C2UC	2CDS271061R0024		0.125	10
	3	4430732	S201M-C3UC	2CDS271061R0034		0.125	10
	4	4430749	S201M-C4UC	2CDS271061R0044		0.125	10
	6	4430756	S201M-C6UC	2CDS271061R0064		0.125	10
	8	4430763	S201M-C8UC	2CDS271061R0084		0.125	10
	10	4430770	S201M-C10UC	2CDS271061R0104		0.125	10
	13	4430787	S201M-C13UC	2CDS271061R0134		0.125	10
	16	4430794	S201M-C16UC	2CDS271061R0164		0.125	10
	20	4430800	S201M-C20UC	2CDS271061R0204		0.125	10
	25	4430817	S201M-C25UC	2CDS271061R0254		0.125	10
	32	4430824	S201M-C32UC	2CDS271061R0324		0.125	10
	40	4430831	S201M-C40UC	2CDS271061R0404		0.125	10
	50	4430848	S201M-C50UC	2CDS271061R0504		0.125	10
	63	4430855	S201M-C63UC	2CDS271061R0634		0.125	10

Number of poles	Rated current	Bbn 401361	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	4432910	S202M-C0.5UC	2CDS272061R0984		0.250	5
	1	4432927	S202M-C1UC	2CDS272061R0014		0.250	5
	1.6	4432934	S202M-C1.6UC	2CDS272061R0974		0.250	5
	2	4432941	S202M-C2UC	2CDS272061R0024		0.250	5
	3	4432958	S202M-C3UC	2CDS272061R0034		0.250	5
	4	4432965	S202M-C4UC	2CDS272061R0044		0.250	5
	6	4432972	S202M-C6UC	2CDS272061R0064		0.250	5
	8	4432989	S202M-C8UC	2CDS272061R0084		0.250	5
	10	4432996	S202M-C10UC	2CDS272061R0104		0.250	5
	13	4433009	S202M-C13UC	2CDS272061R0134		0.250	5
	16	4433016	S202M-C16UC	2CDS272061R0164		0.250	5
	20	4433023	S202M-C20UC	2CDS272061R0204		0.250	5
	25	4433030	S202M-C25UC	2CDS272061R0254		0.250	5
	32	4433047	S202M-C32UC	2CDS272061R0324		0.250	5
	40	4433054	S202M-C40UC	2CDS272061R0404		0.250	5
	50	4433061	S202M-C50UC	2CDS272061R0504		0.250	5
	63	4433078	S202M-C63UC	2CDS272061R0634		0.250	5

S 203 M UC

S 204 M UC

Number of poles	Rated current	Bbn 401361	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	4435133	S203M-C0.5UC	2CDS273061R0984		0.375	1
	1	4435140	S203M-C1UC	2CDS273061R0014		0.375	1
	1.6	4435157	S203M-C1.6UC	2CDS273061R0974		0.375	1
	2	4435164	S203M-C2UC	2CDS273061R0024		0.375	1
	3	4435171	S203M-C3UC	2CDS273061R0034		0.375	1
	4	4435188	S203M-C4UC	2CDS273061R0044		0.375	1
	6	4435195	S203M-C6UC	2CDS273061R0064		0.375	1
	8	4435201	S203M-C8UC	2CDS273061R0084		0.375	1
	10	4435218	S203M-C10UC	2CDS273061R0104		0.375	1
	13	4435225	S203M-C13UC	2CDS273061R0134		0.375	1
	16	4435232	S203M-C16UC	2CDS273061R0164		0.375	1
	20	4435249	S203M-C20UC	2CDS273061R0204		0.375	1
	25	4435256	S203M-C25UC	2CDS273061R0254		0.375	1
	32	4435263	S203M-C32UC	2CDS273061R0324		0.375	1
	40	4435270	S203M-C40UC	2CDS273061R0404		0.375	1
	50	4435287	S203M-C50UC	2CDS273061R0504		0.375	1
	63	4435294	S203M-C63UC	2CDS273061R0634		0.375	1

Number of poles	Rated current	Bbn 401361	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	4437359	S204M-C0.5UC	2CDS274061R0984		0.500	1
	1	4437366	S204M-C1UC	2CDS274061R0014		0.500	1
	1.6	4437373	S204M-C1.6UC	2CDS274061R0974		0.500	1
	2	4437380	S204M-C2UC	2CDS274061R0024		0.500	1
	3	4437397	S204M-C3UC	2CDS274061R0034		0.500	1
	4	4437403	S204M-C4UC	2CDS274061R0044		0.500	1
	6	4437410	S204M-C6UC	2CDS274061R0064		0.500	1
	8	4437427	S204M-C8UC	2CDS274061R0084		0.500	1
	10	4437434	S204M-C10UC	2CDS274061R0104		0.500	1
	13	4437441	S204M-C13UC	2CDS274061R0134		0.500	1
	16	4437458	S204M-C16UC	2CDS274061R0164		0.500	1
	20	4437465	S204M-C20UC	2CDS274061R0204		0.500	1
	25	4437472	S204M-C25UC	2CDS274061R0254		0.500	1
	32	4437489	S204M-C32UC	2CDS274061R0324		0.500	1
	40	4437496	S204M-C40UC	2CDS274061R0404		0.500	1
	50	4437502	S204M-C50UC	2CDS274061R0504		0.500	1
	63	4437519	S204M-C63UC	2CDS274061R0634		0.500	1

MCBs

S 200 series M UC – Universal current range K characteristic

S 201 M UC

S 200 M UC K characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for people and big length cables in TN and IT systems; version dedicated to application
in direct current circuits for voltages up to 220 V DC 1 pole and 440 V DC 2, 3 and 4 poles.
Applications: Industrial.
Standard: IEC/EN 60898-2, IEC/EN 60947-2, UL1077, CSA 22.2 No. 235
(for DC applications, please note polarity of device)
Icu=10 kA

Number of poles	Rated current In A	Bbn 401361 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1	0.2	4430862	S201M-K0.2UC	2CDS271061R0087		0.125	10
	0.3	4430879	S201M-K0.3UC	2CDS271061R0117		0.125	10
	0.5	4430886	S201M-K0.5UC	2CDS271061R0157		0.125	10
	0.75	4430893	S201M-K0.75UC	2CDS271061R0187		0.125	10
	1	4430909	S201M-K1UC	2CDS271061R0217		0.125	10
	1.6	4430916	S201M-K1.6UC	2CDS271061R0257		0.125	10
	2	4430923	S201M-K2UC	2CDS271061R0277		0.125	10
	3	4430930	S201M-K3UC	2CDS271061R0317		0.125	10
	4	4430947	S201M-K4UC	2CDS271061R0337		0.125	10
	5	4430954	S201M-K5UC	2CDS271061R0357		0.125	10
	6	4430961	S201M-K6UC	2CDS271061R0377		0.125	10
	8	4430978	S201M-K8UC	2CDS271061R0407		0.125	10
	10	4430985	S201M-K10UC	2CDS271061R0427		0.125	10
	13	4430992	S201M-K13UC	2CDS271061R0447		0.125	10
	15	4431005	S201M-K15UC	2CDS271061R0457		0.125	10
	16	4431012	S201M-K16UC	2CDS271061R0467		0.125	10
	20	4431029	S201M-K20UC	2CDS271061R0487		0.125	10
	25	4431036	S201M-K25UC	2CDS271061R0517		0.125	10
	30	4431043	S201M-K30UC	2CDS271061R0527		0.125	10
	32	4431050	S201M-K32UC	2CDS271061R0537		0.125	10
	35	4431067	S201M-K35UC	2CDS271061R0547		0.125	10
	40	4431074	S201M-K40UC	2CDS271061R0557		0.125	10
	50	4431081	S201M-K50UC	2CDS271061R0577		0.125	10
	60	4431098	S201M-K60UC	2CDS271061R0587		0.125	10
	63	4431104	S201M-K63UC	2CDS271061R0607		0.125	10

S 202 M UC

Number of poles	Rated current In A	Bbn 401361 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	0.2	4433085	S202M-K0.2UC	2CDS272061R0087		0.250	5
	0.3	4433092	S202M-K0.3UC	2CDS272061R0117		0.250	5
	0.5	4433108	S202M-K0.5UC	2CDS272061R0157		0.250	5
	0.75	4433115	S202M-K0.75UC	2CDS272061R0187		0.250	5
	1	4433122	S202M-K1UC	2CDS272061R0217		0.250	5
	1.6	4433139	S202M-K1.6UC	2CDS272061R0257		0.250	5
	2	4433146	S202M-K2UC	2CDS272061R0277		0.250	5
	3	4433153	S202M-K3UC	2CDS272061R0317		0.250	5
	4	4433160	S202M-K4UC	2CDS272061R0337		0.250	5
	5	4433177	S202M-K5UC	2CDS272061R0357		0.250	5
	6	4433184	S202M-K6UC	2CDS272061R0377		0.250	5
	8	4433191	S202M-K8UC	2CDS272061R0407		0.250	5
	10	4433207	S202M-K10UC	2CDS272061R0427		0.250	5
	13	4433214	S202M-K13UC	2CDS272061R0447		0.250	5
	15	4433221	S202M-K15UC	2CDS272061R0457		0.250	5
	16	4433238	S202M-K16UC	2CDS272061R0467		0.250	5
	20	4433245	S202M-K20UC	2CDS272061R0487		0.250	5
	25	4433252	S202M-K25UC	2CDS272061R0517		0.250	5
	30	4433269	S202M-K30UC	2CDS272061R0527		0.250	5
	32	4433276	S202M-K32UC	2CDS272061R0537		0.250	5
	35	4433283	S202M-K35UC	2CDS272061R0547		0.250	5
	40	4433290	S202M-K40UC	2CDS272061R0557		0.250	5
	50	4433306	S202M-K50UC	2CDS272061R0577		0.250	5
	60	4433313	S202M-K60UC	2CDS272061R0587		0.250	5
	63	4433320	S202M-K63UC	2CDS272061R0607		0.250	5

S 203 M UC

Number of poles	Rated current In A	Bbn 401361 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	0.2	4435300	S203M-K0.2UC	2CDS273061R0087		0.375	1
	0.3	4435317	S203M-K0.3UC	2CDS273061R0117		0.375	1
	0.5	4435324	S203M-K0.5UC	2CDS273061R0157		0.375	1
	0.75	4435331	S203M-K0.75UC	2CDS273061R0187		0.375	1
	1	4435348	S203M-K1UC	2CDS273061R0217		0.375	1
	1.6	4435355	S203M-K1.6UC	2CDS273061R0257		0.375	1
	2	4435362	S203M-K2UC	2CDS273061R0277		0.375	1
	3	4435379	S203M-K3UC	2CDS273061R0317		0.375	1
	4	4435386	S203M-K4UC	2CDS273061R0337		0.375	1
	5	4435393	S203M-K5UC	2CDS273061R0357		0.375	1
	6	4435409	S203M-K6UC	2CDS273061R0377		0.375	1
	8	4435416	S203M-K8UC	2CDS273061R0407		0.375	1
	10	4435423	S203M-K10UC	2CDS273061R0427		0.375	1
	13	4435430	S203M-K13UC	2CDS273061R0447		0.375	1
	15	4435447	S203M-K15UC	2CDS273061R0457		0.375	1
	16	4435454	S203M-K16UC	2CDS273061R0467		0.375	1
	20	4435461	S203M-K20UC	2CDS273061R0487		0.375	1
	25	4435478	S203M-K25UC	2CDS273061R0517		0.375	1
	30	4435485	S203M-K30UC	2CDS273061R0527		0.375	1
	32	4435492	S203M-K32UC	2CDS273061R0537		0.375	1
	35	4435508	S203M-K35UC	2CDS273061R0547		0.375	1
	40	4435515	S203M-K40UC	2CDS273061R0557		0.375	1
	50	4435522	S203M-K50UC	2CDS273061R0577		0.375	1
	60	4435539	S203M-K60UC	2CDS273061R0587		0.375	1
	63	4435546	S203M-K63UC	2CDS273061R0607		0.375	1

MCBs

S 200 series M UC – Universal current range K characteristic

S 204 M UC

Number of poles	Rated current In A	Bbn 401361 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	0.2	4437526	S204M-K0.2UC	2CDS274061R0087		0.500	1
	0.3	4437533	S204M-K0.3UC	2CDS274061R0117		0.500	1
	0.5	4437540	S204M-K0.5UC	2CDS274061R0157		0.500	1
	0.75	4437557	S204M-K0.75UC	2CDS274061R0187		0.500	1
	1	4437564	S204M-K1UC	2CDS274061R0217		0.500	1
	1.6	4437571	S204M-K1.6UC	2CDS274061R0257		0.500	1
	2	4437588	S204M-K2UC	2CDS274061R0277		0.500	1
	3	4437595	S204M-K3UC	2CDS274061R0317		0.500	1
	4	4437601	S204M-K4UC	2CDS274061R0337		0.500	1
	5	4437618	S204M-K5UC	2CDS274061R0357		0.500	1
	6	4437625	S204M-K6UC	2CDS274061R0377		0.500	1
	8	4437632	S204M-K8UC	2CDS274061R0407		0.500	1
	10	4437649	S204M-K10UC	2CDS274061R0427		0.500	1
	13	4437656	S204M-K13UC	2CDS274061R0447		0.500	1
	15	4437663	S204M-K15UC	2CDS274061R0457		0.500	1
	16	4437670	S204M-K16UC	2CDS274061R0467		0.500	1
	20	4437687	S204M-K20UC	2CDS274061R0487		0.500	1
	25	4437694	S204M-K25UC	2CDS274061R0517		0.500	1
	30	4437700	S204M-K30UC	2CDS274061R0527		0.500	1
	32	4437717	S204M-K32UC	2CDS274061R0537		0.500	1
	35	4437724	S204M-K35UC	2CDS274061R0547		0.500	1
	40	4437731	S204M-K40UC	2CDS274061R0557		0.500	1
	50	4437748	S204M-K50UC	2CDS274061R0577		0.500	1
	60	4437755	S204M-K60UC	2CDS274061R0587		0.500	1
	63	4437762	S204M-K63UC	2CDS274061R0607		0.500	1

MCBs

S 200 series M UC – Universal current range Z characteristic

S 201 M UC

S 202 M UC

S 200 M UC Z characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for people and big length cables in TN and IT systems; version dedicated to application
in direct current circuits for voltages up to 220 V DC 1 pole and 440 V DC 2, 3 and 4 poles.
Applications: Industrial.
Standard: IEC/EN 60898-2, IEC/EN 60947-2, UL1077, CSA 22.2 No. 235
(for DC applications, please note polarity of device)
Icu=10 kA

Number of poles	Rated current In A	Bbn 401361 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1	0.5	4431111	S201M-Z0.5UC	2CDS271061R0158		0.125	1
	1	4431128	S201M-Z1UC	2CDS271061R0218		0.125	1
	1.6	4431135	S201M-Z1.6UC	2CDS271061R0258		0.125	1
	2	4431142	S201M-Z2UC	2CDS271061R0278		0.125	1
	3	4431159	S201M-Z3UC	2CDS271061R0318		0.125	1
	4	4431166	S201M-Z4UC	2CDS271061R0338		0.125	1
	5	4431173	S201M-Z5UC	2CDS271061R0358		0.125	1
	6	4431180	S201M-Z6UC	2CDS271061R0378		0.125	1
	8	4431197	S201M-Z8UC	2CDS271061R0408		0.125	1
	10	4431203	S201M-Z10UC	2CDS271061R0428		0.125	1
	15	4431227	S201M-Z15UC	2CDS271061R0458		0.125	1
	16	4431234	S201M-Z16UC	2CDS271061R0468		0.125	1
	20	4431241	S201M-Z20UC	2CDS271061R0488		0.125	1
	25	4431258	S201M-Z25UC	2CDS271061R0518		0.125	1
	30	4431265	S201M-Z30UC	2CDS271061R0528		0.125	1
	32	4431272	S201M-Z32UC	2CDS271061R0538		0.125	1
	35	4431289	S201M-Z35UC	2CDS271061R0548		0.125	1
	40	4431296	S201M-Z40UC	2CDS271061R0558		0.125	1
	50	4431302	S201M-Z50UC	2CDS271061R0578		0.125	1
	60	4431319	S201M-Z60UC	2CDS271061R0588		0.125	1
	63	4431326	S201M-Z63UC	2CDS271061R0608		0.125	1
2	0.5	4433337	S202M-Z0.5UC	2CDS272061R0158		0.250	5
	1	4433344	S202M-Z1UC	2CDS272061R0218		0.250	5
	1.6	4433351	S202M-Z1.6UC	2CDS272061R0258		0.250	5
	2	4433368	S202M-Z2UC	2CDS272061R0278		0.250	5
	3	4433375	S202M-Z3UC	2CDS272061R0318		0.250	5
	4	4433382	S202M-Z4UC	2CDS272061R0338		0.250	5
	5	4433399	S202M-Z5UC	2CDS272061R0358		0.250	5
	6	4433405	S202M-Z6UC	2CDS272061R0378		0.250	5
	8	4433412	S202M-Z8UC	2CDS272061R0408		0.250	5
	10	4433429	S202M-Z10UC	2CDS272061R0428		0.250	5
	15	4433443	S202M-Z15UC	2CDS272061R0458		0.250	5
	16	4433450	S202M-Z16UC	2CDS272061R0468		0.250	5
	20	4433467	S202M-Z20UC	2CDS272061R0488		0.250	5
	25	4433474	S202M-Z25UC	2CDS272061R0518		0.250	5
	30	4433481	S202M-Z30UC	2CDS272061R0528		0.250	5
	32	4433498	S202M-Z32UC	2CDS272061R0538		0.250	5
	35	4433504	S202M-Z35UC	2CDS272061R0548		0.250	5
	40	4433511	S202M-Z40UC	2CDS272061R0558		0.250	5
	50	4433528	S202M-Z50UC	2CDS272061R0578		0.250	5
	60	4433535	S202M-Z60UC	2CDS272061R0588		0.250	5
	63	4433542	S202M-Z63UC	2CDS272061R0608		0.250	5

1

MCBs

S 200 series M UC – Universal current range Z characteristic

S 203 M UC

S 204 M UC

Number of poles	Rated current In A	Bbn 401361 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	0.5	4435553	S203M-Z0.5UC	2CDS273061R0158		0.375	1
	1	4435560	S203M-Z1UC	2CDS273061R0218		0.375	1
	1.6	4435577	S203M-Z1.6UC	2CDS273061R0258		0.375	1
	2	4435584	S203M-Z2UC	2CDS273061R0278		0.375	1
	3	4435591	S203M-Z3UC	2CDS273061R0318		0.375	1
	4	4435607	S203M-Z4UC	2CDS273061R0338		0.375	1
	5	4435614	S203M-Z5UC	2CDS273061R0358		0.375	1
	6	4435621	S203M-Z6UC	2CDS273061R0378		0.375	1
	8	4435638	S203M-Z8UC	2CDS273061R0408		0.375	1
	10	4435645	S203M-Z10UC	2CDS273061R0428		0.375	1
	15	4435669	S203M-Z15UC	2CDS273061R0458		0.375	1
	16	4435676	S203M-Z16UC	2CDS273061R0468		0.375	1
	20	4435683	S203M-Z20UC	2CDS273061R0488		0.375	1
	25	4435690	S203M-Z25UC	2CDS273061R0518		0.375	1
	30	4435706	S203M-Z30UC	2CDS273061R0528		0.375	1
	32	4435713	S203M-Z32UC	2CDS273061R0538		0.375	1
	35	4435720	S203M-Z35UC	2CDS273061R0548		0.375	1
	40	4435737	S203M-Z40UC	2CDS273061R0558		0.375	1
	50	4435744	S203M-Z50UC	2CDS273061R0578		0.375	1
	60	4435751	S203M-Z60UC	2CDS273061R0588		0.375	1
	63	4435768	S203M-Z63UC	2CDS273061R0608		0.375	1

Number of poles	Rated current In A	Bbn 401361 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	0.5	4437779	S204M-Z0.5UC	2CDS274061R0158		0.500	1
	1	4437786	S204M-Z1UC	2CDS274061R0218		0.500	1
	1.6	4437793	S204M-Z1.6UC	2CDS274061R0258		0.500	1
	2	4437809	S204M-Z2UC	2CDS274061R0278		0.500	1
	3	4437816	S204M-Z3UC	2CDS274061R0318		0.500	1
	4	4437823	S204M-Z4UC	2CDS274061R0338		0.500	1
	5	4437830	S204M-Z5UC	2CDS274061R0358		0.500	1
	6	4437847	S204M-Z6UC	2CDS274061R0378		0.500	1
	8	4437854	S204M-Z8UC	2CDS274061R0408		0.500	1
	10	4437861	S204M-Z10UC	2CDS274061R0428		0.500	1
	15	4437885	S204M-Z15UC	2CDS274061R0458		0.500	1
	16	4437892	S204M-Z16UC	2CDS274061R0468		0.500	1
	20	4437908	S204M-Z20UC	2CDS274061R0488		0.500	1
	25	4437915	S204M-Z25UC	2CDS274061R0518		0.500	1
	30	4437922	S204M-Z30UC	2CDS274061R0528		0.500	1
	32	4437939	S204M-Z32UC	2CDS274061R0538		0.500	1
	35	4437946	S204M-Z35UC	2CDS274061R0548		0.500	1
	40	4437953	S204M-Z40UC	2CDS274061R0558		0.500	1
	50	4437960	S204M-Z50UC	2CDS274061R0578		0.500	1
	60	4437977	S204M-Z60UC	2CDS274061R0588		0.500	1
	63	4437984	S204M-Z63UC	2CDS274061R0608		0.500	1

MCBs

S 200 series P-B characteristic

S 201 P

S 202 P

S 203 P

S 200 P-B characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for people and large length of cables in TN and IT systems.
Applications: commercial and industrial.
Standard: IEC/EN 60898-1, IEC/EN 60947-2
Icn=Icu=25 kA for 0.5 A≤In≤25 A
Icn=Icu=15 kA for 32 A≤In≤63 A

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	589574	S201P-B6	2CDS281001R0065		0.14	10
	10	589581	S201P-B10	2CDS281001R0105		0.14	10
	13	589598	S201P-B13	2CDS281001R0135		0.14	10
	16	589260	S201P-B16	2CDS281001R0165		0.14	10
	20	589604	S201P-B20	2CDS281001R0205		0.14	10
	25	589611	S201P-B25	2CDS281001R0255		0.14	10
	32	589628	S201P-B32	2CDS281001R0325		0.14	10
	40	589635	S201P-B40	2CDS281001R0405		0.14	10
	50	589659	S201P-B50	2CDS281001R0505		0.14	10
	63	589666	S201P-B63	2CDS281001R0635		0.14	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	589673	S202P-B6	2CDS282001R0065		0.28	5
	10	589680	S202P-B10	2CDS282001R0105		0.28	5
	13	589697	S202P-B13	2CDS282001R0135		0.28	5
	16	589703	S202P-B16	2CDS282001R0165		0.28	5
	20	589710	S202P-B20	2CDS282001R0205		0.28	5
	25	589727	S202P-B25	2CDS282001R0255		0.28	5
	32	589734	S202P-B32	2CDS282001R0325		0.28	5
	40	589741	S202P-B40	2CDS282001R0405		0.28	5
	50	589758	S202P-B50	2CDS282001R0505		0.28	5
	63	589765	S202P-B63	2CDS282001R0635		0.28	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	589772	S203P-B6	2CDS283001R0065		0.42	1
	10	589789	S203P-B10	2CDS283001R0105		0.42	1
	13	589796	S203P-B13	2CDS283001R0135		0.42	1
	16	589802	S203P-B16	2CDS283001R0165		0.42	1
	20	589819	S203P-B20	2CDS283001R0205		0.42	1
	25	589826	S203P-B25	2CDS283001R0255		0.42	1
	32	589833	S203P-B32	2CDS283001R0325		0.42	1
	40	589840	S203P-B40	2CDS283001R0405		0.42	1
	50	589857	S203P-B50	2CDS283001R0505		0.42	1
	63	589864	S203P-B63	2CDS283001R0635		0.42	1

MCBs

S 200 series P-B characteristic

S 204 P

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	589871	S204P-B6	2CDS284001R0065		0.56	1
	10	589888	S204P-B10	2CDS284001R0105		0.56	1
	13	589895	S204P-B13	2CDS284001R0135		0.56	1
	16	589901	S204P-B16	2CDS284001R0165		0.56	1
	20	589918	S204P-B20	2CDS284001R0205		0.56	1
	25	589925	S204P-B25	2CDS284001R0255		0.56	1
	32	589932	S204P-B32	2CDS284001R0325		0.56	1
	40	589949	S204P-B40	2CDS284001R0405		0.56	1
	50	589956	S204P-B50	2CDS284001R0505		0.56	1
	63	589963	S204P-B63	2CDS284001R0635		0.56	1

S 201 P NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	6	589970	S201P-B6NA	2CDS281103R0065		0.28	5
	10	589987	S201P-B10NA	2CDS281103R0105		0.28	5
	13	589994	S201P-B13NA	2CDS281103R0135		0.28	5
	16	590006	S201P-B16NA	2CDS281103R0165		0.28	5
	20	590013	S201P-B20NA	2CDS281103R0205		0.28	5
	25	590020	S201P-B25NA	2CDS281103R0255		0.28	5
	32	590037	S201P-B32NA	2CDS281103R0325		0.28	5
	40	590044	S201P-B40NA	2CDS281103R0405		0.28	5
	50	590051	S201P-B50NA	2CDS281103R0505		0.28	5
	63	590068	S201P-B63NA	2CDS281103R0635		0.28	5

S 203 P NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	6	590075	S203P-B6NA	2CDS283103R0065		0.56	1
	10	590082	S203P-B10NA	2CDS283103R0105		0.56	1
	13	590099	S203P-B13NA	2CDS283103R0135		0.56	1
	16	590105	S203P-B16NA	2CDS283103R0165		0.56	1
	20	590112	S203P-B20NA	2CDS283103R0205		0.56	1
	25	590129	S203P-B25NA	2CDS283103R0255		0.56	1
	32	590136	S203P-B32NA	2CDS283103R0325		0.56	1
	40	590143	S203P-B40NA	2CDS283103R0405		0.56	1
	50	590150	S203P-B50NA	2CDS283103R0505		0.56	1
	63	590167	S203P-B63NA	2CDS283103R0635		0.56	1

S 201 P

S 202 P

S 200 P-C characteristic

Function: protection and control of the circuits against overloads and short-circuits; protection for resistive and inductive loads with low inrush current.

Applications: commercial and industrial.

Standard: IEC/EN 60898-1, IEC/EN 60947-2

Icn=Icu=25 kA for 0.5 A≤In≤25 A

Icn=Icu=15 kA for 32 A≤In≤63 A

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	590174	S201P-C0.5	2CDS281001R0984		0.14	10
	1	590181	S201P-C1	2CDS281001R0014		0.14	10
	1.6	590198	S201P-C1.6	2CDS281001R0974		0.14	10
	2	590204	S201P-C2	2CDS281001R0024		0.14	10
	3	590211	S201P-C3	2CDS281001R0034		0.14	10
	4	590228	S201P-C4	2CDS281001R0044		0.14	10
	6	590235	S201P-C6	2CDS281001R0064		0.14	10
	8	590242	S201P-C8	2CDS281001R0084		0.14	10
	10	590259	S201P-C10	2CDS281001R0104		0.14	10
	13	590266	S201P-C13	2CDS281001R0134		0.14	10
	16	590273	S201P-C16	2CDS281001R0164		0.14	10
	20	590280	S201P-C20	2CDS281001R0204		0.14	10
	25	590297	S201P-C25	2CDS281001R0254		0.14	10
	32	590303	S201P-C32	2CDS281001R0324		0.14	10
	40	590310	S201P-C40	2CDS281001R0404		0.14	10
	50	590327	S201P-C50	2CDS281001R0504		0.14	10
	63	590334	S201P-C63	2CDS281001R0634		0.14	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	590341	S202P-C0.5	2CDS282001R0984		0.28	5
	1	590358	S202P-C1	2CDS282001R0014		0.28	5
	1.6	590365	S202P-C1.6	2CDS282001R0974		0.28	5
	2	590372	S202P-C2	2CDS282001R0024		0.28	5
	3	590389	S202P-C3	2CDS282001R0034		0.28	5
	4	590396	S202P-C4	2CDS282001R0044		0.28	5
	6	590402	S202P-C6	2CDS282001R0064		0.28	5
	8	590419	S202P-C8	2CDS282001R0084		0.28	5
	10	590426	S202P-C10	2CDS282001R0104		0.28	5
	13	590433	S202P-C13	2CDS282001R0134		0.28	5
	16	590440	S202P-C16	2CDS282001R0164		0.28	5
	20	590457	S202P-C20	2CDS282001R0204		0.28	5
	25	590464	S202P-C25	2CDS282001R0254		0.28	5
	32	590471	S202P-C32	2CDS282001R0324		0.28	5
	40	590488	S202P-C40	2CDS282001R0404		0.28	5
	50	590495	S202P-C50	2CDS282001R0504		0.28	5
	63	590501	S202P-C63	2CDS282001R0634		0.28	5

MCBs

S 200 series P-C characteristic

S 203 P

S 204 P

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	590518	S203P-C0.5	2CDS283001R0984		0.42	1
	1	590525	S203P-C1	2CDS283001R0014		0.42	1
	1.6	590532	S203P-C1.6	2CDS283001R0974		0.42	1
	2	590549	S203P-C2	2CDS283001R0024		0.42	1
	3	590556	S203P-C3	2CDS283001R0034		0.42	1
	4	590563	S203P-C4	2CDS283001R0044		0.42	1
	6	590570	S203P-C6	2CDS283001R0064		0.42	1
	8	590587	S203P-C8	2CDS283001R0084		0.42	1
	10	590594	S203P-C10	2CDS283001R0104		0.42	1
	13	590600	S203P-C13	2CDS283001R0134		0.42	1
	16	590617	S203P-C16	2CDS283001R0164		0.42	1
	20	590624	S203P-C20	2CDS283001R0204		0.42	1
	25	590631	S203P-C25	2CDS283001R0254		0.42	1
	32	590648	S203P-C32	2CDS283001R0324		0.42	1
	40	590655	S203P-C40	2CDS283001R0404		0.42	1
	50	590662	S203P-C50	2CDS283001R0504		0.42	1
	63	590679	S203P-C63	2CDS283001R0634		0.42	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	590686	S204P-C0.5	2CDS284001R0984		0.56	1
	1	590693	S204P-C1	2CDS284001R0014		0.56	1
	1.6	590709	S204P-C1.6	2CDS284001R0974		0.56	1
	2	590716	S204P-C2	2CDS284001R0024		0.56	1
	3	590723	S204P-C3	2CDS284001R0034		0.56	1
	4	590730	S204P-C4	2CDS284001R0044		0.56	1
	6	590747	S204P-C6	2CDS284001R0064		0.56	1
	8	590754	S204P-C8	2CDS284001R0084		0.56	1
	10	590761	S204P-C10	2CDS284001R0104		0.56	1
	13	590778	S204P-C13	2CDS284001R0134		0.56	1
	16	590785	S204P-C16	2CDS284001R0164		0.56	1
	20	590792	S204P-C20	2CDS284001R0204		0.56	1
	25	590808	S204P-C25	2CDS284001R0254		0.56	1
	32	590815	S204P-C32	2CDS284001R0324		0.56	1
	40	590822	S204P-C40	2CDS284001R0404		0.56	1
	50	590839	S204P-C50	2CDS284001R0504		0.56	1
	63	590846	S204P-C63	2CDS284001R0634		0.56	1

S 201 P NA

S 203 P NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	590853	S201P-C0.5NA	2CDS281103R0984		0.28	5
	1	590860	S201P-C1NA	2CDS281103R0014		0.28	5
	1.6	590877	S201P-C1.6NA	2CDS281103R0974		0.28	5
	2	590884	S201P-C2NA	2CDS281103R0024		0.28	5
	3	590891	S201P-C3NA	2CDS281103R0034		0.28	5
	4	590907	S201P-C4NA	2CDS281103R0044		0.28	5
	6	590914	S201P-C6NA	2CDS281103R0064		0.28	5
	8	590921	S201P-C8NA	2CDS281103R0084		0.28	5
	10	590938	S201P-C10NA	2CDS281103R0104		0.28	5
	13	590945	S201P-C13NA	2CDS281103R0134		0.28	5
	16	590952	S201P-C16NA	2CDS281103R0164		0.28	5
	20	590969	S201P-C20NA	2CDS281103R0204		0.28	5
	25	590976	S201P-C25NA	2CDS281103R0254		0.28	5
	32	590983	S201P-C32NA	2CDS281103R0324		0.28	5
	40	590990	S201P-C40NA	2CDS281103R0404		0.28	5
	50	591003	S201P-C50NA	2CDS281103R0504		0.28	5
	63	591010	S201P-C63NA	2CDS281103R0634		0.28	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	591027	S203P-C0.5NA	2CDS283103R0984		0.56	1
	1	591034	S203P-C1NA	2CDS283103R0014		0.56	1
	1.6	591041	S203P-C1.6NA	2CDS283103R0974		0.56	1
	2	591058	S203P-C2NA	2CDS283103R0024		0.56	1
	3	591065	S203P-C3NA	2CDS283103R0034		0.56	1
	4	591072	S203P-C4NA	2CDS283103R0044		0.56	1
	6	591089	S203P-C6NA	2CDS283103R0064		0.56	1
	8	591096	S203P-C8NA	2CDS283103R0084		0.56	1
	10	591102	S203P-C10NA	2CDS283103R0104		0.56	1
	13	591119	S203P-C13NA	2CDS283103R0134		0.56	1
	16	591126	S203P-C16NA	2CDS283103R0164		0.56	1
	20	591133	S203P-C20NA	2CDS283103R0204		0.56	1
	25	591140	S203P-C25NA	2CDS283103R0254		0.56	1
	32	591157	S203P-C32NA	2CDS283103R0324		0.56	1
	40	591164	S203P-C40NA	2CDS283103R0404		0.56	1
	50	591171	S203P-C50NA	2CDS283103R0504		0.56	1
	63	591188	S203P-C63NA	2CDS283103R0634		0.56	1

MCBs

S 200 series P-D characteristic

S 201 P

S 202 P

S 200 P-D characteristic
Function: protection and control of the circuits against overloads and short-circuits; protection for circuits which supply loads with high inrush current at the circuit closing (LV/LV transformers, breakdown lamps).
Applications: commercial and industrial.
Standard: IEC/EN 60898-1, IEC/EN 60947-2
Icn=Icu=25 kA for 0.5 A≤In≤25 A
Icn=Icu=15 kA for 32 A≤In≤63 A

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	591195	S201P-D0.5	2CDS281001R0981		0.14	10
	1	591201	S201P-D1	2CDS281001R0011		0.14	10
	1.6	591218	S201P-D1.6	2CDS281001R0971		0.14	10
	2	591225	S201P-D2	2CDS281001R0021		0.14	10
	3	591232	S201P-D3	2CDS281001R0031		0.14	10
	4	591249	S201P-D4	2CDS281001R0041		0.14	10
	6	591256	S201P-D6	2CDS281001R0061		0.14	10
	8	591263	S201P-D8	2CDS281001R0081		0.14	10
	10	591270	S201P-D10	2CDS281001R0101		0.14	10
	13	591287	S201P-D13	2CDS281001R0131		0.14	10
	16	591294	S201P-D16	2CDS281001R0161		0.14	10
	20	591300	S201P-D20	2CDS281001R0201		0.14	10
	25	591317	S201P-D25	2CDS281001R0251		0.14	10
	32	591324	S201P-D32	2CDS281001R0321		0.14	10
	40	591331	S201P-D40	2CDS281001R0401		0.14	10
	50	591348	S201P-D50	2CDS281001R0501		0.14	10
	63	591355	S201P-D63	2CDS281001R0631		0.14	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	591362	S202P-D0.5	2CDS282001R0981		0.28	5
	1	591379	S202P-D1	2CDS282001R0011		0.28	5
	1.6	591386	S202P-D1.6	2CDS282001R0971		0.28	5
	2	591393	S202P-D2	2CDS282001R0021		0.28	5
	3	591409	S202P-D3	2CDS282001R0031		0.28	5
	4	591416	S202P-D4	2CDS282001R0041		0.28	5
	6	591423	S202P-D6	2CDS282001R0061		0.28	5
	8	591430	S202P-D8	2CDS282001R0081		0.28	5
	10	591447	S202P-D10	2CDS282001R0101		0.28	5
	13	591454	S202P-D13	2CDS282001R0131		0.28	5
	16	591461	S202P-D16	2CDS282001R0161		0.28	5
	20	591478	S202P-D20	2CDS282001R0201		0.28	5
	25	591485	S202P-D25	2CDS282001R0251		0.28	5
	32	591492	S202P-D32	2CDS282001R0321		0.28	5
	40	591508	S202P-D40	2CDS282001R0401		0.28	5
	50	591515	S202P-D50	2CDS282001R0501		0.28	5
	63	591522	S202P-D63	2CDS282001R0631		0.28	5

S 203 P

S 204 P

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	591539	S203P-D0.5	2CDS283001R0981		0.42	1
	1	591546	S203P-D1	2CDS283001R0011		0.42	1
	1.6	591553	S203P-D1.6	2CDS283001R0971		0.42	1
	2	591560	S203P-D2	2CDS283001R0021		0.42	1
	3	591577	S203P-D3	2CDS283001R0031		0.42	1
	4	591584	S203P-D4	2CDS283001R0041		0.42	1
	6	591591	S203P-D6	2CDS283001R0061		0.42	1
	8	591607	S203P-D8	2CDS283001R0081		0.42	1
	10	591614	S203P-D10	2CDS283001R0101		0.42	1
	13	591621	S203P-D13	2CDS283001R0131		0.42	1
	16	591638	S203P-D16	2CDS283001R0161		0.42	1
	20	591645	S203P-D20	2CDS283001R0201		0.42	1
	25	591652	S203P-D25	2CDS283001R0251		0.42	1
	32	591669	S203P-D32	2CDS283001R0321		0.42	1
	40	591676	S203P-D40	2CDS283001R0401		0.42	1
	50	591683	S203P-D50	2CDS283001R0501		0.42	1
	63	591690	S203P-D63	2CDS283001R0631		0.42	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	591706	S204P-D0.5	2CDS284001R0981		0.56	1
	1	591713	S204P-D1	2CDS284001R0011		0.56	1
	1.6	591720	S204P-D1.6	2CDS284001R0971		0.56	1
	2	591737	S204P-D2	2CDS284001R0021		0.56	1
	3	591744	S204P-D3	2CDS284001R0031		0.56	1
	4	591751	S204P-D4	2CDS284001R0041		0.56	1
	6	591768	S204P-D6	2CDS284001R0061		0.56	1
	8	591775	S204P-D8	2CDS284001R0081		0.56	1
	10	591782	S204P-D10	2CDS284001R0101		0.56	1
	13	591799	S204P-D13	2CDS284001R0131		0.56	1
	16	591805	S204P-D16	2CDS284001R0161		0.56	1
	20	591812	S204P-D20	2CDS284001R0201		0.56	1
	25	591829	S204P-D25	2CDS284001R0251		0.56	1
	32	591836	S204P-D32	2CDS284001R0321		0.56	1
	40	591843	S204P-D40	2CDS284001R0401		0.56	1
	50	591850	S204P-D50	2CDS284001R0501		0.56	1
	63	591867	S204P-D63	2CDS284001R0631		0.56	1

MCBs

S 200 series P-D characteristic

S 201 P NA

S 203 P NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	591874	S201P-D0.5NA	2CDS281103R0981		0.28	5
	1	591881	S201P-D1NA	2CDS281103R0011		0.28	5
	1.6	591898	S201P-D1.6NA	2CDS281103R0971		0.28	5
	2	591904	S201P-D2NA	2CDS281103R0021		0.28	5
	3	591911	S201P-D3NA	2CDS281103R0031		0.28	5
	4	591928	S201P-D4NA	2CDS281103R0041		0.28	5
	6	591935	S201P-D6NA	2CDS281103R0061		0.28	5
	8	591942	S201P-D8NA	2CDS281103R0081		0.28	5
	10	591959	S201P-D10NA	2CDS281103R0101		0.28	5
	13	591966	S201P-D13NA	2CDS281103R0131		0.28	5
	16	591973	S201P-D16NA	2CDS281103R0161		0.28	5
	20	591980	S201P-D20NA	2CDS281103R0201		0.28	5
	25	591997	S201P-D25NA	2CDS281103R0251		0.28	5
	32	592000	S201P-D32NA	2CDS281103R0321		0.28	5
	40	592017	S201P-D40NA	2CDS281103R0401		0.28	5
	50	592024	S201P-D50NA	2CDS281103R0501		0.28	5
	63	592031	S201P-D63NA	2CDS281103R0631		0.28	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	592048	S203P-D0.5NA	2CDS283103R0981		0.56	1
	1	592055	S203P-D1NA	2CDS283103R0011		0.56	1
	1.6	592062	S203P-D1.6NA	2CDS283103R0971		0.56	1
	2	592079	S203P-D2NA	2CDS283103R0021		0.56	1
	3	592086	S203P-D3NA	2CDS283103R0031		0.56	1
	4	592093	S203P-D4NA	2CDS283103R0041		0.56	1
	6	592109	S203P-D6NA	2CDS283103R0061		0.56	1
	8	592116	S203P-D8NA	2CDS283103R0081		0.56	1
	10	592123	S203P-D10NA	2CDS283103R0101		0.56	1
	13	592130	S203P-D13NA	2CDS283103R0131		0.56	1
	16	592147	S203P-D16NA	2CDS283103R0161		0.56	1
	20	592154	S203P-D20NA	2CDS283103R0201		0.56	1
	25	592161	S203P-D25NA	2CDS283103R0251		0.56	1
	32	592178	S203P-D32NA	2CDS283103R0321		0.56	1
	40	592185	S203P-D40NA	2CDS283103R0401		0.56	1
	50	592192	S203P-D50NA	2CDS283103R0501		0.56	1
	63	592208	S203P-D63NA	2CDS283103R0631		0.56	1

MCBs

S 200 series P-K characteristic

S 201 P

S 200 P-K (power) characteristic
Function: protection and control of the circuits like motors, transformers and auxiliary circuits, against overloads and short-circuits.
Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=25 kA for 0.5 A≤In≤25 A; Icu=15 kA for 32 A≤In≤63 A

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.2	592215	S201P-K0.2	2CDS281001R0087		0.14	10
	0.3	592222	S201P-K0.3	2CDS281001R0117		0.14	10
	0.5	592239	S201P-K0.5	2CDS281001R0157		0.14	10
	0.75	592246	S201P-K0.75	2CDS281001R0187		0.14	10
	1	592253	S201P-K1	2CDS281001R0217		0.14	10
	1.6	592260	S201P-K1.6	2CDS281001R0257		0.14	10
	2	592277	S201P-K2	2CDS281001R0277		0.14	10
	3	592284	S201P-K3	2CDS281001R0317		0.14	10
	4	592291	S201P-K4	2CDS281001R0337		0.14	10
	6	592307	S201P-K6	2CDS281001R0377		0.14	10
	8	592314	S201P-K8	2CDS281001R0407		0.14	10
	10	592321	S201P-K10	2CDS281001R0427		0.14	10
	13	592338	S201P-K13	2CDS281001R0447		0.14	10
	16	592345	S201P-K16	2CDS281001R0467		0.14	10
	20	592352	S201P-K20	2CDS281001R0487		0.14	10
	25	592369	S201P-K25	2CDS281001R0517		0.14	10
	32	592376	S201P-K32	2CDS281001R0537		0.14	10
	40	592383	S201P-K40	2CDS281001R0557		0.14	10
	50	592390	S201P-K50	2CDS281001R0577		0.14	10
	63	592406	S201P-K63	2CDS281001R0607		0.14	10

MCBs

S 200 series P-K characteristic

S 202 P

S 203 P

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.2	592413	S202P-K0.2	2CDS282001R0087		0.28	5
	0.3	592420	S202P-K0.3	2CDS282001R0117		0.28	5
	0.5	592437	S202P-K0.5	2CDS282001R0157		0.28	5
	0.75	592444	S202P-K0.75	2CDS282001R0187		0.28	5
	1	592451	S202P-K1	2CDS282001R0217		0.28	5
	1.6	592468	S202P-K1.6	2CDS282001R0257		0.28	5
	2	592475	S202P-K2	2CDS282001R0277		0.28	5
	3	592482	S202P-K3	2CDS282001R0317		0.28	5
	4	592499	S202P-K4	2CDS282001R0337		0.28	5
	6	592505	S202P-K6	2CDS282001R0377		0.28	5
	8	592512	S202P-K8	2CDS282001R0407		0.28	5
	10	592529	S202P-K10	2CDS282001R0427		0.28	5
	13	592536	S202P-K13	2CDS282001R0447		0.28	5
	16	592543	S202P-K16	2CDS282001R0467		0.28	5
	20	592550	S202P-K20	2CDS282001R0487		0.28	5
	25	592567	S202P-K25	2CDS282001R0517		0.28	5
	32	592574	S202P-K32	2CDS282001R0537		0.28	5
	40	592581	S202P-K40	2CDS282001R0557		0.28	5
	50	592598	S202P-K50	2CDS282001R0577		0.28	5
	63	592604	S202P-K63	2CDS282001R0607		0.28	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.2	592611	S203P-K0.2	2CDS283001R0087		0.42	1
	0.3	592628	S203P-K0.3	2CDS283001R0117		0.42	1
	0.5	592635	S203P-K0.5	2CDS283001R0157		0.42	1
	0.75	592642	S203P-K0.75	2CDS283001R0187		0.42	1
	1	592659	S203P-K1	2CDS283001R0217		0.42	1
	1.6	592666	S203P-K1.6	2CDS283001R0257		0.42	1
	2	592673	S203P-K2	2CDS283001R0277		0.42	1
	3	592680	S203P-K3	2CDS283001R0317		0.42	1
	4	592697	S203P-K4	2CDS283001R0337		0.42	1
	6	592703	S203P-K6	2CDS283001R0377		0.42	1
	8	592710	S203P-K8	2CDS283001R0407		0.42	1
	10	592727	S203P-K10	2CDS283001R0427		0.42	1
	13	592734	S203P-K13	2CDS283001R0447		0.42	1
	16	592741	S203P-K16	2CDS283001R0467		0.42	1
	20	592758	S203P-K20	2CDS283001R0487		0.42	1
	25	592765	S203P-K25	2CDS283001R0517		0.42	1
	32	592772	S203P-K32	2CDS283001R0537		0.42	1
	40	592789	S203P-K40	2CDS283001R0557		0.42	1
	50	592796	S203P-K50	2CDS283001R0577		0.42	1
	63	592802	S203P-K63	2CDS283001R0607		0.42	1

S 204 P

S 201 P NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.2	592819	S204P-K0.2	2CDS284001R0087		0.56	1
	0.3	592826	S204P-K0.3	2CDS284001R0117		0.56	1
	0.5	592833	S204P-K0.5	2CDS284001R0157		0.56	1
	0.75	592840	S204P-K0.75	2CDS284001R0187		0.56	1
	1	592857	S204P-K1	2CDS284001R0217		0.56	1
	1.6	592864	S204P-K1.6	2CDS284001R0257		0.56	1
	2	592871	S204P-K2	2CDS284001R0277		0.56	1
	3	592888	S204P-K3	2CDS284001R0317		0.56	1
	4	592895	S204P-K4	2CDS284001R0337		0.56	1
	6	592901	S204P-K6	2CDS284001R0377		0.56	1
	8	592918	S204P-K8	2CDS284001R0407		0.56	1
	10	592925	S204P-K10	2CDS284001R0427		0.56	1
	13	592932	S204P-K13	2CDS284001R0447		0.56	1
	16	592949	S204P-K16	2CDS284001R0467		0.56	1
	20	592956	S204P-K20	2CDS284001R0487		0.56	1
	25	592963	S204P-K25	2CDS284001R0517		0.56	1
	32	592970	S204P-K32	2CDS284001R0537		0.56	1
	40	592987	S204P-K40	2CDS284001R0557		0.56	1
	50	592994	S204P-K50	2CDS284001R0577		0.56	1
	63	593007	S204P-K63	2CDS284001R0607		0.56	1

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.2	593014	S201P-K0.2NA	2CDS281103R0087		0.28	5
	0.3	593021	S201P-K0.3NA	2CDS281103R0117		0.28	5
	0.5	593038	S201P-K0.5NA	2CDS281103R0157		0.28	5
	0.75	593045	S201P-K0.75NA	2CDS281103R0187		0.28	5
	1	593052	S201P-K1NA	2CDS281103R0217		0.28	5
	1.6	593069	S201P-K1.6NA	2CDS281103R0257		0.28	5
	2	593076	S201P-K2NA	2CDS281103R0277		0.28	5
	3	593083	S201P-K3NA	2CDS281103R0317		0.28	5
	4	593090	S201P-K4NA	2CDS281103R0337		0.28	5
	6	593106	S201P-K6NA	2CDS281103R0377		0.28	5
	8	593113	S201P-K8NA	2CDS281103R0407		0.28	5
	10	593120	S201P-K10NA	2CDS281103R0427		0.28	5
	13	593137	S201P-K13NA	2CDS281103R0447		0.28	5
	16	593144	S201P-K16NA	2CDS281103R0467		0.28	5
	20	593151	S201P-K20NA	2CDS281103R0487		0.28	5
	25	593168	S201P-K25NA	2CDS281103R0517		0.28	5
	32	593175	S201P-K32NA	2CDS281103R0537		0.28	5
	40	593182	S201P-K40NA	2CDS281103R0557		0.28	5
	50	593199	S201P-K50NA	2CDS281103R0577		0.28	5
	63	593205	S201P-K63NA	2CDS281103R0607		0.28	5

MCBs

S 200 series P-K characteristic

S 203 P NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.2	593212	S203P-K0.2NA	2CDS283103R0087		0.56	2
	0.3	593229	S203P-K0.3NA	2CDS283103R0117		0.56	2
	0.5	593236	S203P-K0.5NA	2CDS283103R0157		0.56	2
	0.75	593243	S203P-K0.75NA	2CDS283103R0187		0.56	2
	1	593250	S203P-K1NA	2CDS283103R0217		0.56	2
	1.6	593267	S203P-K1.6NA	2CDS283103R0257		0.56	2
	2	593274	S203P-K2NA	2CDS283103R0277		0.56	2
	3	593281	S203P-K3NA	2CDS283103R0317		0.56	2
	4	593298	S203P-K4NA	2CDS283103R0337		0.56	2
	6	593304	S203P-K6NA	2CDS283103R0377		0.56	2
	8	593311	S203P-K8NA	2CDS283103R0407		0.56	2
	10	593328	S203P-K10NA	2CDS283103R0427		0.56	2
	13	593335	S203P-K13NA	2CDS283103R0447		0.56	2
	16	593342	S203P-K16NA	2CDS283103R0467		0.56	2
	20	593359	S203P-K20NA	2CDS283103R0487		0.56	2
	25	593366	S203P-K25NA	2CDS283103R0517		0.56	2
	32	593373	S203P-K32NA	2CDS283103R0537		0.56	2
	40	593380	S203P-K40NA	2CDS283103R0557		0.56	2
	50	593397	S203P-K50NA	2CDS283103R0577		0.56	2
	63	593403	S203P-K63NA	2CDS283103R0607		0.56	2

MCBs

S 200 series P-Z characteristic

S 201 P

S 202 P

S 200 P-Z characteristic

Function: protection and control of the electronic circuits against lower and long duration overloads and short-circuits.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2

Icu=25 kA for 0.5 A≤In≤25 A; Icu=15 kA for 32 A≤In≤63 A

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	593410	S201P-Z0.5	2CDS281001R0158		0.14	10
	1	593427	S201P-Z1	2CDS281001R0218		0.14	10
	1.6	593434	S201P-Z1.6	2CDS281001R0258		0.14	10
	2	593441	S201P-Z2	2CDS281001R0278		0.14	10
	3	593458	S201P-Z3	2CDS281001R0318		0.14	10
	4	593465	S201P-Z4	2CDS281001R0338		0.14	10
	6	593472	S201P-Z6	2CDS281001R0378		0.14	10
	8	593489	S201P-Z8	2CDS281001R0408		0.14	10
	10	593496	S201P-Z10	2CDS281001R0428		0.14	10
	16	593502	S201P-Z16	2CDS281001R0468		0.14	10
	20	593519	S201P-Z20	2CDS281001R0488		0.14	10
	25	593526	S201P-Z25	2CDS281001R0518		0.14	10
	32	593533	S201P-Z32	2CDS281001R0538		0.14	10
	40	593540	S201P-Z40	2CDS281001R0558		0.14	10
	50	593557	S201P-Z50	2CDS281001R0578		0.14	10
	63	593564	S201P-Z63	2CDS281001R0608		0.14	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	593571	S202P-Z0.5	2CDS282001R0158		0.28	5
	1	593588	S202P-Z1	2CDS282001R0218		0.28	5
	1.6	593595	S202P-Z1.6	2CDS282001R0258		0.28	5
	2	593601	S202P-Z2	2CDS282001R0278		0.28	5
	3	593618	S202P-Z3	2CDS282001R0318		0.28	5
	4	593625	S202P-Z4	2CDS282001R0338		0.28	5
	6	593632	S202P-Z6	2CDS282001R0378		0.28	5
	8	593649	S202P-Z8	2CDS282001R0408		0.28	5
	10	593656	S202P-Z10	2CDS282001R0428		0.28	5
	16	593663	S202P-Z16	2CDS282001R0468		0.28	5
	20	593670	S202P-Z20	2CDS282001R0488		0.28	5
	25	593687	S202P-Z25	2CDS282001R0518		0.28	5
	32	593694	S202P-Z32	2CDS282001R0538		0.28	5
	40	593700	S202P-Z40	2CDS282001R0558		0.28	5
	50	593717	S202P-Z50	2CDS282001R0578		0.28	5
	63	593724	S202P-Z63	2CDS282001R0608		0.28	5

MCBs

S 200 series P-Z characteristic

S 203 P

S 204 P

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5	593731	S203P-Z0.5	2CDS283001R0158		0.42	1
	1	593748	S203P-Z1	2CDS283001R0218		0.42	1
	1.6	593755	S203P-Z1.6	2CDS283001R0258		0.42	1
	2	593762	S203P-Z2	2CDS283001R0278		0.42	1
	3	593779	S203P-Z3	2CDS283001R0318		0.42	1
	4	593786	S203P-Z4	2CDS283001R0338		0.42	1
	6	593793	S203P-Z6	2CDS283001R0378		0.42	1
	8	593809	S203P-Z8	2CDS283001R0408		0.42	1
	10	593816	S203P-Z10	2CDS283001R0428		0.42	1
	16	593823	S203P-Z16	2CDS283001R0468		0.42	1
	20	593830	S203P-Z20	2CDS283001R0488		0.42	1
	25	593847	S203P-Z25	2CDS283001R0518		0.42	1
	32	593854	S203P-Z32	2CDS283001R0538		0.42	1
	40	593861	S203P-Z40	2CDS283001R0558		0.42	1
	50	593878	S203P-Z50	2CDS283001R0578		0.42	1
	63	593885	S203P-Z63	2CDS283001R0608		0.42	1

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5	593892	S204P-Z0.5	2CDS284001R0158		0.56	1
	1	593908	S204P-Z1	2CDS284001R0218		0.56	1
	1.6	593915	S204P-Z1.6	2CDS284001R0258		0.56	1
	2	593922	S204P-Z2	2CDS284001R0278		0.56	1
	3	593939	S204P-Z3	2CDS284001R0318		0.56	1
	4	593946	S204P-Z4	2CDS284001R0338		0.56	1
	6	593953	S204P-Z6	2CDS284001R0378		0.56	1
	8	593960	S204P-Z8	2CDS284001R0408		0.56	1
	10	593977	S204P-Z10	2CDS284001R0428		0.56	1
	16	593984	S204P-Z16	2CDS284001R0468		0.56	1
	20	593991	S204P-Z20	2CDS284001R0488		0.56	1
	25	594004	S204P-Z25	2CDS284001R0518		0.56	1
	32	594011	S204P-Z32	2CDS284001R0538		0.56	1
	40	594028	S204P-Z40	2CDS284001R0558		0.56	1
	50	594035	S204P-Z50	2CDS284001R0578		0.56	1
	63	594042	S204P-Z63	2CDS284001R0608		0.56	1

S 201 P NA

S 203 P NA

With disconnecting neutral NA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+NA	0.5	594059	S201P-Z0.5NA	2CDS281103R0158		0.28	5
	1	594066	S201P-Z1NA	2CDS281103R0218		0.28	5
	1.6	594073	S201P-Z1.6NA	2CDS281103R0258		0.28	5
	2	594080	S201P-Z2NA	2CDS281103R0278		0.28	5
	3	594097	S201P-Z3NA	2CDS281103R0318		0.28	5
	4	594103	S201P-Z4NA	2CDS281103R0338		0.28	5
	6	594110	S201P-Z6NA	2CDS281103R0378		0.28	5
	8	594127	S201P-Z8NA	2CDS281103R0408		0.28	5
	10	594134	S201P-Z10NA	2CDS281103R0428		0.28	5
	16	594141	S201P-Z16NA	2CDS281103R0468		0.28	5
	20	594158	S201P-Z20NA	2CDS281103R0488		0.28	5
	25	594165	S201P-Z25NA	2CDS281103R0518		0.28	5
	32	594172	S201P-Z32NA	2CDS281103R0538		0.28	5
	40	594189	S201P-Z40NA	2CDS281103R0558		0.28	5
	50	594196	S201P-Z50NA	2CDS281103R0578		0.28	5
	63	594202	S201P-Z63NA	2CDS281103R0608		0.28	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3+NA	0.5	594219	S203P-Z0.5NA	2CDS283103R0158		0.56	1
	1	594226	S203P-Z1NA	2CDS283103R0218		0.56	1
	1.6	594233	S203P-Z1.6NA	2CDS283103R0258		0.56	1
	2	594240	S203P-Z2NA	2CDS283103R0278		0.56	1
	3	594257	S203P-Z3NA	2CDS283103R0318		0.56	1
	4	594264	S203P-Z4NA	2CDS283103R0338		0.56	1
	6	594271	S203P-Z6NA	2CDS283103R0378		0.56	1
	8	594288	S203P-Z8NA	2CDS283103R0408		0.56	1
	10	594295	S203P-Z10NA	2CDS283103R0428		0.56	1
	16	594301	S203P-Z16NA	2CDS283103R0468		0.56	1
	20	594318	S203P-Z20NA	2CDS283103R0488		0.56	1
	25	594325	S203P-Z25NA	2CDS283103R0518		0.56	1
	32	594332	S203P-Z32NA	2CDS283103R0538		0.56	1
	40	594349	S203P-Z40NA	2CDS283103R0558		0.56	1
	50	594356	S203P-Z50NA	2CDS283103R0578		0.56	1
	63	594363	S203P-Z63NA	2CDS283103R0608		0.56	1

MCBs

S 200 series S - screwless range B and C characteristics

S 201 S

S 203 S

S 200 S-B and S 200 S-C characteristic
Function: protection and control of the circuits against overloads and short-circuits.
Applications: residential, commercial and industrial.
Standard: IEC/EN 60898-1
Icn=6 kA

S 200 S-B characteristic

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	709385	S201S-B6	2CDS251002R0065		0.100	10
	10	709415	S201S-B10	2CDS251002R0105		0.100	10
	13	709439	S201S-B13	2CDS251002R0135		0.100	10
	16	709453	S201S-B16	2CDS251002R0165		0.100	10
	20	709477	S201S-B20	2CDS251002R0205		0.100	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	709484	S203S-B6	2CDS253002R0065		0.300	1
	10	709514	S203S-B10	2CDS253002R0105		0.300	1
	13	709538	S203S-B13	2CDS253002R0135		0.300	1
	16	709552	S203S-B16	2CDS253002R0165		0.300	1
	20	709576	S203S-B20	2CDS253002R0205		0.300	1

S 200 S-C characteristic

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	756891	S201S-C6	2CDS251002R0064		100	10
	8	709392	S201S-C8	2CDS251002R0084		100	10
	10	709408	S201S-C10	2CDS251002R0104		100	10
	13	709422	S201S-C13	2CDS251002R0134		100	10
	16	709446	S201S-C16	2CDS251002R0164		100	10
	20	709460	S201S-C20	2CDS251002R0204		100	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	709378	S203S-C6	2CDS253002R0064		300	1
	8	709491	S203S-C8	2CDS253002R0084		300	1
	10	709507	S203S-C10	2CDS253002R0104		300	1
	13	709521	S203S-C13	2CDS253002R0134		300	1
	16	709545	S203S-C16	2CDS253002R0164		300	1
	20	709569	S203S-C20	2CDS253002R0204		300	1

MCBs

SU 200 M series technical characteristic

General Data		
Standards		UL 489, CSA 22.2 No. 5, IEC/EN 60947-2
Poles		1P, 2P, 3P, 4P
Tripping characteristics		C, K, Z
Rated current In		0.2 - 63 A
Rated frequency f		50 / 60 Hz, DC (0 Hz)
Rated insulation voltage Ui acc. to IEC/EN 60664-1		440 V AC (phase to phase)
Overvoltage category		III
Pollution degree		3
IEC/EN 60947-2		
Rated operational voltage Ue		1P: 230 V AC; 2P, 3P, 4P: 400 V AC
Max. power frequency recovery voltage Umax AC		1P: 253 V AC; 2P, 3P, 4P: 440 V AC
Min. operating voltage		12 V AC, 12 V DC
Rated ultimate short-circuit breaking capacity Icu		15 kA
Rated service short-circuit breaking capacity Ics		≤ 40 A: 11.25 kA
		> 40 A: 7.5 kA
Rated impulse withstand voltage Uimp (1.2/50µs)		4 kV (test voltage 6.2 kV at sea level, 5 kV at 2,000 m)
Dielectric test voltage		2 kV (50 / 60Hz, 1 min.)
Reference temperature for tripping characteristics		30 °C
Electrical endurance		In < 30 A: 20,000 ops (AC), In ≥ 30 A: 10,000 ops. (AC);
		1 cycle (2 s - ON, 13 s - OFF, In ≤ 32 A), 1 cycle (2 s - ON, 28 s - OFF, In > 32 A)
UL / CSA		
Rated voltage	AC	1P: 277 V AC up to 40 A for C, Z char.,
	AC	277 V AC up to 35 A for K char., 240 V AC
	AC	2P, 3P, 4P: 480 Y / 277 V AC up to 40 A for C, Z char.,
	AC	480 Y / 277 V AC up to 35 A for K char., 240 V AC
	DC	1P: 48 V DC; 2P: 96 V DC (2p in series)
Rated interrupting capacity acc. to UL 1077		–
Short-circuit current rating acc. to UL 489		10 kA
Application		–
Reference temperature for tripping characteristics		40 °C
Electrical endurance		6,000 ops (AC), 6,000 ops. (DC); 1 cycle (1 s - ON, 9 s - OFF)

MCBs

SU 200 M series technical characteristic

Mechanical data	
Housing	Insulation group II, RAL 7035
Toggle	Insulation group II, black, sealable
Contact position indication	Real CPI (green OFF / red ON)
Protection degree acc. to DIN EN 60529	IP20*, IP40 in enclosure with cover
Mechanical endurance	20,000 ops.
Shock resistance acc. to IEC/EN 60068-2-27	25 g - 2 shocks - 13 ms
Vibration resistance acc. to IEC/EN 60068-2-6	5g - 20 cycles at 5…150…5 Hz with load 0.8 In
Environmental conditions (damp heat cyclic) acc. to IEC/EN 60068-2-30	28 cycles with 55°C/90-96% and 25°C/95-100%
Ambient temperature	-25 … +55°C
Storage temperature	-40 … +70 °C
Installation	
Terminal	Failsafe bi-directional cylinder-lift terminal
Cross-section of conductors (top/bottom)	solid, stranded: 35 mm² / 35 mm² flexible: 25 mm² / 25 mm²
	18 – 4 AWG
Cross-section of busbars (top/bottom)	10 mm² / 10 mm²
	18 – 8 AWG
Torque	2.8 Nm
	AWG 18-16: 13.3 in-lbs. AWG 14-10: 17.7 in-lbs. AWG 8-4: 39.8 in-lbs.
Screwdriver	No. 2 Pozidrive
Mounting	On DIN rail 35 mm acc. to EN 60715 by fast clip
Mounting position	any
Supply	optional
Dimensions and weight	
Mounting dimensions acc. to DIN 43880	Mounting dimension 3
Pole dimensions (H x D x W)	111 x 69 x 17.5 mm
Pole weight approx.	125 g
Combination with auxiliary elements	
Auxiliary contact	Yes
Signal contact	Yes
Shunt trip	Yes

* Also fulfilling the requirements acc. to the protection degree IPXXB

MCBs

SU 200 M series C characteristic

SU 200 M-C characteristic

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5		SU201M-C0,5	2CDS271337R0984		0.125	10
	1		SU201M-C1	2CDS271337R0014		0.125	10
	1.6		SU201M-C1,6	2CDS271337R0974		0.125	10
	2		SU201M-C2	2CDS271337R0024		0.125	10
	3		SU201M-C3	2CDS271337R0034		0.125	10
	4		SU201M-C4	2CDS271337R0044		0.125	10
	5		SU201M-C5	2CDS271337R0054		0.125	10
	6		SU201M-C6	2CDS271337R0064		0.125	10
	8		SU201M-C8	2CDS271337R0084		0.125	10
	10		SU201M-C10	2CDS271337R0104		0.125	10
	13		SU201M-C13	2CDS271337R0134		0.125	10
	15		SU201M-C15	2CDS271337R0154		0.125	10
	16		SU201M-C16	2CDS271337R0164		0.125	10
	20		SU201M-C20	2CDS271337R0204		0.125	10
	25		SU201M-C25	2CDS271337R0254		0.125	10
	30		SU201M-C30	2CDS271337R0304		0.125	10
	32		SU201M-C32	2CDS271337R0324		0.125	10
	35		SU201M-C35	2CDS271337R0354		0.125	10
	40		SU201M-C40	2CDS271337R0404		0.125	10
	50		SU201M-C50	2CDS271337R0504		0.125	10
	60		SU201M-C60	2CDS271337R0604		0.125	10
	63		SU201M-C63	2CDS271337R0634		0.125	10

MCBs

SU 200 M series C characteristic

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5		SU202M-C0,5	2CDS272337R0984		0.250	5
	1		SU202M-C1	2CDS272337R0014		0.250	5
	1.6		SU202M-C1,6	2CDS272337R0974		0.250	5
	2		SU202M-C2	2CDS272337R0024		0.250	5
	3		SU202M-C3	2CDS272337R0034		0.250	5
	4		SU202M-C4	2CDS272337R0044		0.250	5
	5		SU202M-C5	2CDS272337R0054		0.250	5
	6		SU202M-C6	2CDS272337R0064		0.250	5
	8		SU202M-C8	2CDS272337R0084		0.250	5
	10		SU202M-C10	2CDS272337R0104		0.250	5
	13		SU202M-C13	2CDS272337R0134		0.250	5
	15		SU202M-C15	2CDS272337R0154		0.250	5
	16		SU202M-C16	2CDS272337R0164		0.250	5
	20		SU202M-C20	2CDS272337R0204		0.250	5
	25		SU202M-C25	2CDS272337R0254		0.250	5
	30		SU202M-C30	2CDS272337R0304		0.250	5
	32		SU202M-C32	2CDS272337R0324		0.250	5
	35		SU202M-C35	2CDS272337R0354		0.250	5
	40		SU202M-C40	2CDS272337R0404		0.250	5
	50		SU202M-C50	2CDS272337R0504		0.250	5
	60		SU202M-C60	2CDS272337R0604		0.250	5
	63		SU202M-C63	2CDS272337R0634		0.250	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5		SU203M-C0,5	2CDS273337R0984		0.375	3
	1		SU203M-C1	2CDS273337R0014		0.375	3
	1.6		SU203M-C1,6	2CDS273337R0974		0.375	3
	2		SU203M-C2	2CDS273337R0024		0.375	3
	3		SU203M-C3	2CDS273337R0034		0.375	3
	4		SU203M-C4	2CDS273337R0044		0.375	3
	5		SU203M-C5	2CDS273337R0054		0.375	3
	6		SU203M-C6	2CDS273337R0064		0.375	3
	8		SU203M-C8	2CDS273337R0084		0.375	3
	10		SU203M-C10	2CDS273337R0104		0.375	3
	13		SU203M-C13	2CDS273337R0134		0.375	3
	15		SU203M-C15	2CDS273337R0154		0.375	3
	16		SU203M-C16	2CDS273337R0164		0.375	3
	20		SU203M-C20	2CDS273337R0204		0.375	3
	25		SU203M-C25	2CDS273337R0254		0.375	3
	30		SU203M-C30	2CDS273337R0304		0.375	3
	32		SU203M-C32	2CDS273337R0324		0.375	3
	35		SU203M-C35	2CDS273337R0354		0.375	3
	40		SU203M-C40	2CDS273337R0404		0.375	3
	50		SU203M-C50	2CDS273337R0504		0.375	3
	60		SU203M-C60	2CDS273337R0604		0.375	3
	63		SU203M-C63	2CDS273337R0634		0.375	3

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5		SU204M-C0,5	2CDS274337R0984		0.500	2
	1		SU204M-C1	2CDS274337R0014		0.500	2
	1.6		SU204M-C1,6	2CDS274337R0974		0.500	2
	2		SU204M-C2	2CDS274337R0024		0.500	2
	3		SU204M-C3	2CDS274337R0034		0.500	2
	4		SU204M-C4	2CDS274337R0044		0.500	2
	5		SU204M-C5	2CDS274337R0054		0.500	2
	6		SU204M-C6	2CDS274337R0064		0.500	2
	8		SU204M-C8	2CDS274337R0084		0.500	2
	10		SU204M-C10	2CDS274337R0104		0.500	2
	13		SU204M-C13	2CDS274337R0134		0.500	2
	15		SU204M-C15	2CDS274337R0154		0.500	2
	16		SU204M-C16	2CDS274337R0164		0.500	2
	20		SU204M-C20	2CDS274337R0204		0.500	2
	25		SU204M-C25	2CDS274337R0254		0.500	2
	30		SU204M-C30	2CDS274337R0304		0.500	2
	32		SU204M-C32	2CDS274337R0324		0.500	2
	35		SU204M-C35	2CDS274337R0354		0.500	2
	40		SU204M-C40	2CDS274337R0404		0.500	2
	50		SU204M-C50	2CDS274337R0504		0.500	2
	60		SU204M-C60	2CDS274337R0604		0.500	2
	63		SU204M-C63	2CDS274337R0634		0.500	2

MCBs

SU 200 M series K characteristic

SU 200 M-K characteristic

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.2		SU201M-K0,2	2CDS271337R0087		0.125	10
	0.3		SU201M-K0,3	2CDS271337R0117		0.125	10
	0.5		SU201M-K0,5	2CDS271337R0157		0.125	10
	0.75		SU201M-K0,75	2CDS271337R0187		0.125	10
	1		SU201M-K1	2CDS271337R0217		0.125	10
	1.6		SU201M-K1,6	2CDS271337R0257		0.125	10
	2		SU201M-K2	2CDS271337R0277		0.125	10
	3		SU201M-K3	2CDS271337R0317		0.125	10
	4		SU201M-K4	2CDS271337R0337		0.125	10
	5		SU201M-K5	2CDS271337R0357		0.125	10
	6		SU201M-K6	2CDS271337R0377		0.125	10
	8		SU201M-K8	2CDS271337R0407		0.125	10
	10		SU201M-K10	2CDS271337R0427		0.125	10
	13		SU201M-K13	2CDS271337R0447		0.125	10
	15		SU201M-K15	2CDS271337R0457		0.125	10
	16		SU201M-K16	2CDS271337R0467		0.125	10
	20		SU201M-K20	2CDS271337R0487		0.125	10
	25		SU201M-K25	2CDS271337R0517		0.125	10
	30		SU201M-K30	2CDS271337R0527		0.125	10
	32		SU201M-K32	2CDS271337R0537		0.125	10
	35		SU201M-K35	2CDS271337R0547		0.125	10
	40		SU201M-K40	2CDS271337R0557		0.125	10
	50		SU201M-K50	2CDS271337R0577		0.125	10
	60		SU201M-K60	2CDS271337R0587		0.125	10
	63		SU201M-K63	2CDS271337R0607		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.2		SU202M-K0,2	2CDS272337R0087		0.250	5
	0.3		SU202M-K0,3	2CDS272337R0117		0.250	5
	0.5		SU202M-K0,5	2CDS272337R0157		0.250	5
	0.75		SU202M-K0,75	2CDS272337R0187		0.250	5
	1		SU202M-K1	2CDS272337R0217		0.250	5
	1.6		SU202M-K1,6	2CDS272337R0257		0.250	5
	2		SU202M-K2	2CDS272337R0277		0.250	5
	3		SU202M-K3	2CDS272337R0317		0.250	5
	4		SU202M-K4	2CDS272337R0337		0.250	5
	5		SU202M-K5	2CDS272337R0357		0.250	5
	6		SU202M-K6	2CDS272337R0377		0.250	5
	8		SU202M-K8	2CDS272337R0407		0.250	5
	10		SU202M-K10	2CDS272337R0427		0.250	5
	13		SU202M-K13	2CDS272337R0447		0.250	5
	15		SU202M-K15	2CDS272337R0457		0.250	5
	16		SU202M-K16	2CDS272337R0467		0.250	5
	20		SU202M-K20	2CDS272337R0487		0.250	5
	25		SU202M-K25	2CDS272337R0517		0.250	5
	30		SU202M-K30	2CDS272337R0527		0.250	5
	32		SU202M-K32	2CDS272337R0537		0.250	5
	35		SU202M-K35	2CDS272337R0547		0.250	5
	40		SU202M-K40	2CDS272337R0557		0.250	5
	50		SU202M-K50	2CDS272337R0577		0.250	5
	60		SU202M-K60	2CDS272337R0587		0.250	5
	63		SU202M-K63	2CDS272337R0607		0.250	5

MCBs

SU 200 M series K characteristic

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.2		SU203M-K0,2	2CDS273337R0087		0.375	3
	0.3		SU203M-K0,3	2CDS273337R0117		0.375	3
	0.5		SU203M-K0,5	2CDS273337R0157		0.375	3
	0.75		SU203M-K0,75	2CDS273337R0187		0.375	3
	1		SU203M-K1	2CDS273337R0217		0.375	3
	1.6		SU203M-K1,6	2CDS273337R0257		0.375	3
	2		SU203M-K2	2CDS273337R0277		0.375	3
	3		SU203M-K3	2CDS273337R0317		0.375	3
	4		SU203M-K4	2CDS273337R0337		0.375	3
	5		SU203M-K5	2CDS273337R0357		0.375	3
	6		SU203M-K6	2CDS273337R0377		0.375	3
	8		SU203M-K8	2CDS273337R0407		0.375	3
	10		SU203M-K10	2CDS273337R0427		0.375	3
	13		SU203M-K13	2CDS273337R0447		0.375	3
	15		SU203M-K15	2CDS273337R0457		0.375	3
	16		SU203M-K16	2CDS273337R0467		0.375	3
	20		SU203M-K20	2CDS273337R0487		0.375	3
	25		SU203M-K25	2CDS273337R0517		0.375	3
	30		SU203M-K30	2CDS273337R0527		0.375	3
	32		SU203M-K32	2CDS273337R0537		0.375	3
	35		SU203M-K35	2CDS273337R0547		0.375	3
	40		SU203M-K40	2CDS273337R0557		0.375	3
	50		SU203M-K50	2CDS273337R0577		0.375	3
	60		SU203M-K60	2CDS273337R0587		0.375	3
	63		SU203M-K63	2CDS273337R0607		0.375	3

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.2		SU204M-K0,2	2CDS274337R0087		0.500	2
	0.3		SU204M-K0,3	2CDS274337R0117		0.500	2
	0.5		SU204M-K0,5	2CDS274337R0157		0.500	2
	0.75		SU204M-K0,75	2CDS274337R0187		0.500	2
	1		SU204M-K1	2CDS274337R0217		0.500	2
	1.6		SU204M-K1,6	2CDS274337R0257		0.500	2
	2		SU204M-K2	2CDS274337R0277		0.500	2
	3		SU204M-K3	2CDS274337R0317		0.500	2
	4		SU204M-K4	2CDS274337R0337		0.500	2
	5		SU204M-K5	2CDS274337R0357		0.500	2
	6		SU204M-K6	2CDS274337R0377		0.500	2
	8		SU204M-K8	2CDS274337R0407		0.500	2
	10		SU204M-K10	2CDS274337R0427		0.500	2
	13		SU204M-K13	2CDS274337R0447		0.500	2
	15		SU204M-K15	2CDS274337R0457		0.500	2
	16		SU204M-K16	2CDS274337R0467		0.500	2
	20		SU204M-K20	2CDS274337R0487		0.500	2
	25		SU204M-K25	2CDS274337R0517		0.500	2
	30		SU204M-K30	2CDS274337R0527		0.500	2
	32		SU204M-K32	2CDS274337R0537		0.500	2
	35		SU204M-K35	2CDS274337R0547		0.500	2
	40		SU204M-K40	2CDS274337R0557		0.500	2
	50		SU204M-K50	2CDS274337R0577		0.500	2
	60		SU204M-K60	2CDS274337R0587		0.500	2
	63		SU204M-K63	2CDS274337R0607		0.500	2

MCBs

SU 200 M series Z characteristic

SU 200 M-Z characteristic

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5		SU201M-Z0,5	2CDS271337R0158		0.125	10
	1		SU201M-Z1	2CDS271337R0218		0.125	10
	1.6		SU201M-Z1,6	2CDS271337R0258		0.125	10
	2		SU201M-Z2	2CDS271337R0278		0.125	10
	3		SU201M-Z3	2CDS271337R0318		0.125	10
	4		SU201M-Z4	2CDS271337R0338		0.125	10
	5		SU201M-Z5	2CDS271337R0358		0.125	10
	6		SU201M-Z6	2CDS271337R0378		0.125	10
	8		SU201M-Z8	2CDS271337R0408		0.125	10
	10		SU201M-Z10	2CDS271337R0428		0.125	10
	13		SU201M-Z13	2CDS271337R0448		0.125	10
	15		SU201M-Z15	2CDS271337R0458		0.125	10
	16		SU201M-Z16	2CDS271337R0468		0.125	10
	20		SU201M-Z20	2CDS271337R0488		0.125	10
	25		SU201M-Z25	2CDS271337R0518		0.125	10
	30		SU201M-Z30	2CDS271337R0528		0.125	10
	32		SU201M-Z32	2CDS271337R0538		0.125	10
	35		SU201M-Z35	2CDS271337R0548		0.125	10
	40		SU201M-Z40	2CDS271337R0558		0.125	10
	50		SU201M-Z50	2CDS271337R0578		0.125	10
	60		SU201M-Z60	2CDS271337R0588		0.125	10
	63		SU201M-Z63	2CDS271337R0608		0.125	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5		SU202M-Z0,5	2CDS272337R0158		0.250	5
	1		SU202M-Z1	2CDS272337R0218		0.250	5
	1.6		SU202M-Z1,6	2CDS272337R0258		0.250	5
	2		SU202M-Z2	2CDS272337R0278		0.250	5
	3		SU202M-Z3	2CDS272337R0318		0.250	5
	4		SU202M-Z4	2CDS272337R0338		0.250	5
	5		SU202M-Z5	2CDS272337R0358		0.250	5
	6		SU202M-Z6	2CDS272337R0378		0.250	5
	8		SU202M-Z8	2CDS272337R0408		0.250	5
	10		SU202M-Z10	2CDS272337R0428		0.250	5
	13		SU202M-Z13	2CDS272337R0448		0.250	5
	15		SU202M-Z15	2CDS272337R0458		0.250	5
	16		SU202M-Z16	2CDS272337R0468		0.250	5
	20		SU202M-Z20	2CDS272337R0488		0.250	5
	25		SU202M-Z25	2CDS272337R0518		0.250	5
	30		SU202M-Z30	2CDS272337R0528		0.250	5
	32		SU202M-Z32	2CDS272337R0538		0.250	5
	35		SU202M-Z35	2CDS272337R0548		0.250	5
	40		SU202M-Z40	2CDS272337R0558		0.250	5
	50		SU202M-Z50	2CDS272337R0578		0.250	5
	60		SU202M-Z60	2CDS272337R0588		0.250	5
	63		SU202M-Z63	2CDS272337R0608		0.250	5

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.5		SU203M-Z0,5	2CDS273337R0158		0.375	3
	1		SU203M-Z1	2CDS273337R0218		0.375	3
	1.6		SU203M-Z1,6	2CDS273337R0258		0.375	3
	2		SU203M-Z2	2CDS273337R0278		0.375	3
	3		SU203M-Z3	2CDS273337R0318		0.375	3
	4		SU203M-Z4	2CDS273337R0338		0.375	3
	5		SU203M-Z5	2CDS273337R0358		0.375	3
	6		SU203M-Z6	2CDS273337R0378		0.375	3
	8		SU203M-Z8	2CDS273337R0408		0.375	3
	10		SU203M-Z10	2CDS273337R0428		0.375	3
	13		SU203M-Z13	2CDS273337R0448		0.375	3
	15		SU203M-Z15	2CDS273337R0458		0.375	3
	16		SU203M-Z16	2CDS273337R0468		0.375	3
	20		SU203M-Z20	2CDS273337R0488		0.375	3
	25		SU203M-Z25	2CDS273337R0518		0.375	3
	30		SU203M-Z30	2CDS273337R0528		0.375	3
	32		SU203M-Z32	2CDS273337R0538		0.375	3
	35		SU203M-Z35	2CDS273337R0548		0.375	3
	40		SU203M-Z40	2CDS273337R0558		0.375	3
	50		SU203M-Z50	2CDS273337R0578		0.375	3
	60		SU203M-Z60	2CDS273337R0588		0.375	3
	63		SU203M-Z63	2CDS273337R0608		0.375	3

MCBs

SU 200 M series Z characteristic

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.5		SU204M-Z0,5	2CDS274337R0158		0.500	2
	1		SU204M-Z1	2CDS274337R0218		0.500	2
	1.6		SU204M-Z1,6	2CDS274337R0258		0.500	2
	2		SU204M-Z2	2CDS274337R0278		0.500	2
	3		SU204M-Z3	2CDS274337R0318		0.500	2
	4		SU204M-Z4	2CDS274337R0338		0.500	2
	5		SU204M-Z5	2CDS274337R0358		0.500	2
	6		SU204M-Z6	2CDS274337R0378		0.500	2
	8		SU204M-Z8	2CDS274337R0408		0.500	2
	10		SU204M-Z10	2CDS274337R0428		0.500	2
	13		SU204M-Z13	2CDS274337R0448		0.500	2
	15		SU204M-Z15	2CDS274337R0458		0.500	2
	16		SU204M-Z16	2CDS274337R0468		0.500	2
	20		SU204M-Z20	2CDS274337R0488		0.500	2
	25		SU204M-Z25	2CDS274337R0518		0.500	2
	30		SU204M-Z30	2CDS274337R0528		0.500	2
	32		SU204M-Z32	2CDS274337R0538		0.500	2
	35		SU204M-Z35	2CDS274337R0548		0.500	2
	40		SU204M-Z40	2CDS274337R0558		0.500	2
	50		SU204M-Z50	2CDS274337R0578		0.500	2
	60		SU204M-Z60	2CDS274337R0588		0.500	2
	63		SU204M-Z63	2CDS274337R0608		0.500	2

MCBs

Circuit breaker SU 200 MR series, 10kA

The SU200 MR is a high-performance circuit breaker with ring cable lug connections conforming to UL 489; CSA 22.2. No. 5 and IEC/EN 60947-2 standards. The integrated captive connecting screws simplify the connection of electric lines, provides extra protection and saves time.

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.2	956192	SU201MR-K0.2	2CDS271347R0087		0.140	10
	0.3	956215	SU201MR-K0.3	2CDS271347R0117		0.140	10
	0.5	956239	SU201MR-K0.5	2CDS271347R0157		0.140	10
	0.75	956253	SU201MR-K0.75	2CDS271347R0187		0.140	10
	1	956277	SU201MR-K1	2CDS271347R0217		0.140	10
	1.6	956291	SU201MR-K1.6	2CDS271347R0257		0.140	10
	2	956314	SU201MR-K2	2CDS271347R0277		0.140	10
	3	956338	SU201MR-K3	2CDS271347R0317		0.140	10
	4	956352	SU201MR-K4	2CDS271347R0337		0.140	10
	5	956376	SU201MR-K5	2CDS271347R0357		0.140	10
	6	956390	SU201MR-K6	2CDS271347R0377		0.140	10
	8	956413	SU201MR-K8	2CDS271347R0407		0.140	10
	10	956437	SU201MR-K10	2CDS271347R0427		0.140	10
	13	956451	SU201MR-K13	2CDS271347R0447		0.140	10
	15	956475	SU201MR-K15	2CDS271347R0457		0.140	10
	16	956499	SU201MR-K16	2CDS271347R0467		0.140	10
	20	956512	SU201MR-K20	2CDS271347R0487		0.140	10
	25	956536	SU201MR-K25	2CDS271347R0517		0.140	10
	30	956550	SU201MR-K30	2CDS271347R0527		0.140	10
	32	956574	SU201MR-K32	2CDS271347R0537		0.140	10
	35	956598	SU201MR-K35	2CDS271347R0547		0.140	10
	40	956611	SU201MR-K40	2CDS271347R0557		0.140	10
	50	956635	SU201MR-K50	2CDS271347R0577		0.140	10
	60	956659	SU201MR-K60	2CDS271347R0587		0.140	10
	63	956673	SU201MR-K63	2CDS271347R0607		0.140	10
2	0.2	957175	SU202MR-K0.2	2CDS272347R0087		0.280	5
	0.3	957199	SU202MR-K0.3	2CDS272347R0117		0.280	5
	0.5	957212	SU202MR-K0.5	2CDS272347R0157		0.280	5
	0.75	957236	SU202MR-K0.75	2CDS272347R0187		0.280	5
	1	957250	SU202MR-K1	2CDS272347R0217		0.280	5
	1.6	957274	SU202MR-K1.6	2CDS272347R0257		0.280	5
	2	957298	SU202MR-K2	2CDS272347R0277		0.280	5
	3	957311	SU202MR-K3	2CDS272347R0317		0.280	5
	4	957335	SU202MR-K4	2CDS272347R0337		0.280	5
	5	957359	SU202MR-K5	2CDS272347R0357		0.280	5
	6	957373	SU202MR-K6	2CDS272347R0377		0.280	5
	8	957397	SU202MR-K8	2CDS272347R0407		0.280	5
	10	957410	SU202MR-K10	2CDS272347R0427		0.280	5
	13	957434	SU202MR-K13	2CDS272347R0447		0.280	5
	15	957458	SU202MR-K15	2CDS272347R0457		0.280	5
	16	957472	SU202MR-K16	2CDS272347R0467		0.280	5
	20	957496	SU202MR-K20	2CDS272347R0487		0.280	5
	25	957519	SU202MR-K25	2CDS272347R0517		0.280	5
	30	957533	SU202MR-K30	2CDS272347R0527		0.280	5
	32	957557	SU202MR-K32	2CDS272347R0537		0.280	5
	35	957571	SU202MR-K35	2CDS272347R0547		0.280	5
	40	957595	SU202MR-K40	2CDS272347R0557		0.280	5
	50	957618	SU202MR-K50	2CDS272347R0577		0.280	5
	60	957632	SU202MR-K60	2CDS272347R0587		0.280	5
	63	957656	SU202MR-K63	2CDS272347R0607		0.280	5

MCBs

Circuit breaker SU 200 MR series, 10kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.2	958172	SU203MR-K0.2	2CDS273347R0087		0.420	3
	0.3	958196	SU203MR-K0.3	2CDS273347R0117		0.420	3
	0.5	958219	SU203MR-K0.5	2CDS273347R0157		0.420	3
	0.75	958233	SU203MR-K0.75	2CDS273347R0187		0.420	3
	1	958257	SU203MR-K1	2CDS273347R0217		0.420	3
	1.6	958271	SU203MR-K1.6	2CDS273347R0257		0.420	3
	2	958295	SU203MR-K2	2CDS273347R0277		0.420	3
	3	958318	SU203MR-K3	2CDS273347R0317		0.420	3
	4	958332	SU203MR-K4	2CDS273347R0337		0.420	3
	5	958356	SU203MR-K5	2CDS273347R0357		0.420	3
	6	958370	SU203MR-K6	2CDS273347R0377		0.420	3
	8	958394	SU203MR-K8	2CDS273347R0407		0.420	3
	10	958417	SU203MR-K10	2CDS273347R0427		0.420	3
	13	958431	SU203MR-K13	2CDS273347R0447		0.420	3
	15	958455	SU203MR-K15	2CDS273347R0457		0.420	3
	16	958479	SU203MR-K16	2CDS273347R0467		0.420	3
	20	958493	SU203MR-K20	2CDS273347R0487		0.420	3
	25	958516	SU203MR-K25	2CDS273347R0517		0.420	3
	30	958530	SU203MR-K30	2CDS273347R0527		0.420	3
	32	958554	SU203MR-K32	2CDS273347R0537		0.420	3
	35	958578	SU203MR-K35	2CDS273347R0547		0.420	3
	40	958592	SU203MR-K40	2CDS273347R0557		0.420	3
	50	958615	SU203MR-K50	2CDS273347R0577		0.420	3
	60	958639	SU203MR-K60	2CDS273347R0587		0.420	3
	63	958653	SU203MR-K63	2CDS273347R0607		0.420	3
4	0.2	959179	SU204MR-K0.2	2CDS274347R0087		0.560	2
	0.3	959193	SU204MR-K0.3	2CDS274347R0117		0.560	2
	0.5	959216	SU204MR-K0.5	2CDS274347R0157		0.560	2
	0.75	959230	SU204MR-K0.75	2CDS274347R0187		0.560	2
	1	959254	SU204MR-K1	2CDS274347R0217		0.560	2
	1.6	959278	SU204MR-K1.6	2CDS274347R0257		0.560	2
	2	959292	SU204MR-K2	2CDS274347R0277		0.560	2
	3	959315	SU204MR-K3	2CDS274347R0317		0.560	2
	4	959339	SU204MR-K4	2CDS274347R0337		0.560	2
	5	959353	SU204MR-K5	2CDS274347R0357		0.560	2
	6	959377	SU204MR-K6	2CDS274347R0377		0.560	2
	8	959391	SU204MR-K8	2CDS274347R0407		0.560	2
	10	959414	SU204MR-K10	2CDS274347R0427		0.560	2
	13	959438	SU204MR-K13	2CDS274347R0447		0.560	2
	15	959452	SU204MR-K15	2CDS274347R0457		0.560	2
	16	959476	SU204MR-K16	2CDS274347R0467		0.560	2
	20	959490	SU204MR-K20	2CDS274347R0487		0.560	2
	25	959513	SU204MR-K25	2CDS274347R0517		0.560	2
	30	959537	SU204MR-K30	2CDS274347R0527		0.560	2
	32	959551	SU204MR-K32	2CDS274347R0537		0.560	2
	35	959575	SU204MR-K35	2CDS274347R0547		0.560	2
	40	959599	SU204MR-K40	2CDS274347R0557		0.560	2
	50	959612	SU204MR-K50	2CDS274347R0577		0.560	2
	60	959636	SU204MR-K60	2CDS274347R0587		0.560	2
	63	959650	SU204MR-K63	2CDS274347R0607		0.560	2

MCBs

S 200 series UDC - Universal current range, UL, K characteristic

S 201 UDC

S 200 UDC-K characteristic
Function: protection and control of the circuits like motors, transformers and auxiliary circuits, against overloads and short-circuits.
Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.
Applications: commercial and industrial.
Standard: UL 489, CSA 22.2 No. 5
(only DC, please note polarity of device)
Short-circuit current rating (SCCR acc. to UL 489): 14 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	1	825924	S201UDC-K1	2CDS271517R0217		0.150	10
	1,6	825948	S201UDC-K1.6	2CDS271517R0257		0.150	10
	2	825955	S201UDC-K2	2CDS271517R0277		0.150	10
	3	825962	S201UDC-K3	2CDS271517R0317		0.150	10
	4	825979	S201UDC-K4	2CDS271517R0337		0.150	10
	5	825986	S201UDC-K5	2CDS271517R0357		0.150	10
	6	825993	S201UDC-K6	2CDS271517R0377		0.150	10
	8	826006	S201UDC-K8	2CDS271517R0407		0.150	10
	10	826013	S201UDC-K10	2CDS271517R0427		0.150	10
	13	826020	S201UDC-K13	2CDS271517R0447		0.150	10
	15	826037	S201UDC-K15	2CDS271517R0457		0.150	10
	16	826044	S201UDC-K16	2CDS271517R0467		0.150	10
	20	826051	S201UDC-K20	2CDS271517R0487		0.150	10
	25	826068	S201UDC-K25	2CDS271517R0517		0.150	10
	30	826075	S201UDC-K30	2CDS271517R0527		0.150	10
	32	826082	S201UDC-K32	2CDS271517R0537		0.150	10
	40	826099	S201UDC-K40	2CDS271517R0557		0.150	10
	50	826105	S201UDC-K50	2CDS271517R0577		0.150	10
	60	826112	S201UDC-K60	2CDS271517R0587		0.150	10
	63	826129	S201UDC-K63	2CDS271517R0607		0.150	10

MCBs

S 200 series UDC - Universal current range, UL, K characteristic

S 202 UDC

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	1	825061	S202UDC-K1	2CDS272517R0217		0.300	5
	1,6	825160	S202UDC-K1.6	2CDS272517R0257		0.300	5
	2	825177	S202UDC-K2	2CDS272517R0277		0.300	5
	3	825184	S202UDC-K3	2CDS272517R0317		0.300	5
	4	825191	S202UDC-K4	2CDS272517R0337		0.300	5
	5	825207	S202UDC-K5	2CDS272517R0357		0.300	5
	6	825214	S202UDC-K6	2CDS272517R0377		0.300	5
	8	825221	S202UDC-K8	2CDS272517R0407		0.300	5
	10	825238	S202UDC-K10	2CDS272517R0427		0.300	5
	13	825245	S202UDC-K13	2CDS272517R0447		0.300	5
	15	825252	S202UDC-K15	2CDS272517R0457		0.300	5
	16	825269	S202UDC-K16	2CDS272517R0467		0.300	5
	20	825276	S202UDC-K20	2CDS272517R0487		0.300	5
	25	825283	S202UDC-K25	2CDS272517R0517		0.300	5
	30	825290	S202UDC-K30	2CDS272517R0527		0.300	5
	32	825306	S202UDC-K32	2CDS272517R0537		0.300	5
	40	825313	S202UDC-K40	2CDS272517R0557		0.300	5
	50	825320	S202UDC-K50	2CDS272517R0577		0.300	5
	60	825337	S202UDC-K60	2CDS272517R0587		0.300	5
	63	825344	S202UDC-K63	2CDS272517R0607		0.300	5

S 201 UDC

S 202 UDC

S 200 UDC-Z characteristic

Function: protection and control of the electronic circuits against lower and long duration overloads and short-circuits.

Applications: commercial and industrial.

Standard: UL 489, CSA 22.2 No. 5

(only DC, please note polarity of device)

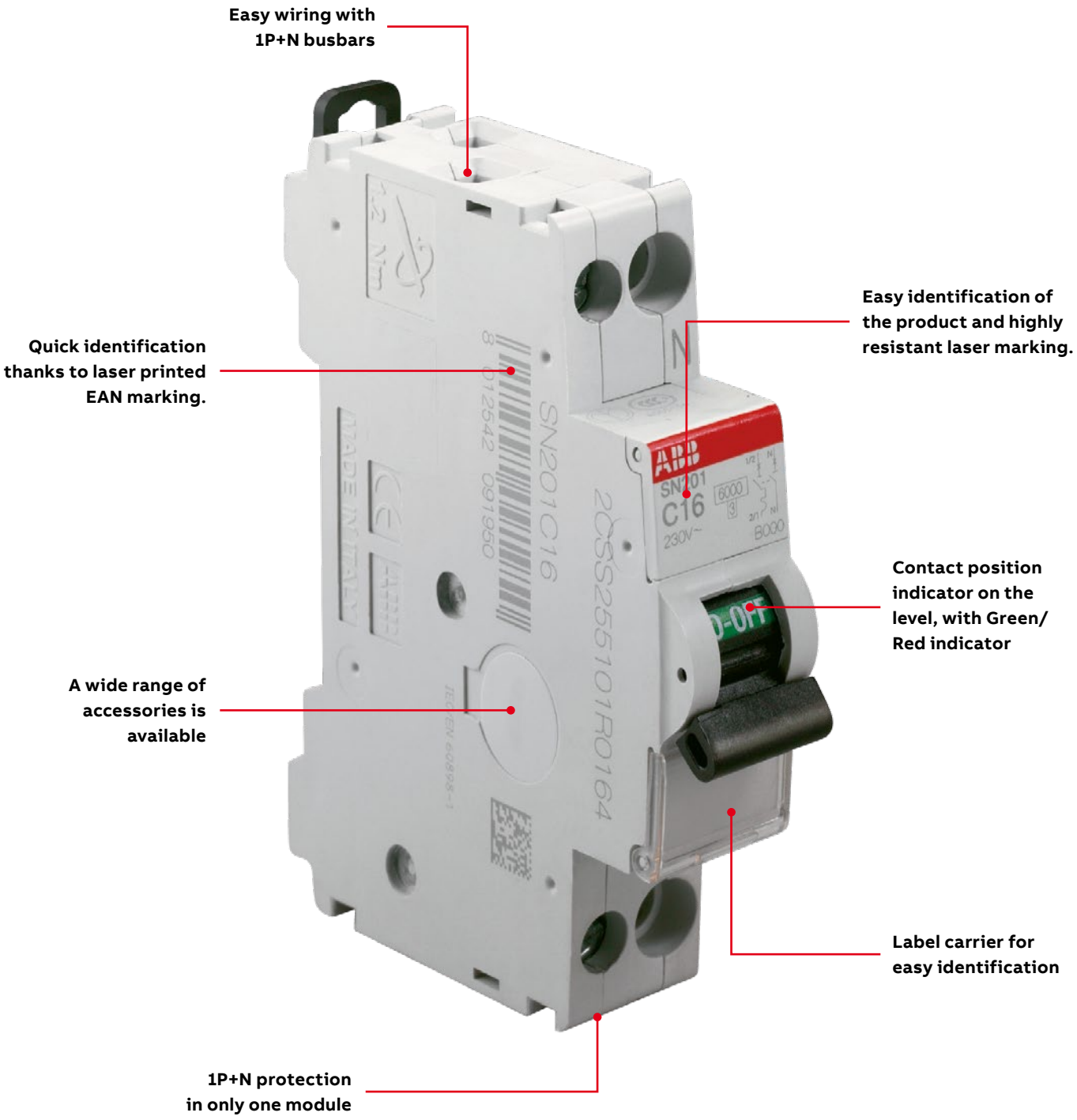
Short-circuit current rating (SCCR acc. to UL 489): 14 kA

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	1	826136	S201UDC-Z1	2CDS271517R0218		0.150	10
	1,6	826143	S201UDC-Z1.6	2CDS271517R0258		0.150	10
	2	826150	S201UDC-Z2	2CDS271517R0278		0.150	10
	3	826167	S201UDC-Z3	2CDS271517R0318		0.150	10
	4	826174	S201UDC-Z4	2CDS271517R0338		0.150	10
	5	826181	S201UDC-Z5	2CDS271517R0358		0.150	10
	6	826198	S201UDC-Z6	2CDS271517R0378		0.150	10
	8	826204	S201UDC-Z8	2CDS271517R0408		0.150	10
	10	826211	S201UDC-Z10	2CDS271517R0428		0.150	10
	15	826228	S201UDC-Z15	2CDS271517R0458		0.150	10
	16	826235	S201UDC-Z16	2CDS271517R0468		0.150	10
	20	826242	S201UDC-Z20	2CDS271517R0488		0.150	10
	25	826259	S201UDC-Z25	2CDS271517R0518		0.150	10
	30	826266	S201UDC-Z30	2CDS271517R0528		0.150	10
	32	826273	S201UDC-Z32	2CDS271517R0538		0.150	10
	40	826280	S201UDC-Z40	2CDS271517R0558		0.150	10
	50	826297	S201UDC-Z50	2CDS271517R0578		0.150	10
	60	826303	S201UDC-Z60	2CDS271517R0588		0.150	10
	63	826310	S201UDC-Z63	2CDS271517R0608		0.150	10

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	1	825351	S202UDC-Z1	2CDS272517R0218		0.300	5
	1,6	825368	S202UDC-Z1.6	2CDS272517R0258		0.300	5
	2	825375	S202UDC-Z2	2CDS272517R0278		0.300	5
	3	825382	S202UDC-Z3	2CDS272517R0318		0.300	5
	4	825399	S202UDC-Z4	2CDS272517R0338		0.300	5
	5	825405	S202UDC-Z5	2CDS272517R0358		0.300	5
	6	825412	S202UDC-Z6	2CDS272517R0378		0.300	5
	8	825429	S202UDC-Z8	2CDS272517R0408		0.300	5
	10	825436	S202UDC-Z10	2CDS272517R0428		0.300	5
	15	825443	S202UDC-Z15	2CDS272517R0458		0.300	5
	16	825450	S202UDC-Z16	2CDS272517R0468		0.300	5
	20	825467	S202UDC-Z20	2CDS272517R0488		0.300	5
	25	825474	S202UDC-Z25	2CDS272517R0518		0.300	5
	30	825481	S202UDC-Z30	2CDS272517R0528		0.300	5
	32	825498	S202UDC-Z32	2CDS272517R0538		0.300	5
	40	825504	S202UDC-Z40	2CDS272517R0558		0.300	5
	50	825511	S202UDC-Z50	2CDS272517R0578		0.300	5
	60	825528	S202UDC-Z60	2CDS272517R0588		0.300	5
	63	825535	S202UDC-Z63	2CDS272517R0608		0.300	5

MCB SN 201. The details make the difference

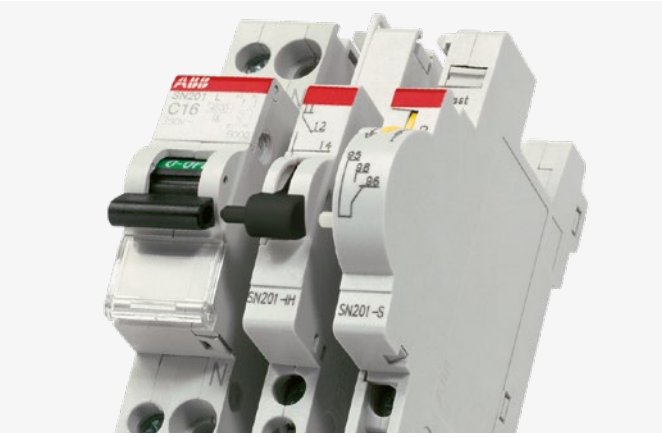
A range designed to ensure efficiency and protection



Space for insulated screwdrivers: the larger neutral hole allows the use of an insulated screwdriver to tighten the screws of both wire terminals, ensuring maximum safety of the operation.

Two bistable fixing devices for maximum ease of use: due to larger size of the DIN rail fixing system, made with 2 bistable fixing devices, the same screwdriver used for tightening the terminals can also be used for assembling and disassembling the device.

With the practical label carrier fitted in the SN201 circuit-breakers you can give maximum visibility to the information relating to the protected loads.



The SN201 fully integrates with the range of System pro M compact® miniature circuit-breakers, sharing the wide selection of accessories available through a dedicated interface (half module), which also can be used as auxiliary contact.

Miniature circuit-breakers

SN 201 series - 1P+N in one module housing

SN 201

General Data	Standards	
	Poles	
	Tripping characteristics	
	Rated current I_n	A
	Rated frequency f	Hz
	Rated insulation voltage U_i acc. to DIN EN 60664-1	V
	Overvoltage category	
	Pollution degree	
Data acc. to IEC/EN 60898-1	Rated operational voltage U_n	V
	Max. power frequency recovery voltage (U_{max})	V
	Min. operating voltage	V
	Rated short-circuit capacity I_{cn}	kA
	Rated making and breaking capacity of one individual pole I_{cn1}	kA
	Energy limiting class (B, C up to 40A)	
	Rated impulse withstand voltage $U_{imp.}$ (1.2/50µs)	kV
	Dielectric test voltage	kV
	Reference temperature for tripping characteristics	°C
	Electrical endurance	operations
Data acc. to IEC/EN 60947-2	Rated ultimate short-circuit breaking capacity I_{cu}	kA
	Rated service short-circuit breaking capacity I_{cs}	kA
Mechanical Data	Housing	
	Toggle	
	Contact position indication	
	Protection degree acc. to EN 60529	
	Mechanical endurance	operations
	Shock resistance acc. to IEC/EN 60068-2-27	
	Vibration resistance acc. to IEC/EN 60068-2-6	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH
	Ambient temperature (with daily average ≤ +35°C)	°C
	Storage temperature	°C
Installation	Cross-section of conductors (top/bottom) Stranded / Solid	mm^2
	Cross-section of conductors (top/bottom) Flexible	mm^2
	Tightening Torque	Nm
	Mounting	
	Mounting Position	
	Supply	
Dimensions and weight	Pole dimensions (H x D x W)	mm
	Pole weight	g
Combination with aux. elements	Auxiliary contact	
	Signal contact/auxiliary switch	
	Shunt trip	
	Undervoltage release	

*1 SN201 and SN201M series in B and D characteristic are available for rated current In ≥ 6 A

SN 201 L	SN 201	SN 201 M
IEC/EN 60898		
1P + N		
B, C	B, C, D	B, C
2…40 A *1		
50 / 60 Hz		
500 V AC		
III		
2		
230 V AC		
254 V AC 1P: 60 V DC 1P+N: 125 V DC		
12 V AC - 12 V DC		
4.5 kA	6 kA	10 kA
4.5 kA	6 kA	6 kA
3		
4 kV (test voltage 6,2kV at sea level, 5kV at 2000m)		
2.5 kV (50 / 60Hz, 1 min.)		
30°C		
10.000 operations		
6 kA	10 kA	10 kA
4.5 kA	6 kA	7.5 kA
Insulation group II, RAL 7035		
Insulation group IIIA, black, sealable in ON/OFF positions		
Marking on toggle (I ON / 0 OFF)		
Housing: IP4X; Terminals: IP2X		
20.000 operations		
30 g - 2 shocks - 13 ms		
0,35mm or 5g - 20 cycles at 5…150…5 Hz without load		
28 cycles with 55°C/90-96% and 25°C/95-100%		
-25 … +55°C		
-40 … +70°C		
16 mm^2 / 16 mm^2		
10 mm^2 / 10 mm^2		
1.2 Nm		
On DIN rail 35 mm acc. to EN 60715 by fast clip		
any		
optional (supply from top/bottom)		
85 x 68.9 x 17.6 mm		
ca. 110 g		
Yes		
Yes		
Yes (with coupling interface)		
Yes (with coupling interface)		

MCBs

SN 201 L series B and C characteristic

SN 201 L

SN 201 L - B characteristic

Function: overload and short-circuit protection of circuits in final distribution; protection of long cable lengths in TN and IT systems.

Applications: residential.

Standard: IEC/EN 60898

Icn: 4.5 kA

Number of poles	Rated current	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+N	2	087366	SN201LB2	2CSS245101R0025		0.110	6
	4	087465	SN201LB4	2CSS245101R0045		0.110	6
	6	087564	SN201LB6	2CSS245101R0065		0.110	6
	10	087663	SN201LB10	2CSS245101R0105		0.110	6
	16	087762	SN201LB16	2CSS245101R0165		0.110	6
	20	087861	SN201LB20	2CSS245101R0205		0.110	6
	25	087960	SN201LB25	2CSS245101R0255		0.110	6
	32	088066	SN201LB32	2CSS245101R0325		0.110	6
	40	088165	SN201LB40	2CSS245101R0405		0.110	6

SN 201 L - C characteristic

Function: overload and short-circuit protection of circuits in final distribution; protection of resistive and inductive loads with low inrush current.

Applications: residential.

Standard: IEC/EN 60898

Icn: 4.5 kA

Number of poles	Rated current	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+N	2	088264	SN201LC2	2CSS245101R0024		0.110	6
	4	088363	SN201LC4	2CSS245101R0044		0.110	6
	6	088462	SN201LC6	2CSS245101R0064		0.110	6
	10	088561	SN201LC10	2CSS245101R0104		0.110	6
	16	088660	SN201LC16	2CSS245101R0164		0.110	6
	20	088769	SN201LC20	2CSS245101R0204		0.110	6
	25	088868	SN201LC25	2CSS245101R0254		0.110	6
	32	088967	SN201LC32	2CSS245101R0324		0.110	6
	40	089063	SN201LC40	2CSS245101R0404		0.110	6

MCBs

SN 201 series B and C characteristic

SN 201

SN 201 - B characteristic

Function: overload and short-circuits protection of circuits in final distribution; protection of long cable lengths in TN and IT systems.

Applications: residential and commercial.

Standard: IEC/EN 60898

Icn: 6 kA

Number of poles	Rated current	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+N	6	090762	SN201B6	2CSS255101R0065		0.110	6
	10	090861	SN201B10	2CSS255101R0105		0.110	6
	16	090960	SN201B16	2CSS255101R0165		0.110	6
	20	091066	SN201B20	2CSS255101R0205		0.110	6
	25	091165	SN201B25	2CSS255101R0255		0.110	6
	32	091264	SN201B32	2CSS255101R0325		0.110	6
	40	091363	SN201B40	2CSS255101R0405		0.110	6

SN 201 - C characteristic

Function: overload and short-circuit protection of circuits in final distribution; protection of resistive and inductive loads with low inrush current.

Applications: residential and commercial.

Standard: IEC/EN 60898

Icn: 6 kA

Number of poles	Rated current	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+N	2	091462	SN201C2	2CSS255101R0024		0.110	6
	4	091561	SN201C4	2CSS255101R0044		0.110	6
	6	091660	SN201C6	2CSS255101R0064		0.110	6
	10	091769	SN201C10	2CSS255101R0104		0.110	6
	13	091868	SN201C13	2CSS255101R0134		0.110	6
	16	091967	SN201C16	2CSS255101R0164		0.110	6
	20	092063	SN201C20	2CSS255101R0204		0.110	6
	25	092162	SN201C25	2CSS255101R0254		0.110	6
	32	092261	SN201C32	2CSS255101R0324		0.110	6
	40	092360	SN201C40	2CSS255101R0404		0.110	6

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MCBs

SN 201 series D characteristic

SN 201

SN 201 - D characteristic

Function: protection and control of the circuits against overloads and short-circuits in final distribution; protection for circuits which supply loads with high inrush current at the circuit closing.

Applications: residential and commercial.

Standard: IEC/EN 60898

Icn: 6 kA

Number of poles	Rated current	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+N	6	092469	SN201D6	2CSS255101R0061		0.110	6
	10	092568	SN201D10	2CSS255101R0101		0.110	6
	16	092667	SN201D16	2CSS255101R0161		0.110	6
	20	092766	SN201D20	2CSS255101R0201		0.110	6
	25	092865	SN201D25	2CSS255101R0251		0.110	6
	32	092964	SN201D32	2CSS255101R0321		0.110	6
	40	093060	SN201D40	2CSS255101R0401		0.110	6

MCBs

SN 201 M series B and C characteristic

SN 201 M

SN 201 M - B characteristic

Function: overloads and short-circuit protection of circuits in final distribution; protection of long cable lengths in TN and IT systems.

Applications: residential and commercial.

Standard: IEC/EN 60898

Icn: 10 kA

Number of poles	Rated current	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+N	6	093152	SN201MB6	2CSS275101R0065		0.110	6
	10	093251	SN201MB10	2CSS275101R0105		0.110	6
	16	093350	SN201MB16	2CSS275101R0165		0.110	6
	20	093459	SN201MB20	2CSS275101R0205		0.110	6
	25	093558	SN201MB25	2CSS275101R0255		0.110	6
	32	093657	SN201MB32	2CSS275101R0325		0.110	6
	40	093756	SN201MB40	2CSS275101R0405		0.110	6

SN 201 M - C characteristic

Function: overload and short-circuit protection of circuits in final distribution; protection of resistive and inductive loads with low inrush current.

Applications: residential and commercial.

Standard: IEC/EN 60898

Icn: 10 kA

Number of poles	Rated current	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1+N	2	093862	SN201MC2	2CSS275101R0024		0.110	6
	4	093961	SN201MC4	2CSS275101R0044		0.110	6
	6	094067	SN201MC6	2CSS275101R0064		0.110	6
	10	094166	SN201MC10	2CSS275101R0104		0.110	6
	16	094265	SN201MC16	2CSS275101R0164		0.110	6
	20	094364	SN201MC20	2CSS275101R0204		0.110	6
	25	094463	SN201MC25	2CSS275101R0254		0.110	6
	32	094562	SN201MC32	2CSS275101R0324		0.110	6
	40	094661	SN201MC40	2CSS275101R0404		0.110	6

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MCBs

S 200 80A-100A series technical features

S 200 80-100A

	S 200 80A-100A
General Data	
Standards	IEC/EN 60898-1, IEC/EN 60947-2
Poles	1P, 2P, 3P, 4P, 1P+N, 3P+N
Tripping characteristics	B, C
Rated current I_n	80 A, 100 A
Rated frequency f	50/60 Hz
Rated insulation voltage Ui acc. to IEC/EN 60664-1 (VDE 0110-1)	440 V AC
Overvoltage category	III
Pollution degree	2
IEC/EN 60898-1	
Rated operational voltage U_n	1P: 230/400 V AC; 1P+N: 230 V AC; 2P, 3P, 4P, 3P+N: 400 V AC
Max. power frequency recovery voltage U_{max}	1P: 253/440 V AC; 1P+N: 253 V AC; 2P, 3P, 4P, 3P+N: 440 V AC
Min. operating voltage	12 V AC
Rated short-circuit capacity I_{cn}	6 kA
Rated impulse withstand voltage U_{imp} (1.2/50µs)	4 kV (test voltage 6.2 kV at sea level, 5 kV at 2,000 m)
Dielectrical test voltage	2 kV (50/60 Hz, 1 min.)
Reference temperature for tripping characteristics	B, C: 30 °C
Electrical endurance	10,000 ops. (AC); one cycle 2 s - ON, 28 s - OFF
IEC/EN 60947-2	
Rated operational voltage U_e	1P, 1P+N: 230 V AC; 2P, 3P, 4P, 3P+N: 400 V AC
Max. power frequency recovery voltage U_{max}	1P, 1P+N: 253 V AC; 2P, 3P, 4P, 3P+N: 440 V AC
Min. operating voltage	12 V AC
Rated ultimate short-circuit breaking capacity I_{cu}	6 kA
Rated service short-circuit breaking capacity I_{cs}	6 kA
Rated impulse withstand voltage U_{imp} (1.2/50 µs)	4 kV (test voltage 6.2 kV at sea level, 5 kV at 2,000 m)
Dielectrical test voltage	2 kV (50/60 Hz, 1 min.)
Reference temperature for tripping characteristics	B, C: 55 °C
Electrical endurance	10,000 ops. (AC); one cycle 2 s - ON, 28 s - OFF

Mechanical data	
Housing	Insulation group I, RAL 7035
Toggle	Insulation group II, black, sealable
Contact position indication	Real CPI (red ON/green OFF)
Protection degree acc. to DIN EN 60529	IP20[1)], IP40 in enclosure with cover
Mechanical endurance	20,000 ops.
Shock resistance acc. to DIN EN 60068-2-27	25 g, 2 shocks, 13 ms
Vibration resistance acc. to DIN EN 60068-2-6	5 g, 20 cycles at 5…150…5 Hz at 0.8 I_n
Environmental conditions (Damp heat cyclic) acc. to DIN EN 60068-2-30	28 cycles with 55 °C/90-96 % and 25 °C/95-100 %
Ambient temperature	-25 ... +55 °C
Storage temperature	-40 ... +70 °C
	S 200 80A-100A
Installation	
Terminal	Failsafe bi-directional cache clamp
Cross-section of conductors (top/bottom)	solid, stranded: 50 mm^2 / 50 mm^2 flexible: 50 mm^2 / 50 mm^2
Cross-section of busbars (top/bottom)	16 mm^2 / 16 mm^2
Torque	3.0 Nm
Screwdriver	Nr. 2 Pozidriv
Mounting	On DIN rail 35 mm acc. to EN 60715 by fast clip
Mounting position	any
Supply	any
Dimensions and weight	
Mounting dimensions acc. to DIN 43880	Mounting dimension 1
Pole dimensions (H x T x B)	88.8 x 69 x 17.5
Pole weight	approx. 126 g
Combination with auxiliary elements	
Auxiliary contact	Yes
Signal/auxiliary contact	Yes
Shunt trip	Yes
Unervoltage release	Yes
Motor Operating Device	Yes

MCBs

S 200 80A-100A

S 201 80-100A

S 202 80-100A

S 203 80-100A

S 204 80-100A

S 201 80-100A NA

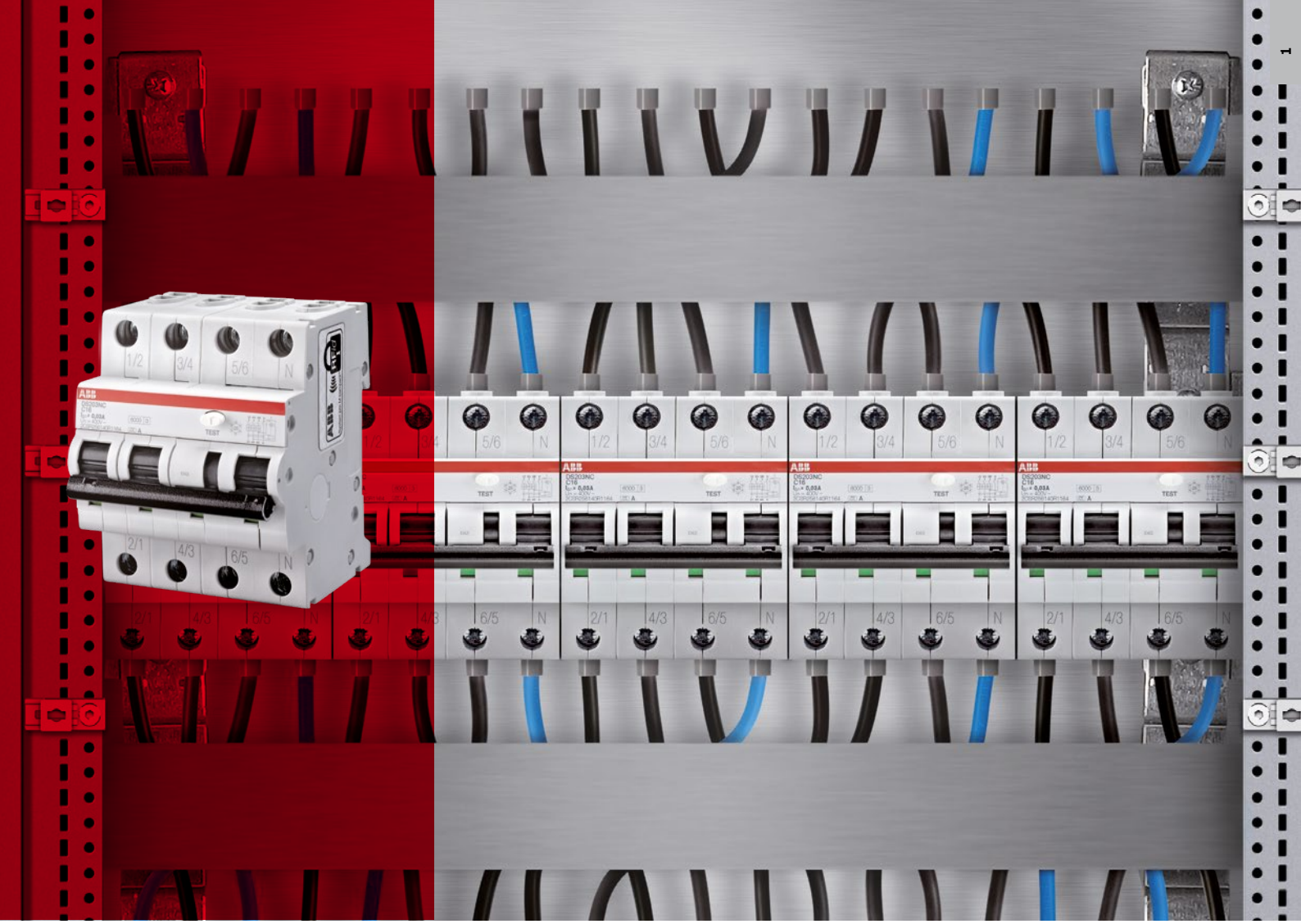
S 203 80-100A NA

The miniature circuit breakers of the System pro M compact® series S 200 provide state-of-the-art safety and comfort. They stand out due to their high performance and the wide range of accessories and approvals.

The additional electrical currents 80 A and 100 A complement the current portfolio of the System pro M compact® and offer maximum performance in a single module width.

- Clear contact position indication in red/green (“real CPI”)
- Unique, patented twin terminal with captive screws and an increased opening for cables up to max. 50 mm², finger-proof (IP20)
- Busbar slot in the back for best visibility during installation
- High performance in building installations and industrial applications up to 6 kA at Ue = 400 V AC acc. to IEC/EN 60947-2 and IEC/EN 60898-1
- Individual product identification code
- Approved acc. to IEC/EN 60898-1 and IEC/EN 60947-2 for global use

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
B characteristic							
1	80	916516	S201-B80	2CDS251001R0805		0.128	10
	100	916530	S201-B100	2CDS251001R0825		0.128	10
2	80	916677	S202-B80	2CDS252001R0805		0.256	5
	100	916691	S202-B100	2CDS252001R0825		0.256	5
3	80	916271	S203-B80	2CDS253001R0805		0.384	1
	100	916295	S203-B100	2CDS253001R0825		0.384	1
4	80	916431	S204-B80	2CDS254001R0805		0.512	1
	100	916455	S204-B100	2CDS254001R0825		0.512	1
1+NA	80	916592	S201-B80NA	2CDS251103R0805		0.256	5
	100	916615	S201-B100NA	2CDS251103R0825		0.256	5
3+NA	80	916356	S203-B80NA	2CDS253103R0805		0.512	1
	100	916370	S203-B100NA	2CDS253103R0825		0.512	1
C characteristic							
1	80	916509	S201-C80	2CDS251001R0804		0.128	10
	100	916523	S201-C100	2CDS251001R0824		0.128	10
2	80	916660	S202-C80	2CDS252001R0804		0.256	5
	100	916684	S202-C100	2CDS252001R0824		0.256	5
3	80	916264	S203-C80	2CDS253001R0804		0.384	1
	100	916288	S203-C100	2CDS253001R0824		0.384	1
4	80	916424	S204-C80	2CDS254001R0804		0.512	1
	100	916448	S204-C100	2CDS254001R0824		0.512	1
1+NA	80	916585	S201-C80NA	2CDS251103R0804		0.256	5
	100	916608	S201-C100NA	2CDS251103R0824		0.256	5
3+NA	80	916349	S203-C80NA	2CDS253103R0804		0.512	1
	100	916363	S203-C100NA	2CDS253103R0824		0.512	1



Minimum space, maximum protection.

DS203NC: 3P+N RCBOs
in 4 modules.

Designed to be compact, DS203NC 3P+N RCBOs are suitable in all those applications where size can be an obstacle. They provide reliable and complete protection from over-current and earth fault currents. DS203NC RCBOS are available in two ranges with different breaking capacities to cover all the applications in commercial and industrial installations; DS203NC L with 4.5kA and DS203NC with 6kA breaking capacity according to IEC/EN 61009. The range includes types AC, A, APR and S and tripping curves B, C or K.

www.abb.com/lowvoltage

SMCBs

S750 series DR technical features

S750 DR

			S 750 DR
General Data	Standards		IEC/EN 60947-2
	Poles		1P, 2P, 3P, 4P
	Tripping characteristics		$E_{selective}$, $K_{selective}$
	Rated current I_n	A	16…63
	Rated frequency f	Hz	50 / 60
Electrical Data acc. to IEC/ EN 60947-2	Rated operational voltage U_e	V AC	230 (1-pole), 400 (2-, 3-, 4-pole)
	Rated breaking capacity I_{cu}	kA	25
	Rated service breaking capacity I_{cs}	kA	12.5
	Rated insulation voltage U_i	V	690
	Selectivity limit current Is1		rated breaking capacity of downstream breaker (min.) – see selectivity tables
	Overvoltage category		IV
	Pollution degree		3
	Rated impulse withstand voltage $U_{imp.}$	kV	6
	Impulse withstand voltage acc. to IEC 60364-5-53 (at 2000m above sea level)	kV	8
	Impulse withstand test voltage (1.2/50µs)	kV	9.8
	Isolation function acc. to IEC 60364-5-53		yes
	Dielectric test voltage (50/60 Hz, 1 min.)	kV	2 (50 / 60 Hz, 1 min.)
Mechanical Data	Contact position indication		via toggle (I-ON / O-OFF), via trip indicator (red-ON / green-OFF)
	IP protection degree acc. to IEC/EN 60529		IP40 (when protected by cabinet cover)
	Shock resistance acc. to IEC / EN 60068-2-27		25 g, min. 3 shocks, duration 13 ms
	Vibration resistance acc. to IEC/EN 60068-2-6		2 g, 20 cycles 5…150…5 Hz
	Environmental conditions (damp heat cyclic) acc. to IEC/EN 60068-2-30	°C/ RH	28 cycles: 55 / 90…96 – 25 / 95…100
	Ambient temperature	°C	-25 … +55
	Storage temperature	°C	-40 … +70
Installation	Wire connection (Top)		frame terminal to connect solid and rigid stranded conductors incl. flexible conductors 2.5…50 mm²
	Wire connection (Bottom)		frame terminal to connect solid and rigid stranded conductors incl. flexible conductors 2.5…50 mm²
	Max. torque	Nm	2.5 … 3
	Recommended Screwdriver		slotted: 1 x 5.5, Pozidrive: PZ 2
	Mounting		DIN rail 35 mm acc. to EN 60715
	Locking		integrated blocking device, additional locking by 3 mm padlock, 1mm seal wire or cabel binder
	Mounting position		any
	Supply		any
Dimensions and weight	Size acc. to DIN 43880		3
	Width	mm	27 (per pole)
	Pole dimensions (H x D x W)	mm	see drawings
	Pole weight	g	see order tables
Accessories			3 mm padlock

SMCBs

S750 series DR- selective main circuit-breakers, $E_{selective}$ characteristic

S751 DR

S752 DR

S753 DR

S754 DR

S750 series DR

Selective main circuit-breakers of the S 750 DR series are SMCBs based on DIN VDE 0641-21 with voltage-independent operating principle. This means that they do not rely on a control circuit to make or break contact (SHU) and are therefore particularly suitable for use in energy distributionsystems with maximum availability requirements. They offer total selec-tivity to downstream MCB's and outstanding selectivity to upstream protective devices due to unique current limiting selectivity.

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	16	4016779878968	S751DR-E16	2CDH781010R0162		0.35	3
	20	4016779878975	S751DR-E20	2CDH781010R0202		0.35	3
	25	4016779878982	S751DR-E25	2CDH781010R0252		0.35	3
	32	4016779878999	S751DR-E32	2CDH781010R0322		0.35	3
	40	4016779879019	S751DR-E40	2CDH781010R0402		0.35	3
	50	4016779879026	S751DR-E50	2CDH781010R0502		0.35	3
	63	4016779879033	S751DR-E63	2CDH781010R0632		0.35	3
2	16	4016779879361	S752DR-E16	2CDH782010R0162		0.7	2
	20	4016779879378	S752DR-E20	2CDH782010R0202		0.7	2
	25	4016779879385	S752DR-E25	2CDH782010R0252		0.7	2
	32	4016779879392	S752DR-E32	2CDH782010R0322		0.7	2
	40	4016779879415	S752DR-E40	2CDH782010R0402		0.7	2
	50	4016779879422	S752DR-E50	2CDH782010R0502		0.7	2
	63	4016779879439	S752DR-E63	2CDH782010R0632		0.7	2
3	16	4016779879569	S753DR-E16	2CDH783010R0162		1.05	1
	20	4016779879576	S753DR-E20	2CDH783010R0202		1.05	1
	25	4016779879583	S753DR-E25	2CDH783010R0252		1.05	1
	32	4016779879590	S753DR-E32	2CDH783010R0322		1.05	1
	40	4016779879613	S753DR-E40	2CDH783010R0402		1.05	1
	50	4016779879620	S753DR-E50	2CDH783010R0502		1.05	1
	63	4016779879637	S753DR-E63	2CDH783010R0632		1.05	1
4	16	4016779879767	S754DR-E16	2CDH784010R0162		1.4	1
	20	4016779879774	S754DR-E20	2CDH784010R0202		1.4	1
	25	4016779879781	S754DR-E25	2CDH784010R0252		1.4	1
	32	4016779879798	S754DR-E32	2CDH784010R0322		1.4	1
	40	4016779879811	S754DR-E40	2CDH784010R0402		1.4	1
	50	4016779879828	S754DR-E50	2CDH784010R0502		1.4	1
	63	4016779879835	S754DR-E63	2CDH784010R0632		1.4	1

Due to the lack of international product standards for SMCB, S750DR products as given in this catalogue are certified acc. to IEC/EN 60947-2. If requested, S750 (for 40mm busbar systems) and S750DR (for DIN rail mounting) are also available with a certification based on a German SMCB standard. Please contact your ABB office for further information.

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SMCBs

S750 DR series - selective main circuit-breakers, $K_{selective}$ characteristic

S751 DR

S752 DR

S753 DR

S754 DR

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	16	4016779879064	S751DR-K16	2CDH781010R0467		0.35	3
	20	4016779879071	S751DR-K20	2CDH781010R0487		0.35	3
	25	4016779879088	S751DR-K25	2CDH781010R0517		0.35	3
	32	4016779879095	S751DR-K32	2CDH781010R0537		0.35	3
	40	4016779879118	S751DR-K40	2CDH781010R0557		0.35	3
	50	4016779879125	S751DR-K50	2CDH781010R0577		0.35	3
	63	4016779879132	S751DR-K63	2CDH781010R0607		0.35	3
2	16	4016779879460	S752DR-K16	2CDH782010R0467		0.7	2
	20	4016779879477	S752DR-K20	2CDH782010R0487		0.7	2
	25	4016779879484	S752DR-K25	2CDH782010R0517		0.7	2
	32	4016779879491	S752DR-K32	2CDH782010R0537		0.7	2
	40	4016779879514	S752DR-K40	2CDH782010R0557		0.7	2
	50	4016779879521	S752DR-K50	2CDH782010R0577		0.7	2
	63	4016779879538	S752DR-K63	2CDH782010R0607		0.7	2
3	16	4016779879668	S753DR-K16	2CDH783010R0467		1.05	1
	20	4016779879675	S753DR-K20	2CDH783010R0487		1.05	1
	25	4016779879682	S753DR-K25	2CDH783010R0517		1.05	1
	32	4016779879699	S753DR-K32	2CDH783010R0537		1.05	1
	40	4016779879712	S753DR-K40	2CDH783010R0557		1.05	1
	50	4016779879729	S753DR-K50	2CDH783010R0577		1.05	1
	63	4016779879736	S753DR-K63	2CDH783010R0607		1.05	1
4	16	4016779879866	S754DR-K16	2CDH784010R0467		1.4	1
	20	4016779879873	S754DR-K20	2CDH784010R0487		1.4	1
	25	4016779879880	S754DR-K25	2CDH784010R0517		1.4	1
	32	4016779879897	S754DR-K32	2CDH784010R0537		1.4	1
	40	4016779879910	S754DR-K40	2CDH784010R0557		1.4	1
	50	4016779879927	S754DR-K50	2CDH784010R0577		1.4	1
	63	4016779879934	S754DR-K63	2CDH784010R0607		1.4	1

SMCBs

S700 series technical features

S700

			S 700
General Data	Standards		E DIN VDE 0645:2003-09,
			partly acc. to IEC EN 60947-2
	Poles		1P, 2P, 3P, 4P
	Tripping characteristics		$E_{selective}$, $K_{selective}$
	thermal tripping		1.05 … 1.2 x In
	short-time delayed tripping		E: 5 … 6.25 x In K: 10 … 14 x In (≤ 50 A), 8 …12 x In (≥ 63 A)
	minimum tripping delay	ms	10
	Rated insulation voltage Ui acc.to IEC/EN 60664-1	V AC	690
	Rated current I_n	A	E: 10, 80, 100: K: 80, 100
	Rated frequency f	Hz	50 / 60
Electrical Data	Rated operational voltage U^n	V AC	1P: 230 / 400; 2…4P: 400
	Rated breaking capacity I^{cn}	kA	25
	Selectivity limit current Is1		Rated breaking capactiy of the downstream MCB (see selectivity tables)
	Overvoltage category		IV
	Pollution degree		3
	Rated impulse withstand voltage $U_{imp.}$	kV	6
	Impulse withstand voltage acc. to IEC 60364-5-53, clause 536.2 (at 2000m over sea level)	kV	8
	Impulse withstand test voltage (1.2/50µs) at sea level		
	new condition	kV	12.3
	after use	kV	9.8
	Isolation function acc. to IEC 60364-5-53		yes
	Dielectric test voltage (50/60 Hz, 1 min.)	kV	2
Mechanical Data	Contact position indication		Toggle (I ON / 0 OFF); Real CPI (red ON / green OFF)
	IP protection degree acc. to IEC/EN 60529		IP40 (in enclosure with cover, cut-out dimension 46mm)
	Mechanical switching cycles		
	without load	ops.	1000
	with rated current	ops.	1000
	Shock resistance acc. to IEC/EN 60068-2-27		25 g - 3 shocks - 13 ms
	Vibration resistance acc. to IEC/EN 60068-2-6		2 g, 20 cycles 5…150…5Hz
	Environmental conditions (damp heat cyclic) acc. to IEC/EN 60068-2-30	°C/ RH	28 cycles: 55°C/90…96% - 25°C/95…100%
	Ambient temperature	°C	-25 … +55
	Storage temperature	°C	-40 … +70
Installation	Terminal type		Saddle terminal
	Terminal size top / bottom	mm^2	Capable to connect solid and rigid stranded conductors incl. flexible conductors 2.5…50 / 70
	Terminal screws tighning torque	Nm	3…3.5
	Max. torque for surface mounting	Nm	2.5 … 3 (only fl at-headed screws, no circlips)
	Recommended screwdriver		Slot: 1 x 5.5, cross slot: PZ 2
	Mounting		Surface mounting with 2 screws, DIN rail mounting (35 mm DIN rail acc. to EN 60715, 40 mm busbar systems 4/5-pole, 5/10 mm x 12 mm)
	Mounting position		any
	Supply side/load side		any
Dimensions and weight	Size acc. to DIN 43880		5 (mounting on DIN-Rail); 6 (mounting on busbar)
	Width		2 modules / pole
	Pole dimensions (H x D x W)		see drawings
	Pole weight		see order tables
Accessories			Optional: version with factory assembled auxiliary switch (2 change-over contacts) Terminal covers Handle covers Busbar adapters DIN rail adapters Locking devices

SMCBs

S700 series - selective main circuit-breakers, $E_{selective}$ characteristic

S701

S702

S700 E characteristic

Breakers of the S700 series are selective main circuit-breakers (SMCB) for overcurrent protection in electrical installations. They have total selectivity to downstream mcb's and outstanding selectivity to upstream protective devices due to unique current limiting selectivity. Since S700 breakers are designed for overvoltage category IV and incorporate isolation function, they are predestinated for the use in any main distribution cabinet or meter board.

The S700 product range is completed by a broad range of accessories. With dedicated adapters, S700 products can be assembled on flat surfaces, on DIN rails or 40 mm busbar systems. To adapt S700 to different installations, they are available 1- to 4-pole with tripping characteristic E and K - optional with factory assembled auxiliary switch.

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	522507	S701-E10	GHS7015001R0449		0.55	3
	80	524204	S701-E80	GHS7015001R0629		0.55	3
	100	524402	S701-E100	GHS7015001R0639		0.55	3

Number of poles	Rated current	Bbn 40 16779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	80	109604	S702-E80	GHS7025001R0629		1.1	2
	100	062503	S702-E100	GHS7025001R0639		1.1	2

*1 bbn-Nr. 40 12233

S0001895

S703

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	80	527601	S703-E80	GHS7035001R0629		1.65	1
	100	527809	S703-E100	GHS7035001R0639		1.65	1

S0012b95

S704

Number of poles	Rated current	Bbn 40 16779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	80	111201	S704-E80	GHS7045001R0629		2.2	1
	100	062602	S704-E100	GHS7045001R0639		2.2	1

SMCBs

S700 series - selective main circuit-breakers, $K_{selective}$ characteristic

S701

S702

S700 K characteristic

Breakers of the S700 series are selective main circuit-breakers (SMCB) for overcurrent protection in electrical installations. They have total selectivity to downstream mcb's and outstanding selectivity to upstream protective devices due to unique current limiting selectivity. Since S700 breakers are designed for overvoltage category IV and incorporate isolation function, they are predestinated for the use in any main distribution cabinet or meter board.

The S700 product range iS completed by a broad range of accessories. With dedicated adapters, S700 products can be assembled on flat surfaces, on DIN rails or 40 mm busbar systems. To adapt S700 to different installations, they are available 1- to 4-pole with tripping characteristic E and K - optional with factory assembled auxiliary switch.

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	80	524105	S701-K80	GHS7015001R0627		0.55	3
	100	524303	S701-K100	GHS7015001R0637		0.55	3

Number of poles	Rated current	Bbn 40 16779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	80	110402	S702-K80	GHS7025001R0627		1.1	2
	100	110501	S702-K100	GHS7025001R0637		1.1	2

S703

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	80	527502	S703-K80	GHS7035001R0627		1.65	1
	100	527700	S703-K100	GHS7035001R0637		1.65	1

S704

Number of poles	Rated current	Bbn 40 16779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	80	111805	S704-K80	GHS7045001R0627		2.2	1
	100	111904	S704-K100	GHS7045001R0637		2.2	1

*1 bbn-Nr. 40 12233

SMCBs

S700 series - selective main circuit-breakers, $E_{selective}$ characteristic + H2WR

S701 + H2WR

S702 + H2WR

S700 E characteristic

Breakers of the S700 series are selective main circuit-breakers (SMCB) for overcurrent protection in electrical installations. They have total selectivity to downstream mcb's and outstanding selectivity to upstream protective devices due to unique current limiting selectivity. Since S700 breakers are designed for overvoltage category IV and incorporate isolation function, they are predestinated for the use in any main distribution cabinet or meter board.

The S700 product range is completed by a broad range of accessories. With dedicated adapters, S700 products can be assembled on flat surfaces, on DIN rails or 40 mm busbar systems. To adapt S700 to different installations, they are available 1- to 4-pole with tripping characteristic E and K - optional with factory assembled auxiliary switch (H2WR).

With factory assembled auxiliary switch (2 change-over contacts)

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	80	457408	S701-E80+H2WR	GHS7010316R0629		0.65	3
	100	457507	S701-E100+H2WR	GHS7010316R0639		0.65	3

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	80	459204	S702-E80+H2WR	GHS7020316R0629		1.2	2
	100	459303	S702-E100+H2WR	GHS7020316R0639		1.2	2

S001B95

S703 + H2WR

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	80	461009	S703-E80+H2WR	GHS7030316R0629		1.75	1
	100	461108	S703-E100+H2WR	GHS7030316R0639		1.75	1

S0012695

S704 + H2WR

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	80	462808	S704-E80+H2WR	GHS7040316R0629		2.3	1
	100	462907	S704-E100+H2WR	GHS7040316R0639		2.3	1

SMCBs

S700 series - selective main circuit-breakers, $K_{selective}$ characteristic + H2WR

S701 + H2WR

S702 + H2WR

S700 K characteristic

Breakers of the S700 series are selective main circuit-breakers (SMCB) for overcurrent protection in electrical installations. They have total selectivity to downstream mcb's and outstanding selectivity to upstream protective devices due to unique current limiting selectivity. Since S700 breakers are designed for overvoltage category IV and incorporate isolation function, they are predestinated for the use in any main distribution cabinet or meter board.

The S700 product range is completed by a broad range of accessories. With dedicated adapters, S700 products can be assembled on flat surfaces, on DIN rails or 40 mm busbar systems. To adapt S700 to different installations, they are available 1- to 4-pole with tripping characteristic E and K - optional with factory assembled auxiliary switch (H2WR).

With factory assembled auxiliary switch (2 change-over contacts)

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	80	499651	S701-K80+H2WR	GHS7010316R0627		0.65	3
	100	499729	S701-K100+H2WR	GHS7010316R0637		0.65	3

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	80	499750	S702-K80+H2WR	GHS7020316R0627		1.2	2
	100	499767	S702-K100+H2WR	GHS7020316R0637		1.2	2

S703 + H2WR

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	80	499774	S703-K80+H2WR	GHS7030316R0627		1.75	1
	100	499781	S703-K100+H2WR	GHS7030316R0637		1.75	1

S704 + H2WR

Number of poles	Rated current	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	80	499798	S704-K80+H2WR	GHS7040316R0627		2.3	1
	100	499804	S704-K100+H2WR	GHS7040316R0637		2.3	1

SMCBs

Selective short-circuit current limiter WT63

WT63

WT63-3 HS

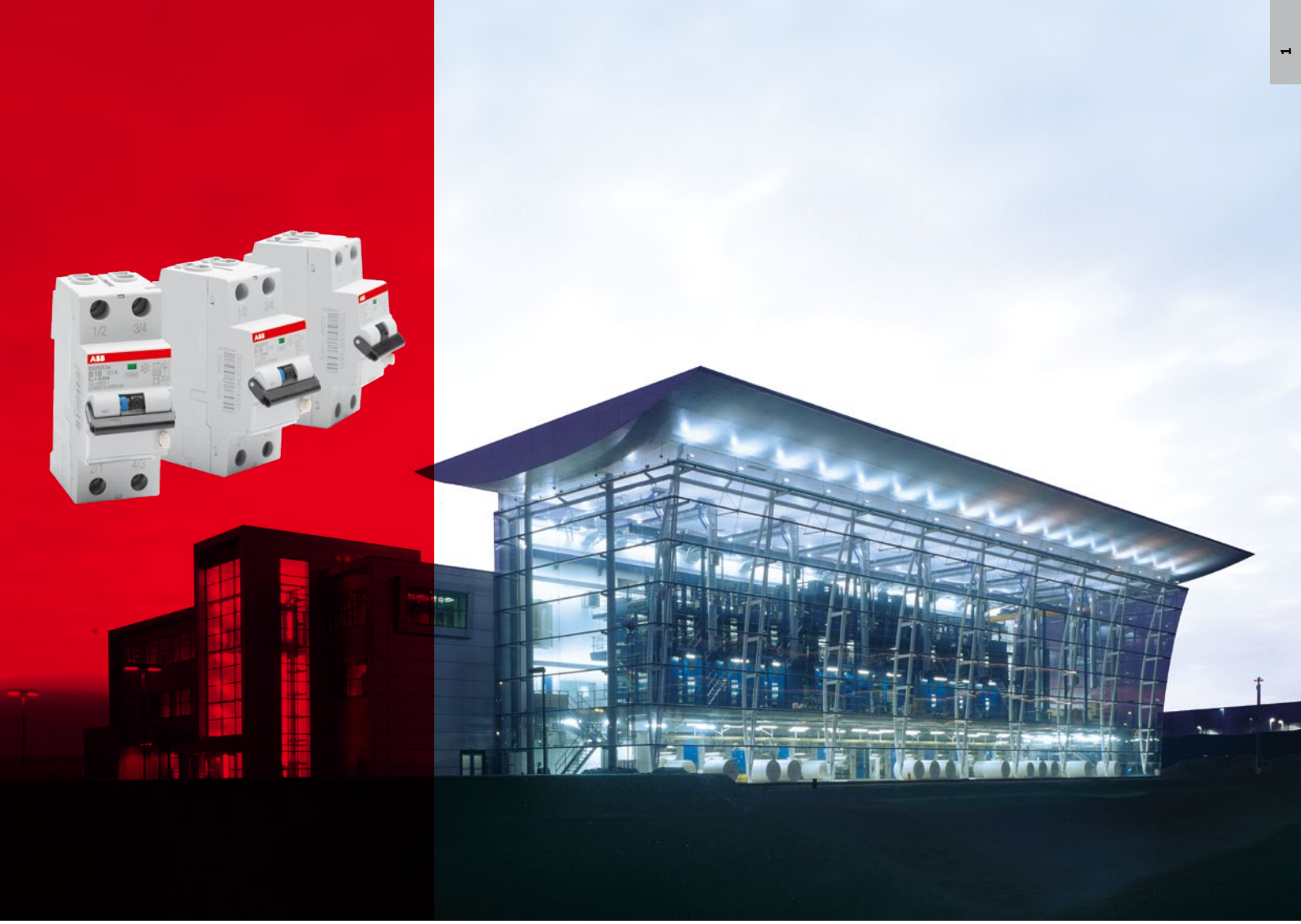
WT63 characteristic

WT63 is a short-circuit current limiter for 690 V AC applications.
In combination with other ABB devices WT63 offers smart solutions for coordinated motor protection according to IEC/EN 60947-4-1. As a main limiting device, WT63 can increase the short-circuit breaking capability for several groups of motor circuits to high values at 690 V AC. For further information according to selection and installation see the coordination table.

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	63	510677	WT63-3	2CDH103012R0599		1.65	1

with factory assembled auxiliary switch (2 change-over contacts)

Number of poles	Rated current	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	63	510684	WT63-3HS	2CDH103816R0599		1.75	1



DS202C

Protection with unrivalled compactness.

With only 2 modules, the DS202C series of 2P residual current circuit-breakers with overcurrent protection (RCBOs) enables to save 50 % of switchboard space compared to the conventional 4-modules solution. Available in a technologically advanced and comprehensive range, the DS202C can be applied in the tertiary sector, in large-sized industrial plants and in naval applications. The series perfectly integrates with the System pro M compact® range, starting from the same profile, ensuring a nice and functional design in the installation. The maximum protection in only 2 modules.

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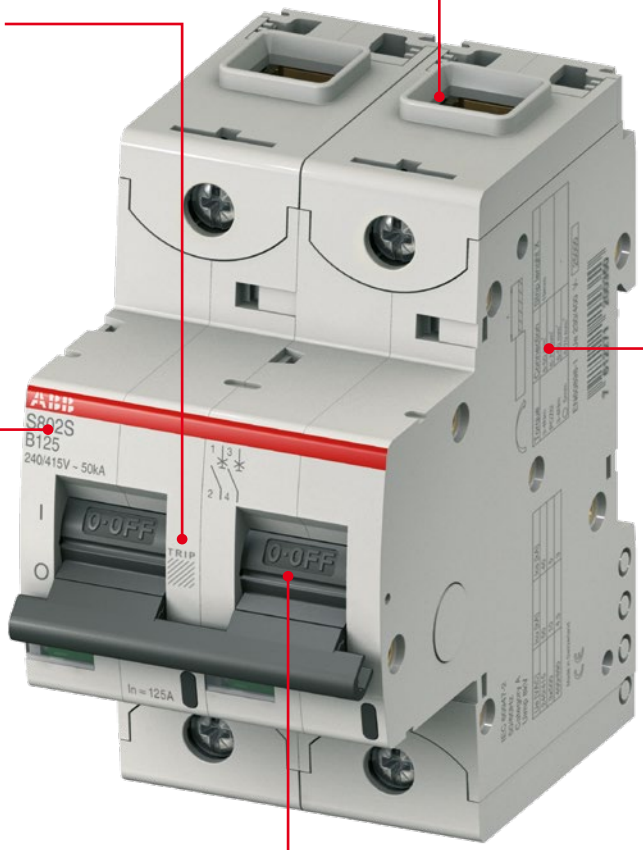
High Performance MCB S800

Incomparable performances



Interchangeable terminal, failsafe cage or ring lug terminal

Clear identification of the reason of cut-off thanks to TRIP position of the toggle

Quick identification of technical characteristics thanks to laser-printing of all data

Easy product name, easy identification, easy life.

Clear identification of the moving contact position thanks to toggle identification ON, OFF and TRIP position

Housing materials
In the S800 range of MCBs for traction, specific materials are used that are classified with an hazard level R26/HL3 according to EN 45545-2. Plastic materials are also classified I2-F3 according the NF F 16-101/102 (“Railway Rolling Stock Fire Behavior-Choice of Materials„ and “Railway Rolling Stock Fire Behavior- Choice of Materials, Application to Electrical Equipment„) thus responding to exigency 3.

Shock and vibration resistance
Additionally to the high quality standards and the fl ammability requirements, rail applications have specific demands that have to be to fulfi lled like resistance to shocks and vibrations. The resistance to vibrations and shocks of S800 has been positively tested according to: IEC 61373 – 2010 – 05 Edition 2.0 Rolling stock equipment – Shock and vibration tests considering Category 1, Class A and Class B.

Play it safe: display the operational state
The mechanical drive of the S800 high performance MCB is equipped with a trip-free release. The trip position display thereby always reliably displays the exact position of the moving contact. The trip position provides additional trip detection allowing to easily identify the reason for the cut-off. The switch lever moves to the middle position in case of thermal or magnetic tripping.

Cage and ring terminals
The S800 standard equipment with interchangeable terminal adapter for wires, cables and rigid conductors guarantees a high level of flexibility and comfort. Fast and safe connection of the conductors is ensured by the “onboard terminal shutter” integrated into the body of the terminal, thereby preventing incorrect underclamping of the connections.

Reliable: the disconnector properties In OFF position (0 position), the S800 high performance MCB guarantees safe electrical isolation of the circuit compliant to IEC 60947-2.

Wide range of accessories
S800 MCB range is completed with a wide range of accessories that enlarge the functions of the MCB not only as a protection devices, but even for control and monitor remotely the installation. The range of accessories include auxiliary contacts, aux/signal contacts, remote switching unit, short circuit limiter, shunt operation releases, undervoltage releases and busbars.

MCBs

S800 series technical features

S800

Tripping characteristics		S800S B, C, D, K	S803S-KM KM
Standards		IEC/EN 60947-2 IEC/EN 60898-1 UL 1077	IEC/EN 60947-2
Poles		1 … 4	3
Rated current I_e	A	6 … 125	20 … 80
Rated frequency **f**	Hz	50/60	50/60
Rated insulation voltage U_i acc. to IEC/EN 60664-1	V	AC 690	AC 690
Rated impulse withstand voltage U_{imp} (1.2/50µs)	kV	8	8
Overvoltage category		IV	IV
Pollution degree		3	3
Suitability for isolation		yes	yes
Data acc. to IEC/EN 60898-1			
Rated operational voltage U_e	V	AC 230/400	–
Rated short-circuit capacity I_{cn}	kA	Char. B, C, D: 230/400 V (10 … 80 A) = 25 kA	–
Service short-circuit capacity I_{cs}	kA	Char. B, C, D: 230/400 V (10 … 80 A) = 12.5 kA	–
Data acc. to IEC/EN 60947-2			
Rated operational voltage U_e	V	AC 400/690 1-pole: DC 125 2-pole: DC 250 3-pole: DC 375 4-pole: DC 500	AC 690
Rated ultimate short-circuit capacity I_{cu}	kA	AC 240/415 V = 50 kA AC 254/440 V = 30 kA AC 400/690 V (up to 80 A) = 6 kA AC 400/690 V (100 … 125 A) = 4.5 kA DC 125 V (1-pole) = 30 kA DC 250 V (2-pole) = 30 kA DC 375 V (3-pole) = 30 kA DC 500 V (4-pole) = 30 kA	AC 240/415 V = 50 kA AC 254/440 V = 30 kA AC 400/690 V = 6 kA DC 375 V = 30 kA
Rated service short-circuit capacity I_{cs}	kA	AC 240/415 V = 40 kA AC 254/440 V (up to 80 A) = 22.5 kA AC 254/440 V (100 … 125 A) = 15 kA AC 400/690 V (up to 80 A) = 4 kA AC 400/690 V (100 … 125 A) = 3 kA DC 125 V (1-pole) = 30 kA DC 250 V (2-pole) = 30 kA DC 375 V (3-pole) = 30 kA DC 500 V (4-pole) = 30 kA	AC 240/415 V = 40 kA AC 254/440 V = 22.5 kA AC 400/690 V = 4 kA DC 375 V = 30 kA
Data acc.to UL 1077, Supplementary Protector			
Poles		1 ...4	
Rated voltage U_n	V	AC 240 (1 -pole...4-pole) Δ AC 277 (1 -pole) Y AC 277/480 (2-pole ... 4-pole) Y AC 347 (1 -pole) Y AC 347/600 (2-pole ... 4-pole) Y	
Rated current I_n	A	6 ... 63	
Tripping characteristic		B, C, D, K	
Short - circuit breaking capacity I_{cc}	kA	AC 240 (1 -pole ... 4-pole) Δ = 30 kA AC 277 (1 -pole) Y = 14 kA AC 277/480 (2-pole...4-pole) Y = 14 kA AC 347 (1 -pole) Y = 6 kA AC 347/600 (2-pole ... 4-pole) Y = 6 kA *	

Note: The minimum operating voltage for S800 is 12 VAC/VDC. *certification 50A ongoing

S800S-UC **UCB, UCK**	**S800N** **B, C, D**	**S800C** **B, C, D, K**
IEC/EN 60947-2	IEC/EN 60947-2, IEC/EN 60898-1	IEC/EN 60947-2 EN 60898-1 UL 1077
1 … 4	1 … 4	1 … 4
10 … 125	6 … 125	10 … 125
50/60	50/60	50/60
DC 1000	AC 690	AC 500
8	8	8
IV	IV	IV
1- and 2-pole: 3 3- and 4-pole: 2	3	3
yes	yes	yes
–	AC 230/400	AC 230/400
–	230/400 V (10 … 80 A) = 20 kA	Char. B, C, D: 230/400 V = 15 kA
–	230/400 V (10 … 80 A) = 10 kA	Char. B, C, D: 230/400 V = 7.5 kA
1-pole: DC 250 2-pole: DC 500 3-pole: DC 750 4-pole (63 … 125 A): DC 750 4-pole (10 … 50 A): DC 1000	AC 400/690 1-pole: DC 125 2-pole: DC 250 3-pole: DC 375 4-pole: DC 500	AC 254/440 1-pole: DC 125 2-pole: DC 250 3-pole: DC 375 4-pole: DC 500
DC 250 V (1-pole) = 50 kA DC 500 V (2-pole) = 50 kA DC 750 V (3-pole) = 50 kA DC 750 V (4-pole) = 50 kA (63...25A) DC 1000 V (4-pole) = 50 kA (10...50A)	AC 240/415 V = 36 kA AC 254/440 V = 20 kA AC 400/690 V = 4.5 kA DC 125 V (1-pole) = 20 kA DC 250 V (2-pole) = 20 kA DC 375 V (3-pole) = 20 kA DC 500 V (4-pole) = 20 kA	AC 240/415 V = 25 kA AC 254/440 V = 15 kA DC 125 V (1-pole) = 10 kA DC 250 V (2-pole) = 10 kA DC 375 V (3-pole) = 10 kA DC500V (4-pole) = 10kA
DC 250 V (1-pole) = 50 kA DC 500 V (2-pole) = 50 kA DC 750 V (3-pole) = 50 kA DC 750 V (4-pole) = 50 kA (63...25A) DC 1000 V (4-pole) = 50 kA (10...50A)	AC 240/415 V = 30 kA AC 254/440 V (up to 80 A) = 15 kA AC 254/440 V (100 … 125 A) = 10 kA AC 400/690 V = 3 kA DC 125 V (1-pole) = 20 kA DC 250 V (2-pole) = 20 kA DC 375 V (3-pole) = 20 kA DC 500 V (4-pole) = 20 kA DC 375 V (3-pole) = 30 kA	AC 240/415 V = 18 kA AC 254/440 V = 10 kA DC 125 V (1-pole) = 10 kA DC 250 V (2-pole) = 10 kA DC 375 V (3-pole) = 10 kA DC 500 V (4-pole) = 10 kA
		1...4
		AC 240 (1 -pole ... 4-pole) Δ AC 277 (1 -pole) Y AC 277/480 (2 -pole ... 4-pole) Y DC 125 (1-pole) DC 250 (2-pole) DC 375 (3-pole) DC 500 (4-pole)
		10 ... 100
		B, C, D, K
		AC 240 (1 -pole ... 4-pole) Δ = 20 kA AC 277 (1 -pole) Y = 10 kA AC 277/480 (2 -pole ... 4-pole) Y = 10 kA DC 125 (1-pole) = 10 kA DC 250 (2-pole) = 10 kA DC 375 (3-pole) = 10 kA DC 500 (4-pole) = 10 kA

MCBs

S800 series technical features

S800

		S800S B, C, D, K	S803S-KM KM	S800S-UC UCB, UCK
Mechanical Data				
Housing		Material group I, RAL 7035		
Toggle		black, lockable		
Classification acc. to NF F 126-101, NF F 16-102		I3, F2		
Protection degree acc. to EN 60529		IP20; IP40(actuating end only)		
Shock resistance acc. to IEC/EN 60068-2-31		IEC 61373 Cat. 1 Class B, 5g / 30 ms acc. to IEC 60068-27 Test Ea		
Vibration resistance acc. to IEC/EN 60068-2-6		IEC 60068-2-6 Test Fc; 2 - 13.2 Hz /1 mm 13.2 - 100 Hz / 0.7g with load 100% x I_e		
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH	12 + 12 cycle with 55 °C/90–96 % and 25 °C/95–100 %		
Environmental conditions (dry heat) acc. to IEC/EN 60068-2-2 Test B	°C/RH	16 hours 55 °C / 2 hours 70 °C with damp heat 55 %		
Ambient temperature	°C	–25 … +60		
Storage temperature	°C	–40 … +70		
Data acc. to UL 1077/ C22.2 No 235, Supplementary Protector				
Alternating current: int. cap.				
Direct current: int. cap.				
Installation				
Terminal		Failsafe cage or ringlug terminal		
Connections (top/bottom) – Cu only	mm^2	1 … 50 stranded 1 … 70 flexible		
Tightening torque	Nm	3.5		
	in-lbs.	31		
Screwdriver		POZI 2		
Mounting		EN 60715		
Mounting position		any		
Supply		any		
Dimensions and weight				
Pole dimensions (H x L x W)	mm	82.5 x 95 x 26.5		
Pole weight	g	ca. 240		

	S800N **B, C, D**	**S800C** **B, C, D, K**
	Material group I, RAL 7035	Material group I, RAL 7035
	black, lockable	black, lockable
	I3, F2	I3, F2
	IP20; IP40 (actuating end only)	IP20; IP40 (actuating end only)
	IEC 61373 Cat. 1 Class B, 5g / 30ms acc. To IEC 60068-27 Test Ea	IEC 61373 Cat. 1 Class B, 5g / 30ms acc. To IEC 60068-27 Test Ea
	IEC 60068-2-6 Test Fc; 2–13.2 Hz/1 mm 13.2–100 Hz/0.7 g with load 100% x I_e	IEC 60068-2-6 Test Fc; 2–13.2 Hz/1 mm 13.2–100 Hz/0.7 g with load 100% x I_e
	12 + 12 cycle with 55 °C/90–96 % and 25 °C/95–100 %	12 + 12 cycle with 55 °C/90–96 % and 25 °C/95–100 %
	16 hours 55 °C/2 hours 70 °C with damp heat 55 %	16 hours 55 °C/2 hours 70 °C with damp heat 55 %
	–25 … +60	–25 … +60
	–40 … +70	–40 … +70
		1, 1P+N 240: 20(≤ 100A) 347: 10 (≤ 100A)
		2,3,4 480 Y/277: 10 (≤ 100A)
		1, 1P+N 125: 10 (≤ 100A)
		2, 3, 4 250: 10 (2P, ≤ 100A) 375: 10 (3P, ≤ 100A) 500: 10 (4P, ≤ 100A)
	Failsafe cage or ringlug terminal	Failsafe cage or ringlug terminal
	1 … 50 stranded 1 … 70 flexible	1 … 50 stranded 1 … 70 flexible
	3.5	3.5
	31	31
	POZI 2	POZI 2
	EN 60715	EN 60715
	any	any
	any	any
	82.5 x 95 x 26.5	82.5 x 95 x 26.5
	ca. 240	ca. 240

1

MCBs

S800 series technical features

S800

Tripping characteristics		S800B B, C, D, K	S800HV C, K
Standards		IEC 60947-2 EN 60898-1	IEC/EN 60947-2 UL 1077
Poles		1 … 4	1 … 3
Rated current **I_e**	A		Char. C: 10, 32 Char. K: 6...125
Rated frequency **f**	Hz	50/60	50/60
Rated insulation voltage **Ui** acc. to IEC/EN 60664-1	V	AC 500	AC 1000
Rated impulse withstand voltage Uimp (1.2/50µs)	kV	6	8
Overvoltage category		III	III
Pollution degree		3	2
Suitability for isolation		yes	yes
Data acc. to IEC/EN 60898-1			
Rated operational voltage **U_e**	V	AC 230/400	–
Rated short-circuit capacity **I_{cn}**	kA	230/400 V = 10 kA	–
Service short-circuit capacity **I_{cs}**	kA	230/400 V = 7.5 kA	–
Data acc. to IEC/EN 60947-3			
Rated operational voltage **Ue**	V	–	–
Min. operating voltage	V	–	–
Rated short-term withstand current **Icw**	kA	–	–
Rated short-circuit making capacity **Icm**	kA	–	–
Utilisation category		–	–
Data acc. to IEC/EN 60947-2			
Rated operational voltage **Ue**	V	AC 230/400	AC 580/1000
Rated ultimate short-circuit capacity **I_{cu}**	kA	AC 230 V = 16 kA AC 230/400 V = 16 kA DC 75 V (1-pole) = 10 kA DC 150 V (2-pole) = 10 kA DC 225 V (3-pole = 10 kA DC 300 V (4-pole) = 10 kA	AC 580/1000 (6 … 63 A) = 4kA (80 … 125 A) = 3kA
Rated service short-circuit capacity **I_{cs}**	kA	AC 230 V = 10 kA AC 230/400 V = 10 kA	2.5 (6 … 63 A) 2 (80 … 125 A)
Data acc.to UL 1077, Supplementary Protector			
Poles			3
Rated voltage **U_n**	V		AC 600
Rated current **I_n**	A		10 ... 32
Characteristic			C, K
Short - circuit breaking capacity **I_{cc}**	kA		AC 600 Y = 15 kA with XT2L 125A TMF35-400

		S800B B, C, D, K	S800HV C, K
Mechanical Data			
Housing		Material group I, RAL 7035	Material group I, RAL 7035
Toggle		black, lockable	black, lockable
Classification acc. to NF F 126-101, NF F 16-102		I3, F2	I3, F2
Protection degree acc. to EN 60529		IP20; IP40 (actuating end only)	IP20; IP40 (actuating end only)
Classification acc. to IEC 61373 (shock and vibration)			Cat. 1, Class B
Shock resistance acc. to IEC/EN 60068-2-27			Test Ea: 5 g / 30 ms
Vibration resistance acc. to IEC/EN 60068-2-6			Test Fc: 2–13.2 Hz/1 mm 13.2–100 Hz/0.7 g with load 100 % x I_e
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH		12 + 12 cycle with 55 °C/90–96 % and 25 °C/95–100 %
Environmental conditions (dry heat) acc. to IEC/EN 60068-2-2 Test B	°C/RH		16 hours 55°C / 2 hours 70°C / 55% RH
Ambient temperature	°C	–25 … +60	–25 … +60
Storage temperature	°C	–40 … +70	–40 … +70
Installation			
Terminal		Failsafe cage or ringlug terminal	Failsafe cage terminal
Connections (top/bottom) – Cu only	mm^2	1 … 50 stranded 1 … 70 flexible	1 … 50 stranded 1 … 70 flexible
Tightening torque	Nm	3.5	3.5
	in-lbs.	31	
Screwdriver		POZI 2	POZI 2
Mounting		EN 60715	EN 60715
Mounting position		any	any
Supply		any	any
Dimensions and weight			
Pole dimensions (H x L x W)	mm	82.5 x 95 x 26.5	142 x 82.5 x 26.5
Pole weight	g	ca. 240	0.27

High performance MCBs

S800S series with cage terminal, B characteristic

S801S

S802S

S800S-B characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

Applications: commercial and industrial.

Standard: IEC/EN 60898, IEC/EN 60947-2, UL 1077, supplementary protector

Icn=25kA (10 ... 80A)

Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	408107	S801S-B6	2CCS861001R0065		0.245	1
	8	411329	S801S-B8	2CCS861001R0085		0.245	1
	10	200008	S801S-B10	2CCS861001R0105		0.245	1
	13	200015	S801S-B13	2CCS861001R0135		0.245	1
	16	200022	S801S-B16	2CCS861001R0165		0.245	1
	20	200039	S801S-B20	2CCS861001R0205		0.245	1
	25	200046	S801S-B25	2CCS861001R0255		0.245	1
	32	200053	S801S-B32	2CCS861001R0325		0.245	1
	40	200060	S801S-B40	2CCS861001R0405		0.245	1
	50	200077	S801S-B50	2CCS861001R0505		0.245	1
	63	200084	S801S-B63	2CCS861001R0635		0.245	1
	80	200091	S801S-B80	2CCS861001R0805		0.245	1
	100	200107	S801S-B100	2CCS861001R0825		0.245	1
	125	200114	S801S-B125	2CCS861001R0845		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	408114	S802S-B6	2CCS862001R0065		0.49	1
	8	411336	S802S-B8	2CCS862001R0085		0.49	1
	10	200121	S802S-B10	2CCS862001R0105		0.49	1
	13	200138	S802S-B13	2CCS862001R0135		0.49	1
	16	200145	S802S-B16	2CCS862001R0165		0.49	1
	20	200152	S802S-B20	2CCS862001R0205		0.49	1
	25	200169	S802S-B25	2CCS862001R0255		0.49	1
	32	200176	S802S-B32	2CCS862001R0325		0.49	1
	40	200183	S802S-B40	2CCS862001R0405		0.49	1
	50	200190	S802S-B50	2CCS862001R0505		0.49	1
	63	200206	S802S-B63	2CCS862001R0635		0.49	1
	80	200213	S802S-B80	2CCS862001R0805		0.49	1
	100	200220	S802S-B100	2CCS862001R0825		0.49	1
	125	200237	S802S-B125	2CCS862001R0845		0.49	1

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	408121	S803S-B6	2CCS863001R0065		0.735	1
	8	411343	S803S-B8	2CCS863001R0085		0.735	1
	10	200244	S803S-B10	2CCS863001R0105		0.735	1
	13	200251	S803S-B13	2CCS863001R0135		0.735	1
	16	200268	S803S-B16	2CCS863001R0165		0.735	1
	20	200275	S803S-B20	2CCS863001R0205		0.735	1
	25	200282	S803S-B25	2CCS863001R0255		0.735	1
	32	200299	S803S-B32	2CCS863001R0325		0.735	1
	40	200305	S803S-B40	2CCS863001R0405		0.735	1
	50	200312	S803S-B50	2CCS863001R0505		0.735	1
	63	200329	S803S-B63	2CCS863001R0635		0.735	1
	80	200336	S803S-B80	2CCS863001R0805		0.735	1
	100	200343	S803S-B100	2CCS863001R0825		0.735	1
	125	200350	S803S-B125	2CCS863001R0845		0.735	1

S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	408138	S804S-B6	2CCS864001R0065		0.98	1
	8	411350	S804S-B8	2CCS864001R0085		0.98	1
	10	200367	S804S-B10	2CCS864001R0105		0.98	1
	13	200374	S804S-B13	2CCS864001R0135		0.98	1
	16	200381	S804S-B16	2CCS864001R0165		0.98	1
	20	200398	S804S-B20	2CCS864001R0205		0.98	1
	25	200404	S804S-B25	2CCS864001R0255		0.98	1
	32	200411	S804S-B32	2CCS864001R0325		0.98	1
	40	200428	S804S-B40	2CCS864001R0405		0.98	1
	50	200435	S804S-B50	2CCS864001R0505		0.98	1
	63	200442	S804S-B63	2CCS864001R0635		0.98	1
	80	200459	S804S-B80	2CCS864001R0805		0.98	1
	100	200466	S804S-B100	2CCS864001R0825		0.98	1
	125	200473	S804S-B125	2CCS864001R0845		0.98	1

High performance MCBs

S800S series with ring terminal connection, B characteristic

S801S

S802S

S800S-B characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

Applications: commercial and industrial.

Standard: IEC/EN 60898, IEC/EN 60947-2, UL 1077, supplementary protector

Icn=25kA (10 ... 80A)

Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	408268	S801S-B6-R	2CCS861002R0065		0.245	1
	8	411480	S801S-B8-R	2CCS861002R0085		0.245	1
	10	209636	S801S-B10-R	2CCS861002R0105		0.245	1
	13	209643	S801S-B13-R	2CCS861002R0135		0.245	1
	16	209650	S801S-B16-R	2CCS861002R0165		0.245	1
	20	209667	S801S-B20-R	2CCS861002R0205		0.245	1
	25	209674	S801S-B25-R	2CCS861002R0255		0.245	1
	32	209681	S801S-B32-R	2CCS861002R0325		0.245	1
	40	206826	S801S-B40-R	2CCS861002R0405		0.245	1
	50	206833	S801S-B50-R	2CCS861002R0505		0.245	1
	63	206840	S801S-B63-R	2CCS861002R0635		0.245	1
	80	206857	S801S-B80-R	2CCS861002R0805		0.245	1
	100	206864	S801S-B100-R	2CCS861002R0825		0.245	1
	125	206871	S801S-B125-R	2CCS861002R0845		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	408275	S802S-B6-R	2CCS862002R0065		0.49	1
	8	411497	S802S-B8-R	2CCS862002R0085		0.49	1
	10	209698	S802S-B10-R	2CCS862002R0105		0.49	1
	13	209704	S802S-B13-R	2CCS862002R0135		0.49	1
	16	209711	S802S-B16-R	2CCS862002R0165		0.49	1
	20	209728	S802S-B20-R	2CCS862002R0205		0.49	1
	25	209735	S802S-B25-R	2CCS862002R0255		0.49	1
	32	209742	S802S-B32-R	2CCS862002R0325		0.49	1
	40	206888	S802S-B40-R	2CCS862002R0405		0.49	1
	50	206895	S802S-B50-R	2CCS862002R0505		0.49	1
	63	206901	S802S-B63-R	2CCS862002R0635		0.49	1
	80	206918	S802S-B80-R	2CCS862002R0805		0.49	1
	100	206925	S802S-B100-R	2CCS862002R0825		0.49	1
	125	206932	S802S-B125-R	2CCS862002R0845		0.49	1

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	408282	S803S-B6-R	2CCS863002R0065		0.735	1
	8	411503	S803S-B8-R	2CCS863002R0085		0.735	1
	10	209759	S803S-B10-R	2CCS863002R0105		0.735	1
	13	209766	S803S-B13-R	2CCS863002R0135		0.735	1
	16	209773	S803S-B16-R	2CCS863002R0165		0.735	1
	20	209780	S803S-B20-R	2CCS863002R0205		0.735	1
	25	209797	S803S-B25-R	2CCS863002R0255		0.735	1
	32	209803	S803S-B32-R	2CCS863002R0325		0.735	1
	40	206949	S803S-B40-R	2CCS863002R0405		0.735	1
	50	206956	S803S-B50-R	2CCS863002R0505		0.735	1
	63	206963	S803S-B63-R	2CCS863002R0635		0.735	1
	80	206970	S803S-B80-R	2CCS863002R0805		0.735	1
	100	206987	S803S-B100-R	2CCS863002R0825		0.735	1
	125	206994	S803S-B125-R	2CCS863002R0845		0.735	1

S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	408299	S804S-B6-R	2CCS864002R0065		0.98	1
	8	411510	S804S-B8-R	2CCS864002R0085		0.98	1
	10	209810	S804S-B10-R	2CCS864002R0105		0.98	1
	13	209827	S804S-B13-R	2CCS864002R0135		0.98	1
	16	209834	S804S-B16-R	2CCS864002R0165		0.98	1
	20	209841	S804S-B20-R	2CCS864002R0205		0.98	1
	25	209858	S804S-B25-R	2CCS864002R0255		0.98	1
	32	209865	S804S-B32-R	2CCS864002R0325		0.98	1
	40	207007	S804S-B40-R	2CCS864002R0405		0.98	1
	50	207014	S804S-B50-R	2CCS864002R0505		0.98	1
	63	207021	S804S-B63-R	2CCS864002R0635		0.98	1
	80	207038	S804S-B80-R	2CCS864002R0805		0.98	1
	100	207045	S804S-B100-R	2CCS864002R0825		0.98	1
	125	207052	S804S-B125-R	2CCS864002R0845		0.98	1

High performance MCBs

S800S series with cage terminal, C characteristic

S801S

S802S

S800S-C characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for resistive and inductive loads with low inrush current; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

Applications: commercial and industrial.

Standard: IEC/EN 60898, IEC/EN 60947-2, UL 1077, supplementary protector

Icn=25kA (10 ... 80A)

Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	408145	S801S-C6	2CCS861001R0064		0.245	1
	8	411367	S801S-C8	2CCS861001R0084		0.245	1
	10	200480	S801S-C10	2CCS861001R0104		0.245	1
	13	200497	S801S-C13	2CCS861001R0134		0.245	1
	16	200503	S801S-C16	2CCS861001R0164		0.245	1
	20	200510	S801S-C20	2CCS861001R0204		0.245	1
	25	200527	S801S-C25	2CCS861001R0254		0.245	1
	32	200534	S801S-C32	2CCS861001R0324		0.245	1
	40	200541	S801S-C40	2CCS861001R0404		0.245	1
	50	200558	S801S-C50	2CCS861001R0504		0.245	1
	63	200565	S801S-C63	2CCS861001R0634		0.245	1
	80	200572	S801S-C80	2CCS861001R0804		0.245	1
	100	200589	S801S-C100	2CCS861001R0824		0.245	1
	125	200596	S801S-C125	2CCS861001R0844		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	408152	S802S-C6	2CCS862001R0064		0.49	1
	8	411374	S802S-C8	2CCS862001R0084		0.49	1
	10	200602	S802S-C10	2CCS862001R0104		0.49	1
	13	200619	S802S-C13	2CCS862001R0134		0.49	1
	16	200626	S802S-C16	2CCS862001R0164		0.49	1
	20	200633	S802S-C20	2CCS862001R0204		0.49	1
	25	200640	S802S-C25	2CCS862001R0254		0.49	1
	32	200657	S802S-C32	2CCS862001R0324		0.49	1
	40	200664	S802S-C40	2CCS862001R0404		0.49	1
	50	200671	S802S-C50	2CCS862001R0504		0.49	1
	63	200688	S802S-C63	2CCS862001R0634		0.49	1
	80	200695	S802S-C80	2CCS862001R0804		0.49	1
	100	200701	S802S-C100	2CCS862001R0824		0.49	1
	125	200718	S802S-C125	2CCS862001R0844		0.49	1

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	408169	S803S-C6	2CCS863001R0064		0.735	1
	8	411381	S803S-C8	2CCS863001R0084		0.735	1
	10	200725	S803S-C10	2CCS863001R0104		0.735	1
	13	200732	S803S-C13	2CCS863001R0134		0.735	1
	16	200749	S803S-C16	2CCS863001R0164		0.735	1
	20	200756	S803S-C20	2CCS863001R0204		0.735	1
	25	200763	S803S-C25	2CCS863001R0254		0.735	1
	32	200770	S803S-C32	2CCS863001R0324		0.735	1
	40	200787	S803S-C40	2CCS863001R0404		0.735	1
	50	200794	S803S-C50	2CCS863001R0504		0.735	1
	63	200800	S803S-C63	2CCS863001R0634		0.735	1
	80	200817	S803S-C80	2CCS863001R0804		0.735	1
	100	200824	S803S-C100	2CCS863001R0824		0.735	1
	125	200831	S803S-C125	2CCS863001R0844		0.735	1

S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	408176	S804S-C6	2CCS864001R0064		0.98	1
	8	411398	S804S-C8	2CCS864001R0084		0.98	1
	10	200848	S804S-C10	2CCS864001R0104		0.98	1
	13	200855	S804S-C13	2CCS864001R0134		0.98	1
	16	200862	S804S-C16	2CCS864001R0164		0.98	1
	20	200879	S804S-C20	2CCS864001R0204		0.98	1
	25	200886	S804S-C25	2CCS864001R0254		0.98	1
	32	200893	S804S-C32	2CCS864001R0324		0.98	1
	40	200909	S804S-C40	2CCS864001R0404		0.98	1
	50	200916	S804S-C50	2CCS864001R0504		0.98	1
	63	200923	S804S-C63	2CCS864001R0634		0.98	1
	80	200930	S804S-C80	2CCS864001R0804		0.98	1
	100	200947	S804S-C100	2CCS864001R0824		0.98	1
	125	200954	S804S-C125	2CCS864001R0844		0.98	1

High performance MCBs

S800S series with ring terminal connection, C characteristic

S801S

S802S

S800S-C characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for resistive and inductive loads with low inrush current; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2, IEC/EN 60898

Icn=25kA (10 ... 80A)

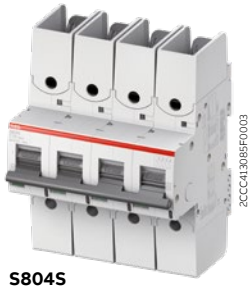
Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	408305	S801S-C6-R	2CCS861002R0064		0.245	1
	8	411527	S801S-C8-R	2CCS861002R0084		0.245	1
	10	209872	S801S-C10-R	2CCS861002R0104		0.245	1
	13	209889	S801S-C13-R	2CCS861002R0134		0.245	1
	16	209896	S801S-C16-R	2CCS861002R0164		0.245	1
	20	209902	S801S-C20-R	2CCS861002R0204		0.245	1
	25	209919	S801S-C25-R	2CCS861002R0254		0.245	1
	32	209926	S801S-C32-R	2CCS861002R0324		0.245	1
	40	207069	S801S-C40-R	2CCS861002R0404		0.245	1
	50	207076	S801S-C50-R	2CCS861002R0504		0.245	1
	63	207083	S801S-C63-R	2CCS861002R0634		0.245	1
	80	207090	S801S-C80-R	2CCS861002R0804		0.245	1
	100	207106	S801S-C100-R	2CCS861002R0824		0.245	1
	125	207113	S801S-C125-R	2CCS861002R0844		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	408312	S802S-C6-R	2CCS862002R0064		0.49	1
	8	411534	S802S-C8-R	2CCS862001R0084		0.49	1
	10	209933	S802S-C10-R	2CCS862002R0104		0.49	1
	13	209940	S802S-C13-R	2CCS862002R0134		0.49	1
	16	209957	S802S-C16-R	2CCS862002R0164		0.49	1
	20	209964	S802S-C20-R	2CCS862002R0204		0.49	1
	25	209971	S802S-C25-R	2CCS862002R0254		0.49	1
	32	209988	S802S-C32-R	2CCS862002R0324		0.49	1
	40	207120	S802S-C40-R	2CCS862002R0404		0.49	1
	50	207137	S802S-C50-R	2CCS862002R0504		0.49	1
	63	207144	S802S-C63-R	2CCS862002R0634		0.49	1
	80	207151	S802S-C80-R	2CCS862002R0804		0.49	1
	100	207168	S802S-C100-R	2CCS862002R0824		0.49	1
	125	207175	S802S-C125-R	2CCS862002R0844		0.49	1

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	408329	S803S-C6-R	2CCS863002R0064		0.735	1
	8	411541	S803S-C8-R	2CCS863002R0084		0.735	1
	10	209995	S803S-C10-R	2CCS863002R0104		0.735	1
	13	210007	S803S-C13-R	2CCS863002R0134		0.735	1
	16	210014	S803S-C16-R	2CCS863002R0164		0.735	1
	20	210021	S803S-C20-R	2CCS863002R0204		0.735	1
	25	210038	S803S-C25-R	2CCS863002R0254		0.735	1
	32	210045	S803S-C32-R	2CCS863002R0324		0.735	1
	40	207182	S803S-C40-R	2CCS863002R0404		0.735	1
	50	207199	S803S-C50-R	2CCS863002R0504		0.735	1
	63	207205	S803S-C63-R	2CCS863002R0634		0.735	1
	80	207212	S803S-C80-R	2CCS863002R0804		0.735	1
	100	207229	S803S-C100-R	2CCS863002R0824		0.735	1
	125	207236	S803S-C125-R	2CCS863002R0844		0.735	1



S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	408336	S804S-C6-R	2CCS864002R0064		0.98	1
	8	411558	S804S-C8-R	2CCS864002R0084		0.98	1
	10	210052	S804S-C10-R	2CCS864002R0104		0.98	1
	13	210069	S804S-C13-R	2CCS864002R0134		0.98	1
	16	210076	S804S-C16-R	2CCS864002R0164		0.98	1
	20	210083	S804S-C20-R	2CCS864002R0204		0.98	1
	25	210090	S804S-C25-R	2CCS864002R0254		0.98	1
	32	210106	S804S-C32-R	2CCS864002R0324		0.98	1
	40	207243	S804S-C40-R	2CCS864002R0404		0.98	1
	50	207250	S804S-C50-R	2CCS864002R0504		0.98	1
	63	207267	S804S-C63-R	2CCS864002R0634		0.98	1
	80	207274	S804S-C80-R	2CCS864002R0804		0.98	1
	100	207281	S804S-C100-R	2CCS864002R0824		0.98	1
	125	207298	S804S-C125-R	2CCS864002R0844		0.98	1

High performance MCBs

S800S series with cage terminal, D characteristic

S801S

S802S

S800S-D characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for circuits which supply loads with high inrush current at the circuit closing (motors, LV / LV transformers, breakdown lamps); very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

Applications: commercial and industrial.

Standard: IEC/EN 60898, IEC/EN 60947-2, UL 1077, supplementary protector

Icn=25kA (10 ... 80A)

Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	408183	S801S-D6	2CCS861001R0061		0.245	1
	8	411404	S801S-D8	2CCS861001R0081		0.245	1
	10	200961	S801S-D10	2CCS861001R0101		0.245	1
	13	200978	S801S-D13	2CCS861001R0131		0.245	1
	16	200985	S801S-D16	2CCS861001R0161		0.245	1
	20	200992	S801S-D20	2CCS861001R0201		0.245	1
	25	201005	S801S-D25	2CCS861001R0251		0.245	1
	32	201012	S801S-D32	2CCS861001R0321		0.245	1
	40	201029	S801S-D40	2CCS861001R0401		0.245	1
	50	201036	S801S-D50	2CCS861001R0501		0.245	1
	63	201043	S801S-D63	2CCS861001R0631		0.245	1
	80	201050	S801S-D80	2CCS861001R0801		0.245	1
	100	201067	S801S-D100	2CCS861001R0821		0.245	1
	125	201074	S801S-D125	2CCS861001R0841		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	408190	S802S-D6	2CCS862001R0061		0.49	1
	8	411411	S802S-D8	2CCS862001R0081		0.49	1
	10	201081	S802S-D10	2CCS862001R0101		0.49	1
	13	201098	S802S-D13	2CCS862001R0131		0.49	1
	16	201104	S802S-D16	2CCS862001R0161		0.49	1
	20	201111	S802S-D20	2CCS862001R0201		0.49	1
	25	201128	S802S-D25	2CCS862001R0251		0.49	1
	32	201135	S802S-D32	2CCS862001R0321		0.49	1
	40	201142	S802S-D40	2CCS862001R0401		0.49	1
	50	201159	S802S-D50	2CCS862001R0501		0.49	1
	63	201166	S802S-D63	2CCS862001R0631		0.49	1
	80	201173	S802S-D80	2CCS862001R0801		0.49	1
	100	201180	S802S-D100	2CCS862001R0821		0.49	1
	125	201197	S802S-D125	2CCS862001R0841		0.49	1

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	408206	S803S-D6	2CCS863001R0061		0.735	1
	8	411428	S803S-D8	2CCS863001R0081		0.735	1
	10	201203	S803S-D10	2CCS863001R0101		0.735	1
	13	201210	S803S-D13	2CCS863001R0131		0.735	1
	16	201227	S803S-D16	2CCS863001R0161		0.735	1
	20	201234	S803S-D20	2CCS863001R0201		0.735	1
	25	201241	S803S-D25	2CCS863001R0251		0.735	1
	32	201258	S803S-D32	2CCS863001R0321		0.735	1
	40	201265	S803S-D40	2CCS863001R0401		0.735	1
	50	201272	S803S-D50	2CCS863001R0501		0.735	1
	63	201289	S803S-D63	2CCS863001R0631		0.735	1
	80	201296	S803S-D80	2CCS863001R0801		0.735	1
	100	201302	S803S-D100	2CCS863001R0821		0.735	1
	125	201319	S803S-D125	2CCS863001R0841		0.735	1

S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	408213	S804S-D6	2CCS864001R0061		0.98	1
	8	411435	S804S-D8	2CCS864001R0081		0.98	1
	10	201326	S804S-D10	2CCS864001R0101		0.98	1
	13	201333	S804S-D13	2CCS864001R0131		0.98	1
	16	201340	S804S-D16	2CCS864001R0161		0.98	1
	20	201357	S804S-D20	2CCS864001R0201		0.98	1
	25	201364	S804S-D25	2CCS864001R0251		0.98	1
	32	201371	S804S-D32	2CCS864001R0321		0.98	1
	40	201388	S804S-D40	2CCS864001R0401		0.98	1
	50	201395	S804S-D50	2CCS864001R0501		0.98	1
	63	201401	S804S-D63	2CCS864001R0631		0.98	1
	80	201418	S804S-D80	2CCS864001R0801		0.98	1
	100	201425	S804S-D100	2CCS864001R0821		0.98	1
	125	201432	S804S-D125	2CCS864001R0841		0.98	1

High performance MCBs

S800S series with ring terminal connection, D characteristic

S801S

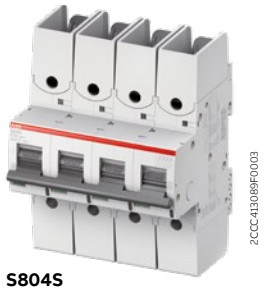
S802S

S800S-D characteristic
Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for circuits which supply loads with high inrush current at the circuit closing (motors, LV / LV transformers, breakdown lamps); very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2, IEC/EN 60898
Icn=25kA (10 ... 80A)
Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	408343	S801S-D6-R	2CCS861002R0061		0.245	1
	8	411565	S801S-D8-R	2CCS861002R0081		0.245	1
	10	210113	S801S-D10-R	2CCS861002R0101		0.245	1
	13	210120	S801S-D13-R	2CCS861002R0131		0.245	1
	16	210137	S801S-D16-R	2CCS861002R0161		0.245	1
	20	210144	S801S-D20-R	2CCS861002R0201		0.245	1
	25	210151	S801S-D25-R	2CCS861002R0251		0.245	1
	32	210168	S801S-D32-R	2CCS861002R0321		0.245	1
	40	207304	S801S-D40-R	2CCS861002R0401		0.245	1
	50	207311	S801S-D50-R	2CCS861002R0501		0.245	1
	63	207328	S801S-D63-R	2CCS861002R0631		0.245	1
	80	207335	S801S-D80-R	2CCS861002R0801		0.245	1
	100	207342	S801S-D100-R	2CCS861002R0821		0.245	1
	125	207359	S801S-D125-R	2CCS861002R0841		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	408350	S802S-D6-R	2CCS862002R0061		0.49	1
	8	411572	S802S-D8-R	2CCS862002R0081		0.49	1
	10	210175	S802S-D10-R	2CCS862002R0101		0.49	1
	13	210182	S802S-D13-R	2CCS862002R0131		0.49	1
	16	210199	S802S-D16-R	2CCS862002R0161		0.49	1
	20	210205	S802S-D20-R	2CCS862002R0201		0.49	1
	25	210212	S802S-D25-R	2CCS862002R0251		0.49	1
	32	210229	S802S-D32-R	2CCS862002R0321		0.49	1
	40	207366	S802S-D40-R	2CCS862002R0401		0.49	1
	50	207373	S802S-D50-R	2CCS862002R0501		0.49	1
	63	207380	S802S-D63-R	2CCS862002R0631		0.49	1
	80	207397	S802S-D80-R	2CCS862002R0801		0.49	1
	100	207403	S802S-D100-R	2CCS862002R0821		0.49	1
	125	207410	S802S-D125-R	2CCS862002R0841		0.49	1

S803S



S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	408367	S803S-D6-R	2CCS863002R0061		0.735	1
	8	411589	S803S-D8-R	2CCS863002R0081		0.735	1
	10	210236	S803S-D10-R	2CCS863002R0101		0.735	1
	13	210243	S803S-D13-R	2CCS863002R0131		0.735	1
	16	210250	S803S-D16-R	2CCS863002R0161		0.735	1
	20	210267	S803S-D20-R	2CCS863002R0201		0.735	1
	25	210274	S803S-D25-R	2CCS863002R0251		0.735	1
	32	210281	S803S-D32-R	2CCS863002R0321		0.735	1
	40	207427	S803S-D40-R	2CCS863002R0401		0.735	1
	50	207434	S803S-D50-R	2CCS863002R0501		0.735	1
	63	207441	S803S-D63-R	2CCS863002R0631		0.735	1
	80	207458	S803S-D80-R	2CCS863002R0801		0.735	1
	100	207465	S803S-D100-R	2CCS863002R0821		0.735	1
	125	207472	S803S-D125-R	2CCS863002R0841		0.735	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	408374	S804S-D6-R	2CCS864002R0061		0.98	1
	8	411596	S804S-D8-R	2CCS864002R0081		0.98	1
	10	210298	S804S-D10-R	2CCS864002R0101		0.98	1
	13	210304	S804S-D13-R	2CCS864002R0131		0.98	1
	16	210311	S804S-D16-R	2CCS864002R0161		0.98	1
	20	210328	S804S-D20-R	2CCS864002R0201		0.98	1
	25	210335	S804S-D25-R	2CCS864002R0251		0.98	1
	32	210342	S804S-D32-R	2CCS864002R0321		0.98	1
	40	207489	S804S-D40-R	2CCS864002R0401		0.98	1
	50	207496	S804S-D50-R	2CCS864002R0501		0.98	1
	63	207502	S804S-D63-R	2CCS864002R0631		0.98	1
	80	207519	S804S-D80-R	2CCS864002R0801		0.98	1
	100	207526	S804S-D100-R	2CCS864002R0821		0.98	1
	125	207533	S804S-D125-R	2CCS864002R0841		0.98	1

1

High performance MCBs

S800S series with cage terminal, K characteristic

S801S

S802S

S800S-K characteristic

Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits when a high breaking capacity is required; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream. Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2, UL 1077, supplementary protector

Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	408220	S801S-K6	2CCS861001R0067		0.245	1
	8	411442	S801S-K8	2CCS861001R0407		0.245	1
	10	201449	S801S-K10	2CCS861001R0427		0.245	1
	13	201456	S801S-K13	2CCS861001R0447		0.245	1
	16	201463	S801S-K16	2CCS861001R0467		0.245	1
	20	201470	S801S-K20	2CCS861001R0487		0.245	1
	25	201487	S801S-K25	2CCS861001R0517		0.245	1
	32	201494	S801S-K32	2CCS861001R0537		0.245	1
	40	201500	S801S-K40	2CCS861001R0557		0.245	1
	50	201517	S801S-K50	2CCS861001R0577		0.245	1
	63	201524	S801S-K63	2CCS861001R0597		0.245	1
	80	201531	S801S-K80	2CCS861001R0627		0.245	1
	100	201548	S801S-K100	2CCS861001R0637		0.245	1
	125	201555	S801S-K125	2CCS861001R0647		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	408237	S802S-K6	2CCS862001R0067		0.49	1
	8	411459	S802S-K8	2CCS862001R0407		0.49	1
	10	201562	S802S-K10	2CCS862001R0427		0.49	1
	13	201579	S802S-K13	2CCS862001R0447		0.49	1
	16	201586	S802S-K16	2CCS862001R0467		0.49	1
	20	201593	S802S-K20	2CCS862001R0487		0.49	1
	25	201609	S802S-K25	2CCS862001R0517		0.49	1
	32	201616	S802S-K32	2CCS862001R0537		0.49	1
	40	201623	S802S-K40	2CCS862001R0557		0.49	1
	50	201630	S802S-K50	2CCS862001R0577		0.49	1
	63	201647	S802S-K63	2CCS862001R0597		0.49	1
	80	201654	S802S-K80	2CCS862001R0627		0.49	1
	100	201661	S802S-K100	2CCS862001R0637		0.49	1
	125	201678	S802S-K125	2CCS862001R0647		0.49	1

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	408244	S803S-K6	2CCS863001R0067		0.735	1
	8	411466	S803S-K8	2CCS863001R0407		0.735	1
	10	201685	S803S-K10	2CCS863001R0427		0.735	1
	13	201692	S803S-K13	2CCS863001R0447		0.735	1
	16	201708	S803S-K16	2CCS863001R0467		0.735	1
	20	201715	S803S-K20	2CCS863001R0487		0.735	1
	25	201722	S803S-K25	2CCS863001R0517		0.735	1
	32	201739	S803S-K32	2CCS863001R0537		0.735	1
	40	201746	S803S-K40	2CCS863001R0557		0.735	1
	50	201753	S803S-K50	2CCS863001R0577		0.735	1
	63	201760	S803S-K63	2CCS863001R0597		0.735	1
	80	201777	S803S-K80	2CCS863001R0627		0.735	1
	100	201784	S803S-K100	2CCS863001R0637		0.735	1
	125	201791	S803S-K125	2CCS863001R0647		0.735	1

S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	408251	S804S-K6	2CCS864001R0067		0.98	1
	8	411473	S804S-K8	2CCS864001R0407		0.98	1
	10	201807	S804S-K10	2CCS864001R0427		0.98	1
	13	201814	S804S-K13	2CCS864001R0447		0.98	1
	16	201821	S804S-K16	2CCS864001R0467		0.98	1
	20	201838	S804S-K20	2CCS864001R0487		0.98	1
	25	201845	S804S-K25	2CCS864001R0517		0.98	1
	32	201852	S804S-K32	2CCS864001R0537		0.98	1
	40	201869	S804S-K40	2CCS864001R0557		0.98	1
	50	201876	S804S-K50	2CCS864001R0577		0.98	1
	63	201883	S804S-K63	2CCS864001R0597		0.98	1
	80	201890	S804S-K80	2CCS864001R0627		0.98	1
	100	201906	S804S-K100	2CCS864001R0637		0.98	1
	125	201913	S804S-K125	2CCS864001R0647		0.98	1

1

High performance MCBs

S800S series with ring terminal connection, K characteristic

S801S

S802S

S800S-K characteristic
Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits when a high breaking capacity is required; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	408381	S801S-K6-R	2CCS861002R0067		0.245	1
	8	411602	S801S-K8-R	2CCS861002R0407		0.245	1
	10	209391	S801S-K10-R	2CCS861002R0427		0.245	1
	13	209407	S801S-K13-R	2CCS861002R0447		0.245	1
	16	209414	S801S-K16-R	2CCS861002R0467		0.245	1
	20	209421	S801S-K20-R	2CCS861002R0487		0.245	1
	25	209438	S801S-K25-R	2CCS861002R0517		0.245	1
	32	209445	S801S-K32-R	2CCS861002R0537		0.245	1
	40	207540	S801S-K40-R	2CCS861002R0557		0.245	1
	50	207557	S801S-K50-R	2CCS861002R0577		0.245	1
	63	207564	S801S-K63-R	2CCS861002R0597		0.245	1
	80	207571	S801S-K80-R	2CCS861002R0627		0.245	1
	100	207588	S801S-K100-R	2CCS861002R0637		0.245	1
	125	207595	S801S-K125-R	2CCS861002R0647		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	408398	S802S-K6-R	2CCS862002R0067		0.49	1
	8	411619	S802S-K8-R	2CCS862002R0407		0.49	1
	10	209452	S802S-K10-R	2CCS862002R0427		0.49	1
	13	209469	S802S-K13-R	2CCS862002R0447		0.49	1
	16	209476	S802S-K16-R	2CCS862002R0467		0.49	1
	20	209483	S802S-K20-R	2CCS862002R0487		0.49	1
	25	209490	S802S-K25-R	2CCS862002R0517		0.49	1
	32	209506	S802S-K32-R	2CCS862002R0537		0.49	1
	40	207601	S802S-K40-R	2CCS862002R0557		0.49	1
	50	207618	S802S-K50-R	2CCS862002R0577		0.49	1
	63	207625	S802S-K63-R	2CCS862002R0597		0.49	1
	80	207632	S802S-K80-R	2CCS862002R0627		0.49	1
	100	207649	S802S-K100-R	2CCS862002R0637		0.49	1
	125	207656	S802S-K125-R	2CCS862002R0647		0.49	1

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	6	408404	S803S-K6-R	2CCS863002R0067		0.735	1
	8	411626	S803S-K8-R	2CCS863002R0407		0.735	1
	10	209513	S803S-K10-R	2CCS863002R0427		0.735	1
	13	209520	S803S-K13-R	2CCS863002R0447		0.735	1
	16	209537	S803S-K16-R	2CCS863002R0467		0.735	1
	20	209544	S803S-K20-R	2CCS863002R0487		0.735	1
	25	209551	S803S-K25-R	2CCS863002R0517		0.735	1
	32	209568	S803S-K32-R	2CCS863002R0537		0.735	1
	40	207663	S803S-K40-R	2CCS863002R0557		0.735	1
	50	207670	S803S-K50-R	2CCS863002R0577		0.735	1
	63	207687	S803S-K63-R	2CCS863002R0597		0.735	1
	80	207694	S803S-K80-R	2CCS863002R0627		0.735	1
	100	207700	S803S-K100-R	2CCS863002R0637		0.735	1
	125	207717	S803S-K125-R	2CCS863002R0647		0.735	1

S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	6	408411	S804S-K6-R	2CCS864002R0067		0.98	1
	8	411633	S804S-K8-R	2CCS864002R0407		0.98	1
	10	209575	S804S-K10-R	2CCS864002R0427		0.98	1
	13	209582	S804S-K13-R	2CCS864002R0447		0.98	1
	16	209599	S804S-K16-R	2CCS864002R0467		0.98	1
	20	209605	S804S-K20-R	2CCS864002R0487		0.98	1
	25	209612	S804S-K25-R	2CCS864002R0517		0.98	1
	32	209629	S804S-K32-R	2CCS864002R0537		0.98	1
	40	207724	S804S-K40-R	2CCS864002R0557		0.98	1
	50	207731	S804S-K50-R	2CCS864002R0577		0.98	1
	63	207748	S804S-K63-R	2CCS864002R0597		0.98	1
	80	207755	S804S-K80-R	2CCS864002R0627		0.98	1
	100	207762	S804S-K100-R	2CCS864002R0637		0.98	1
	125	207779	S804S-K125-R	2CCS864002R0647		0.98	1

High performance MCBs

S800S series KM characteristic

S803S

S804S

S800S-KM characteristic with cage terminal

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; only magnetic version dedicated to protect motors; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream; version dedicated to application in direct current circuits.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2

Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	20	202194	S803S-KM20	2CCS863001R0486		0.735	1
	25	202200	S803S-KM25	2CCS863001R0516		0.735	1
	32	202217	S803S-KM32	2CCS863001R0536		0.735	1
	40	202224	S803S-KM40	2CCS863001R0556		0.735	1
	50	202231	S803S-KM50	2CCS863001R0576		0.735	1
	63	202248	S803S-KM63	2CCS863001R0596		0.735	1
	80	202255	S803S-KM80	2CCS863001R0626		0.735	1

S800S-KM-R characteristic with ring terminal connection

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; only magnetic version dedicated to protect motors; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream; version dedicated to application in direct current circuits.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2

Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	20	210830	S803S-KM20-R	2CCS863002R0486		0.735	1
	25	210847	S803S-KM25-R	2CCS863002R0516		0.735	1
	32	210854	S803S-KM32-R	2CCS863002R0536		0.735	1
	40	207786	S803S-KM40-R	2CCS863002R0556		0.735	1
	50	207793	S803S-KM50-R	2CCS863002R0576		0.735	1
	63	207809	S803S-KM63-R	2CCS863002R0596		0.735	1
	80	207816	S803S-KM80-R	2CCS863002R0626		0.735	1

High performance MCBs

S800S series DC range with cage terminal, UC-B characteristic

S801S

S802S

S800S-UCB characteristic
Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream; version dedicated to application in direct current circuits.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	202842	S801S-UCB10	2CCS861001R1105		0.245	1
	13	202859	S801S-UCB13	2CCS861001R1135		0.245	1
	16	202866	S801S-UCB16	2CCS861001R1165		0.245	1
	20	202873	S801S-UCB20	2CCS861001R1205		0.245	1
	25	202880	S801S-UCB25	2CCS861001R1255		0.245	1
	32	202897	S801S-UCB32	2CCS861001R1325		0.245	1
	40	202903	S801S-UCB40	2CCS861001R1405		0.245	1
	50	202910	S801S-UCB50	2CCS861001R1505		0.245	1
	63	202927	S801S-UCB63	2CCS861001R1635		0.245	1
	80	202934	S801S-UCB80	2CCS861001R1805		0.245	1
	100	202941	S801S-UCB100	2CCS861001R1825		0.245	1
	125	202958	S801S-UCB125	2CCS861001R1845		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	202965	S802S-UCB10	2CCS862001R1105		0.49	1
	13	202972	S802S-UCB13	2CCS862001R1135		0.49	1
	16	202989	S802S-UCB16	2CCS862001R1165		0.49	1
	20	202996	S802S-UCB20	2CCS862001R1205		0.49	1
	25	203009	S802S-UCB25	2CCS862001R1255		0.49	1
	32	203016	S802S-UCB32	2CCS862001R1325		0.49	1
	40	203023	S802S-UCB40	2CCS862001R1405		0.49	1
	50	203030	S802S-UCB50	2CCS862001R1505		0.49	1
	63	203047	S802S-UCB63	2CCS862001R1635		0.49	1
	80	203054	S802S-UCB80	2CCS862001R1805		0.49	1
	100	203061	S802S-UCB100	2CCS862001R1825		0.49	1
	125	203078	S802S-UCB125	2CCS862001R1845		0.49	1

High performance MCBs

S800S series DC range with cage terminal, UC-B characteristic

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	203085	S803S-UCB10	2CCS863001R1105		0.735	1
	13	203092	S803S-UCB13	2CCS863001R1135		0.735	1
	16	203108	S803S-UCB16	2CCS863001R1165		0.735	1
	20	203115	S803S-UCB20	2CCS863001R1205		0.735	1
	25	203122	S803S-UCB25	2CCS863001R1255		0.735	1
	32	203139	S803S-UCB32	2CCS863001R1325		0.735	1
	40	203146	S803S-UCB40	2CCS863001R1405		0.735	1
	50	203153	S803S-UCB50	2CCS863001R1505		0.735	1
	63	203160	S803S-UCB63	2CCS863001R1635		0.735	1
	80	203177	S803S-UCB80	2CCS863001R1805		0.735	1
	100	203184	S803S-UCB100	2CCS863001R1825		0.735	1
	125	203191	S803S-UCB125	2CCS863001R1845		0.735	1

S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	203207	S804S-UCB10	2CCS864001R1105		0.98	1
	13	203214	S804S-UCB13	2CCS864001R1135		0.98	1
	16	203221	S804S-UCB16	2CCS864001R1165		0.98	1
	20	203238	S804S-UCB20	2CCS864001R1205		0.98	1
	25	203245	S804S-UCB25	2CCS864001R1255		0.98	1
	32	203252	S804S-UCB32	2CCS864001R1325		0.98	1
	40	203269	S804S-UCB40	2CCS864001R1405		0.98	1
	50	203276	S804S-UCB50	2CCS864001R1505		0.98	1
	63	203283	S804S-UCB63	2CCS864001R1635		0.98	1
	80	203290	S804S-UCB80	2CCS864001R1805		0.98	1
	100	203306	S804S-UCB100	2CCS864001R1825		0.98	1
	125	203313	S804S-UCB125	2CCS864001R1845		0.98	1

High performance MCBs

S800S series DC range with ring terminal connection, UC-B characteristic

S801S

S802S

S800S-UCB characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream; version dedicated to application in direct current circuits.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2

Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	210359	S801S-UCB10-R	2CCS861002R1105		0.245	1
	13	210366	S801S-UCB13-R	2CCS861002R1135		0.245	1
	16	210373	S801S-UCB16-R	2CCS861002R1165		0.245	1
	20	210380	S801S-UCB20-R	2CCS861002R1205		0.245	1
	25	210397	S801S-UCB25-R	2CCS861002R1255		0.245	1
	32	210403	S801S-UCB32-R	2CCS861002R1325		0.245	1
	40	208424	S801S-UCB40-R	2CCS861002R1405		0.245	1
	50	208431	S801S-UCB50-R	2CCS861002R1505		0.245	1
	63	208448	S801S-UCB63-R	2CCS861002R1635		0.245	1
	80	208455	S801S-UCB80-R	2CCS861002R1805		0.245	1
	100	208462	S801S-UCB100-R	2CCS861002R1825		0.245	1
	125	208479	S801S-UCB125-R	2CCS861002R1845		0.245	1

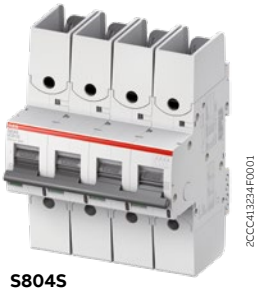
Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	210410	S802S-UCB10-R	2CCS862002R1105		0.49	1
	13	210427	S802S-UCB13-R	2CCS862002R1135		0.49	1
	16	210434	S802S-UCB16-R	2CCS862002R1165		0.49	1
	20	210441	S802S-UCB20-R	2CCS862002R1205		0.49	1
	25	210458	S802S-UCB25-R	2CCS862002R1255		0.49	1
	32	210465	S802S-UCB32-R	2CCS862002R1325		0.49	1
	40	208486	S802S-UCB40-R	2CCS862002R1405		0.49	1
	50	208493	S802S-UCB50-R	2CCS862002R1505		0.49	1
	63	208509	S802S-UCB63-R	2CCS862002R1635		0.49	1
	80	208516	S802S-UCB80-R	2CCS862002R1805		0.49	1
	100	208523	S802S-UCB100-R	2CCS862002R1825		0.49	1
	125	208530	S802S-UCB125-R	2CCS862002R1845		0.49	1

High performance MCBs

S800S series DC range with ring terminal connection, UC-B characteristic

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	210472	S803S-UCB10-R	2CCS863002R1105		0.735	1
	13	210489	S803S-UCB13-R	2CCS863002R1135		0.735	1
	16	210496	S803S-UCB16-R	2CCS863002R1165		0.735	1
	20	210502	S803S-UCB20-R	2CCS863002R1205		0.735	1
	25	210519	S803S-UCB25-R	2CCS863002R1255		0.735	1
	32	210526	S803S-UCB32-R	2CCS863002R1325		0.735	1
	40	208547	S803S-UCB40-R	2CCS863002R1405		0.735	1
	50	208554	S803S-UCB50-R	2CCS863002R1505		0.735	1
	63	208561	S803S-UCB63-R	2CCS863002R1635		0.735	1
	80	208578	S803S-UCB80-R	2CCS863002R1805		0.735	1
	100	208585	S803S-UCB100-R	2CCS863002R1825		0.735	1
	125	208592	S803S-UCB125-R	2CCS863002R1845		0.735	1



S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	210533	S804S-UCB10-R	2CCS864002R1105		0.98	1
	13	210540	S804S-UCB13-R	2CCS864002R1135		0.98	1
	16	210557	S804S-UCB16-R	2CCS864002R1165		0.98	1
	20	210564	S804S-UCB20-R	2CCS864002R1205		0.98	1
	25	210571	S804S-UCB25-R	2CCS864002R1255		0.98	1
	32	210588	S804S-UCB32-R	2CCS864002R1325		0.98	1
	40	208608	S804S-UCB40-R	2CCS864002R1405		0.98	1
	50	208615	S804S-UCB50-R	2CCS864002R1505		0.98	1
	63	208622	S804S-UCB63-R	2CCS864002R1635		0.98	1
	80	208639	S804S-UCB80-R	2CCS864002R1805		0.98	1
	100	208646	S804S-UCB100-R	2CCS864002R1825		0.98	1
	125	208653	S804S-UCB125-R	2CCS864002R1845		0.98	1

High performance MCBs

S800S series DC range with cage terminal, UC-K characteristic

2CCC413223F0001

S801S

2CCC413002F0002

S802S

S800S-UCK characteristic

Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits when a high breaking capacity is required; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream; version dedicated to application in direct current circuits.

Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2

Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	203320	S801S-UCK10	2CCS861001R1427		0.245	1
	13	203337	S801S-UCK13	2CCS861001R1447		0.245	1
	16	203344	S801S-UCK16	2CCS861001R1467		0.245	1
	20	203351	S801S-UCK20	2CCS861001R1487		0.245	1
	25	203368	S801S-UCK25	2CCS861001R1517		0.245	1
	32	203375	S801S-UCK32	2CCS861001R1537		0.245	1
	40	203382	S801S-UCK40	2CCS861001R1557		0.245	1
	50	203399	S801S-UCK50	2CCS861001R1577		0.245	1
	63	203405	S801S-UCK63	2CCS861001R1597		0.245	1
	80	203412	S801S-UCK80	2CCS861001R1627		0.245	1
	100	203429	S801S-UCK100	2CCS861001R1637		0.245	1
	125	203436	S801S-UCK125	2CCS861001R1647		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	203443	S802S-UCK10	2CCS862001R1427		0.49	1
	13	203450	S802S-UCK13	2CCS862001R1447		0.49	1
	16	203467	S802S-UCK16	2CCS862001R1467		0.49	1
	20	203474	S802S-UCK20	2CCS862001R1487		0.49	1
	25	203481	S802S-UCK25	2CCS862001R1517		0.49	1
	32	203498	S802S-UCK32	2CCS862001R1537		0.49	1
	40	203504	S802S-UCK40	2CCS862001R1557		0.49	1
	50	203511	S802S-UCK50	2CCS862001R1577		0.49	1
	63	203528	S802S-UCK63	2CCS862001R1597		0.49	1
	80	203535	S802S-UCK80	2CCS862001R1627		0.49	1
	100	203542	S802S-UCK100	2CCS862001R1637		0.49	1
	125	203559	S802S-UCK125	2CCS862001R1647		0.49	1

High performance MCBs

S800S series DC range with cage terminal, UC-K characteristic

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	203566	S803S-UCK10	2CCS863001R1427		0.735	1
	13	203573	S803S-UCK13	2CCS863001R1447		0.735	1
	16	203580	S803S-UCK16	2CCS863001R1467		0.735	1
	20	203597	S803S-UCK20	2CCS863001R1487		0.735	1
	25	203603	S803S-UCK25	2CCS863001R1517		0.735	1
	32	203610	S803S-UCK32	2CCS863001R1537		0.735	1
	40	203627	S803S-UCK40	2CCS863001R1557		0.735	1
	50	203634	S803S-UCK50	2CCS863001R1577		0.735	1
	63	203641	S803S-UCK63	2CCS863001R1597		0.735	1
	80	203658	S803S-UCK80	2CCS863001R1627		0.735	1
	100	203665	S803S-UCK100	2CCS863001R1637		0.735	1
	125	203672	S803S-UCK125	2CCS863001R1647		0.735	1

S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	203689	S804S-UCK10	2CCS864001R1427		0.98	1
	13	203696	S804S-UCK13	2CCS864001R1447		0.98	1
	16	203702	S804S-UCK16	2CCS864001R1467		0.98	1
	20	203719	S804S-UCK20	2CCS864001R1487		0.98	1
	25	203726	S804S-UCK25	2CCS864001R1517		0.98	1
	32	203733	S804S-UCK32	2CCS864001R1537		0.98	1
	40	203740	S804S-UCK40	2CCS864001R1557		0.98	1
	50	203757	S804S-UCK50	2CCS864001R1577		0.98	1
	63	203764	S804S-UCK63	2CCS864001R1597		0.98	1
	80	203771	S804S-UCK80	2CCS864001R1627		0.98	1
	100	203788	S804S-UCK100	2CCS864001R1637		0.98	1
	125	203795	S804S-UCK125	2CCS864001R1647		0.98	1

High performance MCBs

S800S series DC range with ring terminal connection, UC-K characteristic

S801S

S802S

S800S-UCK characteristic

Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits when a high breaking capacity is required; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream; version dedicated to application in direct current circuits.

Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2

Icu=50 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	210595	S801S-UCK10-R	2CCS861002R1427		0.245	1
	13	210601	S801S-UCK13-R	2CCS861002R1447		0.245	1
	16	210618	S801S-UCK16-R	2CCS861002R1467		0.245	1
	20	210625	S801S-UCK20-R	2CCS861002R1487		0.245	1
	25	210632	S801S-UCK25-R	2CCS861002R1517		0.245	1
	32	210649	S801S-UCK32-R	2CCS861002R1537		0.245	1
	40	208660	S801S-UCK40-R	2CCS861002R1557		0.245	1
	50	208677	S801S-UCK50-R	2CCS861002R1577		0.245	1
	63	208684	S801S-UCK63-R	2CCS861002R1597		0.245	1
	80	208691	S801S-UCK80-R	2CCS861002R1627		0.245	1
	100	208707	S801S-UCK100-R	2CCS861002R1637		0.245	1
	125	208714	S801S-UCK125-R	2CCS861002R1647		0.245	1

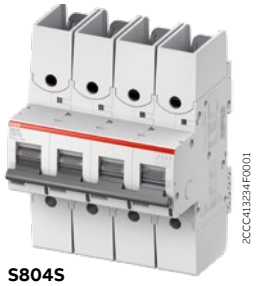
Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	210656	S802S-UCK10-R	2CCS862002R1427		0.490	1
	13	210663	S802S-UCK13-R	2CCS862002R1447		0.490	1
	16	210670	S802S-UCK16-R	2CCS862002R1467		0.490	1
	20	210687	S802S-UCK20-R	2CCS862002R1487		0.490	1
	25	210694	S802S-UCK25-R	2CCS862002R1517		0.490	1
	32	210700	S802S-UCK32-R	2CCS862002R1537		0.490	1
	40	208721	S802S-UCK40-R	2CCS862002R1557		0.490	1
	50	208738	S802S-UCK50-R	2CCS862002R1577		0.490	1
	63	208745	S802S-UCK63-R	2CCS862002R1597		0.490	1
	80	208752	S802S-UCK80-R	2CCS862002R1627		0.490	1
	100	208769	S802S-UCK100-R	2CCS862002R1637		0.490	1
	125	208776	S802S-UCK125-R	2CCS862002R1647		0.490	1

High performance MCBs

S800S series DC range with ring terminal connection, UC-K characteristic

S803S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	210717	S803S-UCK10-R	2CCS863002R1427		0.735	1
	13	210724	S803S-UCK13-R	2CCS863002R1447		0.735	1
	16	210731	S803S-UCK16-R	2CCS863002R1467		0.735	1
	20	210748	S803S-UCK20-R	2CCS863002R1487		0.735	1
	25	210755	S803S-UCK25-R	2CCS863002R1517		0.735	1
	32	210762	S803S-UCK32-R	2CCS863002R1537		0.735	1
	40	208783	S803S-UCK40-R	2CCS863002R1557		0.735	1
	50	208790	S803S-UCK50-R	2CCS863002R1577		0.735	1
	63	208806	S803S-UCK63-R	2CCS863002R1597		0.735	1
	80	208813	S803S-UCK80-R	2CCS863002R1627		0.735	1
	100	208820	S803S-UCK100-R	2CCS863002R1637		0.735	1
	125	208837	S803S-UCK125-R	2CCS863002R1647		0.735	1



S804S

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	210779	S804S-UCK10-R	2CCS864002R1427		0.98	1
	13	210786	S804S-UCK13-R	2CCS864002R1447		0.98	1
	16	210793	S804S-UCK16-R	2CCS864002R1467		0.98	1
	20	210809	S804S-UCK20-R	2CCS864002R1487		0.98	1
	25	210816	S804S-UCK25-R	2CCS864002R1517		0.98	1
	32	210823	S804S-UCK32-R	2CCS864002R1537		0.98	1
	40	208844	S804S-UCK40-R	2CCS864002R1557		0.98	1
	50	208851	S804S-UCK50-R	2CCS864002R1577		0.98	1
	63	208868	S804S-UCK63-R	2CCS864002R1597		0.98	1
	80	208875	S804S-UCK80-R	2CCS864002R1627		0.98	1
	100	208882	S804S-UCK100-R	2CCS864002R1637		0.98	1
	125	208899	S804S-UCK125-R	2CCS864002R1647		0.98	1

High performance MCBs

S800N series with cage terminal, B characteristic

S801N

S802N

S800N-B characteristic
Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Applications: commercial and industrial.
Standard: IEC/EN 60898, IEC/EN 60947-2
Icn=20 kA (10 ... 80 A)
Icu=36 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	203801	S801N-B10	2CCS891001R0105		0.24	1
	13	203818	S801N-B13	2CCS891001R0135		0.24	1
	16	203825	S801N-B16	2CCS891001R0165		0.24	1
	20	203832	S801N-B20	2CCS891001R0205		0.24	1
	25	203849	S801N-B25	2CCS891001R0255		0.24	1
	32	203856	S801N-B32	2CCS891001R0325		0.24	1
	40	203863	S801N-B40	2CCS891001R0405		0.24	1
	50	203870	S801N-B50	2CCS891001R0505		0.24	1
	63	203887	S801N-B63	2CCS891001R0635		0.24	1
	80	203894	S801N-B80	2CCS891001R0805		0.24	1
	100	203900	S801N-B100	2CCS891001R0825		0.24	1
	125	203917	S801N-B125	2CCS891001R0845		0.24	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	203924	S802N-B10	2CCS892001R0105		0.48	1
	13	203931	S802N-B13	2CCS892001R0135		0.48	1
	16	203948	S802N-B16	2CCS892001R0165		0.48	1
	20	203955	S802N-B20	2CCS892001R0205		0.48	1
	25	203962	S802N-B25	2CCS892001R0255		0.48	1
	32	203979	S802N-B32	2CCS892001R0325		0.48	1
	40	203986	S802N-B40	2CCS892001R0405		0.48	1
	50	203993	S802N-B50	2CCS892001R0505		0.48	1
	63	204006	S802N-B63	2CCS892001R0635		0.48	1
	80	204013	S802N-B80	2CCS892001R0805		0.48	1
	100	204020	S802N-B100	2CCS892001R0825		0.48	1
	125	204037	S802N-B125	2CCS892001R0845		0.48	1

High performance MCBs

S800N series with cage terminal, B characteristic

S803N

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	204044	S803N-B10	2CCS893001R0105		0.72	1
	13	204051	S803N-B13	2CCS893001R0135		0.72	1
	16	204068	S803N-B16	2CCS893001R0165		0.72	1
	20	204075	S803N-B20	2CCS893001R0205		0.72	1
	25	204082	S803N-B25	2CCS893001R0255		0.72	1
	32	204099	S803N-B32	2CCS893001R0325		0.72	1
	40	204105	S803N-B40	2CCS893001R0405		0.72	1
	50	204112	S803N-B50	2CCS893001R0505		0.72	1
	63	204129	S803N-B63	2CCS893001R0635		0.72	1
	80	204136	S803N-B80	2CCS893001R0805		0.72	1
	100	204143	S803N-B100	2CCS893001R0825		0.72	1
	125	204150	S803N-B125	2CCS893001R0845		0.72	1

S804N

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	204167	S804N-B10	2CCS894001R0105		0.96	1
	13	204174	S804N-B13	2CCS894001R0135		0.96	1
	16	204181	S804N-B16	2CCS894001R0165		0.96	1
	20	204198	S804N-B20	2CCS894001R0205		0.96	1
	25	204204	S804N-B25	2CCS894001R0255		0.96	1
	32	204211	S804N-B32	2CCS894001R0325		0.96	1
	40	204228	S804N-B40	2CCS894001R0405		0.96	1
	50	204235	S804N-B50	2CCS894001R0505		0.96	1
	63	204242	S804N-B63	2CCS894001R0635		0.96	1
	80	204259	S804N-B80	2CCS894001R0805		0.96	1
	100	204266	S804N-B100	2CCS894001R0825		0.96	1
	125	204273	S804N-B125	2CCS894001R0845		0.96	1

High performance MCBs

S800N series with cage terminal, C characteristic

S801N

S802N

S800N-C characteristic
Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for resistive and inductive loads with low inrush current; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Applications: commercial and industrial.
Standard: IEC/EN 60898, IEC/EN 60947-2
Icn=20 kA (10 ... 80 A)
Icu=36 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	204280	S801N-C10	2CCS891001R0104		0.24	1
	13	204297	S801N-C13	2CCS891001R0134		0.24	1
	16	204303	S801N-C16	2CCS891001R0164		0.24	1
	20	204310	S801N-C20	2CCS891001R0204		0.24	1
	25	204327	S801N-C25	2CCS891001R0254		0.24	1
	32	204334	S801N-C32	2CCS891001R0324		0.24	1
	40	204341	S801N-C40	2CCS891001R0404		0.24	1
	50	204358	S801N-C50	2CCS891001R0504		0.24	1
	63	204365	S801N-C63	2CCS891001R0634		0.24	1
	80	204372	S801N-C80	2CCS891001R0804		0.24	1
	100	204389	S801N-C100	2CCS891001R0824		0.24	1
	125	204396	S801N-C125	2CCS891001R0844		0.24	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	204402	S802N-C10	2CCS892001R0104		0.48	1
	13	204419	S802N-C13	2CCS892001R0134		0.48	1
	16	204426	S802N-C16	2CCS892001R0164		0.48	1
	20	204433	S802N-C20	2CCS892001R0204		0.48	1
	25	204440	S802N-C25	2CCS892001R0254		0.48	1
	32	204457	S802N-C32	2CCS892001R0324		0.48	1
	40	204464	S802N-C40	2CCS892001R0404		0.48	1
	50	204471	S802N-C50	2CCS892001R0504		0.48	1
	63	204488	S802N-C63	2CCS892001R0634		0.48	1
	80	204495	S802N-C80	2CCS892001R0804		0.48	1
	100	204501	S802N-C100	2CCS892001R0824		0.48	1
	125	204518	S802N-C125	2CCS892001R0844		0.48	1

High performance MCBs

S800N series with cage terminal, C characteristic

S803N

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	204525	S803N-C10	2CCS893001R0104		0.72	1
	13	204532	S803N-C13	2CCS893001R0134		0.72	1
	16	204549	S803N-C16	2CCS893001R0164		0.72	1
	20	204556	S803N-C20	2CCS893001R0204		0.72	1
	25	204563	S803N-C25	2CCS893001R0254		0.72	1
	32	204570	S803N-C32	2CCS893001R0324		0.72	1
	40	204587	S803N-C40	2CCS893001R0404		0.72	1
	50	204594	S803N-C50	2CCS893001R0504		0.72	1
	63	204600	S803N-C63	2CCS893001R0634		0.72	1
	80	204617	S803N-C80	2CCS893001R0804		0.72	1
	100	204624	S803N-C100	2CCS893001R0824		0.72	1
	125	204631	S803N-C125	2CCS893001R0844		0.72	1

S804N

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	204648	S804N-C10	2CCS894001R0104		0.96	1
	13	204655	S804N-C13	2CCS894001R0134		0.96	1
	16	204662	S804N-C16	2CCS894001R0164		0.96	1
	20	204679	S804N-C20	2CCS894001R0204		0.96	1
	25	204686	S804N-C25	2CCS894001R0254		0.96	1
	32	204693	S804N-C32	2CCS894001R0324		0.96	1
	40	204709	S804N-C40	2CCS894001R0404		0.96	1
	50	204716	S804N-C50	2CCS894001R0504		0.96	1
	63	204723	S804N-C63	2CCS894001R0634		0.96	1
	80	204730	S804N-C80	2CCS894001R0804		0.96	1
	100	204747	S804N-C100	2CCS894001R0824		0.96	1
	125	204754	S804N-C125	2CCS894001R0844		0.96	1

High performance MCBs

S800N series with cage terminal, D characteristic

S801N

S802N

S800N-D characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for circuits which supply loads with high inrush current at the circuit closing (motors, LV / LV transformers, breakdown lamps); very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

Applications: commercial and industrial.

Standard: IEC/EN 60898, IEC/EN 60947-2

Icn=20 kA (10 ... 80 A)

Icu=36 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	204761	S801N-D10	2CCS891001R0101		0.245	1
	13	204778	S801N-D13	2CCS891001R0131		0.245	1
	16	204785	S801N-D16	2CCS891001R0161		0.245	1
	20	204792	S801N-D20	2CCS891001R0201		0.245	1
	25	204808	S801N-D25	2CCS891001R0251		0.245	1
	32	204815	S801N-D32	2CCS891001R0321		0.245	1
	40	204822	S801N-D40	2CCS891001R0401		0.245	1
	50	204839	S801N-D50	2CCS891001R0501		0.245	1
	63	204846	S801N-D63	2CCS891001R0631		0.245	1
	80	204853	S801N-D80	2CCS891001R0801		0.245	1
	100	204860	S801N-D100	2CCS891001R0821		0.245	1
	125	204877	S801N-D125	2CCS891001R0841		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	204884	S802N-D10	2CCS892001R0101		0.49	1
	13	204891	S802N-D13	2CCS892001R0131		0.49	1
	16	204907	S802N-D16	2CCS892001R0161		0.49	1
	20	204914	S802N-D20	2CCS892001R0201		0.49	1
	25	204921	S802N-D25	2CCS892001R0251		0.49	1
	32	204938	S802N-D32	2CCS892001R0321		0.49	1
	40	204945	S802N-D40	2CCS892001R0401		0.49	1
	50	204952	S802N-D50	2CCS892001R0501		0.49	1
	63	204969	S802N-D63	2CCS892001R0631		0.49	1
	80	204976	S802N-D80	2CCS892001R0801		0.49	1
	100	204983	S802N-D100	2CCS892001R0821		0.49	1
	125	204990	S802N-D125	2CCS892001R0841		0.49	1

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High performance MCBs

S800N series with cage terminal, D characteristic

S803N

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	205003	S803N-D10	2CCS893001R0101		0.735	1
	13	205010	S803N-D13	2CCS893001R0131		0.735	1
	16	205027	S803N-D16	2CCS893001R0161		0.735	1
	20	205034	S803N-D20	2CCS893001R0201		0.735	1
	25	205041	S803N-D25	2CCS893001R0251		0.735	1
	32	205058	S803N-D32	2CCS893001R0321		0.735	1
	40	205065	S803N-D40	2CCS893001R0401		0.735	1
	50	205072	S803N-D50	2CCS893001R0501		0.735	1
	63	205089	S803N-D63	2CCS893001R0631		0.735	1
	80	205096	S803N-D80	2CCS893001R0801		0.735	1
	100	205102	S803N-D100	2CCS893001R0821		0.735	1
	125	205119	S803N-D125	2CCS893001R0841		0.735	1

S804N

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	205126	S804N-D10	2CCS894001R0101		0.98	1
	13	205133	S804N-D13	2CCS894001R0131		0.98	1
	16	205140	S804N-D16	2CCS894001R0161		0.98	1
	20	205157	S804N-D20	2CCS894001R0201		0.98	1
	25	205164	S804N-D25	2CCS894001R0251		0.98	1
	32	205171	S804N-D32	2CCS894001R0321		0.98	1
	40	205188	S804N-D40	2CCS894001R0401		0.98	1
	50	205195	S804N-D50	2CCS894001R0501		0.98	1
	63	205201	S804N-D63	2CCS894001R0631		0.98	1
	80	205218	S804N-D80	2CCS894001R0801		0.98	1
	100	205225	S804N-D100	2CCS894001R0821		0.98	1
	125	205232	S804N-D125	2CCS894001R0841		0.98	1

High performance MCBs

S800C series with cage terminal, B characteristic

S801C

S802C

S800C-B characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2, IEC/EN 60898, UL 1077, supplementary protector

Icn=15 kA

Icu=25 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	212087	S801C-B10	2CCS881001R0105		0.245	1
	13	212247	S801C-B13	2CCS881001R0135		0.245	1
	16	212407	S801C-B16	2CCS881001R0165		0.245	1
	20	212568	S801C-B20	2CCS881001R0205		0.245	1
	25	212728	S801C-B25	2CCS881001R0255		0.245	1
	32	212889	S801C-B32	2CCS881001R0325		0.245	1
	40	213046	S801C-B40	2CCS881001R0405		0.245	1
	50	213206	S801C-B50	2CCS881001R0505		0.245	1
	63	213367	S801C-B63	2CCS881001R0635		0.245	1
	80	213527	S801C-B80	2CCS881001R0805		0.245	1
	100	213688	S801C-B100	2CCS881001R0825		0.245	1
	125	213848	S801C-B125	2CCS881001R0845		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	212094	S802C-B10	2CCS882001R0105		0.49	1
	13	212254	S802C-B13	2CCS882001R0135		0.49	1
	16	212414	S802C-B16	2CCS882001R0165		0.49	1
	20	212575	S802C-B20	2CCS882001R0205		0.49	1
	25	212735	S802C-B25	2CCS882001R0255		0.49	1
	32	212896	S802C-B32	2CCS882001R0325		0.49	1
	40	213053	S802C-B40	2CCS882001R0405		0.49	1
	50	213213	S802C-B50	2CCS882001R0505		0.49	1
	63	213374	S802C-B63	2CCS882001R0635		0.49	1
	80	213534	S802C-B80	2CCS882001R0805		0.49	1
	100	213695	S802C-B100	2CCS882001R0825		0.49	1
	125	213855	S802C-B125	2CCS882001R0845		0.49	1

High performance MCBs

S800C series with cage terminal, B characteristic

S803C

S804C

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	212100	S803C-B10	2CCS883001R0105		0.735	1
	13	212261	S803C-B13	2CCS883001R0135		0.735	1
	16	212421	S803C-B16	2CCS883001R0165		0.735	1
	20	212582	S803C-B20	2CCS883001R0205		0.735	1
	25	212742	S803C-B25	2CCS883001R0255		0.735	1
	32	212902	S803C-B32	2CCS883001R0325		0.735	1
	40	213060	S803C-B40	2CCS883001R0405		0.735	1
	50	213220	S803C-B50	2CCS883001R0505		0.735	1
	63	213381	S803C-B63	2CCS883001R0635		0.735	1
	80	213541	S803C-B80	2CCS883001R0805		0.735	1
	100	213701	S803C-B100	2CCS883001R0825		0.735	1
	125	213862	S803C-B125	2CCS883001R0845		0.735	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	212117	S804C-B10	2CCS884001R0105		0.98	1
	13	212278	S804C-B13	2CCS884001R0135		0.98	1
	16	212438	S804C-B16	2CCS884001R0165		0.98	1
	20	212599	S804C-B20	2CCS884001R0205		0.98	1
	25	212759	S804C-B25	2CCS884001R0255		0.98	1
	32	212919	S804C-B32	2CCS884001R0325		0.98	1
	40	213077	S804C-B40	2CCS884001R0405		0.98	1
	50	213237	S804C-B50	2CCS884001R0505		0.98	1
	63	213398	S804C-B63	2CCS884001R0635		0.98	1
	80	213558	S804C-B80	2CCS884001R0805		0.98	1
	100	213718	S804C-B100	2CCS884001R0825		0.98	1
	125	213879	S804C-B125	2CCS884001R0845		0.98	1

High performance MCBs

S800C series with cage terminal, C characteristic

S801C

S802C

S800C-C characteristic
Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2, IEC/EN 60898, UL 1077, supplementary protector
Icn=15 kA
Icu=25 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	212124	S801C-C10	2CCS881001R0104		0.245	1
	13	212285	S801C-C13	2CCS881001R0134		0.245	1
	16	212445	S801C-C16	2CCS881001R0164		0.245	1
	20	212605	S801C-C20	2CCS881001R0204		0.245	1
	25	212766	S801C-C25	2CCS881001R0254		0.245	1
	32	212926	S801C-C32	2CCS881001R0324		0.245	1
	40	213084	S801C-C40	2CCS881001R0404		0.245	1
	50	213244	S801C-C50	2CCS881001R0504		0.245	1
	63	213404	S801C-C63	2CCS881001R0634		0.245	1
	80	213565	S801C-C80	2CCS881001R0804		0.245	1
	100	213725	S801C-C100	2CCS881001R0824		0.245	1
	125	213886	S801C-C125	2CCS881001R0844		0.245	1

Number of poles	**Rated current**	**Bbn 7612271**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	In A	**EAN**	**Type code**	**Order code**		**kg**	**pc.**
2	10	212131	S802C-C10	2CCS882001R0104		0.49	1
	13	212292	S802C-C13	2CCS882001R0134		0.49	1
	16	212452	S802C-C16	2CCS882001R0164		0.49	1
	20	212612	S802C-C20	2CCS882001R0204		0.49	1
	25	212773	S802C-C25	2CCS882001R0254		0.49	1
	32	212933	S802C-C32	2CCS882001R0324		0.49	1
	40	213091	S802C-C40	2CCS882001R0404		0.49	1
	50	213251	S802C-C50	2CCS882001R0504		0.49	1
	63	213411	S802C-C63	2CCS882001R0634		0.49	1
	80	213572	S802C-C80	2CCS882001R0804		0.49	1
	100	213732	S802C-C100	2CCS882001R0824		0.49	1
	125	213893	S802C-C125	2CCS882001R0844		0.49	1

High performance MCBs

S800C series with cage terminal, C characteristic

S803C

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	212148	S803C-C10	2CCS883001R0104		0.735	1
	13	212308	S803C-C13	2CCS883001R0134		0.735	1
	16	212469	S803C-C16	2CCS883001R0164		0.735	1
	20	212629	S803C-C20	2CCS883001R0204		0.735	1
	25	212780	S803C-C25	2CCS883001R0254		0.735	1
	32	212940	S803C-C32	2CCS883001R0324		0.735	1
	40	213107	S803C-C40	2CCS883001R0404		0.735	1
	50	213268	S803C-C50	2CCS883001R0504		0.735	1
	63	213428	S803C-C63	2CCS883001R0634		0.735	1
	80	213589	S803C-C80	2CCS883001R0804		0.735	1
	100	213749	S803C-C100	2CCS883001R0824		0.735	1
	125	213909	S803C-C125	2CCS883001R0844		0.735	1

S804C

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	212155	S804C-C10	2CCS884001R0104		0.98	1
	13	212315	S804C-C13	2CCS884001R0134		0.98	1
	16	212476	S804C-C16	2CCS884001R0164		0.98	1
	20	212636	S804C-C20	2CCS884001R0204		0.98	1
	25	212797	S804C-C25	2CCS884001R0254		0.98	1
	32	212957	S804C-C32	2CCS884001R0324		0.98	1
	40	213114	S804C-C40	2CCS884001R0404		0.98	1
	50	213275	S804C-C50	2CCS884001R0504		0.98	1
	63	213435	S804C-C63	2CCS884001R0634		0.98	1
	80	213596	S804C-C80	2CCS884001R0804		0.98	1
	100	213756	S804C-C100	2CCS884001R0824		0.98	1
	125	213916	S804C-C125	2CCS884001R0844		0.98	1

High performance MCBs

S800C series with cage terminal, D characteristic

S801C

S802C

S800C-D characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2, IEC/EN 60898, UL 1077, supplementary protector

Icn=15kA

Icu=25 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	212162	S801C-D10	2CCS881001R0101		0.245	1
	13	212322	S801C-D13	2CCS881001R0131		0.245	1
	16	212483	S801C-D16	2CCS881001R0161		0.245	1
	20	212643	S801C-D20	2CCS881001R0201		0.245	1
	25	212803	S801C-D25	2CCS881001R0251		0.245	1
	32	212964	S801C-D32	2CCS881001R0321		0.245	1
	40	213121	S801C-D40	2CCS881001R0401		0.245	1
	50	213282	S801C-D50	2CCS881001R0501		0.245	1
	63	213442	S801C-D63	2CCS881001R0631		0.245	1
	80	213602	S801C-D80	2CCS881001R0801		0.245	1
	100	213763	S801C-D100	2CCS881001R0821		0.245	1
	125	213923	S801C-D125	2CCS881001R0841		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	212179	S802C-D10	2CCS882001R0101		0.49	1
	13	212339	S802C-D13	2CCS882001R0131		0.49	1
	16	212490	S802C-D16	2CCS882001R0161		0.49	1
	20	212650	S802C-D20	2CCS882001R0201		0.49	1
	25	212810	S802C-D25	2CCS882001R0251		0.49	1
	32	212971	S802C-D32	2CCS882001R0321		0.49	1
	40	213138	S802C-D40	2CCS882001R0401		0.49	1
	50	213299	S802C-D50	2CCS882001R0501		0.49	1
	63	213459	S802C-D63	2CCS882001R0631		0.49	1
	80	213619	S802C-D80	2CCS882001R0801		0.49	1
	100	213770	S802C-D100	2CCS882001R0821		0.49	1
	125	213930	S802C-D125	2CCS882001R0841		0.49	1

High performance MCBs

S800C series with cage terminal, D characteristic

S803C

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	212186	S803C-D10	2CCS883001R0101		0.735	1
	13	212346	S803C-D13	2CCS883001R0131		0.735	1
	16	212506	S803C-D16	2CCS883001R0161		0.735	1
	20	212667	S803C-D20	2CCS883001R0201		0.735	1
	25	212827	S803C-D25	2CCS883001R0251		0.735	1
	32	212988	S803C-D32	2CCS883001R0321		0.735	1
	40	213145	S803C-D40	2CCS883001R0401		0.735	1
	50	213305	S803C-D50	2CCS883001R0501		0.735	1
	63	213466	S803C-D63	2CCS883001R0631		0.735	1
	80	213626	S803C-D80	2CCS883001R0801		0.735	1
	100	213787	S803C-D100	2CCS883001R0821		0.735	1
	125	213947	S803C-D125	2CCS883001R0841		0.735	1

S804C

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	212193	S804C-D10	2CCS884001R0101		0.98	1
	13	212353	S804C-D13	2CCS884001R0131		0.98	1
	16	212513	S804C-D16	2CCS884001R0161		0.98	1
	20	212674	S804C-D20	2CCS884001R0201		0.98	1
	25	212834	S804C-D25	2CCS884001R0251		0.98	1
	32	212995	S804C-D32	2CCS884001R0321		0.98	1
	40	213152	S804C-D40	2CCS884001R0401		0.98	1
	50	213312	S804C-D50	2CCS884001R0501		0.98	1
	63	213473	S804C-D63	2CCS884001R0631		0.98	1
	80	213633	S804C-D80	2CCS884001R0801		0.98	1
	100	213794	S804C-D100	2CCS884001R0821		0.98	1
	125	213954	S804C-D125	2CCS884001R0841		0.98	1

High performance MCBs

S800C series with cage terminal, K characteristic

2CCC413001F0021

S801C

2CCC413002F0021

S802C

S800C-K characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2, UL 1077, supplementary protector

Icu=25 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	212209	S801C-K10	2CCS881001R0427		0.245	1
	13	212360	S801C-K13	2CCS881001R0447		0.245	1
	16	212520	S801C-K16	2CCS881001R0467		0.245	1
	20	212681	S801C-K20	2CCS881001R0487		0.245	1
	25	212841	S801C-K25	2CCS881001R0517		0.245	1
	32	213008	S801C-K32	2CCS881001R0537		0.245	1
	40	213169	S801C-K40	2CCS881001R0557		0.245	1
	50	213329	S801C-K50	2CCS881001R0577		0.245	1
	63	213480	S801C-K63	2CCS881001R0597		0.245	1
	80	213640	S801C-K80	2CCS881001R0627		0.245	1
	100	213800	S801C-K100	2CCS881001R0637		0.245	1
	125	213961	S801C-K125	2CCS881001R0647		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	212216	S802C-K10	2CCS882001R0427		0.49	1
	13	212377	S802C-K13	2CCS882001R0447		0.49	1
	16	212537	S802C-K16	2CCS882001R0467		0.49	1
	20	212698	S802C-K20	2CCS882001R0487		0.49	1
	25	212858	S802C-K25	2CCS882001R0517		0.49	1
	32	213015	S802C-K32	2CCS882001R0537		0.49	1
	40	213176	S802C-K40	2CCS882001R0557		0.49	1
	50	213336	S802C-K50	2CCS882001R0577		0.49	1
	63	213497	S802C-K63	2CCS882001R0597		0.49	1
	80	213657	S802C-K80	2CCS882001R0627		0.49	1
	100	213817	S802C-K100	2CCS882001R0637		0.49	1
	125	213978	S802C-K125	2CCS882001R0647		0.49	1

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High performance MCBs

S800C series with cage terminal, K characteristic

S803C

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	212223	S803C-K10	2CCS883001R0427		0.735	1
	13	212384	S803C-K13	2CCS883001R0447		0.735	1
	16	212544	S803C-K16	2CCS883001R0467		0.735	1
	20	212704	S803C-K20	2CCS883001R0487		0.735	1
	25	212865	S803C-K25	2CCS883001R0517		0.735	1
	32	213022	S803C-K32	2CCS883001R0537		0.735	1
	40	213183	S803C-K40	2CCS883001R0557		0.735	1
	50	213343	S803C-K50	2CCS883001R0577		0.735	1
	63	213503	S803C-K63	2CCS883001R0597		0.735	1
	80	213664	S803C-K80	2CCS883001R0627		0.735	1
	100	213824	S803C-K100	2CCS883001R0637		0.735	1
	125	213985	S803C-K125	2CCS883001R0647		0.735	1

S804C

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	212230	S804C-K10	2CCS884001R0427		0.98	1
	13	212391	S804C-K13	2CCS884001R0447		0.98	1
	16	212551	S804C-K16	2CCS884001R0467		0.98	1
	20	212711	S804C-K20	2CCS884001R0487		0.98	1
	25	212872	S804C-K25	2CCS884001R0517		0.98	1
	32	213039	S804C-K32	2CCS884001R0537		0.98	1
	40	213190	S804C-K40	2CCS884001R0557		0.98	1
	50	213350	S804C-K50	2CCS884001R0577		0.98	1
	63	213510	S804C-K63	2CCS884001R0597		0.98	1
	80	213671	S804C-K80	2CCS884001R0627		0.98	1
	100	213831	S804C-K100	2CCS884001R0637		0.98	1
	125	213992	S804C-K125	2CCS884001R0647		0.98	1

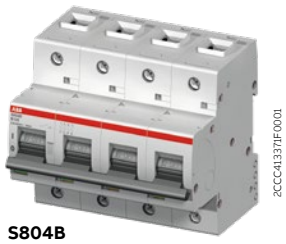
High performance MCBs

S800B series with cage terminal, B characteristic

S801B

S802B

S803B



S804B

S800B-B characteristic

Function: protection and control of the circuits against overloads and short-circuits. With its lower breaking capacity it is designed to meet the needs of the sub-distributions.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2, EN 60898

Icn=10kA

Icu=16 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	32	415303	S801B-B32	2CCS811001R0325		0.24	1
	40	416539	S801B-B40	2CCS811001R0405		0.24	1
	50	416577	S801B-B50	2CCS811001R0505		0.24	1
	63	416614	S801B-B63	2CCS811001R0635		0.24	1
	80	416652	S801B-B80	2CCS811001R0805		0.24	1
	100	416690	S801B-B100	2CCS811001R0825		0.24	1
	125	416737	S801B-B125	2CCS811001R0845		0.24	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	32	416508	S802B-B32	2CCS812001R0325		0.49	1
	40	416546	S802B-B40	2CCS812001R0405		0.49	1
	50	416584	S802B-B50	2CCS812001R0505		0.49	1
	63	416621	S802B-B63	2CCS812001R0635		0.49	1
	80	416669	S802B-B80	2CCS812001R0805		0.49	1
	100	416706	S802B-B100	2CCS812001R0825		0.49	1
	125	416744	S802B-B125	2CCS812001R0845		0.49	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	32	416515	S803B-B32	2CCS813001R0325		0.74	1
	40	416553	S803B-B40	2CCS813001R0405		0.74	1
	50	416591	S803B-B50	2CCS813001R0505		0.74	1
	63	416638	S803B-B63	2CCS813001R0635		0.74	1
	80	416676	S803B-B80	2CCS813001R0805		0.74	1
	100	416713	S803B-B100	2CCS813001R0825		0.74	1
	125	416751	S803B-B125	2CCS813001R0845		0.74	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	32	416522	S804B-B32	2CCS814001R0325		0.98	1
	40	416560	S804B-B40	2CCS814001R0405		0.98	1
	50	416607	S804B-B50	2CCS814001R0505		0.98	1
	63	416645	S804B-B63	2CCS814001R0635		0.98	1
	80	416683	S804B-B80	2CCS814001R0805		0.98	1
	100	416720	S804B-B100	2CCS814001R0825		0.98	1
	125	416768	S804B-B125	2CCS814001R0845		0.98	1

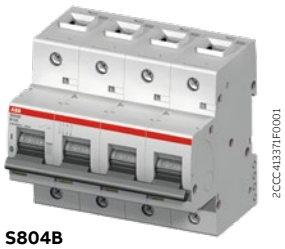
High performance MCBs

S800B series with cage terminal, C characteristic

S801B

S802B

S803B



S804B

S800B-C characteristic
Function: protection and control of the circuits against overloads and short-circuits. With its lower breaking capacity it is designed to meet the needs of the sub-distributions.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2, EN 60898
Icn=10kA
Icu=16 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	32	16225	S801B-C32	2CCS811001R0324		0.24	1
	40	16263	S801B-C40	2CCS811001R0404		0.24	1
	50	16300	S801B-C50	2CCS811001R0504		0.24	1
	63	16348	S801B-C63	2CCS811001R0634		0.24	1
	80	16386	S801B-C80	2CCS811001R0804		0.24	1
	100	16423	S801B-C100	2CCS811001R0824		0.24	1
	125	16461	S801B-C125	2CCS811001R0844		0.24	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	32	16232	S802B-C32	2CCS812001R0324		0.49	1
	40	16270	S802B-C40	2CCS812001R0404		0.49	1
	50	16317	S802B-C50	2CCS812001R0504		0.49	1
	63	16355	S802B-C63	2CCS812001R0634		0.49	1
	80	16393	S802B-C80	2CCS812001R0804		0.49	1
	100	16430	S802B-C100	2CCS812001R0824		0.49	1
	125	16478	S802B-C125	2CCS812001R0844		0.49	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	32	16249	S803B-C32	2CCS813001R0324		0.74	1
	40	16287	S803B-C40	2CCS813001R0404		0.74	1
	50	16324	S803B-C50	2CCS813001R0504		0.74	1
	63	16362	S803B-C63	2CCS813001R0634		0.74	1
	80	16409	S803B-C80	2CCS813001R0804		0.74	1
	100	16447	S803B-C100	2CCS813001R0824		0.74	1
	125	16485	S803B-C125	2CCS813001R0844		0.74	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	32	16256	S804B-C32	2CCS814001R0324		0.98	1
	40	16294	S804B-C40	2CCS814001R0404		0.98	1
	50	16331	S804B-C50	2CCS814001R0504		0.98	1
	63	16379	S804B-C63	2CCS814001R0634		0.98	1
	80	16416	S804B-C80	2CCS814001R0804		0.98	1
	100	16454	S804B-C100	2CCS814001R0824		0.98	1
	125	16492	S804B-C125	2CCS814001R0844		0.98	1

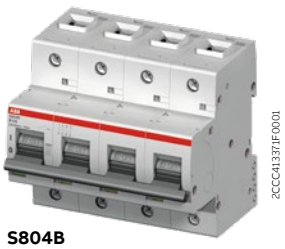
High performance MCBs

S800B series cage terminal, D characteristic

S801B

S802B

S803B



S804B

S800B-D characteristic

Function: protection and control of the circuits against overloads and short-circuits. With its lower breaking capacity it is designed to meet the needs of the sub-distributions.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2, EN 60898

Icn=10kA

Icu=16 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	32	15945	S801B-D32	2CCS811001R0321		0.24	1
	40	15983	S801B-D40	2CCS811001R0401		0.24	1
	50	16027	S801B-D50	2CCS811001R0501		0.24	1
	63	16065	S801B-D63	2CCS811001R0631		0.24	1
	80	16102	S801B-D80	2CCS811001R0801		0.24	1
	100	16140	S801B-D100	2CCS811001R0821		0.24	1
	125	16188	S801B-D125	2CCS811001R0841		0.24	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	32	15952	S802B-D32	2CCS812001R0321		0.49	1
	40	15990	S802B-D40	2CCS812001R0401		0.49	1
	50	16034	S802B-D50	2CCS812001R0501		0.49	1
	63	16072	S802B-D63	2CCS812001R0631		0.49	1
	80	16119	S802B-D80	2CCS812001R0801		0.49	1
	100	16157	S802B-D100	2CCS812001R0821		0.49	1
	125	16195	S802B-D125	2CCS812001R0841		0.49	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	32	15969	S803B-D32	2CCS813001R0321		0.74	1
	40	16003	S803B-D40	2CCS813001R0401		0.74	1
	50	16041	S803B-D50	2CCS813001R0501		0.74	1
	63	16089	S803B-D63	2CCS813001R0631		0.74	1
	80	16126	S803B-D80	2CCS813001R0801		0.74	1
	100	16164	S803B-D100	2CCS813001R0821		0.74	1
	125	16201	S803B-D125	2CCS813001R0841		0.74	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	32	15976	S804B-D32	2CCS814001R0321		0.98	1
	40	16010	S804B-D40	2CCS814001R0401		0.98	1
	50	16058	S804B-D50	2CCS814001R0501		0.98	1
	63	16096	S804B-D63	2CCS814001R0631		0.98	1
	80	16133	S804B-D80	2CCS814001R0801		0.98	1
	100	16171	S804B-D100	2CCS814001R0821		0.98	1
	125	16218	S804B-D125	2CCS814001R0841		0.98	1

High performance MCBs

S800B series with cage terminal, K characteristic

S801B

S802B

S803B

S804B

S800B-K characteristic

Function: protection and control of the circuits against overloads and short-circuits. With its lower breaking capacity it is designed to meet the needs of the sub-distributions.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2, EN 60898
Icn=10kA
Icu=16 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	32	15600	S801B-K32	2CCS811001R0537		0.24	1
	40	15723	S801B-K40	2CCS811001R0557		0.24	1
	50	15730	S801B-K50	2CCS811001R0577		0.24	1
	63	15778	S801B-K63	2CCS811001R0597		0.24	1
	80	15815	S801B-K80	2CCS811001R0627		0.24	1
	100	15860	S801B-K100	2CCS811001R0637		0.24	1
	125	15907	S801B-K125	2CCS811001R0647		0.24	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	32	15709	S802B-K32	2CCS812001R0537		0.49	1
	40	16775	S802B-K40	2CCS812001R0557		0.49	1
	50	15747	S802B-K50	2CCS812001R0577		0.49	1
	63	15785	S802B-K63	2CCS812001R0597		0.49	1
	80	15822	S802B-K80	2CCS812001R0627		0.49	1
	100	15877	S802B-K100	2CCS812001R0637		0.49	1
	125	15914	S802B-K125	2CCS812001R0647		0.49	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	32	15716	S803B-K32	2CCS813001R0537		0.74	1
	40	16799	S803B-K40	2CCS813001R0557		0.74	1
	50	15754	S803B-K50	2CCS813001R0577		0.74	1
	63	15792	S803B-K63	2CCS813001R0597		0.74	1
	80	15846	S803B-K80	2CCS813001R0627		0.74	1
	100	15884	S803B-K100	2CCS813001R0637		0.74	1
	125	15921	S803B-K125	2CCS813001R0647		0.74	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	32	16805	S804B-K32	2CCS814001R0537		0.98	1
	40	16812	S804B-K40	2CCS814001R0557		0.98	1
	50	15761	S804B-K50	2CCS814001R0577		0.98	1
	63	15808	S804B-K63	2CCS814001R0597		0.98	1
	80	15853	S804B-K80	2CCS814001R0627		0.98	1
	100	15891	S804B-K100	2CCS814001R0637		0.98	1
	125	15938	S804B-K125	2CCS814001R0647		0.98	1

High performance MCBs

S800HV series for application up to 1000V AC

S801HV

S802HV

S803HV

S800HV-K characteristics

Function: protection and control of the circuits against overloads and short-circuits. With its Function: S800HV is designed for voltages up to 580/1000 V AC. Due to the high rated operational voltage, the field of application is wide – from underground mining to distributions on high altitudes.

Applications: Industrial

Standard: IEC/EN 60947-2, UL 1077, supplementary protector

Icu 4 kA (6 ... 63 A); 3 kA (80 ... 125 A)

Icu	Rated current	Bbn 76122714	Order details		Price 1 piece	Weight 1 piece	Pack unit
[kA]	[A]	EAN	Type code	Order code		kg	pc.
4	6	36445	S801HV-K6	2CCF019005R0001		0.27	1
4	8	36964	S801HV-K8	2CCF019006R0001		0.27	1
4	10	36452	S801HV-K10	2CCF019007R0001		0.27	1
4	13	36469	S801HV-K13	2CCF019008R0001		0.27	1
4	16	36476	S801HV-K16	2CCF019009R0001		0.27	1
4	20	36483	S801HV-K20	2CCF019010R0001		0.27	1
4	25	36490	S801HV-K25	2CCF019011R0001		0.27	1
4	32	36605	S801HV-K32	2CCF019012R0001		0.27	1
4	40	36612	S801HV-K40	2CCF019013R0001		0.27	1
4	50	36629	S801HV-K50	2CCF019014R0001		0.27	1
4	63	36636	S801HV-K63	2CCF019015R0001		0.27	1
3	80	36643	S801HV-K80	2CCF019016R0001		0.27	1
3	100	36650	S801HV-K100	2CCF019017R0001		0.27	1
3	125	36667	S801HV-K125	2CCF019018R0001		0.27	1

Icu	Rated current	Bbn 76122714	Order details		Price 1 piece	Weight 1 piece	Pack unit
[kA]	[A]	EAN	Type code	Order code		kg	pc.
4	6	36674	S802HV-K6	2CCF019019R0001		0.54	1
4	8	36681	S802HV-K8	2CCF019020R0001		0.54	1
4	10	36698	S802HV-K10	2CCF019021R0001		0.54	1
4	13	36704	S802HV-K13	2CCF019022R0001		0.54	1
4	16	36711	S802HV-K16	2CCF019023R0001		0.54	1
4	20	36728	S802HV-K20	2CCF019024R0001		0.54	1
4	25	36742	S802HV-K25	2CCF019025R0001		0.54	1
4	32	36759	S802HV-K32	2CCF019026R0001		0.54	1
4	40	36766	S802HV-K40	2CCF019027R0001		0.54	1
4	50	36773	S802HV-K50	2CCF019028R0001		0.54	1
4	63	36780	S802HV-K63	2CCF019029R0001		0.54	1
3	80	36797	S802HV-K80	2CCF019030R0001		0.54	1
3	100	36803	S802HV-K100	2CCF019031R0001		0.54	1
3	125	36810	S802HV-K125	2CCF019032R0001		0.54	1

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High performance MCBs

S800HV series for application up to 1000V AC

S801HV

S802HV

S803HV

Icu	Rated current	Bbn 76122714	Order details		Price 1 piece	Weight 1 piece	Pack unit
[kA]	[A]	EAN	Type code	Order code		kg	pc.
4	6	36827	S803HV-K6	2CCF019033R0001		0.81	1
4	8	36834	S803HV-K8	2CCF019034R0001		0.81	1
4	10	36841	S803HV-K10	2CCF019035R0001		0.81	1
4	13	36858	S803HV-K13	2CCF019036R0001		0.81	1
4	16	36865	S803HV-K16	2CCF019037R0001		0.81	1
4	20	36872	S803HV-K20	2CCF019038R0001		0.81	1
4	25	36889	S803HV-K25	2CCF019039R0001		0.81	1
4	32	36896	S803HV-K32	2CCF019040R0001		0.81	1
4	40	36902	S803HV-K40	2CCF019041R0001		0.81	1
4	50	36919	S803HV-K50	2CCF019042R0001		0.81	1
4	63	36926	S803HV-K63	2CCF019043R0001		0.81	1
3	80	36933	S803HV-K80	2CCF019044R0001		0.81	1
3	100	36940	S803HV-K100	2CCF019045R0001		0.81	1
3	125	36957	S803HV-K125	2CCF019046R0001		0.81	1

S800HV-C characteristics

Function: protection and control of the circuits against overloads and short-circuits. With its Function: S800HV is designed for voltages up to 580/1000 V AC. Due to the high rated operational voltage, the field of application is wide – from underground mining to distributions on high altitudes.

Applications: industrial

Standard: IEC/EN 60947-2, UL 1077, supplementary protector

Icu = 4 kA

Icu	Rated current	Bbn 76122714	Order details		Price 1 piece	Weight 1 piece	Pack unit
[kA]	[A]	EAN	Type code	Order code		kg	pc.
4	10	72221	S803HV-C10	2CCF019650R0001		0.81	1
4	32	72245	S803HV-C32	2CCF019651R0001		0.81	1

S800 B. High performance miniature circuit-breakers. Simply innovative.

Safety has never been easier.

Limit downtime in industrial electrical systems while ensuring maximum safety for operators and ease of access to devices: S800 B high performance circuit-breakers are efficient products at a reasonable cost and designed for overload and short-circuit protection in distribution systems with 16 kA breaking capacity. They comply with Standard CEI EN 60947-2, 60898-1 and feature 80 to 125 A rated current values with B, C, D and K characteristic curves. Thanks to a red/green signal, showing the position of internal moving contacts, and to a switch lever, that stops in the middle position in case of thermal or magnetic tripping, they show why tripping occurred at a glance, enabling prompt maintenance. Performance similar to moulded case circuit-breakers but with the advantage of the compact dimension, S800 B are available from 1 to 4 poles versions. **www.abb.com/lowvoltage**

High performance MCBs

S800U series technical features

S800U

General Data	Standards	
	Poles	
	Tripping characteristics	
	Rated current Ie	A
	Rated frequency f	Hz
	Rated insulation voltage Ui acc. to IEC/EN 60664-1	V
	Rated impulse withstand voltage Uimp. (1.2/50µs)	kV
	Overvoltage category	
	Pollution degree	
	Suitability for isolation	
Data acc. to IEC/EN 60947-2	Rated operational voltage Ue	V
	Min. operating voltage	V
	Rated ultimate short-circuit capacity Icu	kA
	Rated service short-circuit capacity Ics	kA
	Reference temperature for tripping characteristics	°C
	Electrical and Mechanical Endurance	ops.
Data acc. to UL / CSA	Rated voltage	V
	Rated interrupting capacity acc. to UL 1077	kA
	Short-circuit current rating acc. to UL 489	kA
	Short-circuit current rating acc. to UL 489B	kA
	Reference temperature for tripping characteristics	°C
	Electrical and Mechanical endurance	ops.
Mechanical Data	Housing	
	Toggle	
	Classification acc. To NF F 126-101, NF F 16-102	
	Protection degree acc. to EN 60529	
	Mechanical endurance	ops.
	Shock resistance acc. to IEC/EN 60068-2-30	
	Vibration resistance acc. to IEC/EN 60068-2-6	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH
	Environmental conditions (dry heat) acc. to IEC/EN 60068-2-2 Test B	°C/RH
	Ambient temperature	°C
	Storage temperature	°C

S800U	**S804U-UCZ**	**S804U-PVS**
UL489	UL489	UL489B (Photovoltaic)
1 … 4	4	4
K, Z	UCZ	PVS
10 - 100	10 - 80	5
50 / 60 Hz	-	-
690 V AC	DC 1500	DC 1500
8	8	8
IV	IV	IV
3	3	3
yes	yes	yes
AC 240/415		
AC 12	-	-
1-pole: AC 240V 30kA	-	-
multipole: AC 415V 50kA	-	-
1-pole: AC 240V 25kA	-	-
multipole: AC 415V 40kA	-	-
25°C	-	-
10 … 32A: 10‘000 electrical/mechanical 40 …100A: 6‘000 electrical/4‘000 mechanical 125A: 4‘000 electrical/6‘000 mechanical	-	-
AC 240	DC 600	DC 1000
1-pole 30kA multipole: 50kA	10	
		3
25°C	25°C	50°C
acc. to UL489 6000 electrical; 4000 mechanical	acc. to UL489 6000 electric; 4000 mechanic	acc. to UL489 1000 electrical; 1000 mechanical
Material group I, RAL 7035	Material group I, RAL 7035	Material group I, RAL 7035
black, lockable	black, lockable	black, lockable
IP20; IP40 (actuating end only)	IP20; IP40 (actuating end only)	IP20; IP40 (actuating end only)
IEC 61373 Cat. 1 Class B, 5 g/30 ms acc. To IEC 60068-27 Test Ea		
IEC 60068-2-6 Test Fc; 2 - 13.2 Hz/1 mm 13.2 - 100 Hz/0.7 g with load 100 % x Ie		
12 + 12 cycle with 55 °C/90 - 96 % and 25 °C/95 - 100 %		
16 hours 55 °C/2 hours 70 °C with damp heat 55 %		
-25… + 60	-25… + 60	-25… + 60
-40 … +70	-40 … +70	-40 … +70

High performance MCBs

S800U series technical features

S800U

Installation		
	Terminal	
	Stranded Cross-section of conductors (top / bottom)	mm²
		AWG
	Flexible Cross-section of conductors (top/bottom)	mm²
		AWG
	Tightening torque	Nm
		in-lbs.
	Screwdriver	
	Mounting	
	Mounting position	
	Supply	
Dimensions and weight	Pole dimensions (H x L x W)	mm
	Pole weight	g
Combination with aux. elements	Auxiliary contact	
	Combined auxiliary- / signal contact	
	Undervoltage release	
	Shunt open release	
	Motor Operating Device	

S800U	S804U-UCZ	S804U-PVS
Failsafe cage or ringlug terminal	Failsafe cage terminal	Failsafe cage terminal
1 … 50		1 … 50
Cu only 10 - 30 A: 14 - 2 AWG 40 - 100 A: 1 - 8 AWG	Cu only 10 - 32A: 14-2 AWG 40 - 80A: 1 - 8 AWG	14 AWG – 2 AWG Single conductor per terminal – copper only, 75C wire
1 … 70		1 … 70
Cu only 10 - 30 A: 14 - 2 AWG 40 - 100 A: 1 - 8 AWG	Cu only 10 - 32A: 14-2 AWG 40 - 80A: 1 - 8 AWG	14 AWG – 2 AWG Single conductor per terminal – copper only, 75C wire
3,5	3,5	3,5
31	31	31
POZI 2	POZI 2	POZI 2
any	any	any
any	any	any
any	any	any
95 x 26.5 x 82.5	142 x 26.5 x 82.5	142 x 26.5 x 82.5
240	240	240
yes	yes	yes
yes	yes	yes
yes	yes	yes
yes	yes	yes
yes	yes	yes

1

High performance MCBs

S800U series with cage terminal, Z characteristic

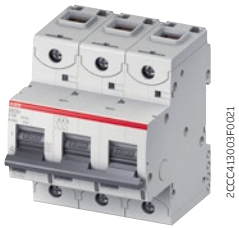
S801U

S802U

S800U-Z characteristic
Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Applications: commercial and industrial.
Standard: UL489, CSA 22.2 NO.5-02, IEC/EN 60947-2
Icu=30 kA (1 pole), 50 kA (2...4 poles)

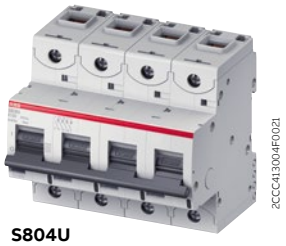
Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	214487	S801U-Z10	2CCS881017R0105		0.245	1
	15	214524	S801U-Z15	2CCS881017R0155		0.245	1
	20	214562	S801U-Z20	2CCS881017R0205		0.245	1
	25	214609	S801U-Z25	2CCS881017R0255		0.245	1
	30	214647	S801U-Z30	2CCS881017R0305		0.245	1
	40	214685	S801U-Z40	2CCS881017R0405		0.245	1
	50	214722	S801U-Z50	2CCS881017R0505		0.245	1
	60	214760	S801U-Z60	2CCS881017R0605		0.245	1
	70	214807	S801U-Z70	2CCS881017R0705		0.245	1
	80	214845	S801U-Z80	2CCS881017R0805		0.245	1
	90	214883	S801U-Z90	2CCS881017R0905		0.245	1
	100	214920	S801U-Z100	2CCS881017R0825		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	214494	S802U-Z10	2CCS862017R0105		0.49	1
	15	214531	S802U-Z15	2CCS862017R0155		0.49	1
	20	214579	S802U-Z20	2CCS862017R0205		0.49	1
	25	214616	S802U-Z25	2CCS862017R0255		0.49	1
	30	214654	S802U-Z30	2CCS862017R0305		0.49	1
	40	214692	S802U-Z40	2CCS862017R0405		0.49	1
	50	214739	S802U-Z50	2CCS862017R0505		0.49	1
	60	214777	S802U-Z60	2CCS862017R0605		0.49	1
	70	214814	S802U-Z70	2CCS862017R0705		0.49	1
	80	214852	S802U-Z80	2CCS862017R0805		0.49	1
	90	214890	S802U-Z90	2CCS862017R0905		0.49	1
	100	214937	S802U-Z100	2CCS862017R0825		0.49	1



S803U

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	214500	S803U-Z10	2CCS863017R0105		0.735	1
	15	214548	S803U-Z15	2CCS863017R0155		0.735	1
	20	214586	S803U-Z20	2CCS863017R0205		0.735	1
	25	214623	S803U-Z25	2CCS863017R0255		0.735	1
	30	214661	S803U-Z30	2CCS863017R0305		0.735	1
	40	214708	S803U-Z40	2CCS863017R0405		0.735	1
	50	214746	S803U-Z50	2CCS863017R0505		0.735	1
	60	214784	S803U-Z60	2CCS863017R0605		0.735	1
	70	214821	S803U-Z70	2CCS863017R0705		0.735	1
	80	214869	S803U-Z80	2CCS863017R0805		0.735	1
	90	214906	S803U-Z90	2CCS863017R0905		0.735	1
	100	214944	S803U-Z100	2CCS863017R0825		0.735	1



S804U

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	214517	S804U-Z10	2CCS864017R0105		0.98	1
	15	214555	S804U-Z15	2CCS864017R0155		0.98	1
	20	214593	S804U-Z20	2CCS864017R0205		0.98	1
	25	214630	S804U-Z25	2CCS864017R0255		0.98	1
	30	214678	S804U-Z30	2CCS864017R0305		0.98	1
	40	214715	S804U-Z40	2CCS864017R0405		0.98	1
	50	214753	S804U-Z50	2CCS864017R0505		0.98	1
	60	214791	S804U-Z60	2CCS864017R0605		0.98	1
	70	214838	S804U-Z70	2CCS864017R0705		0.98	1
	80	214876	S804U-Z80	2CCS864017R0805		0.98	1
	90	214913	S804U-Z90	2CCS864017R0905		0.98	1
	100	214951	S804U-Z100	2CCS864017R0825		0.98	1

High performance MCBs

S800U series with cage terminal, K characteristic

S801U

S802U

S800U-K characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

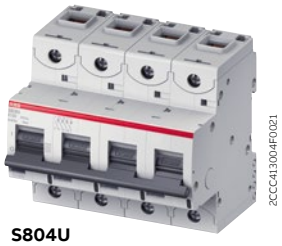
Applications: commercial and industrial.
Standard: UL489, CSA 22.2 NO.5-02, IEC/EN 60947-2
Icu=30 kA (1-pole), 50 kA (2...4-pole)

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	214005	S801U-K10	2CCS881017R0427		0.245	1
	15	214043	S801U-K15	2CCS881017R0457		0.245	1
	20	214081	S801U-K20	2CCS881017R0487		0.245	1
	25	214128	S801U-K25	2CCS881017R0517		0.245	1
	30	214166	S801U-K30	2CCS881017R0527		0.245	1
	40	214203	S801U-K40	2CCS881017R0557		0.245	1
	50	214241	S801U-K50	2CCS881017R0577		0.245	1
	60	214289	S801U-K60	2CCS881017R0587		0.245	1
	70	214326	S801U-K70	2CCS881017R0707		0.245	1
	80	214364	S801U-K80	2CCS881017R0627		0.245	1
	90	214401	S801U-K90	2CCS881017R0907		0.245	1
	100	214449	S801U-K100	2CCS881017R0637		0.245	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	214012	S802U-K10	2CCS862017R0427		0.49	1
	15	214050	S802U-K15	2CCS862017R0457		0.49	1
	20	214098	S802U-K20	2CCS862017R0487		0.49	1
	25	214135	S802U-K25	2CCS862017R0517		0.49	1
	30	214173	S802U-K30	2CCS862017R0527		0.49	1
	40	214210	S802U-K40	2CCS862017R0557		0.49	1
	50	214258	S802U-K50	2CCS862017R0577		0.49	1
	60	214296	S802U-K60	2CCS862017R0587		0.49	1
	70	214333	S802U-K70	2CCS862017R0707		0.49	1
	80	214371	S802U-K80	2CCS862017R0627		0.49	1
	90	214418	S802U-K90	2CCS862017R0907		0.49	1
	100	214456	S802U-K100	2CCS862017R0637		0.49	1

S803U

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	214029	S803U-K10	2CCS863017R0427		0.735	1
	15	214067	S803U-K15	2CCS863017R0457		0.735	1
	20	214104	S803U-K20	2CCS863017R0487		0.735	1
	25	214142	S803U-K25	2CCS863017R0517		0.735	1
	30	214180	S803U-K30	2CCS863017R0527		0.735	1
	40	214227	S803U-K40	2CCS863017R0557		0.735	1
	50	214265	S803U-K50	2CCS863017R0577		0.735	1
	60	214302	S803U-K60	2CCS863017R0587		0.735	1
	70	214340	S803U-K70	2CCS863017R0707		0.735	1
	80	214388	S803U-K80	2CCS863017R0627		0.735	1
	90	214425	S803U-K90	2CCS863017R0907		0.735	1
	100	214463	S803U-K100	2CCS863017R0637		0.735	1



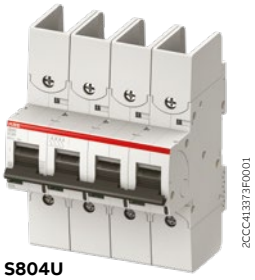
S804U

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	214036	S804U-K10	2CCS864017R0427		0.98	1
	15	214074	S804U-K15	2CCS864017R0457		0.98	1
	20	214111	S804U-K20	2CCS864017R0487		0.98	1
	25	214159	S804U-K25	2CCS864017R0517		0.98	1
	30	214197	S804U-K30	2CCS864017R0527		0.98	1
	40	214234	S804U-K40	2CCS864017R0557		0.98	1
	50	214272	S804U-K50	2CCS864017R0577		0.98	1
	60	214319	S804U-K60	2CCS864017R0587		0.98	1
	70	214357	S804U-K70	2CCS864017R0707		0.98	1
	80	214395	S804U-K80	2CCS864017R0627		0.98	1
	90	214432	S804U-K90	2CCS864017R0907		0.98	1
	100	214470	S804U-K100	2CCS864017R0637		0.98	1

1

High performance MCBs

S800U series UCZ characteristic



S804U

S800 UCZ characteristic

Function: this breaker is specially designed for networks up to 600 V d.c., e.g. datacenter. With its short-circuit current rating of 10 kA you will get a good solution regarding safety and reliability. This breaker is tested acc to UL489 (clUSus).

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	420703	S804U-UCZ10	2CCS248356R0001		0.98	1
	15	420710	S804U-UCZ15	2CCS248357R0001		0.98	1
	20	420727	S804U-UCZ20	2CCS248358R0001		0.98	1
	25	420734	S804U-UCZ25	2CCS248359R0001		0.98	1
	30	420741	S804U-UCZ30	2CCS248360R0001		0.98	1
	40	420758	S804U-UCZ40	2CCS248361R0001		0.98	1
	50	420765	S804U-UCZ50	2CCS248362R0001		0.98	1
	60	420772	S804U-UCZ60	2CCS248363R0001		0.98	1
	70	420789	S804U-UCZ70	2CCS248364R0001		0.98	1
	80	420796	S804U-UCZ80	2CCS248365R0001		0.98	1

High performance MCBs

S800U series PVS characteristic

S804U

S800U PVS characteristic - Ground fault detector interrupter (GFDI)
Function: string protection.
The S804U-PVS5 is for string protection in photovoltaic systems.
In case of reverse currents, the breaker wil trip. Thus the PV generator will not be damaged.
The breaker is tested acc. to UL489B for 1000 V d.c.

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	5	419929	S804U-PVS5	2CCP824017R1159		0.98	1

High performance MCBs

S800PV series technical features

2CCC413002F0021

S800PV

			S800PV-SP
General Data	Standards		IEC / EN 60947-2 and Annex P
	Poles		2 ... 4
	Tripping characteristics		B
	Rated current Ie	A	5 ... 125
	Rated frequency f	Hz	-
	Rated insulation voltage Ui acc. to IEC/EN 60664-1	V	DC 1500
	Rated impulse withstand voltage Uimp. (1.2/50µs)	kV	8
	Overvoltage category		III
	Pollution degree		2
	Suitability for isolation		yes
Data acc. to IEC/EN 60947-2	Rated operational voltage Ue	V	2-pole DC 800V: 5 ... 125A 3-pole DC 1200V: 5 ... 125A 4-pole DC 1500V: 5 ... 125A
	Min. operating voltage	V	-
	Rated ultimate short-circuit capacity Icu	kA	5 ... 16 A **acc. IEC 60947-2 Annex P.**, Icu 5 kA 20 ... 125 A **acc. IEC 60947-2**, Icu 5 kA 20 ... 125 A **acc. IEC 60947-2 Annex P.**, Icu 3 kA
	Rated service short-circuit capacity Ics	kA	Ics = Icu
	Reference temperature for tripping characteristics	°C	40°C
	Electrical and Mechanical Endurance	ops.	**acc. to Annex P:** 5 ... 16A: 300 electrical cycles 9700 mechanical cycles **acc. to IEC 60947-2 (general part):** 20 ... 100A: 1500 electrical cycles 8500 mechanical cycles 125A: 1000 electrical cycles 9000 mechanical cycles
Mechanical Data	Housing		Material group I, RAL 7035
	Toggle		black, lockable
	Classification acc. To NF F 126-101, NF F 16-102		-
	Protection degree acc. to EN 60529		IP20; IP40 (actuating end only)
	Shock resistance acc. to IEC/EN 60068-2-30		IEC 61373 Cat. 1 Class B, 5g / 30ms acc. To IEC 60068-27 Test Ea
	Vibration resistance acc. to IEC/EN 60068-2-6		IEC 60068-2-6 Test Fc; 2 - 13.2Hz /1mm 13.2 - 100Hz / 0.7g with load 100% x Ie
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH	12 + 12 cycle with 55°C / 90-96% and 25% / 95-100%
	Environmental conditions (dry heat) acc. to IEC/ EN 60068-2-2 Test B	°C/RH	16 hours 55°C / 2 hours 70°C with damp heat 55%
	Ambient temperature	°C	-25 ... + 60
	Storage temperature	°C	-40 ... +70
Installation	Terminal		Failsafe cage or ringlug terminal
	Stranded Cross-section of conductors (top / bottom)	mm^2	1 ... 50
	Flexible Cross-section of conductors (top/ bottom)	mm^2	1 ... 70
	Tightening torque	Nm	3,5
		in-lbs.	31
	Screwdriver		POZI 2
	Mounting		any
	Mounting position		any
	Supply		any
Dimensions and weight	Pole dimensions (H x L x W)	mm	95 x 26.5 x 82.5
	Pole weight	g	240
Combination with aux. elements	Auxiliary contact		yes
	Combined auxiliary- / signal contact		yes
	Shunt trip		yes
	Undervoltage release		yes
	Shunt open release		yes
	Motor Operating Device		yes

High performance MCBs

S802PV-M-H and S804PV-SD technical features

		S802PV-M-H	S800PV-SD
General Data			
Tripping characteristics		none	none
Standards		IEC / EN 60947-3	IEC / EN 60947-3 and Annex D
Poles		2 (polarized)	2 ... 4
Rated current I_e	A	32, 63, 100	32, 63, 125
Rated insulation voltage U_i acc. to IEC/EN 60664-1	V	DC 1500	DC 1500
Rated impulse withstand voltage $U_{imp.}$ (1.2/50 µs)	kV	8	8
Overvoltage category		III	III
Pollution degree		2	2
Suitability for isolation		yes	yes
Data acc. to IEC/EN 60947-3			
Rated operational voltage U_e	V	DC 1000 V: 2-pole	DC 800V: 2-pole DC 1200V: 3-Pole DC 1500 V: 4-pole
Min. operating voltage	V	-	-
Rated short-term withstand current I_{cw}	kA	1.5	1.5
Rated short-circuit making capacity I_{cm}	kA	0.5	0.5
Utilisation category		DC-21 A	DC-21 A, DC-PV2
Electrical and Mechanical Endurance	ops.	1500 electric; 8500 mechanic	32, 63A: 1500 electric; 8500 mechanic 125 A: 1000 electrical, 7000 mechanic acc. to IEC 60947-3
Mechanical Data			
Housing		Material group I, RAL 7035	Material group I, RAL 7035
Toggle		black, lockable	black, lockable
Classification acc. To NF F 126-101, NF F 16-102		-	-
Protection degree acc. to EN 60529		IP20; IP40 (actuating end only)	IP20; IP40 (actuating end only)
Shock resistance acc. to IEC/EN 60068-2-30		IEC 61373 Cat. 1 Class B, 5 g / 30 ms acc. To IEC 60068-27 Test Ea	IEC 61373 Cat. 1 Class B, 5 g / 30 ms acc. To IEC 60068-27 Test Ea
Vibration resistance acc. to IEC/EN 60068-2-6		IEC 60068-2-6 Test Fc; 2 - 13.2 Hz/1 mm 13.2 - 100 Hz/0.7 g with load 100 % x I_e	IEC 60068-2-6 Test Fc; 2 - 13.2 Hz/1 mm 13.2 - 100 Hz/0.7 g with load 100 % x I_e
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH	12 + 12 cycle with 55 °C/90 - 96 % and 25 °C/95 - 100 %	12 + 12 cycle with 55 °C/90 - 96 % and 25 °C/95 - 100 %
Environmental conditions (dry heat) acc. to IEC/EN 60068-2-2 Test B	°C/RH	16 hours 55 °C/2 hours 70 °C with damp heat 55 %	16 hours 55 °C/2 hours 70 °C with damp heat 55 %
Ambient temperature	°C	-25 ... +60	-25 ... +60
Storage temperature	°C	-40 ... +70	-40 ... +70
Installation			
Terminal		Failsafe cage or ringlug terminal	Failsafe cage or ringlug terminal
Connections (top/bottom) - C_u only	mm^2	1 ... 50 stranded 1 ... 70 flexible	1 ... 50 stranded 1 ... 70 flexible
Tightening torque	Nm	3.5	3.5
	in-lbs.	31	31
Screwdriver		POZI 2	POZI 2
Mounting		any	any
Mounting position		any	any
Supply		any (taking into account the polarization)	any (taking into account the polarization)
Dimensions and weight			
Pole dimensions (H x L x W)	mm	95 x 26.5 x 82.5	95 x 26.5 x 82.5
Pole weight	g	240	240

High performance MCBs

S800PV series with cage terminal, B characteristic

S802PV

S803PV

S800PV-SP

Function: protection and control of photovoltaic strings against overloads, short-circuits and reverse currents. Ideal replacement for fuses due to comfortable string failure identification and signalisation.

Applications: Photovoltaic systems. Standard: IEC 60947-2 and Annex P

5 ... 16A acc. IEC 60947-2 Annex P., Icu 5 kA

20 ... 125A acc. IEC 60947-2, Icu 5 kA

5 ... 125A acc. IEC 60947-2 Annex P., Icu 3 kA

Number of poles	Rated current	Bbn 76122714	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	5	71170	S802PV-SP5	2CCF019596R0001		0.49	1
	6	72115	S802PV-SP6	2CCF019643R0001		0.49	1
	8	72139	S802PV-SP8	2CCF019644R0001		0.49	1
	10	71194	S802PV-SP10	2CCF019597R0001		0.49	1
	13	71217	S802PV-SP13	2CCF019598R0001		0.49	1
	16	71231	S802PV-SP16	2CCF019599R0001		0.49	1
	20	71255	S802PV-SP20	2CCF019600R0001		0.49	1
	25	71279	S802PV-SP25	2CCF019601R0001		0.49	1
	32	71293	S802PV-SP32	2CCF019602R0001		0.49	1
	40	71316	S802PV-SP40	2CCF019603R0001		0.49	1
	50	71330	S802PV-SP50	2CCF019604R0001		0.49	1
	63	71354	S802PV-SP63	2CCF019605R0001		0.49	1
	80	71378	S802PV-SP80	2CCF019606R0001		0.49	1
	100	71392	S802PV-SP100	2CCF019607R0001		0.49	1
	125	71415	S802PV-SP125	2CCF019608R0001		0.49	1

Number of poles	Rated current	Bbn 76122714	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	5	71439	S803PV-SP5	2CCF019609R0001		0.74	1
	6	72153	S803PV-SP6	2CCF019645R0001		0.74	1
	8	72177	S803PV-SP8	2CCF019646R0001		0.74	1
	10	71453	S803PV-SP10	2CCF019610R0001		0.74	1
	13	71477	S803PV-SP13	2CCF019611R0001		0.74	1
	16	71491	S803PV-SP16	2CCF019612R0001		0.74	1
	20	71514	S803PV-SP20	2CCF019613R0001		0.74	1
	25	71538	S803PV-SP25	2CCF019614R0001		0.74	1
	32	71552	S803PV-SP32	2CCF019615R0001		0.74	1
	40	71576	S803PV-SP40	2CCF019616R0001		0.74	1
	50	71590	S803PV-SP50	2CCF019617R0001		0.74	1
	63	71613	S803PV-SP63	2CCF019618R0001		0.74	1
	80	71637	S803PV-SP80	2CCF019619R0001		0.74	1
	100	71651	S803PV-SP100	2CCF019620R0001		0.74	1
	125	71675	S803PV-SP125	2CCF019621R0001		0.74	1

S804PV

S800PV-SP

Function: protection and control of photovoltaic strings against overloads, short-circuits and reverse currents. Ideal replacement for fuses due to comfortable string failure identification and signalisation.

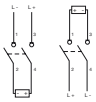
Applications: Photovoltaic systems. Standard: IEC 60947-2 and Annex P

5 ... 16A acc. IEC 60947-2 Annex P., Icu 5 kA

20 ... 125A acc. IEC 60947-2, Icu 5 kA

5 ... 125A acc. IEC 60947-2 Annex P., Icu 3 kA

Number of poles	Rated current	Bbn 76122714	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	5	52124	S804PV-SP5	2CCF019586R0001		0.98	1
	6	72191	S804PV-SP6	2CCF019647R0001		0.98	1
	8	72214	S804PV-SP8	2CCF019648R0001		0.98	1
	10	71699	S804PV-SP10	2CCF019622R0001		0.98	1
	13	71712	S804PV-SP13	2CCF019623R0001		0.98	1
	16	71736	S804PV-SP16	2CCF019624R0001		0.98	1
	20	71750	S804PV-SP20	2CCF019625R0001		0.98	1
	25	71774	S804PV-SP25	2CCF019626R0001		0.98	1
	32	71798	S804PV-SP32	2CCF019627R0001		0.98	1
	40	71811	S804PV-SP40	2CCF019628R0001		0.98	1
	50	71835	S804PV-SP50	2CCF019629R0001		0.98	1
	63	71859	S804PV-SP63	2CCF019630R0001		0.98	1
	80	71873	S804PV-SP80	2CCF019631R0001		0.98	1
	100	71897	S804PV-SP100	2CCF019632R0001		0.98	1
	125	71910	S804PV-SP125	2CCF019633R0001		0.98	1



S802PV-M-H

Photovoltaic 2-pole disconnector (polarized)

I_{cu}	Rated current	Bbn 76122714	Order details		Price 1 piece	Weight 1 piece	Pack unit
kA	A	EAN	Type code	Order code		kg	pc.
1.5	32	419035	S802PV-M32-H	2CCP247204R0001		0.43	1
1.5	63	419042	S802PV-M63-H	2CCP247205R0001		0.43	1
1.5	125	419301	S802PV-M100-H	2CCP247212R0001		0.43	1

S800PV-SD

Function: switch disconnector for DC side isolation of PV systems.
Designed for PV installations of 1500 V DC.

Applications: Photovoltaic systems.

Rated short-term withstand currend, Icw 1,5 kA

I_{cw}	Rated current	Bbn 76122714	Order details		Price 1 piece	Weight 1 piece	Pack unit
kA	A	EAN	Type code	Order code		kg	pc.
1.5	32	71958	S802PV-SD32	2CCF019635R0001		0.43	1
1.5	63	71934	S802PV-SD63	2CCF019634R0001		0.43	1
1.5	125	71972	S802PV-SD125	2CCF019636R0001		0.43	1
1.5	32	72054	S804PV-SD32	2CCF019640R0001		0.86	1
1.5	63	72078	S804PV-SD63	2CCF019641R0001		0.86	1
1.5	125	72092	S804PV-SD125	2CCF019642R0001		0.86	1

1

MCBs

S500 series technical features

S500

			S500-K
General Data	Tripping characteristics		K
	Standards		IEC 60947-2 , UL1077, CAN / CSA-C22.2 No. 35
	Poles		1 … 3
	Rated current I_e adjustable	A	0.1 … 45
	Rated frequency f	Hz	50/60
	Rated insulation voltage Ui acc. to IEC/EN 60664-1	V	AC 690 V
	Rated impulse withstand voltage Uimp. (1.2/50 µs)	kV	6
	Overvoltage category	II	
	Pollution degree	3	
	Suitability for isolation	yes	
Data acc. to IEC/EN 60898-1	Rated operational voltage Ue	V	–
	Min. operating voltage	V	–
	Rated short-circuit capacity Icn	kA	–
	Reference temperature for tripping characteristics	°C	–
	Electrical and Mechanical Endurance	ops.	–
	Service short-circuit capacity Ics	kA	–
Data acc. to IEC/EN 60947-2	Rated operational voltage Ue	V	400/690 V AC
	Min. operating voltage	V	12 V AC
	Rated ultimate short-circuit capacity Icu		
	AC 230/400V	kA	0.1– 11 A: 50 kA; 10–45 A: 30 kA
	AC 250/440V		0.1–11 A: 30 kA; 10–45 A: 25 kA
	AC 3 x 500V		0.1–11 A: 20 kA; 10–45 A: 15 kA
	AC 400/690V		0.1–45 A: 6 kA
	Rated service short-circuit capacity Ics		
	AC 230/400V	kA	0.1–11 A: 30 kA; 10–45 A: 25 kA
	AC 250/440V		0.1–45 A: 22 kA
	AC 3 x 500V		0.1–11 A: 15 kA; 10–45 A: 11 kA
	AC 400/690V		0.1–45 A: 3 kA
	Reference temperature for tripping characteristics	°C	40
	Electrical and Mechanical Endurance	ops.	0.1 … 45 A: 1500 electric; 8500 mechanic
Data acc. to UL/CSA , Supplementary Protector	Rated voltage	V	AC 600
	Rated interrupting capacity acc. to UL 1077	kA	
	AC 240/415V kA		<25A: 30kA; >25: 18kA
	AC 277/480V		14
	AC 346/600		6
	Reference temperature for tripping characteristics	°C	25
	Electrical and Mechanical endurance	ops.	acc. to UL1077. 6000 electric; 8500 mechanic

			S500-K
Mechanical Data	Housing		Material group I, RAL 7035
	Toggle		black, lockable
	Classification acc. to NF F 16-101, NF F 16-102		I2, F1
	Protection degree acc. to EN 60529		IP20; IP40 (actuating end only)
	Vibration resistance acc. to IEC/EN 60068-2-30		IEC 61373 Cat. 1 Class B, 5 g/30 ms acc. to IEC 60068-27 Test Ea
	Vibration resistance acc. to IEC/EN 60068-2-6		IEC 60068-2-6 Test Fc; 2–13.2 Hz/1 mm 13.2–100 Hz/0.7 g with load 100 % x Ie
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30 test Db		12 + 12 cycle with 55 °C/90–96 % r.g. and 25 %/95 –100 % r.f.
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-2 Test B		16 hours 55 °C/2 hours 70 °C with damp heat 55 %
	Ambient temperature	°C	–25 … +55
	Storage temperature	°C	–40 … +70
	Terminal		Cage terminal
	Connections (top/bottom) – CU only	mm^2	1 … 25
Installation	Tightening torque	Nm	2.5
	Screwdriver		POZI 2
	Mounting		EN 60715
	Mounting position		any
	Supply		any
Dimensions and weight	Pole dimensions (H x L x W)	mm	91 x 92 x 25
	Pole weight	g	ca. 250
Combination with aux. elements	Auxiliary contact		Yes
	Signal contact		Yes
	Shunt trip		Yes
	Undervoltage release		Yes
	Shunt open release		Yes
	Motor Operating Device		Yes

1

MCBs

S500 series technical features

S500

			S500UC-K
General Data	Tripping characteristics		K
	Standards		IEC 60947-2
	Poles		1 ... 4
	Rated current Ie	A	0.1 ... 45
	Rated frequency f	Hz	–
	Rated insulation voltage Ui acc. to IEC/EN 60664-1	V	1000V DC
	Rated impulse withstand voltage Uimp. (1.2/50µs)	kV	6
	Overvoltage category		II
	Pollution degree		2
	Suitability for isolation		yes
Data acc. to IEC/EN 60898-1	Rated operational voltage Ue	V	–
	Min. operating voltage	V	–
	Rated short-circuit capacity Icn	kA	–
	Reference temperature for tripping characteristics	°C	–
	Electrical and Mechanical Endurance	ops.	–
	Service short-circuit capacity Ics	kA	–
Data acc. to IEC/EN 60947-2	Rated operational voltage Ue	V	DC 250 V/pol, max. DC 750 V
	Min. operating voltage	V	–
	Rated ultimate short-circuit capacity Icu		
	DC 250 V L/R 15 ms (1-pole)	kA	30 kA
	DC 500 V L/R 15 ms (2-pole in series)		30 kA
	DC 750 V L/R 15 ms (3- and 4-pole in series)		30 kA
	Rated service short-circuit capacity Ics		
	DC 250 V L/R 15 ms (1-pole)	kA	30 kA
	DC 500 V L/R 15 ms (2-pole)		30 kA
	DC 750 V L/R 15 ms (3- and 4-pole)		30 kA
	Reference temperature for tripping characteristics	°C	40
	Electrical and Mechanical Endurance	ops.	0.1 ... 45 A: 1500 electric; 8500 mechanic
Data acc. to UL/ CSA	Rated voltage	V	DC 250 V/pol, max. 600 V
	Rated interrupting capacity acc. to UL 1077 kA		
	DC 250V (1-pole)	kA	30 kA
	DC 500V (2-pole in series)		30 kA
	DC 750V (3- and 4-pole in series)		30 kA
	Reference temperature for tripping characteristics	°C	25
	Electrical and Mechanical endurance	ops.	acc. to UL1077. 6000 electric, 4000 mechanic

			S500UC-K
Mechanical Data	Housing		Material group I, RAL 7035
	Toggle		black, lockable
	Classification acc. to NF F 16-101, NF F 16-102		I2, F1
	Protection degree acc. to EN 60529		IP20; IP40 (actuating end only)
	Vibration resistance acc. to IEC/EN 60068-2-6		IEC 61373 Cat. 1 Class B, 5 g/30 ms acc. to IEC 60068-27 Test Ea
	Vibration resistance acc. to IEC/EN 60068-2-6		IEC 60068-2-6 Test Fc; 2–13.2 Hz/1 mm 13.2–100 Hz/0.7 g with load 100 % x Ie
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30 test Db		12 + 12 cycle with 55 °C/90 –96 % r.g. and 25 %/95 –100 % r.f.
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-2 Test B		16 hours 55 °C/2 hours 70 °C with damp heat 55 %
	Ambient temperature	°C	–25 … +55
	Storage temperature	°C	–40 … +70
	Terminal		Cage terminal
	Connections (top/bottom) – CU only	mm^2	1 … 25
Installation	Tightening torque	Nm	2.5
	Screwdriver		POZI 2
	Mounting		EN 60715
	Mounting position		any
	Supply		any
Dimensions and weight	Pole dimensions (H x L x W)	mm	91 x 92 x 25
	Pole weight	g	ca. 250
Combination with aux. elements	Auxiliary contact		Yes
	Signal contact		Yes
	Shunt trip		Yes
	Undervoltage release		Yes
	Shunt open release		Yes
	Motor Operating Device		Yes

MCBs

S500 series technical features

S500

			S500HV-K
General Data	Tripping characteristics		K
	Standards		IEC 60947-2
	Poles		1 … 3
	Rated current Ie	A	1 … 45
	Rated frequency f	Hz	50/60
	Rated insulation voltage Ui acc. to IEC/EN 60664-1	V	AC 1000 V
	Rated impulse withstand voltage Uimp. (1.2/50 µs)	kV	6
	Overvoltage category		II
	Pollution degree		2
	Suitability for isolation		yes
Data acc. to IEC/EN 60898-1	Rated operational voltage Ue	V	–
	Min. operating voltage	V	–
	Rated short-circuit capacity Icn	kA	–
	Reference temperature for tripping characteristics	°C	–
	Electrical and Mechanical Endurance	ops.	–
	Service short-circuit capacity Ics	kA	–
Data acc. to IEC/EN 60947-2	Rated operational voltage Ue	V	AC 580/1000 V
	Min. operating voltage	V	12 V AC
	Rated ultimate short-circuit capacity Icu		
	AC 580/1000V	kA	1.5
	Rated service short-circuit capacity Ics		
	AC 580/1000V	kA	1.5
	Reference temperature for tripping characteristics	°C	40
	Electrical and Mechanical Endurance	ops.	–
Data acc. to UL/ CSA	Rated voltage	V	–
	Rated interrupting capacity acc. to UL 1077	kA	–
	AC 240/415V	kA	–
	AC 277/480V		–
	AC 346/600		–
	Reference temperature for tripping characteristics		–
	Electrical and Mechanical endurance	ops.	–
Mechanical Data	Housing		Material group I, RAL 7035
	Toggle		black, lockable
	Classification acc. to NF F 16-101, NF F 16-102		I2, F1
	Protection degree acc. to EN 60529		IP20; IP40 (actuating end only)
	Vibration resistance acc. to IEC/EN 60068-2-6		w
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30 test Db		12 + 12 cycle with 55 °C/90 –96 % r.g. and 25 %/95 –100 % r.f.
	Environmental conditions (dry heat) acc. to IEC/EN 60068-2-2 Test B		16 hours 55 °C/2 hours 70 °C with damp heat 55 %
	Ambient temperature	°C	–25 … +55
	Storage temperature	°C	–40 … +70
	Terminal		Cage terminal
	Connections (top/bottom) – CU only	mm^2	1 … 25

			S500HV-K
Installation	Tightening torque	Nm	2.5
	Screwdriver		POZI 2
	Mounting		EN 60715
	Mounting position		any
	Supply		any
Dimensions and weight	Pole dimensions (H x L x W)	mm	91 x 92 x 25
	Pole weight	g	ca. 250
Combination with aux. elements	Auxiliary contact		Yes
	Signal contact		Yes
	Shunt trip		Yes
	Undervoltage release		Yes
	Shunt open release		Yes
	Motor Operating Device		Yes

MCBs

S500 series with with adjustable thermal release for motor protection, K characteristic

S501

S500-K (power) characteristic
Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits when an high breaking capacity is required; very useful when it is needed selectivity vs an MCCB or back-up vs other MCBs wired downstream; version with adjustable thermal release, dedicated to protect motors.
Advantages: No nuisance tripping in the case of functional peak currents up to 8xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2, UL 1077
Icu up to 50 kA

Number of poles	Rated current	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.1-0.15	303007	S501K0.1-0.15	2CCF008856R0001		0.250	1
	0.14-0.21	303014	S501K0.14-0.21	2CCF008857R0001		0.250	1
	0.2-0.3	303021	S501K0.2-0.3	2CCF008858R0001		0.250	1
	0.28-0.42	303038	S501K0.28-0.42	2CCF008859R0001		0.250	1
	0.38-0.58	303045	S501K0.38-0.58	2CCF008860R0001		0.250	1
	0.53-0.8	303052	S501K0.53-0.8	2CCF008861R0001		0.250	1
	0.73-1.1	303069	S501K0.73-1.1	2CCF008862R0001		0.250	1
	1-1.5	303076	S501K1-1.5	2CCF008863R0001		0.250	1
	1.4-2.1	303083	S501K1.4-2.1	2CCF008864R0001		0.250	1
	2-3	303090	S501K2-3	2CCF008865R0001		0.250	1
	2.8-4.2	303106	S501K2.8-4.2	2CCF008866R0001		0.250	1
	3.8-5.8	303113	S501K3.8-5.8	2CCF008867R0001		0.250	1
	5.3-8	303120	S501K5.3-8	2CCF008868R0001		0.250	1
	7.3-11	303137	S501K7.3-11	2CCF008869R0001		0.250	1
	10-15	303144	S501K10-15	2CCF008870R0001		0.250	1
	14-20	303151	S501K14-20	2CCF008871R0001		0.250	1
	18-26	303168	S501K18-26	2CCF008872R0001		0.250	1
	23-32	303175	S501K23-32	2CCF008873R0001		0.250	1
	29-37	303182	S501K29-37	2CCF008874R0001		0.250	1
	34-41	303199	S501K34-41	2CCF008877R0001		0.250	1
	38-45	303205	S501K38-45	2CCF008888R0001		0.250	1

S502

S503

Number of poles	Rated current	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.1-0.15	303250	S502K0.1-0.15	2CCF008894R0001		0.500	1
	0.14-0.21	303267	S502K0.14-0.21	2CCF008895R0001		0.500	1
	0.2-0.3	303274	S502K0.2-0.3	2CCF008896R0001		0.500	1
	0.28-0.42	303281	S502K0.28-0.42	2CCF008897R0001		0.500	1
	0.38-0.58	303298	S502K0.38-0.58	2CCF008898R0001		0.500	1
	0.53-0.8	303304	S502K0.53-0.8	2CCF008899R0001		0.500	1
	0.73-1.1	303311	S502K0.73-1.1	2CCF008900R0001		0.500	1
	1-1.5	303328	S502K1-1.5	2CCF008901R0001		0.500	1
	1.4-2.1	303335	S502K1.4-2.1	2CCF008902R0001		0.500	1
	2-3	303342	S502K2-3	2CCF008903R0001		0.500	1
	2.8-4.2	303359	S502K2.8-4.2	2CCF008904R0001		0.500	1
	3.8-5.8	303366	S502K3.8-5.8	2CCF008905R0001		0.500	1
	5.3-8	303373	S502K5.3-8	2CCF008906R0001		0.500	1
	7.3-11	303380	S502K7.3-11	2CCF008907R0001		0.500	1
	10-15	303397	S502K10-15	2CCF008908R0001		0.500	1
	14-20	303403	S502K14-20	2CCF008909R0001		0.500	1
	18-26	303410	S502K18-26	2CCF008910R0001		0.500	1
	23-32	303427	S502K23-32	2CCF008911R0001		0.500	1
	29-37	303434	S502K29-37	2CCF008912R0001		0.500	1
	34-41	303441	S502K34-41	2CCF008913R0001		0.500	1
	38-4	303458	S502K38-45	2CCF008926R0001		0.500	1

Number of poles	Rated current	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.1-0.15	303502	S503K0.1-0.15	2CCF008932R0001		0.750	1
	0.14-0.21	303519	S503K0.14-0.21	2CCF008933R0001		0.750	1
	0.2-0.3	303526	S503K0.2-0.3	2CCF008934R0001		0.750	1
	0.28-0.42	303533	S503K0.28-0.42	2CCF008935R0001		0.750	1
	0.38-0.58	303540	S503K0.38-0.58	2CCF008936R0001		0.750	1
	0.53-0.8	303557	S503K0.53-0.8	2CCF008937R0001		0.750	1
	0.73-1.1	303564	S503K0.73-1.1	2CCF008938R0001		0.750	1
	1-1.5	303571	S503K1-1.5	2CCF008939R0001		0.750	1
	1.4-2.1	303588	S503K1.4-2.1	2CCF008940R0001		0.750	1
	2-3	303595	S503K2-3	2CCF008941R0001		0.750	1
	2.8-4.2	303601	S503K2.8-4.2	2CCF008942R0001		0.750	1
	3.8-5.8	303618	S503K3.8-5.8	2CCF008943R0001		0.750	1
	5.3-8	303625	S503K5.3-8	2CCF008944R0001		0.750	1
	7.3-11	303632	S503K7.3-11	2CCF008945R0001		0.750	1
	10-15	303649	S503K10-15	2CCF008946R0001		0.750	1
	14-20	303656	S503K14-20	2CCF008947R0001		0.750	1
	18-26	303663	S503K18-26	2CCF008948R0001		0.750	1
	23-32	303670	S503K23-32	2CCF008949R0001		0.750	1
	29-37	303687	S503K29-37	2CCF008950R0001		0.750	1
	34-41	303694	S503K34-41	2CCF008951R0001		0.750	1
	38-45	303700	S503K38-45	2CCF008964R0001		0.750	1

1

MCBs

S500UC series DC range, K characteristic

S501UC

S500UC series K (power) characteristic

Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits when an high breaking capacity is required; very useful when it is needed selectivity vs an MCCB or back-up vs other MCBs wired downstream; version with adjustable thermal release, dedicated to protect motors; version dedicated to application in direct current circuits.

Advantages: No nuisance tripping in the case of functional peak currents up to 8xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.

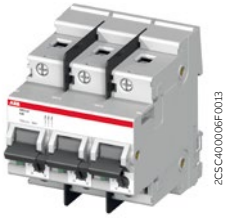
Applications: commercial and industrial.

Standard: IEC/EN 60947-2, UL1077 (supplementary protector)

Icu up to 30 kA

Number of poles	Rated current	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.1-0.15	302000	S501UC-K0.1-0.15	2CCF008988R0001		0.250	1
	0.14-0.21	302017	S501UC-K0.14-0.21	2CCF008991R0001		0.250	1
	0.2-0.3	302024	S501UC-K0.2-0.3	2CCF008994R0001		0.250	1
	0.28-0.42	302031	S501UC-K0.28-0.42	2CCF008997R0001		0.250	1
	0.38-0.58	302048	S501UC-K0.38-0.58	2CCF009000R0001		0.250	1
	0.53-0.8	302055	S501UC-K0.53-0.8	2CCF009003R0001		0.250	1
	0.73-1.1	302062	S501UC-K0.73-1.1	2CCF009006R0001		0.250	1
	1-1.5	302079	S501UC-K1-1.5	2CCF009009R0001		0.250	1
	1.4-2.1	302086	S501UC-K1.4-2.1	2CCF009012R0001		0.250	1
	2-3	302093	S501UC-K2-3	2CCF009015R0001		0.250	1
	2.8-4.2	302109	S501UC-K2.8-4.2	2CCF009018R0001		0.250	1
	3.8-5.8	302116	S501UC-K3.8-5.8	2CCF009021R0001		0.250	1
	5.3-8	302123	S501UC-K5.3-8	2CCF009024R0001		0.250	1
	7.3-11	302130	S501UC-K7.3-11	2CCF009027R0001		0.250	1
	10-15	302147	S501UC-K10-15	2CCF009030R0001		0.250	1
	14-20	302154	S501UC-K14-20	2CCF009033R0001		0.250	1
	18-26	302161	S501UC-K18-26	2CCF009036R0001		0.250	1
	23-32	302178	S501UC-K23-32	2CCF009039R0001		0.250	1
	29-37	302185	S501UC-K29-37	2CCF009042R0001		0.250	1
	34-41	302192	S501UC-K34-41	2CCF009045R0001		0.250	1
	38-45	302208	S501UC-K38-45	2CCF009048R0001		0.250	8

S502UC



S503UC

Number of poles	Rated current	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.1-0.15	302253	S502UC-K0.1-0.15	2CCF008989R0001		0.500	1
	0.14-0.21	302260	S502UC-K0.14-0.21	2CCF008992R0001		0.500	1
	0.2-0.3	302277	S502UC-K0.2-0.3	2CCF008995R0001		0.500	1
	0.28-0.42	302284	S502UC-K0.28-0.42	2CCF008998R0001		0.500	1
	0.38-0.58	302291	S502UC-K0.38-0.58	2CCF009001R0001		0.500	1
	0.53-0.8	302307	S502UC-K0.53-0.8	2CCF009004R0001		0.500	1
	0.73-1.1	302314	S502UC-K0.73-1.1	2CCF009007R0001		0.500	1
	1-1.5	302321	S502UC-K1-1.5	2CCF009010R0001		0.500	1
	1.4-2.1	302338	S502UC-K1.4-2.1	2CCF009013R0001		0.500	1
	2-3	302345	S502UC-K2-3	2CCF009016R0001		0.500	1
	2.8-4.2	302352	S502UC-K2.8-4.2	2CCF009019R0001		0.500	1
	3.8-5.8	302369	S502UC-K3.8-5.8	2CCF009022R0001		0.500	1
	5.3-8	302376	S502UC-K5.3-8	2CCF009025R0001		0.500	1
	7.3-11	302383	S502UC-K7.3-11	2CCF009028R0001		0.500	1
	10-15	302390	S502UC-K10-15	2CCF009031R0001		0.500	1
	14-20	302406	S502UC-K14-20	2CCF009034R0001		0.500	1
	18-26	302413	S502UC-K18-26	2CCF009037R0001		0.500	1
	23-32	302420	S502UC-K23-32	2CCF009040R0001		0.500	1
	29-37	302437	S502UC-K29-37	2CCF009043R0001		0.500	1
	34-41	302444	S502UC-K34-41	2CCF009046R0001		0.500	1
	38-45	302451	S502UC-K38-45	2CCF009049R0001		0.500	1

Number of poles	Rated current	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	0.1-0.15	302505	S503UC-K0.1-0.15	2CCF008990R0001		0.750	1
	0.14-0.21	302512	S503UC-K0.14-0.21	2CCF008993R0001		0.750	1
	0.2-0.3	302529	S503UC-K0.2-0.3	2CCF008996R0001		0.750	1
	0.28-0.42	302536	S503UC-K0.28-0.42	2CCF008999R0001		0.750	1
	0.38-0.58	302543	S503UC-K0.38-0.58	2CCF009002R0001		0.750	1
	0.53-0.8	302550	S503UC-K0.53-0.8	2CCF009005R0001		0.750	1
	0.73-1.1	302567	S503UC-K0.73-1.1	2CCF009008R0001		0.750	1
	1-1.5	302574	S503UC-K1-1.5	2CCF009011R0001		0.750	1
	1.4-2.1	302581	S503UC-K1.4-2.1	2CCF009014R0001		0.750	1
	2-3	302598	S503UC-K2-3	2CCF009017R0001		0.750	1
	2.8-4.2	302604	S503UC-K2.8-4.2	2CCF009020R0001		0.750	1
	3.8-5.8	302611	S503UC-K3.8-5.8	2CCF009023R0001		0.750	1
	5.3-8	302628	S503UC-K5.3-8	2CCF009026R0001		0.750	1
	7.3-11	302635	S503UC-K7.3-11	2CCF009029R0001		0.750	1
	10-15	302642	S503UC-K10-15	2CCF009032R0001		0.750	1
	14-20	302659	S503UC-K14-20	2CCF009035R0001		0.750	1
	18-26	302666	S503UC-K18-26	2CCF009038R0001		0.750	1
	23-32	302673	S503UC-K23-32	2CCF009041R0001		0.750	1
	29-37	302680	S503UC-K29-37	2CCF009044R0001		0.750	1
	34-41	302697	S503UC-K34-41	2CCF009047R0001		0.750	1
	38-45	302703	S503UC-K38-45	2CCF009050R0001		0.750	1

MCBs

S500UC series DC range, K characteristic

Number of poles	Rated current	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	0.1-0.15	302758	S504UC-K0,15	2CCF011771R0001		0.92	1
	0.14-0.21	302765	S504UC-K0,21	2CCF011772R0001		0.92	1
	0.2-0.3	302772	S504UC-K0,3	2CCF011576R0001		0.92	1
	0.28-0.42	302789	S504UC-K0,42	2CCF011773R0001		0.92	1
	0.38-0.58	302796	S504UC-K0,58	2CCF011774R0001		0.92	1
	0.53-0.8	302802	S504UC-K0,8	2CCF011775R0001		0.92	1
	0.73-1.1	302819	S504UC-K1,1	2CCF011776R0001		0.92	1
	1-1.5	302826	S504UC-K1,5	2CCF011777R0001		0.92	1
	1.4-2.1	302833	S504UC-K2,1	2CCF011778R0001		0.92	1
	2-3	302840	S504UC-K3	2CCF011779R0001		0.92	1
	2.8-4.2	302857	S504UC-K4,2	2CCF011780R0001		0.92	1
	3.8-5.8	302864	S504UC-K5,8	2CCF011781R0001		0.92	1
	5.3-8	302871	S504UC-K8	2CCF011782R0001		0.92	1
	7.3-11	302888	S504UC-K11	2CCF011509R0001		0.92	1
	10-15	302895	S504UC-K15	2CCF011783R0001		0.92	1
	14-20	302901	S504UC-K20	2CCF011784R0001		0.92	1
	18-26	302918	S504UC-K26	2CCF011785R0001		0.92	1
	23-32	302925	S504UC-K32	2CCF011786R0001		0.92	1
	29-37	302932	S504UC-K37	2CCF011787R0001		0.92	1
	34-41	302949	S504UC-K41	2CCF011788R0001		0.92	1
	38-45	302956	S504UC-K45	2CCF011789R0001		0.92	1

MCBs

S500HV series for applications up to 1000 VAC, K characteristic

S501HV

S502HV

S503HV

Icu = 1.5 kA

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	1	0403454	S501HV-K1-580V	2CCF017747R0001		0.25	1
	3	0424160	S501HV-K3-580V	2CCF015787R0001		0.25	1
	4	0424184	S501HV-K4-580V	2CCF015790R0001		0.25	1
	6	0424214	S501HV-K6-580V	2CCF015793R0001		0.25	1
	8	0424245	S501HV-K8-580V	2CCF015796R0001		0.25	1
	10	0424276	S501HV-K10-580V	2CCF015799R0001		0.25	1
	13	0424306	S501HV-K13-580V	2CCF015802R0001		0.25	1
	16	0424337	S501HV-K16-580V	2CCF015805R0001		0.25	1
	20	0424368	S501HV-K20-580V	2CCF015808R0001		0.25	1
	25	0424399	S501HV-K25-580V	2CCF015811R0001		0.25	1
	32	0424429	S501HV-K32-580V	2CCF015814R0001		0.25	1
	40	0424450	S501HV-K40-580V	2CCF015817R0001		0.25	1
	45	0424481	S501HV-K45-580V	2CCF015820R0001		0.25	1

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	1	1407810	S502HV-K1-1000V	2CCF017961R0001		0.50	1
	3	0424177	S502HV-K3-1000V	2CCF015788R0001		0.50	1
	4	0424191	S502HV-K4-1000V	2CCF015791R0001		0.50	1
	6	0424221	S502HV-K6-1000V	2CCF015794R0001		0.50	1
	8	0424252	S502HV-K8-1000V	2CCF015797R0001		0.50	1
	10	0424283	S502HV-K10-1000V	2CCF015800R0001		0.50	1
	13	0424313	S502HV-K13-1000V	2CCF015803R0001		0.50	1
	16	0424344	S502HV-K16-1000V	2CCF015806R0001		0.50	1
	20	0424375	S502HV-K20-1000V	2CCF015809R0001		0.50	1
	25	0424405	S502HV-K25-1000V	2CCF015812R0001		0.50	1
	32	0424436	S502HV-K32-1000V	2CCF015815R0001		0.50	1
	40	0424467	S502HV-K40-1000V	2CCF015818R0001		0.50	1
	45	0424498	S502HV-K45-1000V	2CCF015821R0001		0.50	1

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	1	0403461	S503HV-K1-1000V	2CCF017748R0001		0.71	1
	3	0500499	S503HV-K3-1000V	2CCF015827R0001		0.71	1
	4	0424207	S503HV-K4-1000V	2CCF015792R0001		0.71	1
	6	0424238	S503HV-K6-1000V	2CCF015795R0001		0.71	1
	8	0424269	S503HV-K8-1000V	2CCF015798R0001		0.71	1
	10	0424290	S503HV-K10-1000V	2CCF015801R0001		0.71	1
	13	0424320	S503HV-K13-1000V	2CCF015804R0001		0.71	1
	16	0424351	S503HV-K16-1000V	2CCF015807R0001		0.71	1
	20	0424382	S503HV-K20-1000V	2CCF015810R0001		0.71	1
	25	0424412	S503HV-K25-1000V	2CCF015813R0001		0.71	1
	32	0424443	S503HV-K32-1000V	2CCF015816R0001		0.71	1
	40	0424474	S503HV-K40-1000V	2CCF015819R0001		0.71	1
	45	0424504	S503HV-K45-1000V	2CCF015822R0001		0.71	1

Electrical installation solutions for buildings
Residual current devices

Index

Quick selection of RCDs for household and industrial applications	2/2

RCCBs

F 200	2/6
F 200 for overseas markets	2/12
F 200 left neutral	2/14
F 200 AP-R (high immunity)	2/18
F 200 110 V	2/20
F 200 for high frequency and railways applications	2/21
F 200 B type	2/22
F 200 F-ATI and F-ARI	2/26

RCD-blocks

DDA 200	2/30
DDA 200 special version 110 V and 400 V	2/36
DDA 200 AP-R	2/37
DDA 200 AE for emergency stop	2/38
DDA 200 selective	2/39
DDA 200 B APR	2/40

RCBOs

DS201 L	2/46
DS201	2/49
DS201 T	2/55
DS201 M	2/56
DS201 M 110V	2/62
DS202C	2/64
DS202C M	2/68
DS202C M 110V	2/72
DS203NC L	2/78
DS203NC	2/81
DS 200	2/88
DS 200 M	2/97

eRCBOs

DSE201	2/104
DSE201 M	2/108

RCD-blocks

DDA 800	2/116

RCBOs

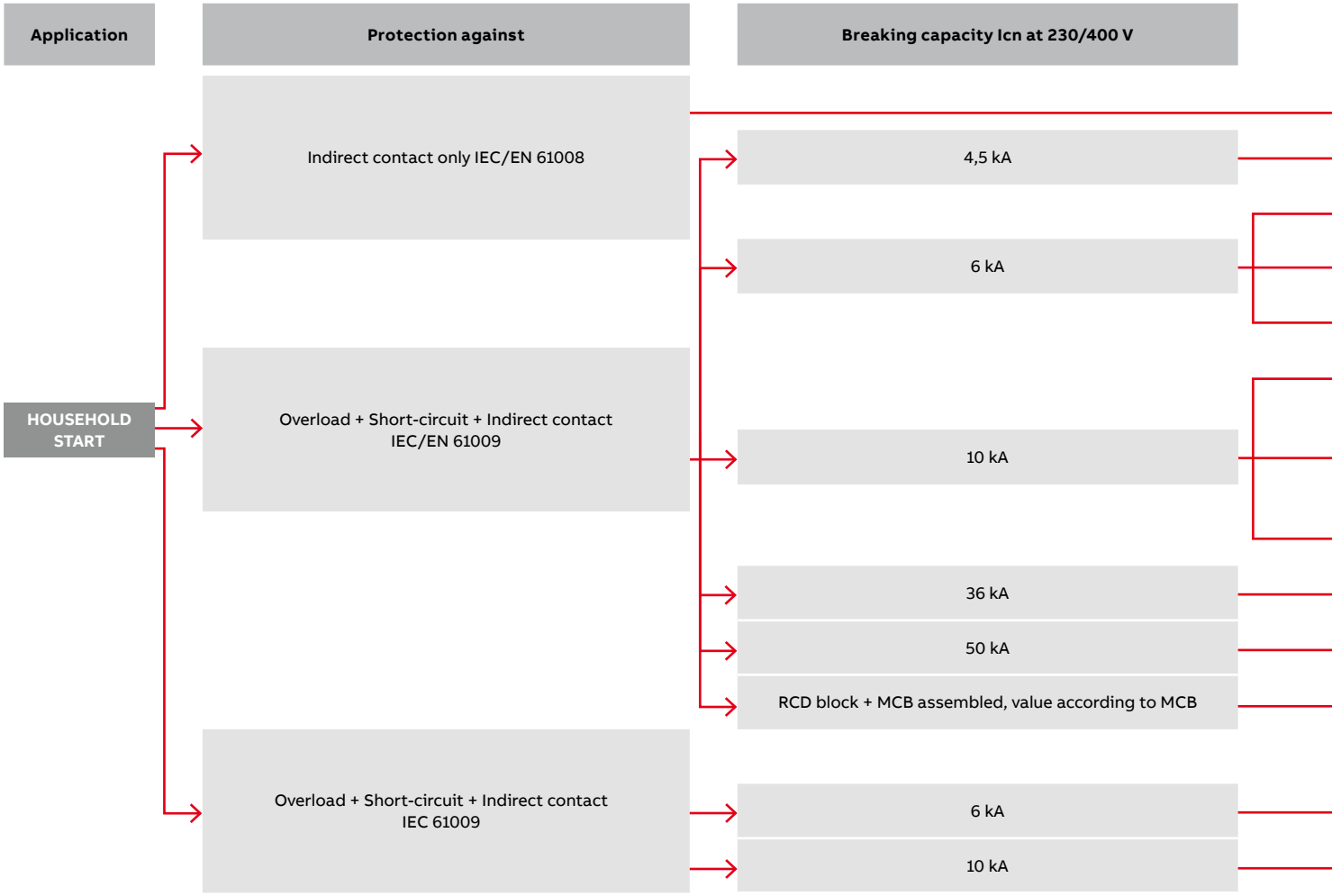
DS800S, DS800N	2/124

Residual current relays

RD2	2/130
RD3	2/131
ELR front panel residual current relays	2/132
TR toroidal transformers	2/134

System pro M compact®
Quick selection of RCDs for household and industrial applications

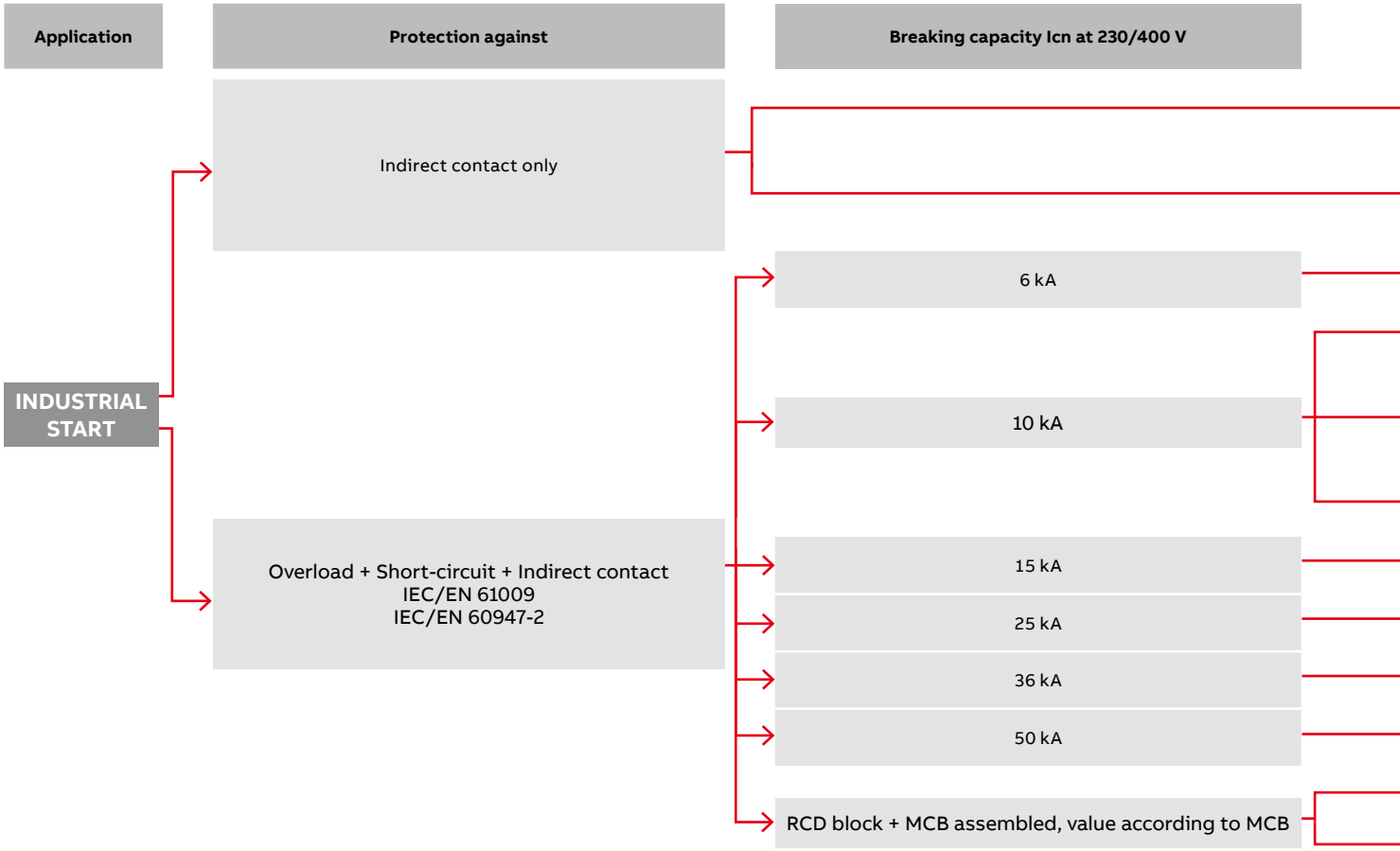
Easy! Find the right range and the corresponding catalogue page at a glance using this selection chart.



Rated current	Remark	Poles	Solution	Page
Up to 125 A		All poles	F200	2/10
Up to 32 A		1P+N	DS201 L	2/46
Up to 32 A	Reduced size	2P	DS202C	2/66
Up to 40 A	Reduced size	1P+N	DS201	2/49
Up to 63 A	Standard size	All poles	DS 200	2/92
Up to 32 A	Reduced size	2P	DS202C M	2/68
Up to 40 A	Reduced size	1P+N	DS201 M	2/56
Up to 63 A	Standard size	All poles	DS 200 M	2/97
Up to 125 A		All poles	DS800N	2/125
Up to 125 A		All poles	DS800S	2/124
Up to 63 A	RCD: IEC/EN 61009 Ann. G	All poles	DDA 200 + S200	2/32 + 1/12
Up to 50 A	Voltage dependent	1P+N	DSE201	2/106
Up to 50 A	Voltage dependent	1P+N	DSE201 M	2/112

System pro M compact®
Quick selection of RCDs for household and industrial applications

Easy! Find the right range and the corresponding catalogue page at a glance using this selection chart.



Rated current	Remark	Poles	Solution	Page
Up to 125 A	IEC/EN 61008	All poles	F200	2/10
According to MCB	IEC/EN 62020	All poles	RD2	2/130
	IEC/EN 60947-2 Ann. M	All poles	RD3	2/131
Up to 32 A		1P+N	DS201 L	2/46
Up to 32 A		2P	DS202C, DS202C M	2/66, 2/68
Up to 40 A		1P+N	DS201, DS201 M	2/49, 2/56
Up to 63 A		All poles	DS 200	2/92
Up to 63 A		All poles	DS 200 M	2/97
Up to 100 A		All poles	DDA800 + S800C	2/118 + 1/164
Up to 125 A		All poles	DS800N	2/125
Up to 125 A		All poles	DS800S	2/124
Up to 63 A	RCD: IEC/EN 61009 Ann. G	All poles	DDA 200 + S200	2/32 + 1/12
Up to 100 A	RCD: IEC/EN 60947-2 Ann. B	All poles	DDA 800 + S800	2/118 + 1/132

RCCB F 200.
The details make the difference
A range designed to ensure efficiency and protection

Bi-directional cylindrical terminal ensure higher safety of connecting operations, making them easier.

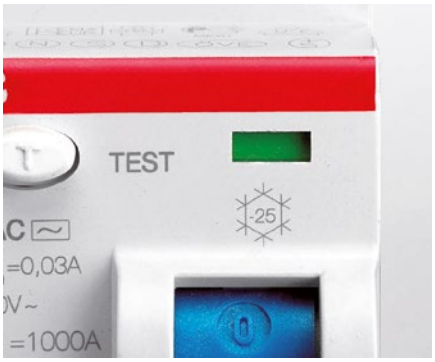
Test pushbutton to verify the correct functioning of the device.

Contact position indicator (CPI): to always know the status of the contacts (red: closed contacts; green: open contacts) independently on the toggle position

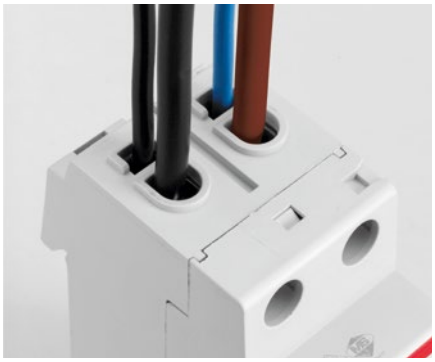
Information on the device are laser printed to make them clearly visible and long lasting.

Laser-marked order code on the front to make easier future orders.

Two terminals are available, the fore one for cables up to 25 mm^2, the back one for cables up to 10 mm^2 or for busbars.

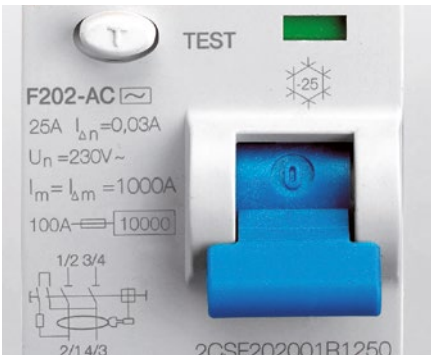


RCCBs F200 can be used in ambient conditions where the temperature of the surrounding atmosphere has values between -25 °C (snowflake laser printed on the front of the device) and +55°C.



The availability of two terminals offers different connection solutions thanks to the possibility to connect two indipendent cables in the same device: the second terminal can be used for an auxiliary circuit or for the supply of devices with small section cables without connecting them together with the main circuit.

All the safety ensured by the international marks: approvals' marking in a visible area, even if RCDs is installed and with the panel-door closed.



High performances:

- rated breaking capacity and rated residual breaking capacity laser printed on the device: Im=IΔm= 1000 A
- coordination with a 100 A rated current SCPD (short-circuit protective device) = 10 000 A.

The F 202 can be coupled with the autoreclosing unit F2C-ARH in order to ensure continuity of service for the whole installation of your home avo ding lack of supply.

RCCBs

F200 technical features

	Standards		
Electrical features	Type (wave form of the earth leakage sensed)		
	Poles		
	Rated current In		A
	Rated sensitivity IΔn		A
	Rated voltage Ue	IEC	V
		UL/CSA	V
	Insulation voltage Ui		V
	Operating voltage of circuit test Ut	IEC	V
		UL/CSA	V
	Rated frequency		Hz
	Rated conditional short-circuit current Inc=IΔ③	SCPD - fuse gG 100 A	kA
	Rated residual breaking capacity IΔm=Im		kA
	Rated impulse withstand voltage (1.2/50) Uimp		kV
	Dielectric test voltage at ind. freq. for 1 min.		kV
	Overvoltage category		
	Surge current resistance (wave 8/20)		A
Mechanical features	Toggle		
	Contact position indicator (CPI)		
	Electrical life		
	Mechanical life		
	Protection degree	housing	
		terminals	
	Environmental conditions (damp heat) acc. to	IEC/EN 60068-2-30	°C/RH
	Ambient temperature (with daily average ≤ +35 °C)	IEC	°C
	Storage temperature		°C
Installation	Terminal type		
	Terminal size top/bottom for cable	IEC	mm²
		UL/CSA	AWG
	Terminal size top/bottom for busbar	IEC	mm²
		UL/CSA	AWG
	Tightening torque	IEC	Nm
		UL/CSA	in-lbs.
	Tool		
	Mounting		
	Mounting position		
	Connection		
	Withdrawal from busbar		
Dimensions and weight	Dimensions (H x D x W)	2P	mm
		4P	mm
	Weight	2P	g
		4P	g
Combination with auxiliary elements	Combinable with:	auxiliary contact	
		signal contact/auxiliary switch	
		shunt trip	
		undervoltage release	

① Ground-fault sensing and relaying equipment-component (up to 63 A)
② prior to connection of aluminium conductors (≥ 4 mm²) ensure that their contact points are cleaned, brushed and coated with grease
③ for S700-E/K 100A, S750-E 63A, S750DR-E/K 63A and other SCPD coordination values see Chapter 3 of Solutions for electrical distribution in buildings - technical details
④ F200 left neutral has not the UL certification and the UL mark
⑤ Only for versions with marking according to EN 61008-1; EN 61008-2-1
⑥ Neutral conductor can be wired anywhere for 2P devices

F200 AC	F200 A	F200 A AP-R	F200 A S	F200 A 110V	F200 A 400 Hz	F200 A 16 2/3 Hz
IEC/EN 61008-1; IEC/EN 61008-2-1, UL 1053 ①				IEC 61008-1; IEC 61008-2-1; UL 1053	IEC/EN 61008-1; IEC/EN 61008-2-1	IEC/EN 61008-1; IEC/EN 61008-2-1
AC	A	A	A	A	A	A
2P ⑥, 4P (for 125 A only 4P)				2P, 4P	4P	2P, 4P
16, 25, 40, 63, 80, 100, 125		25, 40, 63, 80, 100, 125	40, 63, 80, 100, 125	25, 40, 63, 80, 100	25, 40	63
0.01-0.03-0.1-0.3-0.5		0.03	0.1-0.3-0.5-1	0.03	0.03	0.03-0.3-0.5
230/400 - 240/415						
480Y/277 (up to 100 A)				-	-	
500						
In ≤ 100; Right neutral: 110 (170 for 30mA) - 254 ⑤; Left neutral: 195 (250 for 30 mA) - 440 ⑤ In = 125 A; Right neutral: 185 (150 for 30 mA) - 440 (250 for 30 mA) ⑤; Left neutral: 195 (250 for 30 mA) - 440				110-254	170-254	110 (170 for 30 mA) - 254
In ≤ 100; Right neutral: 110 (170 for 30mA) - 277 ⑤; Left neutral: 195 (250 for 30 mA) - 480 ⑤ ④					-	
50…60					50...400	16 2/3
10 (for 125 A fuse is gG 125 A)						
1 (1.25 for 125 A)						
4						
2.5						
III, disconnector abilities						
NA		3000	5000	NA	NA	NA
blue sealable in ON-OFF position						
yes						
10000 (2000 for 125 A)				10000	10000	10000
20000 (5000 for 125 A)				20000	20000	20000
IP4X						
IP2X						
28 cycles with 55°C/90-96% and 25°C/95-100%						
-25…+55 (-25...+40 for 125 A)				-25...+55	-25...+55	-25...+55
-40…+70						
failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected) (cage for In > 63 A) ②						
25/25 (35/35 single slot terminal for In > 63 A)					25/25	25/25
18-4 (up to 63 A)				-	-	
10/10 (not for In = 80-100 A)					10/10	10/10
18-8 (up to 63 A)				-	-	
2.8 (3 for In = 125 A)				2.8	2.8	2.8
25 (up to 63 A)				-	-	
Nr. 2 Pozidriv						
on DIN rail EN 60715 (35 mm) by means of fast clip device						
Any						
from top and bottom						
it is possible without using any tools only from the bottom (not for 125 A)						
85 x 69 x 35					-	
85 x 69 x 70 (85 x 69.5 x 72 for 125 A)					85 x 69 x 70	85 x 69 x 70
200					-	
350 (380 for In = 80 and 100 A and 460 for In = 125A)					350	350
yes (no for 125 A)					yes	yes
yes					yes	yes
yes (no for 125 A)					yes	yes
yes (no for 125 A)					yes	yes

RCCBs

F 200 series AC ∿ type

F202

F 200 AC type
Function: protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61008-1; IEC/EN 61008-2-1
Marking: according to EN 61008-1; EN 61008-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	10	16	779902	F202 AC-16/0.01	2CSF202001R0160		0.225	1/6
		25	738022	F202 AC-25/0.01	2CSF202001R0250		0.225	1/6
	30	25	780007	F202 AC-25/0.03	2CSF202001R1250		0.225	1/6
		40	780106	F202 AC-40/0.03	2CSF202001R1400		0.225	1/6
		63	780205	F202 AC-63/0.03	2CSF202001R1630		0.225	1/6
		80	914204	F202 AC-80/0.03	2CSF202001R1800		0.225	1/6
		100	914303	F202 AC-100/0.03	2CSF202001R1900		0.225	1/6
	100	25	780304	F202 AC-25/0.1	2CSF202001R2250		0.225	1/6
		40	780403	F202 AC-40/0.1	2CSF202001R2400		0.225	1/6
		63	780502	F202 AC-63/0.1	2CSF202001R2630		0.225	1/6
		80	914402	F202 AC-80/0.1	2CSF202001R2800		0.225	1/6
		100	914501	F202 AC-100/0.1	2CSF202001R2900		0.225	1/6
	300	25	780601	F202 AC-25/0.3	2CSF202001R3250		0.225	1/6
		40	780700	F202 AC-40/0.3	2CSF202001R3400		0.225	1/6
		63	780809	F202 AC-63/0.3	2CSF202001R3630		0.225	1/6
		80	914600	F202 AC-80/0.3	2CSF202001R3800		0.225	1/6
		100	914709	F202 AC-100/0.3	2CSF202001R3900		0.225	1/6
	500	25	780908	F202 AC-25/0.5	2CSF202001R4250		0.225	1/6
		40	781004	F202 AC-40/0.5	2CSF202001R4400		0.225	1/6
		63	781103	F202 AC-63/0.5	2CSF202001R4630		0.225	1/6
		80	914808	F202 AC-80/0.5	2CSF202001R4800		0.225	1/6
		100	914907	F202 AC-100/0.5	2CSF202001R4900		0.225	1/6

F204

F204 125 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	781202	F204 AC-25/0.03	2CSF204001R1250		0.375	1/3
		40	781301	F204 AC-40/0.03	2CSF204001R1400		0.375	1/3
		63	781400	F204 AC-63/0.03	2CSF204001R1630		0.375	1/3
		80	916604	F204 AC-80/0.03	2CSF204001R1800		0.405	1/3
		100	916703	F204 AC-100/0.03	2CSF204001R1900		0.405	1/3
		125	941507	F204 AC-125/0.03	2CSF204001R1950		0.500	1
	100	25	781509	F204 AC-25/0.1	2CSF204001R2250		0.375	1/3
		40	781608	F204 AC-40/0.1	2CSF204001R2400		0.375	1/3
		63	781707	F204 AC-63/0.1	2CSF204001R2630		0.375	1/3
		80	916802	F204 AC-80/0.1	2CSF204001R2800		0.405	1/3
		100	916901	F204 AC-100/0.1	2CSF204001R2900		0.405	1/3
		125	941606	F204 AC-125/0.1	2CSF204001R2950		0.500	1
	300	25	781806	F204 AC-25/0.3	2CSF204001R3250		0.375	1/3
		40	781905	F204 AC-40/0.3	2CSF204001R3400		0.375	1/3
		63	782001	F204 AC-63/0.3	2CSF204001R3630		0.375	1/3
		80	917007	F204 AC-80/0.3	2CSF204001R3800		0.405	1/3
		100	917106	F204 AC-100/0.3	2CSF204001R3900		0.405	1/3
		125	941705	F204 AC-125/0.3	2CSF204001R3950		0.500	1
	500	25	782100	F204 AC-25/0.5	2CSF204001R4250		0.375	1/3
		40	782209	F204 AC-40/0.5	2CSF204001R4400		0.375	1/3
		63	782308	F204 AC-63/0.5	2CSF204001R4630		0.375	1/3
		80	917205	F204 AC-80/0.5	2CSF204001R4800		0.405	1/3
		100	917304	F204 AC-100/0.5	2CSF204001R4900		0.405	1/3
		125	941804	F204 AC-125/0.5	2CSF204001R4950		0.500	1

RCCBs

F 200 series AC type, for overseas markets

F202

F 200 AC type (for overseas markets)
Function: protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC 61008-1; IEC 61008-2-1
Marking: according to IEC 61008-1; IEC 61008-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	10	16	814603	F202 AC-16/0.01	2CSF202005R0160		0.225	1/6
	30	25	814702	F202 AC-25/0.03	2CSF202005R1250		0.225	1/6
		40	814801	F202 AC-40/0.03	2CSF202005R1400		0.225	1/6
		63	814900	F202 AC-63/0.03	2CSF202005R1630		0.225	1/6
		80	935902	F202 AC-80/0.03	2CSF202005R1800		0.225	1/6
		100	936008	F202 AC-100/0.03	2CSF202005R1900		0.225	1/6
	100	25	815006	F202 AC-25/0.1	2CSF202005R2250		0.225	1/6
		40	815105	F202 AC-40/0.1	2CSF202005R2400		0.225	1/6
		63	815204	F202 AC-63/0.1	2CSF202005R2630		0.225	1/6
		80	936107	F202 AC-80/0.1	2CSF202005R2800		0.225	1/6
		100	936206	F202 AC-100/0.1	2CSF202005R2900		0.225	1/6
	300	25	815303	F202 AC-25/0.3	2CSF202005R3250		0.225	1/6
		40	815402	F202 AC-40/0.3	2CSF202005R3400		0.225	1/6
		63	815501	F202 AC-63/0.3	2CSF202005R3630		0.225	1/6
		80	936305	F202 AC-80/0.3	2CSF202005R3800		0.225	1/6
		100	936404	F202 AC-100/0.3	2CSF202005R3900		0.225	1/6
	500	25	883302	F202 AC-25/0.5	2CSF202005R4250		0.225	1/6
		40	883401	F202 AC-40/0.5	2CSF202005R4400		0.225	1/6
		63	883500	F202 AC-63/0.5	2CSF202005R4630		0.225	1/6
		80	936503	F202 AC-80/0.5	2CSF202005R4800		0.225	1/6
		100	936602	F202 AC-100/0.5	2CSF202005R4900		0.225	1/6

F204

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	817109	F204 AC-25/0.03	2CSF204005R1250		0.375	1/3
		40	817208	F204 AC-40/0.03	2CSF204005R1400		0.375	1/3
		63	817307	F204 AC-63/0.03	2CSF204005R1630		0.375	1/3
		80	936701	F204 AC-80/0.03	2CSF204005R1800		0.405	1/3
		100	936800	F204 AC-100/0.03	2CSF204005R1900		0.405	1/3
	100	25	817406	F204 AC-25/0.1	2CSF204005R2250		0.375	1/3
		40	817505	F204 AC-40/0.1	2CSF204005R2400		0.375	1/3
		63	817604	F204 AC-63/0.1	2CSF204005R2630		0.375	1/3
		80	936909	F204 AC-80/0.1	2CSF204005R2800		0.405	1/3
		100	937005	F204 AC-100/0.1	2CSF204005R2900		0.405	1/3
	300	25	817703	F204 AC-25/0.3	2CSF204005R3250		0.375	1/3
		40	817802	F204 AC-40/0.3	2CSF204005R3400		0.375	1/3
		63	817901	F204 AC-63/0.3	2CSF204005R3630		0.375	1/3
		80	937104	F204 AC-80/0.3	2CSF204005R3800		0.405	1/3
		100	937203	F204 AC-100/0.3	2CSF204005R3900		0.405	1/3
	500	25	883609	F204 AC-25/0.5	2CSF204005R4250		0.375	1/3
		40	883609	F204 AC-40/0.5	2CSF204005R4400		0.375	1/3
		63	883807	F204 AC-63/0.5	2CSF204005R4630		0.375	1/3
		80	937302	F204 AC-80/0.5	2CSF204005R4800		0.405	1/3
		100	937401	F204 AC-100/0.5	2CSF204005R4900		0.405	1/3

RCCBs

F 200 series AC ∿ type left neutral

F204 left neutral

F204 left neutral 125 A

F 200 AC type with neutral pole on the left
Function: protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with In=30 mA). Product helpful where for installation habits, for wiring with busbars or cables, for special needs neutral on the left is needed.

Application: residential, commercial, industrial.
Standard: IEC/EN 61008-1; IEC/EN 61008-2-1
Marking: according to EN 61008-1; EN 61008-2-1

Number of poles	Rated residual current In mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	815907	F204 AC-25/0.03	2CSF204023R1250		0.375	1/3
		40	816003	F204 AC-40/0.03	2CSF204023R1400		0.375	1/3
		63	816102	F204 AC-63/0.03	2CSF204023R1630		0.375	1/3
		80	917403	F204 AC-80/0.03	2CSF204023R1800		0.405	1/3
		100	917502	F204 AC-100/0.03	2CSF204023R1900		0.405	1/3
		125	975106	F204 AC-125/0.03	2CSF204023R1950		0.500	1
	100	25	816201	F204 AC-25/0.1	2CSF204023R2250		0.375	1/3
		40	816300	F204 AC-40/0.1	2CSF204023R2400		0.375	1/3
		63	816409	F204 AC-63/0.1	2CSF204023R2630		0.375	1/3
	300	25	816508	F204 AC-25/0.3	2CSF204023R3250		0.375	1/3
		40	816607	F204 AC-40/0.3	2CSF204023R3400		0.375	1/3
		63	816706	F204 AC-63/0.3	2CSF204023R3630		0.375	1/3
		80	917601	F204 AC-80/0.3	2CSF204023R3800		0.405	1/3
		100	917700	F204 AC-100/0.3	2CSF204023R3900		0.405	1/3
		125	975304	F204 AC-125/0.3	2CSF204023R3950		0.500	1
	500	25	816805	F204 AC-25/0.5	2CSF204023R4250		0.375	1/3
		40	816904	F204 AC-40/0.5	2CSF204023R4400		0.375	1/3
		63	817000	F204 AC-63/0.5	2CSF204023R4630		0.375	1/3

RCCBs

F 200 series A type

F202

F 200 A type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61008-1; IEC/EN 61008-2-1
Marking: according to EN 61008-1; EN 61008-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	10	16	782407	F202 A-16/0.01	2CSF202101R0160		0.225	1/6
	30	25	782506	F202 A-25/0.03	2CSF202101R1250		0.225	1/6
		40	782605	F202 A-40/0.03	2CSF202101R1400		0.225	1/6
		63	782704	F202 A-63/0.03	2CSF202101R1630		0.225	1/6
		80	915201	F202 A-80/0.03	2CSF202101R1800		0.225	1/6
		100	915300	F202 A-100/0.03	2CSF202101R1900		0.225	1/6
	100	25	786900	F202 A-25/0.1	2CSF202101R2250		0.225	1/6
		40	787006	F202 A-40/0.1	2CSF202101R2400		0.225	1/6
		63	787105	F202 A-63/0.1	2CSF202101R2630		0.225	1/6
		80	915409	F202 A-80/0.1	2CSF202101R2800		0.225	1/6
		100	915508	F202 A-100/0.1	2CSF202101R2900		0.225	1/6
	300	25	782803	F202 A-25/0.3	2CSF202101R3250		0.225	1/6
		40	782902	F202 A-40/0.3	2CSF202101R3400		0.225	1/6
		63	783008	F202 A-63/0.3	2CSF202101R3630		0.225	1/6
		80	915607	F202 A-80/0.3	2CSF202101R3800		0.225	1/6
		100	915706	F202 A-100/0.3	2CSF202101R3900		0.225	1/6
	500	25	783107	F202 A-25/0.5	2CSF202101R4250		0.225	1/6
		40	783206	F202 A-40/0.5	2CSF202101R4400		0.225	1/6
		63	783305	F202 A-63/0.5	2CSF202101R4630		0.225	1/6
		80	915805	F202 A-80/0.5	2CSF202101R4800		0.225	1/6
		100	915904	F202 A-100/0.5	2CSF202101R4900		0.225	1/6

RCCBs

F 200 series A type

F204

F204 125 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	783404	F204 A-25/0.03	2CSF204101R1250		0.375	1/3
		40	783503	F204 A-40/0.03	2CSF204101R1400		0.375	1/3
		63	783602	F204 A-63/0.03	2CSF204101R1630		0.375	1/3
		80	917809	F204 A-80/0.03	2CSF204101R1800		0.405	1/3
		100	917908	F204 A-100/0.03	2CSF204101R1900		0.405	1/3
		125	941903	F204 A-125/0.03	2CSF204101R1950		0.500	1
	100	25	787204	F204 A-25/0.1	2CSF204101R2250		0.375	1/3
		40	787303	F204 A-40/0.1	2CSF204101R2400		0.375	1/3
		63	787402	F204 A-63/0.1	2CSF204101R2630		0.375	1/3
		80	918004	F204 A-80/0.1	2CSF204101R2800		0.405	1/3
		100	918103	F204 A-100/0.1	2CSF204101R2900		0.405	1/3
		125	942009	F204 A-125/0.1	2CSF204101R2950		0.500	1
	300	25	783701	F204 A-25/0.3	2CSF204101R3250		0.375	1/3
		40	783800	F204 A-40/0.3	2CSF204101R3400		0.375	1/3
		63	783909	F204 A-63/0.3	2CSF204101R3630		0.375	1/3
		80	918202	F204 A-80/0.3	2CSF204101R3800		0.405	1/3
		100	918301	F204 A-100/0.3	2CSF204101R3900		0.405	1/3
		125	942108	F204 A-125/0.3	2CSF204101R3950		0.500	1
	500	25	784005	F204 A-25/0.5	2CSF204101R4250		0.375	1/3
		40	784104	F204 A-40/0.5	2CSF204101R4400		0.375	1/3
		63	784203	F204 A-63/0.5	2CSF204101R4630		0.375	1/3
		80	918400	F204 A-80/0.5	2CSF204101R4800		0.405	1/3
		100	918509	F204 A-100/0.5	2CSF204101R4900		0.405	1/3
		125	942207	F204 A-125/0.5	2CSF204101R4950		0.500	1

RCCBs

F 200 series A type left neutral

F204 left neutral

F204 left neutral 125 A

F 200 A type with neutral pole on the left
Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA). Product helpful where for installation habits, for wiring with bus-bars or cables, for special needs neutral on the left is needed.

Application: residential, commercial, industrial.
Standard: IEC/EN 61008-1; IEC/EN 61008-2-1
Marking: according to EN 61008-1; EN 61008-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	820109	F204 A-25/0.03	2CSF204123R1250		0.375	1/3
		40	820208	F204 A-40/0.03	2CSF204123R1400		0.375	1/3
		63	820307	F204 A-63/0.03	2CSF204123R1630		0.375	1/3
		80	918608	F204 A-80/0.03	2CSF204123R1800		0.405	1/3
		100	918707	F204 A-100/0.03	2CSF204123R1900		0.405	1/3
		125	967705	F204 A-125/0.03	2CSF204123R1950		0.500	1
	100	25	820406	F204 A-25/0.1	2CSF204123R2250		0.375	1/3
		40	820505	F204 A-40/0.1	2CSF204123R2400		0.375	1/3
		63	820604	F204 A-63/0.1	2CSF204123R2630		0.375	1/3
	300	25	820703	F204 A-25/0.3	2CSF204123R3250		0.375	1/3
		40	820802	F204 A-40/0.3	2CSF204123R3400		0.375	1/3
		63	820901	F204 A-63/0.3	2CSF204123R3630		0.375	1/3
		80	918806	F204 A-80/0.3	2CSF204123R3800		0.405	1/3
		100	918905	F204 A-100/0.3	2CSF204123R3900		0.405	1/3
		125	967804	F204 A-125/0.3	2CSF204123R3950		0.500	1
	500	25	821007	F204 A-25/0.5	2CSF204123R4250		0.375	1/3
		40	821106	F204 A-40/0.5	2CSF204123R4400		0.375	1/3
		63	821205	F204 A-63/0.5	2CSF204123R4630		0.375	1/3

RCCBs

F 200 series A type, AP-R (high immunity)

F202

F204

F204 125 A

F 200 AP-R, A type
Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61008-1; IEC/EN 61008-2-1
Surge current resistance (wave 8/20)=3000 A
Marking: according to EN 61008-1; EN 61008-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	25	785101	F202 A-25/0.03 AP-R	2CSF202401R1250		0.225	1/6
		40	785200	F202 A-40/0.03 AP-R	2CSF202401R1400		0.225	1/6
		63	785309	F202 A-63/0.03 AP-R	2CSF202401R1630		0.225	1/6
		80	916406	F202 A-80/0.03 AP-R	2CSF202401R1800		0.225	1/6
		100	916505	F202 A-100/0.03 AP-R	2CSF202401R1900		0.225	1/6

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	785408	F204 A-25/0.03 AP-R	2CSF204401R1250		0.375	1/3
		40	785507	F204 A-40/0.03 AP-R	2CSF204401R1400		0.375	1/3
		63	785606	F204 A-63/0.03 AP-R	2CSF204401R1630		0.375	1/3
		80	919407	F204 A-80/0.03 AP-R	2CSF204401R1800		0.405	1/3
		100	919506	F204 A-100/0.03 AP-R	2CSF204401R1900		0.405	1/3
		125	967903	F204 A-125/0.03 AP-R	2CSF204401R1950		0.500	1

RCCBs

F 200 series A type, selective

F202

F204

F204 125 A

F 200 A selective type
Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents with an intentional tripping delay, which permits to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide); protection against indirect contacts.

Application: commercial, industrial.
Standard: IEC/EN 61008-1; IEC/EN 61008-2-1
Surge current resistance (wave 8/20)=5000 A
Marking: according to EN 61008-1; EN 61008-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	100	40	822905	F202 A S-40/0.1	2CSF202201R2400		0.225	1/6
		63	823001	F202 A S-63/0.1	2CSF202201R2630		0.225	1/6
		100	916000	F202 A S-100/0.1	2CSF202201R2900		0.225	1/6
	300	40	784302	F202 A S-40/0.3	2CSF202201R3400		0.225	1/6
		63	784401	F202 A S-63/0.3	2CSF202201R3630		0.225	1/6
		100	916109	F202 A S-100/0.3	2CSF202201R3900		0.225	1/6
	500	40	784500	F202 A S-40/0.5	2CSF202201R4400		0.225	1/6
		63	784609	F202 A S-63/0.5	2CSF202201R4630		0.225	1/6
		100	916208	F202 A S-100/0.5	2CSF202201R4900		0.225	1/6
	1000	40	823100	F202 A S-40/1	2CSF202201R5400		0.225	1/6
		63	823209	F202 A S-63/1	2CSF202201R5630		0.225	1/6
		100	916307	F202 A S-100/1	2CSF202201R5900		0.225	1/6

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	100	40	823308	F204 A S-40/0.1	2CSF204201R2400		0.375	1/3
		63	823407	F204 A S-63/0.1	2CSF204201R2630		0.375	1/3
		100	919001	F204 A S-100/0.1	2CSF204201R2900		0.405	1/3
	300	40	784708	F204 A S-40/0.3	2CSF204201R3400		0.375	1/3
		63	784807	F204 A S-63/0.3	2CSF204201R3630		0.375	1/3
		100	919100	F204 A S-100/0.3	2CSF204201R3900		0.405	1/3
		125	968207	F204 A S-125/0.3	2CSF204201R3950		0.500	1
	500	40	784906	F204 A S-40/0.5	2CSF204201R4400		0.375	1/3
		63	785002	F204 A S-63/0.5	2CSF204201R4630		0.375	1/3
		100	919209	F204 A S-100/0.5	2CSF204201R4900		0.405	1/3
		125	968405	F204 A S-125/0.5	2CSF204201R4950		0.500	1
	1000	40	823506	F204 A S-40/1	2CSF204201R5400		0.375	1/3
		63	823605	F204 A S-63/1	2CSF204201R5630		0.375	1/3
		100	919308	F204 A S-100/1	2CSF204201R5900		0.405	1/3

RCCBs

F 200 110V series A type

F202 110V

F204 110V

F 200 110V A type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA). This particular series of devices has the minimum operating voltage of test button of 110V and it is suitable for 230 V applications. This range is UL approved.

Application: residential, commercial, industrial.
Standard: IEC 61008-1; IEC 61008-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	25	343332	F202 A-25/0.03 110V	2CSF202199R1250		0.225	1/6
		40	343233	F202 A-40/0.03 110V	2CSF202199R1400		0.225	1/6
		63	343134	F202 A-63/0.03 110V	2CSF202199R1630		0.225	1/6
		80	343035	F202 A-80/0.03 110V	2CSF202199R1800		0.225	1/6
		100	342939	F202 A-100/0.03 110V	2CSF202199R1100		0.225	1/6

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	776734	F204 A-25/0.03 110V	2CSF204199R1250		0.375	1/3
		40	342830	F204 A-40/0.03 110V	2CSF204199R1400		0.375	1/3
		63	342731	F204 A-63/0.03 110V	2CSF204199R1630		0.375	1/3
		80	358435	F204 A-80/0.03 110V	2CSF204199R1800		0.405	1/3
		100	079132	F204 A-100/0.03 110V	2CSF204199R1100		0.405	1/3

RCCBs

F 200 series A type for high frequency and railways applications

F202

F204

F 200 A type for high frequency (400 Hz)
Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct (with IΔn=30 mA) contacts.
Advantages: increasing the frequency generates an increase of the magnetic reluctance of the toroidal transformer of standard RCCB and what follows is the value of the increasing operating residual current at 400 Hz reaching values 3 or more times higher than those of the residual current at 50 Hz. The RCCB F 200 400 Hz guarantees protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA) considering that the operating residual current doesn't increase with the increase of the network frequency.

Application: commercial, industrial.
Standard: IEC/EN 61008-1; IEC/EN 61008-2-1
Marking: according to EN 61008-1; EN 61008-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	968603	F204 A-25/0.03 400Hz	2CSF204197R1250		0.375	1/3
		40	968702	F204 A-40/0.03 400Hz	2CSF204197R1400		0.375	1/3

F200 A type 16 2/3 Hz
Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA).
The RCCB F200 16 2/3 Hz can work at rated frequency of 16 2/3 Hz which is common in railways applications

Application: railways
Standard: IEC/EN 61008-1; IEC/EN 61008-2-1
Marking: according to EN 61008-1; EN 61008-2-1

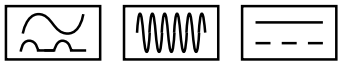
Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	63	734536	F202 A-63/0.03 16-2/3Hz	2CSF202196R1630		0.225	1/6
	300	63	733638	F202 A-63/0.3 16-2/3Hz	2CSF202196R3630		0.225	1/6
	500	63	734437	F202 A-63/0.5 16-2/3Hz	2CSF202196R4630		0.225	1/6

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	63	733539	F204 A-63/0.03 16-2/3Hz	2CSF204196R1630		0.375	1/3
	300	63	734338	F204 A-63/0.3 16-2/3Hz	2CSF204196R3630		0.375	1/3
	500	63	733430	F204 A-63/0.5 16-2/3Hz	2CSF204196R4630		0.375	1/3

F 200 series - B

Details that make the difference

Type B residual current devices are marked according to EN 62423. The marking reminds the different current types that Type B residual current devices are sensitive to



Easy to connect and compatible with busbars thanks to the System pro M compact clamps

Sole two-pole device in only two modules on the market

VDE approved

Green LED to monitor operation of the residual current circuit breaker

Indication of the position of the contacts

Cutting-edge features: safety, service continuity, compactness, integration. These are the characteristics of the F200 B RCCBs (residual current circuit breakers), the state-of-the-art technology by ABB which has been providing the best solutions for residential, commercial and industrial installations for over 120 years.
The F200 B Type is the ultimate novelty of the System pro M compact offering. The most compact device in the market. Type B RCCBs can be adapted perfectly to all types of installation requirements and application fields.
The F200 B Type can be perfectly integrated with all devices produced by ABB in terms of connection, selectivity data and coordination.

Compatible with all System pro M compact accessories of F200 series. Higher operational continuity thanks to auto-reclosing units and motor operating devices.
Operating temperature from -25 to +60 °C with high immunity for extremely harsh weather conditions.
F200 B can be installed either in two-phase and three-phase networks.
A lot of space saving thanks to the two poles device in just two modules.
Coordination and back-up with all ABB devices.

RCCBs

F 200 series - B technical features

				F200 B Type		F200 B Type high ratings
				F202 B 16-63 A	**F204 B 25-63 A**	**F204 B 80-125 A**
	Standards			IEC/EN 61008-1 EN 62423		
Electrical features	Type (wave form of the earth leakage sensed)			B		
	Poles			2P	4P	4P
	Rated current I_n		A	16, 25, 40, 63		80, 125
	Rated sensitivity $I_{\Delta n}$		A	0,03 - 0,3	0,03 - 0,3 - 0,5	0,03 - 0,3 - 0,5
	Rated voltage U_e	IEC	V AC	230	230/400	
	Insulation voltage U_i		V	500		
	Operating voltage of circuit test Ut	IEC	V	110 - 253 V AC 170 - 253 V AC (30 mA)	185 - 440 V AC 300 - 440 V AC (30 mA)	
	Min. operating voltage for detecting Type A/AC residual currents		V AC	0		
	Min. operating voltage for detecting Type B residual currents		V AC	50	50	50
	Rated frequency		Hz	50/60		50
	Frequency range of residual current		kHz	B: 2		B: 100
	Rated conditional short-circuit current Inc=I_Δ [3]	SCPD - fuse gG 100 A	kA	10 (for 125 A fuse is gG 125 A)		
	Rated residual breaking capacity $I_{\Delta m}$=Im		kA	1		125 A: 1,25
	Rated impulse withstand voltage (1.2/50) Uimp		kV	4		
	Dielectric test voltage at ind. freq. for 1 min.		kV	2,5		
	Overvoltage category			III, disconnector abilities		
	Surge current resistance (wave 8/20)		A	3.000	3.000 - 5.000 (B S)	3.000 - 5.000 (B S)
	Maximum electronic consumption		W	1,2	3,5	7,2
Mechanical features	Toggle			Blue sealable in ON-OFF position		
	Contact position indicator (CPI)			yes		
	Electrical life			10.000		2.000
	Mechanical life			20.000		5.000
	Protection degree	housing		IP4X		
		terminals		IP2X		
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH	28 cycles with 55°C/90-96% and 25°C/95-100%		
	Ambient temperature (with daily average ≤ +35 °C)	IEC	°C	-25...+60		-25...+40
	Storage temperature		°C	40...+70		
Installation	Terminal Type			Failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected) (cage for In > 63 A) [2]		
	Min/Max Terminal size top/bottom for cable	IEC	Mm^2	1 - 25		
	Terminal size top/bottom for busbar	IEC	Mm^2	10/10		
	Tightening torque	IEC	Nm	2,8		3
	Tool			Flat tip PZ2		
	Mounting			Any position on DIN rail EN 60715 (35 mm) by means of fast clip device		
	Supply			Top/bottom		
	Withdrawal from busbar			It is possible without using any tools only from the bottom		no
Dimensions and weight	Dimensions (H x D x W)	2P	Mm	85 x 69 x 35	85 x 69 x 70	85 x 69,5 x 72
	Weight	2P	g	200	380	460
Combination with auxiliary elementsi	Combinable with:					
	auxiliary contact			yes		no
	signal contact/auxiliary switch			yes		
	motor operating device			yes		no
	shunt trip			yes		no
	undervoltage release			yes		no

[1] "Ground-Fault Sensing and Relaying Equipment" (F200 up to 100 A)
[2] Prior to connection of aluminium conductors (≥ 4 mm^2) ensure that their contact points are cleaned, brushed and coated with grease
[3] for S700-E/K 100A, S750-E 63A, S750DR-E/K 63A and other SCPD coordination values are available.

RCCBs

F 200 series - B type for continuous, selective continuous type fault currents technical features

F202 B

F204 B

F204 B 100, 125 A

F200 B Type from 16 to 63 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	16	961932	F202 B-16/0,03	2CSF202592R1160		0,220	1
		25	961734	F202 B-25/0,03	2CSF202592R1250		0,220	1
		40	960737	F202 B-40/0,03	2CSF202592R1400		0,220	1
		63	629634	F202 B-63/0,03	2CSF202592R1630		0,220	1
	300	16	372233	F202 B-16/0,3	2CSF202592R3160		0,220	1
		25	372738	F202 B-25/0,3	2CSF202592R3250		0,220	1
		40	372639	F202 B-40/0,3	2CSF202592R3400		0,220	1
		63	372530	F202 B-63/0,3	2CSF202592R3630		0,220	1
4	30	25	348139	F204 B-25/0,03	2CSF204592R1250		0,380	1
		40	358336	F204 B-40/0,03	2CSF204592R1400		0,380	1
		63	348030	F204 B-63/0,03	2CSF204592R1630		0,380	1
	300	25	347934	F204 B-25/0,3	2CSF204592R3250		0,380	1
		40	358138	F204 B-40/0,3	2CSF204592R3400		0,380	1
		63	347835	F204 B-63/0,3	2CSF204592R3630		0,380	1
	300 S	40	347736	F204 B S-40/0,3	2CSF204892R3400		0,380	1
		63	357933	F204 B S-63/0,3	2CSF204892R3630		0,380	1
	500	40	776932	F204 B-40/0,5	2CSF204592R4400		0,380	1
		63	347637	F204 B-63/0,5	2CSF204592R4630		0,380	1
	500 S	40	357834	F204 B S-40/0,5	2CSF204892R4400		0,380	1
		63	347538	F204 B S-63/0,5	2CSF204892R4630		0,380	1

F200 B Type high ratings

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	80	988601	F204B-80/0,03	2CSF204501R1800		0,500	1
		125	988700	F204B-125/0,03L[1]	2CSF204523R1950		0,500	1
	300	80	989103	F204B-80/0,3	2CSF204501R3800		0,500	1
		125	989202	F204B-125/0,3L[1]	2CSF204523R3950		0,500	1
	300 S	125	989509	F204BS-125/0,3L[1]	2CSF204823R3950		0,500	1
	500	125	730439	F204B-125/0,5L[1]	2CSF204523R4950		0,500	1
	500 S	125	731238	F204BS-125/0,5L[1]	2CSF204823R4950		0,500	1

[1] Left-sided neutral pole

RCCBs

F-ATI and F-ARI

F-ATI and F-ARI Test are RCCBs equipped with automatic test features. RCCBs are supposed to be checked every six months in order to make sure that the contacts are working properly and the device is able to trip in case of a leakage to earth. This swift operation affects the operational continuity of the circuits downstream and required a lot of man power. F-ATI and F-ARI test ranges push the periodic test to another level as this is run automatically and with no interruption at all of the service. Therefore, also the operations carried out by maintenance personnel are reduced to the very minimum.
In addition to the automatic test, F-ARI Range features a reclosing unit that tries to reclose the RCCB as it trips. The reclosing operations are based on an insulation check to make sure that no permanent fault is present. Moreover, the results coming from each and every circuit are collected at once thanks to ARBus interface.

- Saving: maintenance costs are cut down as the device runs automatically the test monthly in accordance with EN 61008 provisions.
- Uptime: while running the test, no disconnection of the supply occurs like in the traditional RCCB units.
- Time saving: a full array of maximum 99 devices can be commanded and read by remote by the means of the ARBus interface.
- Easy installation: the unit is factory fitted and it needs no coupling
- Quality: F-ATI Test range is approved by VDE while F-ARI Test is approved by IMQ CSV.
- Smart: complete monitoring over the application thanks to a fault check system and a programmable aux contact
- Reliability: Suitable for demanding environments up to 60 °C
- High immunity: RCCBs Type A APR offer the adequate solution according to the type of loads to be protected , the level of safety and the continuity of service. (inserire forme d’onda ammesse per APR)

RCCBs

F-ATI and F-ARI technical features

		F-ATI Test	F-ARI Test
Reference Standards	EN61008-1 , VDE V 0664-120 (annex M)	EN61008-1 , CPT054, EN50557	
Electrical features	Distribution system	TN, TT, IT	TN, TT
	Rated voltage Ue	230-400 V a.c. -15% ÷ 10%	
	Rated frequency	50 Hz	
	Rated current In	25, 40, 63 A	
	Rated sensitivity IΔn	30, 300 mA	
	Type	A AP-R	
	Poles	2P, 4P	
	Insulation voltage Ui	500 V d.c.	
	Minimum test voltage Utmin	195 V a.c.	
	Rated non-operating resistance between live parts and earth Rdo	8 kΩ (30 mA), 2,5 kΩ(300 mA)	
	Rated operating resistance between live parts and earth Rd	16 kΩ (30 mA), 5 kΩ (300 mA)	
	Rated conditional short-circuit Inc	10 kA (SCPD – gL fuse 63 A for In 25, 40 A; gL fuse 80 A for In 63 A)	
	Dielectric test voltage at ind. freq. for 1 min	2,5 kV	
	Rated impulse withstand voltage (1,2/50) Uimp	4 kV	
	Power loss	2P: 3.5, 6, 12 W; 4P: 2.2, 5.4, 6.2 W	
	Power consumption during operation	41 VA	
Other features	Test cycle time	< 7 s	
	Reclosing time	< 10 s (6 s check, 3 s reclosing)	
Mechanical features	Protection degree	IP20 (terminals), IP40 (housing)	
	Contact position indicator CPI	yes	
	Mechanical life	4000	
Installation	Tightening torque	2 Nm	
	Ambient temperature	-25…+60 °C	
	Storage temperature	-40…+70 °C	
Auxiliary contact	Type	NO-NC-NO+pulse (100 ms)	
	Operating features	5 ÷ 230 V a.c./d.c. Imax 100 mA	
	Terminals cross section	2,5 mm^2	
	Tightening torque	0,4 Nm	
Dimensions	DIN modules	5, 7	
	Weight	550, 900 g	

		ARBus
Electrical features	Rated voltage Ue	230 V a.c. -15% ÷ 10%
	Rated frequency	50 Hz
	Insulation voltage Ui	500 V d.c.
	Rated conditional short-circuit Inc	10 kA (SCPD – gL fuse 63 A for In 25, 40 A; gL fuse 80 A for In 63 A)
	Rated impulse withstand voltage (1,2/50) Uimp	4 kV
	Power consumption	1 W
Installation	Terminals	2,5 mm2
	Tightening torque	0,4 Nm
	Ambient temperature	-25…+60 °C
	Storage temperature	-40…+70 °C
Communication	Protocol	Modbus RS485
	Baud rate	38400
	Addresses	1…99
	Tightening torque	0,4 Nm
Dimensions and weight	DIN modules	1
	Weight	180 gr

RCCBs

F-ATI and F-ARI

F-ATI 2 Test

F-ARI 4 Test

F-ATI

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1P+N	30	25	288855	F-ATI2Test A-25/0.03	2CSF302130R1250		0.550	5
		40	288954	F-ATI2Test A-40/0.03	2CSF302130R1400		0.550	5
		63	289050	F-ATI2Test A-63/0.03	2CSF302130R1630		0.550	5
3P+N	30	25	289159	F-ATI4Test A-25/0.03	2CSF304130R1250		0.900	7
		40	289258	F-ATI4Test A-40/0.03	2CSF304130R1400		0.900	7
		63	289357	F-ATI4Test A-63/0.03	2CSF304130R1630		0.900	7
	300	25	289456	F-ATI4Test A-25/0.3	2CSF304130R3250		0.900	7
		40	289555	F-ATI4Test A-40/0.3	2CSF304130R3400		0.900	7
		63	289654	F-ATI4Test A-63/0.3	2CSF304130R3630		0.900	7

F-ARI Test

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1P+N	30	25	289753	F-ARI2Test A-25/0.03	2CSF302131R1250		0.550	5
		40	289852	F-ARI2Test A-40/0.03	2CSF302131R1400		0.550	5
		63	293453	F-ARI2Test A-63/0.03	2CSF302131R1630		0.550	5
3P+N	30	25	289951	F-ARI4Test A-25/0.03	2CSF304131R1250		0.900	7
		40	290056	F-ARI4Test A-40/0.03	2CSF304131R1400		0.900	7
		63	290155	F-ARI4Test A-63/0.03	2CSF304131R1630		0.900	7
	300	25	290254	F-ARI4Test A-25/0.3	2CSF304131R3250		0.900	7
		40	290353	F-ARI4Test A-40/0.3	2CSF304131R3400		0.900	7
		63	290452	F-ARI4Test A-63/0.3	2CSF304131R3630		0.900	7

ARBus

Gamma ARBus

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
ARBus	293354		2CSF300130R1989		0.180	1

RCD-blocks

DDA 200 technical features

DDA 200

Standards		
Operating characteristic: type		
Rated current In		[A]
Poles		
Rated voltage Ue	2P	[V]
	3P	
	4P	
Insulation voltage Ui		[V]
Operating voltage of circuit test Ut	2P	[V]
	3P	
	4P	
Rated frequency		Hz
Rated breaking capacity according to	IEC EN 61009	[A]
Rated breaking capacity according to	IEC EN 60947-2	[A]
Rated residual breaking capacity IΔm		[kA]
Rated inpulse withstand capacity (1,2/50) Uimp		[kV]
Dielectric test voltage at ind. freq. for 1 min.		[kV]
Surge current resistance (wave 8/20)		[A]
Rated sensitivity IΔn		[A]
Toggle		
Electrical life		
Mechanical life		
Protection degree	housing	
	terminals	
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		[°C/RH]
Ambient temperature (with daily average ≤ +35 °C)		[°C]
Storage temperature		[°C]
Terminal type	2P	
	3P/4P In=25 and 40 A	
	3P/4P In=63 A	
Terminal size	2P	[mm²]
	3P/4P In=25 and 40 A	[mm²]
	3P/4P In=63 A	[mm²]
Tightening torque	2P	[Nm]
	3P/4P In=25 and 40 A	[Nm]
	3P/4P In=63 A	[Nm]
Mounting		
Mounting position		
Dimensions	2P	[mm]
H x P x L	3P/4P In=25 and 40 A	[mm]
	3P/4P In=63 A	[mm]
Weight	2P	[g]
	3P/4P In=25 and 40 A	[g]
	3P/4P In=63 A	[g]
Combinable with	S 200 L	
	S 200	
	S 200 M	
	S 200 P	

① All RCD-blocks DDA 200 with rated current 63 A are provided with two additional terminals for remote tripping.
② DDA200 A AE is provided with two additional terminals for remote release in positive safety.
A remote control circuit should be connected to those terminals where circuit breakers or push buttons with normally closed contacts should be inserted.

DDA 200 AC	**DDA 200 A**	**DDA 200 A AP-R**	**DDA 200 A AE**	**DDA 200 A S**	**DDA 200 B**
IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1					IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1, IEC EN 62423
AC	A	A	A	A	B
25, 40, 63 ①		25, 40, 63 ①	63 ②	63 ①	25-40-63
2P, 3P, 4P					2P, 3P, 4P
230 (400 for special execution @400 V)			230	230	230
230/400			400	400	400
230/400			230/400	230/400	230/400
500					
110-254 for special execution @110V; 195-254 (170-254 for 30 mA; 400 for special execution @400 V)			184-264	195-254 (170-254 for 30 mA)	195-254 (170-254 for 30 mA)
195-440 (300-440 for 30 mA; 110-254 for special execution @110 V)			310-440	195-440 (300-440 for 30 mA)	310-440 (300-440 for 30 mA)
195-440 (300-440 for 30 mA; 110-254 for special execution @110 V)			184-264	195-440 (300-440 for 30 mA)	195-254 (300-440 for 30 mA)
50…60					
same of the coupled MCB					
same of the coupled MCB					
same of the coupled MCB					
4					
2,5					
NA		3000	NA	5000	3000 (5000 for selective types)
0.01-0.03-0.1-0.3-0.5-1		0.03	0.03-0.3-0.5-1	0.1-0.3-0.5-1	0.03 - 0.3 - 0.5
blue					
10000					
20000					
IP4X					
IP2X					
28 cycles with 55°C/90-96% and 25°C/95-100%					
-25…+55					
-40…+70					
bi-directional cylinder-lift					
cage type					-
bi-directional cylinder-lift					
(rigid or flexible) up to 25					
(rigid or flexible) up to 16					-
(rigid or flexible) up to 25					
2.8					
1.2					-
2.8					
on DIN rail EN 60715 (35 mm) by means of fast clip device					
Any					
85 x 69 x 35					85 x 69 x 70
85 x 69 x 35					85 x 69 x 70
85 x 69 x 70					85 x 69 x 70
175					350
175					375
325					395
yes					
yes					
yes					
yes					

RCD-blocks

DDA 200 series AC ∿ type

DDA 202

DDA 203

DDA 200 AC type

Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	10	25	791003	DDA202 AC-25/0.01	2CSB202001R0250		0.180	1
	30	25	791102	DDA202 AC-25/0.03	2CSB202001R1250		0.180	1
		40	791201	DDA202 AC-40/0.03	2CSB202001R1400		0.180	1
		63 ②	791300	DDA202 AC-63/0.03	2CSB202001R1630		0.180	1
	100	25	791409	DDA202 AC-25/0.1	2CSB202001R2250		0.180	1
		40	791508	DDA202 AC-40/0.1	2CSB202001R2400		0.180	1
		63 ②	791607	DDA202 AC-63/0.1	2CSB202001R2630		0.180	1
	300	25	791706	DDA202 AC-25/0.3	2CSB202001R3250		0.180	1
		40	791805	DDA202 AC-40/0.3	2CSB202001R3400		0.180	1
		63 ②	791904	DDA202 AC-63/0.3	2CSB202001R3630		0.180	1
	500	25	792000	DDA202 AC-25/0.5	2CSB202001R4250		0.180	1
		40	792109	DDA202 AC-40/0.5	2CSB202001R4400		0.180	1
		63 ②	792208	DDA202 AC-63/0.5	2CSB202001R4630		0.180	1
	1000	25	808305	DDA202 AC-25/1	2CSB202001R5250		0.180	1
		40	808404	DDA202 AC-40/1	2CSB202001R5400		0.180	1
		63 ②	792307	DDA202 AC-63/1	2CSB202001R5630		0.180	1
	2000	63	792406	DDA202 AC-63/2	2CSB202001R6630		0.180	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	25	792505	DDA203 AC-25/0.03	2CSB203001R1250		0.220	1
		40	792604	DDA203 AC-40/0.03	2CSB203001R1400		0.220	1
		63 ②	792703	DDA203 AC-63/0.03	2CSB203001R1630		0.260	1
	100	25	792802	DDA203 AC-25/0.1	2CSB203001R2250		0.220	1
		40	792901	DDA203 AC-40/0.1	2CSB203001R2400		0.220	1
		63 ②	793007	DDA203 AC-63/0.1	2CSB203001R2630		0.260	1
	300	25	793106	DDA203 AC-25/0.3	2CSB203001R3250		0.220	1
		40	793205	DDA203 AC-40/0.3	2CSB203001R3400		0.220	1
		63 ②	793304	DDA203 AC-63/0.3	2CSB203001R3630		0.260	1
	500	25	793403	DDA203 AC-25/0.5	2CSB203001R4250		0.220	1
		40	793502	DDA203 AC-40/0.5	2CSB203001R4400		0.220	1
		63 ②	793601	DDA203 AC-63/0.5	2CSB203001R4630		0.260	1
	1000	25	808503	DDA203 AC-25/1	2CSB203001R5250		0.220	1
		40	808602	DDA203 AC-40/1	2CSB203001R5400		0.220	1
		63 ①②	793700	DDA203 AC-63/1	2CSB203001R5630		0.260	1
	2000	63	793809	DDA203 AC-63/2	2CSB203001R6630		0.260	1

① version with test button working at 110VAC - 254VAC is available. For selection tables refer to special version paragraph.
② provided with additional terminals for remote tripping

DDA 204

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	793908	DDA204 AC-25/0.03	2CSB204001R1250		0.260	1
		40	794004	DDA204 AC-40/0.03	2CSB204001R1400		0.260	1
		63 ①②	794103	DDA204 AC-63/0.03	2CSB204001R1630		0.305	1
	100	25	794202	DDA204 AC-25/0.1	2CSB204001R2250		0.260	1
		40	794301	DDA204 AC-40/0.1	2CSB204001R2400		0.260	1
		63 ②	794400	DDA204 AC-63/0.1	2CSB204001R2630		0.305	1
	300	25	794509	DDA204 AC-25/0.3	2CSB204001R3250		0.260	1
		40	794608	DDA204 AC-40/0.3	2CSB204001R3400		0.260	1
		63 ②	794707	DDA204 AC-63/0.3	2CSB204001R3630		0.305	1
	500	25	794806	DDA204 AC-25/0.5	2CSB204001R4250		0.260	1
		40	794905	DDA204 AC-40/0.5	2CSB204001R4400		0.260	1
		63 ②	795001	DDA204 AC-63/0.5	2CSB204001R4630		0.305	1
	1000	25	808701	DDA204 AC-25/1	2CSB204001R5250		0.260	1
		40	808800	DDA204 AC-40/1	2CSB204001R5400		0.260	1
		63 ②	795100	DDA204 AC-63/1	2CSB204001R5630		0.305	1
	2000	63	795209	DDA204 AC-63/2	2CSB204001R6630		0.305	1

① version with test button working at 110VAC - 254VAC is available. For selection tables refer to special version paragraph.
② provided with additional terminals for remote tripping

RCD-blocks

DDA 200 series A type

DDA 202

DDA 203

DDA 200 A type

Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	10	25	795308	DDA202 A-25/0.01	2CSB202101R0250		0.180	1
	30	25	795407	DDA202 A-25/0.03	2CSB202101R1250		0.180	1
		40	795506	DDA202 A-40/0.03	2CSB202101R1400		0.180	1
		63 ②	795605	DDA202 A-63/0.03	2CSB202101R1630		0.180	1
	100	25	795704	DDA202 A-25/0.1	2CSB202101R2250		0.180	1
		40	795803	DDA202 A-40/0.1	2CSB202101R2400		0.180	1
		63 ②	795902	DDA202 A-63/0.1	2CSB202101R2630		0.180	1
	300	25	796008	DDA202 A-25/0.3	2CSB202101R3250		0.180	1
		40	796107	DDA202 A-40/0.3	2CSB202101R3400		0.180	1
		63 ②	796206	DDA202 A-63/0.3	2CSB202101R3630		0.180	1
	500	25	796305	DDA202 A-25/0.5	2CSB202101R4250		0.180	1
		40	796404	DDA202 A-40/0.5	2CSB202101R4400		0.180	1
		63 ②	796503	DDA202 A-63/0.5	2CSB202101R4630		0.180	1
	1000	25	808909	DDA202 A-25/1	2CSB202101R5250		0.180	1
		40	809005	DDA202 A-40/1	2CSB202101R5400		0.180	1
		63 ②	796602	DDA202 A-63/1	2CSB202101R5630		0.180	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	25	796701	DDA203 A-25/0.03	2CSB203101R1250		0.220	1
		40 ①	796800	DDA203 A-40/0.03	2CSB203101R1400		0.220	1
		63 ①②	796909	DDA203 A-63/0.03	2CSB203101R1630		0.260	1
	100	25	797005	DDA203 A-25/0.1	2CSB203101R2250		0.220	1
		40	797104	DDA203 A-40/0.1	2CSB203101R2400		0.220	1
		63 ②	797203	DDA203 A-63/0.1	2CSB203101R2630		0.260	1
	300	25	797302	DDA203 A-25/0.3	2CSB203101R3250		0.220	1
		40	797401	DDA203 A-40/0.3	2CSB203101R3400		0.220	1
		63 ②	797500	DDA203 A-63/0.3	2CSB203101R3630		0.260	1
	500	25	797609	DDA203 A-25/0.5	2CSB203101R4250		0.220	1
		40	797708	DDA203 A-40/0.5	2CSB203101R4400		0.220	1
		63 ②	797807	DDA203 A-63/0.5	2CSB203101R4630		0.260	1
	1000	25	809104	DDA203 A-25/1	2CSB203101R5250		0.220	1
		40	809203	DDA203 A-40/1	2CSB203101R5400		0.220	1
		63 ②	797906	DDA203 A-63/1	2CSB203101R5630		0.260	1

① version with test button working at 110VAC - 254VAC is available. For selection tables refer to special version paragraph.
② provided with additional terminals for remote tripping

DDA 204

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	798002	DDA204 A-25/0.03	2CSB204101R1250		0.260	1
		40	798101	DDA204 A-40/0.03	2CSB204101R1400		0.260	1
		63 ①②	798200	DDA204 A-63/0.03	2CSB204101R1630		0.305	1
	100	25	798309	DDA204 A-25/0.1	2CSB204101R2250		0.260	1
		40	798408	DDA204 A-40/0.1	2CSB204101R2400		0.260	1
		63 ②	798507	DDA204 A-63/0.1	2CSB204101R2630		0.305	1
	300	25	798606	DDA204 A-25/0.3	2CSB204101R3250		0.260	1
		40	798705	DDA204 A-40/0.3	2CSB204101R3400		0.260	1
		63 ②	798804	DDA204 A-63/0.3	2CSB204101R3630		0.305	1
	500	25	798903	DDA204 A-25/0.5	2CSB204101R4250		0.260	1
		40	799009	DDA204 A-40/0.5	2CSB204101R4400		0.260	1
		63 ②	799108	DDA204 A-63/0.5	2CSB204101R4630		0.305	1
	1000	25	809302	DDA204 A-25/1	2CSB204101R5250		0.260	1
		40	809401	DDA204 A-40/1	2CSB204101R5400		0.260	1
		63 ②	799207	DDA204 A-63/1	2CSB204101R5630		0.305	1

① version with test button working at 110VAC - 254VAC is available. For selection tables refer to special version paragraph.
② provided with additional terminals for remote tripping

RCD-blocks

DDA 200 special version 110 V and 400 V

DDA 202

DDA 203

DDA 204

DDA 200 special version 110 V and 400 V
Function: special version of RCD-blocks to assembly on site with MCBs S 200 series. Special version are available with protection against the effects of sinusoidal alternating and/or direct pulsating earth fault currents, protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA).
DDA200 110 V is a particular RCD-block with voltage range for test button Ut = 110-254 V. RCD- blocks work for naval applications where the IT system is typically used and the voltage between the phase and the neutral conductor is 115 - 125 V. DDA200 110 V (Ut = 110-254 V) are suitable for naval applications.
Special version is also available for 400 V in the two poles version working in two-phase industrial systems where voltage between phases is 400 V.

Applications: naval, industrial.
Standards: IEC 61009-1 Ann. G; IEC 61009-2-1

110 V version

AC type

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	63 ①	929901	DDA 204 AC-63/0.03 110V	2CSB204099R1630		0.350	1

A type

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	25	079033	DDA202 A-25/0.03 110V	2CSB202199R1250		0.180	1
		40	078937	DDA202 A-40/0.03 110V	2CSB202199R1400		0.180	1
		63 ①	078838	DDA202 A-63/0.03 110V	2CSB202199R1630		0.180	1
3	30	40	811701	DDA 203 A-40/0.03 110V	2CSB203199R1400		0.350	1
		63 ①	811800	DDA 203 A-63/0.03 110V	2CSB203199R1630		0.350	1
4	30	63 ①	812104	DDA 204 A-63/0.03 110V	2CSB204199R1630		0.350	1

400 V version

A type

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	63 ①	954934	DDA 202 A-63/0.03 400V	2CSB202192R1630		0.200	1

① provided with additional terminals for remote tripping

RCD-blocks

DDA 200 series A type, AP-R (high immunity)

DDA 202

DDA 203

DDA 204

DDA 200 AP-R, A type
Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts (with IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1
Surge current resistance (wave 8/20)=3000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	25	801108	DDA202 A-25/0.03 AP-R	2CSB202401R1250		0.180	1
		40	801207	DDA202 A-40/0.03 AP-R	2CSB202401R1400		0.180	1
		63 ①	801306	DDA202 A-63/0.03 AP-R	2CSB202401R1630		0.180	1
	300	63	961932	DDA202 A-63/0,3 AP-R	2CSB202401R3630		0,260	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	25	811008	DDA203 A-25/0.03 AP-R	2CSB203401R1250		0.220	1
		40	811107	DDA203 A-40/0.03 AP-R	2CSB203401R1400		0.220	1
		63 ①	811206	DDA203 A-63/0.03 AP-R	2CSB203401R1630		0.260	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	801405	DDA204 A-25/0.03 AP-R	2CSB204401R1250		0.260	1
		40	801504	DDA204 A-40/0.03 AP-R	2CSB204401R1400		0.260	1
		63 ①	801603	DDA204 A-63/0.03 AP-R	2CSB204401R1630		0.305	1

① provided with additional terminals for remote tripping

RCD-blocks

DDA 200 series A type, AE (for emergency stop)

DDA 202

DDA 203

DDA 204

DDA 200 AE, A type

Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with In=30 mA).
The RCD-block is provided with two additional terminals to be used in emergency circuits for remote opening in positive safety. A remote control circuit should be connected to those terminals where NC push buttons should be inserted in series.

ATTENTION!

It's allowed to use multiple NC buttons to control one DDA200 AE but it's not permitted to use one button in a control circuit for more RCD-blocks DDA200 AE. DDA200 AE must be supplied by the top side.

Application: commercial, industrial.
Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	63	801702	DDA202 A-63/0.03 AE	2CSB202701R1630		0.180	1
	300	63	801801	DDA202 A-63/0.3 AE	2CSB202701R3630		0.180	1
	500	63	801900	DDA202 A-63/0.5 AE	2CSB202701R4630		0.180	1
	1000	63	802006	DDA202 A-63/1 AE	2CSB202701R5630		0.180	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	63	802105	DDA203 A-63/0.03 AE	2CSB203701R1630		0.260	1
	300	63	802204	DDA203 A-63/0.3 AE	2CSB203701R3630		0.260	1
	500	63	802303	DDA203 A-63/0.5 AE	2CSB203701R4630		0.260	1
	1000	63	802402	DDA203 A-63/1 AE	2CSB203701R5630		0.260	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	63	802501	DDA204 A-63/0.03 AE	2CSB204701R1630		0.305	1
	300	63	802600	DDA204 A-63/0.3 AE	2CSB204701R3630		0.305	1
	500	63	802709	DDA204 A-63/0.5 AE	2CSB204701R4630		0.305	1
	1000	63	802808	DDA204 A-63/1 AE	2CSB204701R5630		0.305	1

RCD-blocks

DDA 200 series A type, selective

DDA 202

DDA 203

DDA 204

DDA 200 A selective type
Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents with an intentional tripping delay, which permits to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide).

Application: commercial, industrial.
Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1
Surge current resistance (wave 8/20)=5000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	100	63	799306	DDA202 A S-63/0.1	2CSB202201R2630		0.180	1
	300	63	799405	DDA202 A S-63/0.3	2CSB202201R3630		0.180	1
	500	63	799504	DDA202 A S-63/0.5	2CSB202201R4630		0.180	1
	1000	63	799603	DDA202 A S-63/1	2CSB202201R5630		0.180	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	100	63	799702	DDA203 A S-63/0.1	2CSB203201R2630		0.260	1
	300	63	799801	DDA203 A S-63/0.3	2CSB203201R3630		0.260	1
	500	63	799900	DDA203 A S-63/0.5	2CSB203201R4630		0.260	1
	1000	63	800002	DDA203 A S-63/1	2CSB203201R5630		0.260	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	100	63	800101	DDA204 A S-63/0.1	2CSB204201R2630		0.305	1
	300	63	800200	DDA204 A S-63/0.3	2CSB204201R3630		0.305	1
	500	63	800309	DDA204 A S-63/0.5	2CSB204201R4630		0.305	1
	1000	63	800408	DDA204 A S-63/1	2CSB204201R5630		0.305	1

Attention: All DDA 200 A S are provided with additional terminals for remote tripping

RCD-blocks

DDA 200 series B type

DDA 202

DDA 203

DDA 204

DDA 200 type B for continuous type fault currents
RCD-blocks type B are also sensitive to continuous or mainly continuous (continuous with weak ondulation) current pulsating earth fault currents. They are also sensitive to alternate sinusoidal and direct pulsating earth fault currents as with type A circuit breakers.
They satisfy the requirements of type A devices and thus the requirements for type AC devices which can be considered an extension. For this reason the differential blocks type B are sometimes referred as “universal type”, as sensitive to “all” kind of residual current shape.
DDA 200 type B can be coupled with all the S 200 series MCBs.
They are used for protection in installations with electronic equipments according to EN 50178.

Applications: tertiary and industrial.
Standards: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1; IEC 62423 ed.2
Surge current resistance (8/20 wave): 3000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	25	748021	DDA202 B APR-25/0,03	2CSB202592R1250		0.350	1
		40	515128	DDA202 B APR-40/0,03	2CSB202592R1400		0.350	1
		63	610922	DDA202 B APR-63/0,03	2CSB202592R1630		0.350	1
	300	25	733324	DDA202 B APR-25/0,3	2CSB202592R3250		0.350	1
		63	732426	DDA202 B APR-63/0,3	2CSB202592R3630		0.350	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	63	733225	DDA203 B APR-63/0,03	2CSB203592R1630		0.375	1
	300	63	732327	DDA203 B APR-63/0,3	2CSB203592R3630		0.375	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	25	732228	DDA204 B APR-25/0,03	2CSB204592R1250		0.395	1
		40	020325	DDA204 B APR-40/0,03	2CSB204592R1400		0.395	1
		63	733027	DDA204 B APR-63/0,03	2CSB204592R1630		0.395	1
	300	25	732129	DDA204 B APR-25/0,3	2CSB204592R3250		0.395	1
		63	732921	DDA204 B APR-63/0,3	2CSB204592R3630		0.395	1
	500	63	732020	DDA204 B APR-63/0,5	2CSB204592R4630		0.395	1

DDA 203

DDA 204

DDA 200 type B for selective continuous type fault currents
Function: protection against the effects of alternate sinusoidal, direct pulsating, continuous current and continuous current pulsating earth fault currents with an intentional trip delay that permits selectivity with instantaneous type devices placed downstream (for further information on selectivity, see Chapter 3 of Electrical installation solutions for buildings - technical details).
DDA 200 type B can be coupled with all the S 200 series MCBs.
They are used for protection in installations with electronic equipments according to EN 50178.

Applications: tertiary and industrial.
Standards: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1; IEC 62423 ed.2
Surge current resistance (8/20 wave): 5000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	300	63	733126	DDA203 B S-63/0,3	2CSB203892R3630		0.375	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	300	63	732822	DDA204 B S-63/0,3	2CSB204892R3630		0.395	1

RCBO DS201 and DS202C.
The details make the difference

A range designed to ensure efficiency and protection

Bi-directional cylindrical terminal ensure higher safety of connecting operations, making them easier.

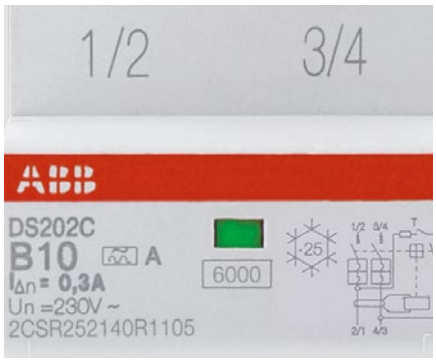
Information on the device are laser printed to ensure readability over time.

Each RCBO of the DS201-DS202C range is equipped with an RFid tag containing a unique serial number assigned to ABB according to the standard ISO/IEC FCD 15693-3 in order to authenticate the product.

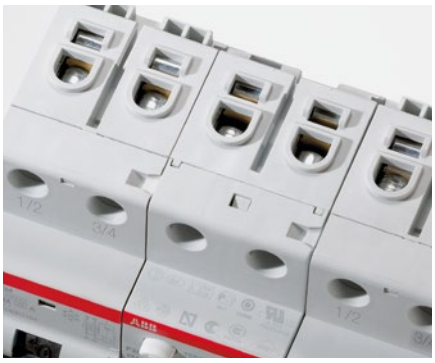
The label carrier to clearly identify the protected circuit.

Test pushbutton to verify the correct functioning of the device

Any earth fault can be immediately identified through the blue indicator, that signals the differential tripping and which cannot be activated in case of manual operation on the toggle. This prevents any misinterpretations of the device and system status.



Contact position indicator (CPI): to always know the status of the contacts (red: closed contacts; green: open contacts).

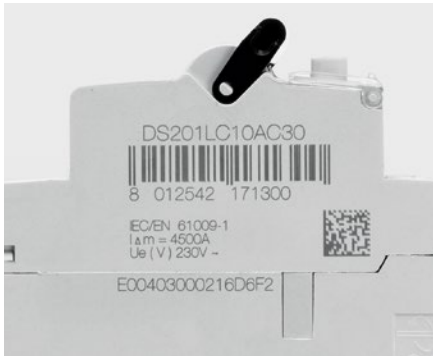


The terminals available on DS201-DS202C make easier the supply operation in parallel with busbars as they are composed by two different seats, a front seat for 25 mm² cables and a back seat for 10 mm² busbars.

All the devices of the DS201 and DS202C series have been tested in a wide range of temperatures: from -25 °C (as indicated by the snowflake marked on the front side) up to +55°C.

Label carrier for clear and reliable identification. With the practical label carrier fitted in the circuit breakers you can give maximum visibility to the information relating to the protected loads.

All the quality ensured by the main international marks is clearly visible on the device even if installed in the switchboard.



Product description and EAN code laser printed on the lateral side of the device for an easier stock management.

RCBOs

DS201 technical features

DS201 L

	Standards		
Electrical features	Type (wave form of the earth leakage sensed)		
	Poles		
	Rated current In		A
	Rated sensitivity IΔn		A
	Rated voltage Ue		V
	Insulation voltage Ui		V
	Operating voltage of circuit test Ut		V
	Rated frequency		Hz
	Rated breaking capacity acc. to IEC/EN 61009	ultimate Icn	A
	Rated breaking capacity acc. to IEC/EN 60947-2	ultimate Icu	kA
	1P+N @230 VAC	service Ics	kA
	Rated residual breaking capacity IΔm		kA
	Rated impulse withstand voltage (1.2/50) Uimp		kV
	Dielectric test voltage at ind. freq. for 1 min.		kV
	Thermomagnetic release characteristic	B: 3 In ≤ Im ≤ 5 In	
		C: 5 In ≤ Im ≤ 10 In	
		K: 10 In ≤ Im ≤ 14 In	
	Surge current resistance (wave 8/20)		A
Mechanical features	Toggle		
	Flag indicators		
	Electrical life		
	Mechanical life		
	Protection degree	housing	
		terminals	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH
	Reference temperature for setting of thermal element		°C
	Ambient temperature (with daily average ≤ +35 °C)		°C
	Storage temperature		°C
Installation	Terminal type	top	
		bottom	
	Terminal size top/bottom for cables		mm^2
	Terminal size top/bottom for busbar		mm^2
	Tightening torque top/bottom		Nm
	Mounting		
	Mounting position		
	Connection		
Dimensions and weight	Dimensions (H x D x W)		mm
	Weight		g
Combination with auxiliary elements	Combinable with:	auxiliary contact	
		signal contact	
		shunt trip	
		undervoltage release	

DS201 L			**DS201**			**DS201 M**			**DS201 M 110V**
IEC/EN 61009-1; IEC/EN 61009-2-1									IEC 61009-1; IEC 61009-2-1
AC	A	APR	AC	A	APR	AC	A	APR	A
1P+N									
6 ≤ In ≤ 32			1 ≤ In ≤ 40			4 ≤ In ≤ 40			6 ≤ In ≤ 40
0.03-0.3	0.01-0.03-0.3	0.03	0.03-0.1-0.3-1	0.01-0.03-0.1-0.3	0.03-0.1-0.3	0.03-0.1-0.3	0.01-0.03-0.1-0.3	0.03-0.1-0.3	0.03
230-240									
500									
110 (170 for 30 mA) - 254									110-254
50…60									
4500			6000			10000			10000
6			10			10			10
4.5			6			7.5			7.5
4.5			6			6			6
4									
2.5									
			■	■		■	■		■
■	■	■	■	■	■	■	■	■	■
				■			■		
NA for A, AC versions; 3000 for APR version									
black sealable in ON-OFF position									
differential trip indicator (blue)									
contact position indicator (green/red)									
10000									
20000									
IP4X									
IP2X									
28 cycles with 55°C/90-96% and 25°C/95-100%									
30									
-25…+55									
-40…+70									
failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)									
failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)									
25/25									
10/10									
2.8									
on DIN rail EN 60715 (35 mm) by means of fast clip device									
Any									
from top and bottom									
85 x 69 x 35									
239									
yes									
yes									
yes									
yes									

RCBOs

DS201 L series 4500 AC type, C characteristic

DS201 L

DS201 L AC type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 4 500 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	171201	DS201 L C6 AC30	2CSR245040R1064		0.240	5
		10	171300	DS201 L C10 AC30	2CSR245040R1104		0.240	5
		16	171409	DS201 L C16 AC30	2CSR245040R1164		0.240	5
		20	171508	DS201 L C20 AC30	2CSR245040R1204		0.240	5
		25	171607	DS201 L C25 AC30	2CSR245040R1254		0.240	5
		32	171706	DS201 L C32 AC30	2CSR245040R1324		0.240	5
	300	6	171805	DS201 L C6 AC300	2CSR245040R3064		0.240	5
		10	171904	DS201 L C10 AC300	2CSR245040R3104		0.240	5
		16	172000	DS201 L C16 AC300	2CSR245040R3164		0.240	5
		20	172109	DS201 L C20 AC300	2CSR245040R3204		0.240	5
		25	172208	DS201 L C25 AC300	2CSR245040R3254		0.240	5
		32	172307	DS201 L C32 AC300	2CSR245040R3324		0.240	5

RCBOs

DS201 L series 4500 A type, C characteristic

DS201 L

DS201 L A type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 4 500 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	10	6	163404	DS201 L C6 A10	2CSR245140R0064		0.240	5
		10	171003	DS201 L C10 A10	2CSR245140R0104		0.240	5
		16	171102	DS201 L C16 A10	2CSR245140R0164		0.240	5
	30	6	172406	DS201 L C6 A30	2CSR245140R1064		0.240	5
		10	172505	DS201 L C10 A30	2CSR245140R1104		0.240	5
		16	172604	DS201 L C16 A30	2CSR245140R1164		0.240	5
		20	172703	DS201 L C20 A30	2CSR245140R1204		0.240	5
		25	173809	DS201 L C25 A30	2CSR245140R1254		0.240	5
		32	173908	DS201 L C32 A30	2CSR245140R1324		0.240	5
	300	6	174004	DS201 L C6 A300	2CSR245140R3064		0.240	5
		10	174103	DS201 L C10 A300	2CSR245140R3104		0.240	5
		16	174202	DS201 L C16 A300	2CSR245140R3164		0.240	5
		20	174301	DS201 L C20 A300	2CSR245140R3204		0.240	5
		25	174707	DS201 L C25 A300	2CSR245140R3254		0.240	5
		32	174806	DS201 L C32 A300	2CSR245140R3324		0.240	5

RCBOs

DS201 L series 4500 APR type, C characteristic

DS201 L

DS201 L APR type, C characteristic
Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal trade-off between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact (IΔn=30mA); protection and isolation of resistive and inductive loads.

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 4 500 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	174905	DS201 L C6 APR30	2CSR245440R1064		0.240	5
		10	175001	DS201 L C10 APR30	2CSR245440R1104		0.240	5
		16	175100	DS201 L C16 APR30	2CSR245440R1164		0.240	5
		20	175209	DS201 L C20 APR30	2CSR245440R1204		0.240	5
		25	175605	DS201 L C25 APR30	2CSR245440R1254		0.240	5
		32	175704	DS201 L C32 APR30	2CSR245440R1324		0.240	5

RCBOs

DS201 series 6000 AC type, B characteristic

DS201

DS201 AC type, B characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	279709	DS201 B6 AC30	2CSR255040R1065		0.240	5
		10	280309	DS201 B10 AC30	2CSR255040R1105		0.240	5
		13	285205	DS201 B13 AC30	2CSR255040R1135		0.240	5
		16	285304	DS201 B16 AC30	2CSR255040R1165		0.240	5
		20	285403	DS201 B20 AC30	2CSR255040R1205		0.240	5
		25	285502	DS201 B25 AC30	2CSR255040R1255		0.240	5
		32	285601	DS201 B32 AC30	2CSR255040R1325		0.240	5
		40	285700	DS201 B40 AC30	2CSR255040R1405		0.240	5
	100	6	285809	DS201 B6 AC100	2CSR255040R2065		0.240	5
		10	285908	DS201 B10 AC100	2CSR255040R2105		0.240	5
		13	286004	DS201 B13 AC100	2CSR255040R2135		0.240	5
		16	286103	DS201 B16 AC100	2CSR255040R2165		0.240	5
		20	286202	DS201 B20 AC100	2CSR255040R2205		0.240	5
		25	286301	DS201 B25 AC100	2CSR255040R2255		0.240	5
		32	286400	DS201 B32 AC100	2CSR255040R2325		0.240	5
		40	286509	DS201 B40 AC100	2CSR255040R2405		0.240	5
	300	6	286608	DS201 B6 AC300	2CSR255040R3065		0.240	5
		10	286707	DS201 B10 AC300	2CSR255040R3105		0.240	5
		13	293903	DS201 B13 AC300	2CSR255040R3135		0.240	5
		16	294009	DS201 B16 AC300	2CSR255040R3165		0.240	5
		20	294108	DS201 B20 AC300	2CSR255040R3205		0.240	5
		25	294207	DS201 B25 AC300	2CSR255040R3255		0.240	5
		32	294306	DS201 B32 AC300	2CSR255040R3325		0.240	5
		40	294405	DS201 B40 AC300	2CSR255040R3405		0.240	5

RCBOs

DS201 series 6000 AC type, C characteristic

DS201

DS201 AC type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	294504	DS201 C6 AC30	2CSR255040R1064		0.240	5
		10	294603	DS201 C10 AC30	2CSR255040R1104		0.240	5
		13	294702	DS201 C13 AC30	2CSR255040R1134		0.240	5
		16	294801	DS201 C16 AC30	2CSR255040R1164		0.240	5
		20	294900	DS201 C20 AC30	2CSR255040R1204		0.240	5
		25	295006	DS201 C25 AC30	2CSR255040R1254		0.240	5
		32	296003	DS201 C32 AC30	2CSR255040R1324		0.240	5
		40	296102	DS201 C40 AC30	2CSR255040R1404		0.240	5
	100	6	296201	DS201 C6 AC100	2CSR255040R2064		0.240	5
		10	296409	DS201 C10 AC100	2CSR255040R2104		0.240	5
		13	370802	DS201 C13 AC100	2CSR255040R2134		0.240	5
		16	370901	DS201 C16 AC100	2CSR255040R2164		0.240	5
		20	371601	DS201 C20 AC100	2CSR255040R2204		0.240	5
		25	371700	DS201 C25 AC100	2CSR255040R2254		0.240	5
		32	371809	DS201 C32 AC100	2CSR255040R2324		0.240	5
		40	498100	DS201 C40 AC100	2CSR255040R2404		0.240	5
	300	6	498209	DS201 C6 AC300	2CSR255040R3064		0.240	5
		10	498308	DS201 C10 AC300	2CSR255040R3104		0.240	5
		13	505907	DS201 C13 AC300	2CSR255040R3134		0.240	5
		16	506003	DS201 C16 AC300	2CSR255040R3164		0.240	5
		20	506102	DS201 C20 AC300	2CSR255040R3204		0.240	5
		25	506201	DS201 C25 AC300	2CSR255040R3254		0.240	5
		32	618300	DS201 C32 AC300	2CSR255040R3324		0.240	5
		40	638407	DS201 C40 AC300	2CSR255040R3404		0.240	5
	1000	6	996606	DS201 C6 AC1000	2CSR255040R5064		0.240	5
		10	996705	DS201 C10 AC1000	2CSR255040R5104		0.240	5
		16	996804	DS201 C16 AC1000	2CSR255040R5164		0.240	5
		20	996903	DS201 C20 AC1000	2CSR255040R5204		0.240	5
		25	997009	DS201 C25 AC1000	2CSR255040R5254		0.240	5
		32	997108	DS201 C32 AC1000	2CSR255040R5324		0.240	5
		40	997207	DS201 C40 AC1000	2CSR255040R5404		0.240	5

RCBOs

DS201 series 6000 APR type, C characteristic

DS201

DS201 APR type, C characteristic
Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal trade-off between safety and continuity of service thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact (IΔn=30 mA); protection and isolation of resistive and inductive loads.

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	997306	DS201 C6 APR30	2CSR255440R1064		0.240	5
		10	997405	DS201 C10 APR30	2CSR255440R1104		0.240	5
		13	997504	DS201 C13 APR30	2CSR255440R1134		0.240	5
		16	997603	DS201 C16 APR30	2CSR255440R1164		0.240	5
		20	997702	DS201 C20 APR30	2CSR255440R1204		0.240	5
		25	997801	DS201 C25 APR30	2CSR255440R1254		0.240	5
		32	997900	DS201 C32 APR30	2CSR255440R1324		0.240	5
		40	998006	DS201 C40 APR30	2CSR255440R1404		0.240	5
	100	6	126454	DS201 C6 APR100	2CSR255440R2064		0.240	5
		10	126553	DS201 C10 APR100	2CSR255440R2104		0.240	5
		13	126652	DS201 C13 APR100	2CSR255440R2134		0.240	5
		16	126751	DS201 C16 APR100	2CSR255440R2164		0.240	5
		20	126850	DS201 C20 APR100	2CSR255440R2204		0.240	5
		25	126959	DS201 C25 APR100	2CSR255440R2254		0.240	5
		32	127055	DS201 C32 APR100	2CSR255440R2324		0.240	5
		40	127154	DS201 C40 APR100	2CSR255440R2404		0.240	5
	300	6	998105	DS201 C6 APR300	2CSR255440R3064		0.240	5
		10	998204	DS201 C10 APR300	2CSR255440R3104		0.240	5
		13	998303	DS201 C13 APR300	2CSR255440R3134		0.240	5
		16	998402	DS201 C16 APR300	2CSR255440R3164		0.240	5
		20	998501	DS201 C20 APR300	2CSR255440R3204		0.240	5
		25	998600	DS201 C25 APR300	2CSR255440R3254		0.240	5
		32	998709	DS201 C32 APR300	2CSR255440R3324		0.240	5
		40	998808	DS201 C40 APR300	2CSR255440R3404		0.240	5

RCBOs

DS201 series 6000 A type, B characteristic

DS201

DS201 A type, B characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current In mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	10	10	995708	DS201 B10 A10	2CSR255140R0105		0.240	5
		13	995807	DS201 B13 A10	2CSR255140R0135		0.240	5
		16	995906	DS201 B16 A10	2CSR255140R0165		0.240	5
	30	6	638506	DS201 B6 A30	2CSR255140R1065		0.240	5
		10	647805	DS201 B10 A30	2CSR255140R1105		0.240	5
		13	655503	DS201 B13 A30	2CSR255140R1135		0.240	5
		16	655602	DS201 B16 A30	2CSR255140R1165		0.240	5
		20	655701	DS201 B20 A30	2CSR255140R1205		0.240	5
		25	766902	DS201 B25 A30	2CSR255140R1255		0.240	5
		32	814504	DS201 B32 A30	2CSR255140R1325		0.240	5
		40	910602	DS201 B40 A30	2CSR255140R1405		0.240	5
	100	6	990307	DS201 B6 A100	2CSR255140R2065		0.240	5
		10	990406	DS201 B10 A100	2CSR255140R2105		0.240	5
		13	990505	DS201 B13 A100	2CSR255140R2135		0.240	5
		16	990604	DS201 B16 A100	2CSR255140R2165		0.240	5
		20	990703	DS201 B20 A100	2CSR255140R2205		0.240	5
		25	990802	DS201 B25 A100	2CSR255140R2255		0.240	5
		32	990901	DS201 B32 A100	2CSR255140R2325		0.240	5
		40	991007	DS201 B40 A100	2CSR255140R2405		0.240	5
	300	6	991908	DS201 B6 A300	2CSR255140R3065		0.240	5
		10	992004	DS201 B10 A300	2CSR255140R3105		0.240	5
		13	992103	DS201 B13 A300	2CSR255140R3135		0.240	5
		16	992202	DS201 B16 A300	2CSR255140R3165		0.240	5
		20	992301	DS201 B20 A300	2CSR255140R3205		0.240	5
		25	992400	DS201 B25 A300	2CSR255140R3255		0.240	5
		32	992509	DS201 B32 A300	2CSR255140R3325		0.240	5
		40	992608	DS201 B40 A300	2CSR255140R3405		0.240	5

RCBOs

DS201 series 6000 A type, C characteristic

DS201

DS201 A type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	10	10	996002	DS201 C10 A10	2CSR255140R0104		0.240	5
		13	996101	DS201 C13 A10	2CSR255140R0134		0.240	5
		16	996200	DS201 C16 A10	2CSR255140R0164		0.240	5
	30	2	123958	DS201 C2 A30	2CSR255140R1024		0.240	5
		4	942306	DS201 C4 A30	2CSR255140R1044		0.240	5
		6	942405	DS201 C6 A30	2CSR255140R1064		0.240	5
		8	124054	DS201 C8 A30	2CSR255140R1084		0.240	5
		10	952503	DS201 C10 A30	2CSR255140R1104		0.240	5
		13	976004	DS201 C13 A30	2CSR255140R1134		0.240	5
		16	976103	DS201 C16 A30	2CSR255140R1164		0.240	5
		20	976202	DS201 C20 A30	2CSR255140R1204		0.240	5
		25	976301	DS201 C25 A30	2CSR255140R1254		0.240	5
		32	990109	DS201 C32 A30	2CSR255140R1324		0.240	5
		40	990208	DS201 C40 A30	2CSR255140R1404		0.240	5
	100	6	991106	DS201 C6 A100	2CSR255140R2064		0.240	5
		10	991205	DS201 C10 A100	2CSR255140R2104		0.240	5
		13	991304	DS201 C13 A100	2CSR255140R2134		0.240	5
		16	991403	DS201 C16 A100	2CSR255140R2164		0.240	5
		20	991502	DS201 C20 A100	2CSR255140R2204		0.240	5
		25	991601	DS201 C25 A100	2CSR255140R2254		0.240	5
		32	991700	DS201 C32 A100	2CSR255140R2324		0.240	5
		40	991809	DS201 C40 A100	2CSR255140R2404		0.240	5
	300	2	124153	DS201 C2 A300	2CSR255140R3024		0.240	5
		4	124252	DS201 C4 A300	2CSR255140R3044		0.240	5
		6	992707	DS201 C6 A300	2CSR255140R3064		0.240	5
		8	124351	DS201 C8 A300	2CSR255140R3084		0.240	5
		10	992806	DS201 C10 A300	2CSR255140R3104		0.240	5
		13	992905	DS201 C13 A300	2CSR255140R3134		0.240	5
		16	993001	DS201 C16 A300	2CSR255140R3164		0.240	5
		20	993100	DS201 C20 A300	2CSR255140R3204		0.240	5
		25	993209	DS201 C25 A300	2CSR255140R3254		0.240	5
		32	993308	DS201 C32 A300	2CSR255140R3324		0.240	5
		40	993407	DS201 C40 A300	2CSR255140R3404		0.240	5

RCBOs

DS201 series 6000 A type, K characteristic

DS201

DS201 A type, K characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	10	10	996309	DS201 K10 A10	2CSR255140R0107		0.240	5
		13	996408	DS201 K13 A10	2CSR255140R0137		0.240	5
		16	996507	DS201 K16 A10	2CSR255140R0167		0.240	5
	30	1	993506	DS201 K1 A30	2CSR255140R1017		0.240	5
		2	993605	DS201 K2 A30	2CSR255140R1027		0.240	5
		4	993704	DS201 K4 A30	2CSR255140R1047		0.240	5
		6	993803	DS201 K6 A30	2CSR255140R1067		0.240	5
		8	123750	DS201 K8 A30	2CSR255140R1087		0.240	5
		10	993902	DS201 K10 A30	2CSR255140R1107		0.240	5
		13	994008	DS201 K13 A30	2CSR255140R1137		0.240	5
		16	994107	DS201 K16 A30	2CSR255140R1167		0.240	5
		20	994206	DS201 K20 A30	2CSR255140R1207		0.240	5
		25	994305	DS201 K25 A30	2CSR255140R1257		0.240	5
		32	994404	DS201 K32 A30	2CSR255140R1327		0.240	5
		40	994503	DS201 K40 A30	2CSR255140R1407		0.240	5
	300	1	994602	DS201 K1 A300	2CSR255140R3017		0.240	5
		2	994701	DS201 K2 A300	2CSR255140R3027		0.240	5
		4	994800	DS201 K4 A300	2CSR255140R3047		0.240	5
		6	994909	DS201 K6 A300	2CSR255140R3067		0.240	5
		8	123859	DS201 K8 A300	2CSR255140R3087		0.240	5
		10	995005	DS201 K10 A300	2CSR255140R3107		0.240	5
		13	995104	DS201 K13 A300	2CSR255140R3137		0.240	5
		16	995203	DS201 K16 A300	2CSR255140R3167		0.240	5
		20	995302	DS201 K20 A300	2CSR255140R3207		0.240	5
		25	995401	DS201 K25 A300	2CSR255140R3257		0.240	5
		32	995500	DS201 K32 A300	2CSR255140R3327		0.240	5
		40	995609	DS201 K40 A300	2CSR255140R3407		0.240	5

RCBOs

DS201 T series 6000 A type, B, C and K characteristics

DS201 T

DS201 T A type

Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA). DS201 T range is able to meet the most strict requirements for railway application in the rolling stock traction business (classification I2-F3 according to NF F 16-101/102 and R26/ HL3 according to EN 45545-1:2013 and EN 45545-2:2013).

Application: railway, rolling stock, traction.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

B characteristic

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	002031	DS201T B6 A30	2CSR255148R1065		0.240	1
		10	001935	DS201T B10 A30	2CSR255148R1105		0.240	1
		13	031437	DS201T B13 A30	2CSR255148R1135		0.240	1
		16	001836	DS201T B16 A30	2CSR255148R1165		0.240	1
		20	001737	DS201T B20 A30	2CSR255148R1205		0.240	1
		25	031338	DS201T B25 A30	2CSR255148R1255		0.240	1
		32	001638	DS201T B32 A30	2CSR255148R1325		0.240	1
		40	001539	DS201T B40 A30	2CSR255148R1405		0.240	1

C characteristic

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	001430	DS201T C6 A30	2CSR255148R1064		0.240	1
		10	001331	DS201T C10 A30	2CSR255148R1104		0.240	1
		13	001232	DS201T C13 A30	2CSR255148R1134		0.240	1
		16	629832	DS201T C16 A30	2CSR255148R1164		0.240	1
		20	648437	DS201T C20 A30	2CSR255148R1204		0.240	1
		25	648338	DS201T C25 A30	2CSR255148R1254		0.240	1
		32	297031	DS201T C32 A30	2CSR255148R1324		0.240	1
		40	953234	DS201T C40 A30	2CSR255148R1404		0.240	1

K characteristic

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	959434	DS201T K6 A30	2CSR255148R1067		0.240	1
		10	959137	DS201T K10 A30	2CSR255148R1107		0.240	1
		13	958833	DS201T K13 A30	2CSR255148R1137		0.240	1
		16	958536	DS201T K16 A30	2CSR255148R1167		0.240	1
		20	960539	DS201T K20 A30	2CSR255148R1207		0.240	1
		25	960331	DS201T K25 A30	2CSR255148R1257		0.240	1
		32	960133	DS201T K32 A30	2CSR255148R1327		0.240	1
		40	959731	DS201T K40 A30	2CSR255148R1407		0.240	1

RCBOs

DS201 M series 10000 AC type, B characteristic

DS201 M

DS201 M AC type, B characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	998907	DS201 M B6 AC30	2CSR275040R1065		0.240	5
		10	999003	DS201 M B10 AC30	2CSR275040R1105		0.240	5
		13	999102	DS201 M B13 AC30	2CSR275040R1135		0.240	5
		16	999201	DS201 M B16 AC30	2CSR275040R1165		0.240	5
		20	999300	DS201 M B20 AC30	2CSR275040R1205		0.240	5
		25	999409	DS201 M B25 AC30	2CSR275040R1255		0.240	5
		32	999508	DS201 M B32 AC30	2CSR275040R1325		0.240	5
		40	999607	DS201 M B40 AC30	2CSR275040R1405		0.240	5
	100	6	106159	DS201 M B6 AC100	2CSR275040R2065		0.240	5
		10	106258	DS201 M B10 AC100	2CSR275040R2105		0.240	5
		13	106357	DS201 M B13 AC100	2CSR275040R2135		0.240	5
		16	106456	DS201 M B16 AC100	2CSR275040R2165		0.240	5
		20	106555	DS201 M B20 AC100	2CSR275040R2205		0.240	5
		25	106654	DS201 M B25 AC100	2CSR275040R2255		0.240	5
		32	106753	DS201 M B32 AC100	2CSR275040R2325		0.240	5
		40	106852	DS201 M B40 AC100	2CSR275040R2405		0.240	5
	300	6	107750	DS201 M B6 AC300	2CSR275040R3065		0.240	5
		10	107859	DS201 M B10 AC300	2CSR275040R3105		0.240	5
		13	107958	DS201 M B13 AC300	2CSR275040R3135		0.240	5
		16	108054	DS201 M B16 AC300	2CSR275040R3165		0.240	5
		20	108153	DS201 M B20 AC300	2CSR275040R3205		0.240	5
		25	108252	DS201 M B25 AC300	2CSR275040R3255		0.240	5
		32	108351	DS201 M B32 AC300	2CSR275040R3325		0.240	5
		40	108450	DS201 M B40 AC300	2CSR275040R3405		0.240	5

RCBOs

DS201 M series 10000 AC type, C characteristic

DS201 M

DS201 M AC type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	999706	DS201 M C6 AC30	2CSR275040R1064		0.240	5
		10	999805	DS201 M C10 AC30	2CSR275040R1104		0.240	5
		13	999904	DS201 M C13 AC30	2CSR275040R1134		0.240	5
		16	105657	DS201 M C16 AC30	2CSR275040R1164		0.240	5
		20	105756	DS201 M C20 AC30	2CSR275040R1204		0.240	5
		25	105855	DS201 M C25 AC30	2CSR275040R1254		0.240	5
		32	105954	DS201 M C32 AC30	2CSR275040R1324		0.240	5
		40	106050	DS201 M C40 AC30	2CSR275040R1404		0.240	5
	100	6	106951	DS201 M C6 AC100	2CSR275040R2064		0.240	5
		10	107057	DS201 M C10 AC100	2CSR275040R2104		0.240	5
		13	107156	DS201 M C13 AC100	2CSR275040R2134		0.240	5
		16	107255	DS201 M C16 AC100	2CSR275040R2164		0.240	5
		20	107354	DS201 M C20 AC100	2CSR275040R2204		0.240	5
		25	107453	DS201 M C25 AC100	2CSR275040R2254		0.240	5
		32	107552	DS201 M C32 AC100	2CSR275040R2324		0.240	5
		40	107651	DS201 M C40 AC100	2CSR275040R2404		0.240	5
	300	6	108559	DS201 M C6 AC300	2CSR275040R3064		0.240	5
		10	108658	DS201 M C10 AC300	2CSR275040R3104		0.240	5
		13	108757	DS201 M C13 AC300	2CSR275040R3134		0.240	5
		16	108856	DS201 M C16 AC300	2CSR275040R3164		0.240	5
		20	108955	DS201 M C20 AC300	2CSR275040R3204		0.240	5
		25	109051	DS201 M C25 AC300	2CSR275040R3254		0.240	5
		32	109150	DS201 M C32 AC300	2CSR275040R3324		0.240	5
		40	109259	DS201 M C40 AC300	2CSR275040R3404		0.240	5

RCBOs

DS201 M series 10000 APR type, C characteristic

DS201 M

DS201 M APR type, C characteristic
Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal compromise between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact (IΔn=30 mA); protection and isolation of resistive and inductive loads.

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	114154	DS201 M C6 APR30	2CSR275440R1064		0.240	5
		10	114253	DS201 M C10 APR30	2CSR275440R1104		0.240	5
		13	114352	DS201 M C13 APR30	2CSR275440R1134		0.240	5
		16	114451	DS201 M C16 APR30	2CSR275440R1164		0.240	5
		20	114550	DS201 M C20 APR30	2CSR275440R1204		0.240	5
		25	114659	DS201 M C25 APR30	2CSR275440R1254		0.240	5
		32	114758	DS201 M C32 APR30	2CSR275440R1324		0.240	5
		40	114857	DS201 M C40 APR30	2CSR275440R1404		0.240	5
	100	6	127253	DS201 M C6 APR100	2CSR275440R2064		0.240	5
		10	127352	DS201 M C10 APR100	2CSR275440R2104		0.240	5
		13	127451	DS201 M C13 APR100	2CSR275440R2134		0.240	5
		16	127550	DS201 M C16 APR100	2CSR275440R2164		0.240	5
		20	127659	DS201 M C20 APR100	2CSR275440R2204		0.240	5
		25	127758	DS201 M C25 APR100	2CSR275440R2254		0.240	5
		32	127857	DS201 M C32 APR100	2CSR275440R2324		0.240	5
		40	127956	DS201 M C40 APR100	2CSR275440R2404		0.240	5
	300	6	114956	DS201 M C6 APR300	2CSR275440R3064		0.240	5
		10	115052	DS201 M C10 APR300	2CSR275440R3104		0.240	5
		13	115151	DS201 M C13 APR300	2CSR275440R3134		0.240	5
		16	115250	DS201 M C16 APR300	2CSR275440R3164		0.240	5
		20	115359	DS201 M C20 APR300	2CSR275440R3204		0.240	5
		25	115458	DS201 M C25 APR300	2CSR275440R3254		0.240	5
		32	115557	DS201 M C32 APR300	2CSR275440R3324		0.240	5
		40	115656	DS201 M C40 APR300	2CSR275440R3404		0.240	5

RCBOs

DS201 M series 10000 A type, B characteristic

DS201 M

DS201 M A type, B characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	10	10	124450	DS201 M B10 A10	2CSR275140R0105		0.240	5
		16	124559	DS201 M B16 A10	2CSR275140R0165		0.240	5
	30	6	109358	DS201 M B6 A30	2CSR275140R1065		0.240	5
		10	109457	DS201 M B10 A30	2CSR275140R1105		0.240	5
		13	109556	DS201 M B13 A30	2CSR275140R1135		0.240	5
		16	109655	DS201 M B16 A30	2CSR275140R1165		0.240	5
		20	109754	DS201 M B20 A30	2CSR275140R1205		0.240	5
		25	109853	DS201 M B25 A30	2CSR275140R1255		0.240	5
		32	109952	DS201 M B32 A30	2CSR275140R1325		0.240	5
		40	110057	DS201 M B40 A30	2CSR275140R1405		0.240	5
	100	6	111054	DS201 M B6 A100	2CSR275140R2065		0.240	5
		10	111153	DS201 M B10 A100	2CSR275140R2105		0.240	5
		13	111252	DS201 M B13 A100	2CSR275140R2135		0.240	5
		16	111351	DS201 M B16 A100	2CSR275140R2165		0.240	5
		20	111450	DS201 M B20 A100	2CSR275140R2205		0.240	5
		25	111559	DS201 M B25 A100	2CSR275140R2255		0.240	5
		32	111658	DS201 M B32 A100	2CSR275140R2325		0.240	5
		40	111757	DS201 M B40 A100	2CSR275140R2405		0.240	5
	300	6	112556	DS201 M B6 A300	2CSR275140R3065		0.240	5
		10	112655	DS201 M B10 A300	2CSR275140R3105		0.240	5
		13	112754	DS201 M B13 A300	2CSR275140R3135		0.240	5
		16	112853	DS201 M B16 A300	2CSR275140R3165		0.240	5
		20	112952	DS201 M B20 A300	2CSR275140R3205		0.240	5
		25	113058	DS201 M B25 A300	2CSR275140R3255		0.240	5
		32	113157	DS201 M B32 A300	2CSR275140R3325		0.240	5
		40	113256	DS201 M B40 A300	2CSR275140R3405		0.240	5

RCBOs

DS201 M series 10000 A type, C characteristic

DS201 M

DS201 M A type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	10	10	124658	DS201 M C10 A10	2CSR275140R0104		0.240	5
		16	124757	DS201 M C16 A10	2CSR275140R0164		0.240	5
	30	4	110156	DS201 M C4 A30	2CSR275140R1044		0.240	5
		6	110255	DS201 M C6 A30	2CSR275140R1064		0.240	5
		10	110354	DS201 M C10 A30	2CSR275140R1104		0.240	5
		13	110453	DS201 M C13 A30	2CSR275140R1134		0.240	5
		16	110552	DS201 M C16 A30	2CSR275140R1164		0.240	5
		20	110651	DS201 M C20 A30	2CSR275140R1204		0.240	5
		25	110750	DS201 M C25 A30	2CSR275140R1254		0.240	5
		32	110859	DS201 M C32 A30	2CSR275140R1324		0.240	5
		40	110958	DS201 M C40 A30	2CSR275140R1404		0.240	5
	100	6	111856	DS201 M C6 A100	2CSR275140R2064		0.240	5
		10	111955	DS201 M C10 A100	2CSR275140R2104		0.240	5
		16	112051	DS201 M C16 A100	2CSR275140R2164		0.240	5
		20	112150	DS201 M C20 A100	2CSR275140R2204		0.240	5
		25	112259	DS201 M C25 A100	2CSR275140R2254		0.240	5
		32	112358	DS201 M C32 A100	2CSR275140R2324		0.240	5
		40	112457	DS201 M C40 A100	2CSR275140R2404		0.240	5
	300	6	113355	DS201 M C6 A300	2CSR275140R3064		0.240	5
		10	113454	DS201 M C10 A300	2CSR275140R3104		0.240	5
		13	113553	DS201 M C13 A300	2CSR275140R3134		0.240	5
		16	113652	DS201 M C16 A300	2CSR275140R3164		0.240	5
		20	113751	DS201 M C20 A300	2CSR275140R3204		0.240	5
		25	113850	DS201 M C25 A300	2CSR275140R3254		0.240	5
		32	113959	DS201 M C32 A300	2CSR275140R3324		0.240	5
		40	114055	DS201 M C40 A300	2CSR275140R3404		0.240	5

RCBOs

DS201 M series 10000 A type, K characteristic

DS201 M

DS201 M A type, K characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents.

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1P+N	100	6	299455	DS201 M K6 A100	2CSR275140R2067		0.240	5
		10	299554	DS201 M K10 A100	2CSR275140R2107		0.240	5
		13	299653	DS201 M K13 A100	2CSR275140R2137		0.240	5
		16	299752	DS201 M K16 A100	2CSR275140R2167		0.240	5
		20	299851	DS201 M K20 A100	2CSR275140R2207		0.240	5
		25	299950	DS201 M K25 A100	2CSR275140R2257		0.240	5
		32	300052	DS201 M K32 A100	2CSR275140R2327		0.240	5
		40	300151	DS201 M K40 A100	2CSR275140R2407		0.240	5

RCBOs

DS201 M series 10000 A type, B and C characteristic

DS201 M 110V

DS201 M 110V A type, B and C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA). This particular series of devices has the minimum operating voltage of test button of 110V and it is suitable for 230 V applications.

Application: residential, commercial, industrial.
Standard: IEC 61009-1; IEC 61009-2-1
Icn = 10 000 A

B characteristic

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	077930	DS201 M B6 A30 110V	2CSR275199R1065		0.240	5
		10	077831	DS201 M B10 A30 110V	2CSR275199R1105		0.240	5
		13	077732	DS201 M B13 A30 110V	2CSR275199R1135		0.240	5
		16	077633	DS201 M B16 A30 110V	2CSR275199R1165		0.240	5
		20	080336	DS201 M B20 A30 110V	2CSR275199R1205		0.240	5
		25	080237	DS201 M B25 A30 110V	2CSR275199R1255		0.240	5
		32	080138	DS201 M B32 A30 110V	2CSR275199R1325		0.240	5
		40	080039	DS201 M B40 A30 110V	2CSR275199R1405		0.240	5

C characteristic

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	078739	DS201 M C6 A30 110V	2CSR275199R1064		0.240	5
		10	078630	DS201 M C10 A30 110V	2CSR275199R1104		0.240	5
		13	078531	DS201 M C13 A30 110V	2CSR275199R1134		0.240	5
		16	078432	DS201 M C16 A30 110V	2CSR275199R1164		0.240	5
		20	078333	DS201 M C20 A30 110V	2CSR275199R1204		0.240	5
		25	078234	DS201 M C25 A30 110V	2CSR275199R1254		0.240	5
		32	078135	DS201 M C32 A30 110V	2CSR275199R1324		0.240	5
		40	078036	DS201 M C40 A30 110V	2CSR275199R1404		0.240	5

S800 B. High performance miniature circuit-breakers. Simply innovative.

Safety has never been easier.

Limit downtime in industrial electrical systems while ensuring maximum safety for operators and ease of access to devices: S800 B high performance circuit-breakers are efficient products at a reasonable cost and designed for overload and short-circuit protection in distribution systems with 16 kA breaking capacity. They comply with Standard CEI EN 60947-2, 60898-1 and feature 80 to 125 A rated current values with B, C, D and K characteristic curves. Thanks to a red/green signal, showing the position of internal moving contacts, and to a switch lever, that stops in the middle position in case of thermal or magnetic tripping, they show why tripping occurred at a glance, enabling prompt maintenance. Performance similar to moulded case circuit-breakers but with the advantage of the compact dimension, S800 B are available from 1 to 4 poles versions. **www.abb.com/lowvoltage**

RCBOs

DS202C technical features

DS202 C

	Standards		
Electrical features	Type (wave form of the earth leakage sensed)		
	Poles		
	Rated current In		A
	Rated sensitivity IΔn		A
	Rated voltage Ue		V
	Insulation voltage Ui		V
	Operating voltage of circuit test Ut		V
	Rated frequency		Hz
	Rated breaking capacity acc. to IEC/EN 61009	ultimate Icn	A
	Rated breaking capacity acc. to IEC/EN 60947-2	ultimate Icu	kA
	2P @230 VAC	service Ics	kA
	Rated residual breaking capacity IΔm		kA
	Rated impulse withstand voltage (1.2/50) Uimp		kV
	Dielectric test voltage at ind. freq. for 1 min.		kV
	Thermomagnetic release characteristic	B: 3 In ≤ Im ≤ 5 In	
		C: 5 In ≤ Im ≤ 10 In	
	Surge current resistance (wave 8/20)		A
Mechanical features	Toggle		
	Flag indicators		
	Electrical life		
	Mechanical life		
	Protection degree	housing	
		terminals	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH
	Reference temperature for setting of thermal element		°C
	Ambient temperature (with daily average ≤ +35 °C)		°C
	Storage temperature		°C
Installation	Terminal type	top	
		bottom	
	Terminal size top/bottom for cables		mm^2
	Terminal size top/bottom for busabar		mm^2
	Tightening torque top/bottom		Nm
	Mounting		
	Mounting position		
	Connection		
Dimensions and weight	Dimensions (H x D x W)		mm
	Weight		g
Combination with auxiliary elements	Combinable with:	auxiliary contact	
		signal contact	
		shunt trip	
		undervoltage release	

DS202C	**DS202C M**		**DS202C M 110V**
IEC/EN 61009-1; IEC/EN 61009-2-1			IEC 61009-1; IEC 61009-2-1
A	A	APR	A
2P			
6 ≤ In ≤ 32			
0.03-0.3	0.01-0.03-0.3	0.03-0.3	0.03
230-240			
500			
110 (170 for 30 mA) - 254			110-254
50…60			
6000	10000		10000
10	10		10
6	7.5		7.5
6			
4			
2.5			
■	■	■	
■	■	■	■
NA for A, AC versions; 3000 for APR version			
black sealable in ON-OFF position			
differential trip indicator (blue)			
contact position indicator (green/red)			
10000			
20000			
IP4X			
IP2X			
28 cycles with 55°C/90-96% and 25°C/95-100%			
30			
-25…+55			
-40…+70			
failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)			
failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)			
25/25			
10/10			
2.8			
on DIN rail EN 60715 (35 mm) by means of fast clip device			
Any			
from top and bottom			
85 x 69 x 35			
239			
yes			
yes			
yes			
yes			

RCBOs

DS202C series 6000 A type, B characteristic

DS202C

DS202C A type, B characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	6	132257	DS202C B6 A30	2CSR252140R1065		0.240	5
		10	132356	DS202C B10 A30	2CSR252140R1105		0.240	5
		13	132455	DS202C B13 A30	2CSR252140R1135		0.240	5
		16	132554	DS202C B16 A30	2CSR252140R1165		0.240	5
		20	132653	DS202C B20 A30	2CSR252140R1205		0.240	5
		25	132752	DS202C B25 A30	2CSR252140R1255		0.240	5
		32	132851	DS202C B32 A30	2CSR252140R1325		0.240	5
	300	6	132950	DS202C B6 A300	2CSR252140R3065		0.240	5
		10	133056	DS202C B10 A300	2CSR252140R3105		0.240	5
		13	133155	DS202C B13 A300	2CSR252140R3135		0.240	5
		16	133254	DS202C B16 A300	2CSR252140R3165		0.240	5
		20	133353	DS202C B20 A300	2CSR252140R3205		0.240	5
		25	133452	DS202C B25 A300	2CSR252140R3255		0.240	5
		32	133551	DS202C B32 A300	2CSR252140R3325		0.240	5

RCBOs

DS202C series 6000 A type, C characteristic

DS202C

DS202C A type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	6	122357	DS202C C6 A30	2CSR252140R1064		0.240	5
		10	122456	DS202C C10 A30	2CSR252140R1104		0.240	5
		13	122555	DS202C C13 A30	2CSR252140R1134		0.240	5
		16	122654	DS202C C16 A30	2CSR252140R1164		0.240	5
		20	122753	DS202C C20 A30	2CSR252140R1204		0.240	5
		25	122852	DS202C C25 A30	2CSR252140R1254		0.240	5
		32	122951	DS202C C32 A30	2CSR252140R1324		0.240	5
	300	6	123057	DS202C C6 A300	2CSR252140R3064		0.240	5
		10	123156	DS202C C10 A300	2CSR252140R3104		0.240	5
		13	123255	DS202C C13 A300	2CSR252140R3134		0.240	5
		16	123354	DS202C C16 A300	2CSR252140R3164		0.240	5
		20	123453	DS202C C20 A300	2CSR252140R3204		0.240	5
		25	123552	DS202C C25 A300	2CSR252140R3254		0.240	5
		32	123651	DS202C C32 A300	2CSR252140R3324		0.240	5

RCBOs

DS202C M series 10000 A type, B characteristic

DS202C M

DS202C M A type, B characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	10	10	124856	DS202C M B10 A10	2CSR272140R0105		0.240	5
		13	117759	DS202C M B13 A10	2CSR272140R0135		0.240	5
		16	117858	DS202C M B16 A10	2CSR272140R0165		0.240	5
	30	6	118152	DS202C M B6 A30	2CSR272140R1065		0.240	5
		10	118251	DS202C M B10 A30	2CSR272140R1105		0.240	5
		13	118350	DS202C M B13 A30	2CSR272140R1135		0.240	5
		16	118459	DS202C M B16 A30	2CSR272140R1165		0.240	5
		20	118558	DS202C M B20 A30	2CSR272140R1205		0.240	5
		25	118657	DS202C M B25 A30	2CSR272140R1255		0.240	5
		32	118756	DS202C M B32 A30	2CSR272140R1325		0.240	5
	300	6	119555	DS202C M B6 A300	2CSR272140R3065		0.240	5
		10	119654	DS202C M B10 A300	2CSR272140R3105		0.240	5
		13	119753	DS202C M B13 A300	2CSR272140R3135		0.240	5
		16	119852	DS202C M B16 A300	2CSR272140R3165		0.240	5
		20	119951	DS202C M B20 A300	2CSR272140R3205		0.240	5
		25	120056	DS202C M B25 A300	2CSR272140R3255		0.240	5
		32	120155	DS202C M B32 A300	2CSR272140R3325		0.240	5

RCBOs

DS202C M series 10000 A type, C characteristic

DS202C M

DS202C M A type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	10	13	117957	DS202C M C13 A10	2CSR272140R0134		0.240	5
		16	118053	DS202C M C16 A10	2CSR272140R0164		0.240	5
	30	6	118855	DS202C M C6 A30	2CSR272140R1064		0.240	5
		10	118954	DS202C M C10 A30	2CSR272140R1104		0.240	5
		13	119050	DS202C M C13 A30	2CSR272140R1134		0.240	5
		16	119159	DS202C M C16 A30	2CSR272140R1164		0.240	5
		20	119258	DS202C M C20 A30	2CSR272140R1204		0.240	5
		25	119357	DS202C M C25 A30	2CSR272140R1254		0.240	5
		32	119456	DS202C M C32 A30	2CSR272140R1324		0.240	5
	300	6	120254	DS202C M C6 A300	2CSR272140R3064		0.240	5
		10	120353	DS202C M C10 A300	2CSR272140R3104		0.240	5
		13	120452	DS202C M C13 A300	2CSR272140R3134		0.240	5
		16	120551	DS202C M C16 A300	2CSR272140R3164		0.240	5
		20	120650	DS202C M C20 A300	2CSR272140R3204		0.240	5
		25	120759	DS202C M C25 A300	2CSR272140R3254		0.240	5
		32	120858	DS202C M C32 A300	2CSR272140R3324		0.240	5

RCBOs

DS202C M series 10000 A APR type, B characteristic

DS202C M

DS202C M APR type, B characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	6	120957	DS202C M B6 APR30	2CSR272440R1065		0.240	5
		10	121053	DS202C M B10 APR30	2CSR272440R1105		0.240	5
		13	121152	DS202C M B13 APR30	2CSR272440R1135		0.240	5
		16	121251	DS202C M B16 APR30	2CSR272440R1165		0.240	5
		20	121350	DS202C M B20 APR30	2CSR272440R1205		0.240	5
		25	121459	DS202C M B25 APR30	2CSR272440R1255		0.240	5
		32	121558	DS202C M B32 APR30	2CSR272440R1325		0.240	5
	300	6	124955	DS202C M B6 APR300	2CSR272440R3065		0.240	5
		10	125051	DS202C M B10 APR300	2CSR272440R3105		0.240	5
		13	125150	DS202C M B13 APR300	2CSR272440R3135		0.240	5
		16	125259	DS202C M B16 APR300	2CSR272440R3165		0.240	5
		20	125358	DS202C M B20 APR300	2CSR272440R3205		0.240	5
		25	125457	DS202C M B25 APR300	2CSR272440R3255		0.240	5
		32	125556	DS202C M B32 APR300	2CSR272440R3325		0.240	5

RCBOs

DS202C M series 10000 APR type, C characteristic

DS202C M

DS202C M APR type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	6	121657	DS202C M C6 APR30	2CSR272440R1064		0.240	5
		10	121756	DS202C M C10 APR30	2CSR272440R1104		0.240	5
		13	121855	DS202C M C13 APR30	2CSR272440R1134		0.240	5
		16	121954	DS202C M C16 APR30	2CSR272440R1164		0.240	5
		20	122050	DS202C M C20 APR30	2CSR272440R1204		0.240	5
		25	122159	DS202C M C25 APR30	2CSR272440R1254		0.240	5
		32	122258	DS202C M C32 APR30	2CSR272440R1324		0.240	5

RCBOs

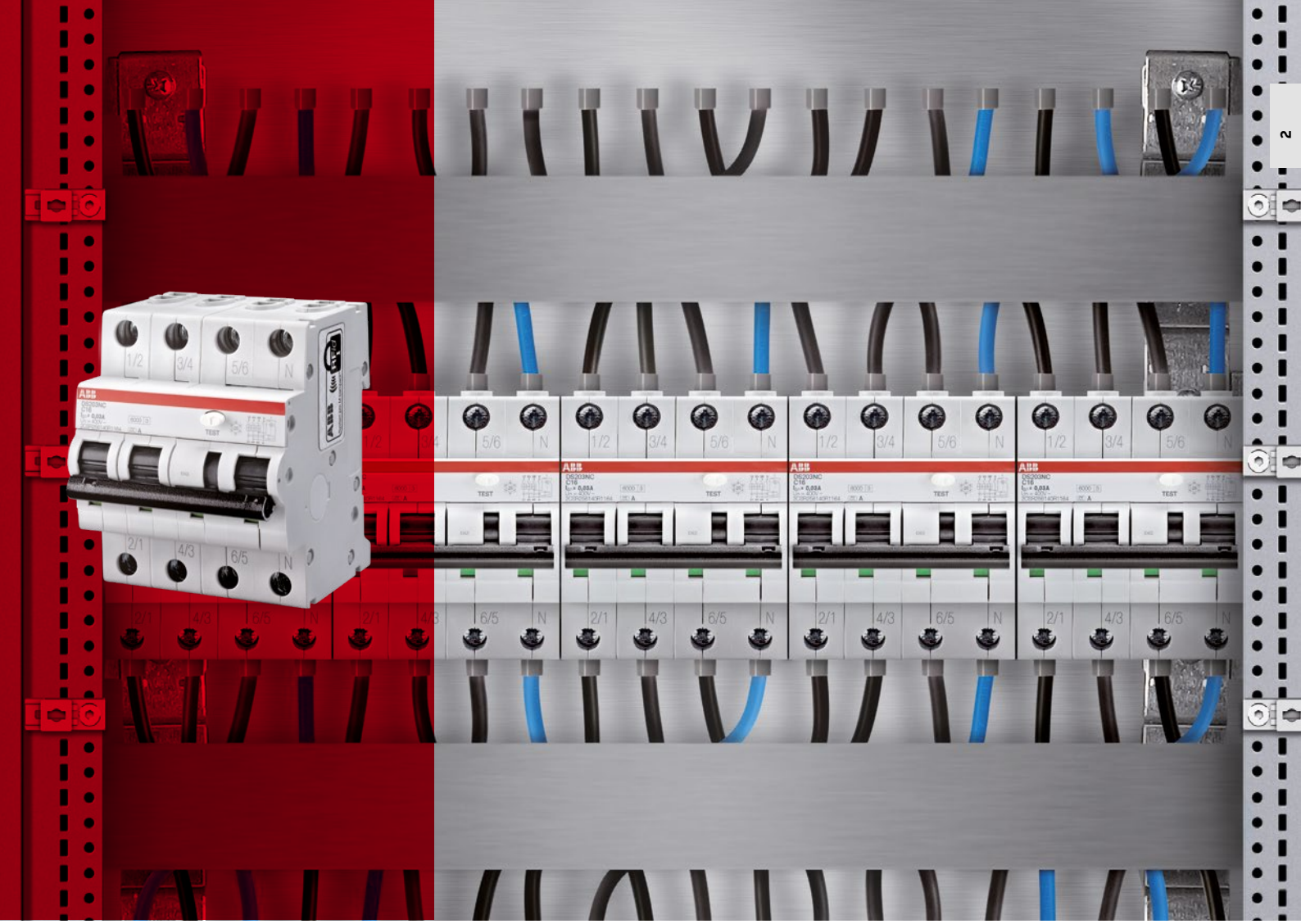
DS202C M 110V series 10000 A type, C characteristic

DS202C M 110V

DS202C M 110V A type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA). This particular series of devices has the minimum operating voltage of test button of 110V and it is suitable for 230 V applications.

Application: residential, commercial, industrial.
Standard: IEC 61009-1; IEC 61009-2-1
Icn = 10 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	6	079934	DS202C M C6 A30 110V	2CSR272199R1064		0.240	5
		10	079835	DS202C M C10 A30 110V	2CSR272199R1104		0.240	5
		13	079330	DS202C M C13 A30 110V	2CSR272199R1134		0.240	5
		16	079736	DS202C M C16 A30 110V	2CSR272199R1164		0.240	5
		20	079637	DS202C M C20 A30 110V	2CSR272199R1204		0.240	5
		25	079538	DS202C M C25 A30 110V	2CSR272199R1254		0.240	5
		32	079439	DS202C M C32 A30 110V	2CSR272199R1324		0.240	5



Minimum space, maximum protection.

DS203NC: 3P+N RCBOs
in 4 modules.

Designed to be compact, DS203NC 3P+N RCBOs are suitable in all those applications where size can be an obstacle. They provide reliable and complete protection from over-current and earth fault currents. DS203NC RCBOS are available in two ranges with different breaking capacities to cover all the applications in commercial and industrial installations; DS203NC L with 4.5kA and DS203NC with 6kA breaking capacity according to IEC/EN 61009. The range includes types AC, A, APR and S and tripping curves B, C or K.

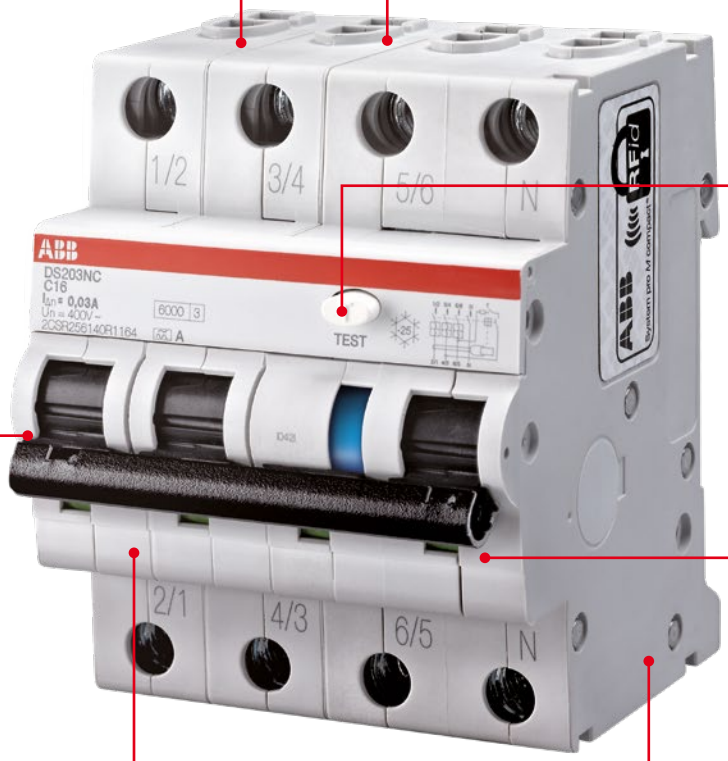
www.abb.com/lowvoltage

RCBO DS203NC. The effective choice

The benefits of a product with the highest quality standards

Compact size for easy installation in small spaces and retrofitting of already existing facilities.

Terminals designed to ease the installation.



Test pushbutton to verify the correct functioning of the device.

Operating toggle can be sealed into on/off position to ensure maintenance in complete safety.

The indication of the status of the contacts is done with a mechanical connection to the mobile contacts and independently from the toggle position.
The contacts position indicator (CPI) allows to exactly know the status of the contacts of the device (green: open contacts, red: closed contacts).

Space for identification labels of the protected line.

Same profile as the System pro M compact® range.

Use with cables and with busbars
Terminals with two slots allow to use different types of conductors: one housing is designed for cables up to 25 mm², the other for busbars or cables up to 10 mm².

RFid
Radio frequency tracking via a radio frequency tag to facilitate logistics and to be assured of the originality of the product.

Differential trip indicator
In case of tripping due to earth fault, a blue flag appears on the toggle thus immediate showing the cause of trip of the device. This feature helps in troubleshooting on the network and reduces the downtime for maintenance.

Laser print information
All the necessary technical and installation information are laser printed on the front and side of units ensuring visibility along the time, including order code on front of device for future orders.

Mounting clip
The mounting clip eases the installation and removal from the DIN rail, even when used in a battery of devices with busbars on bottom terminals (without need of remove other devices).

Approval stamps
DS203NC residual current circuit breakers with overcurrent protection can meet the different installation habits in the various countries and are approved by the most important certification bodies like IMQ, VDE, EAC, KEMA.

RCBOs

DS203NC technical features

			DS203NC L	DS203NC
Standards			IEC/EN 61009-1; IEC/EN 61009-2-1	IEC/EN 61009-1; IEC/EN 61009-2-1
Electrical features				
Type (wave form of the earth leakage sensed)			AC, A, APR	AC, A, APR, S
Number of poles			3P+N	3P+N
Rated current In		A	6≤ In ≤ 32A	6≤ In ≤ 32A
Rated sensitivity IΔn		mA	30-300	30-100-300
Rated voltage Ue		V	400-415V	400-415V
Insulation voltage Ui		V	500 V AC	500 V AC
Overvoltage category			III	III
Pollution degree			2	2
Operating voltage of circuit test Ut		V	195 (300 for 30 mA) - 440	
Rated frequency		Hz	50/60	50/60
Rated breaking capacity acc. to IEC/ EN 61009	ultimate Icn	A	4500	6000
Rated breaking capacity acc. to IEC/EN 60947-2	ultimate Icu	kA	6	10
	service Ics	kA	4.5	5
Rated residual breaking capacity IΔm acc. To EN 61009		kA	4.5	6
Rated residual breaking capacity IΔm acc. to IEC 61009		kA	4.5	4.5
Rated impulse withstand voltage (1.2/50) Uimp		kV	4	4
Dielectric test voltage at ind. freq. for 1 min.		kV	2.5	2.5
Thermomagnetic release - characteristic	B: 3 In ≤ Im ≤ 5 In			■
	C: 5 In ≤ Im ≤ 10 In		■	■
	K: 10 In ≤ Im ≤ 14 In			■
Surge current resistance (wave 8/20)		A	NA for A, AC versions; 3000 for APR version	NA for A, AC versions; 3000 for APR version; 5000 for S version
Mechanical features				
Housing			Insulation group II, RAL 7035	Insulation group II, RAL 7035
Toggle			black, sealable in ON-OFF positions	black, sealable in ON-OFF positions
Flag indicator			Differential trip indicator: blue on toggle	Differential trip indicator: blue on toggle
Contact position indication			CPI on window	CPI on window
Electrical life		operations	10000	10000
Mechanical life		operations	20000	20000
Protection degree	housing		IP4X	IP4X
	terminals		IP2X	IP2X
Shock resistance acc. to IEC/EN 60068-2-27			30g - 2 shocks - 13ms	30g - 2 shocks - 13ms
Vibration resistance acc. to IEC/ EN 60068-2-6			0,35mm or 5g - 20 cycles at 5…150…5 Hz without load	0,35mm or 5g - 20 cycles at 5…150…5 Hz without load
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH	28 cycles with 55°C/90-96% and 25°C/95-100%	28 cycles with 55°C/90-96% and 25°C/95-100%
Reference temperature for setting of thermal element		°C	30	30
Ambient temperature (with daily average ≤ +35 °C)		°C	-25…+55	-25…+55
Storage temperature		°C	-40…+70	-40…+70

			DS203NC L	DS203NC
Installation				
Terminal type	top/ bottom		failsafe bi-directional cylinder-lift terminal (shock protected)	failsafe bi-directional cylinder-lift terminal (shock protected)
Terminal size for cables	top/ bottom	mm^2	25/25	25/25
Terminal size for busbars	top/ bottom	mm^2	10/10	10/10
Tightening torque	top/ bottom	Nm	2.8	2.8
Mounting			on DIN rail EN 60715 (35 mm) by means of mounting clip	on DIN rail EN 60715 (35 mm) by means of mounting clip
Supply from			Top/bottom terminals	Top/bottom terminals
Dimensions and weight				
Dimensions (H x D x W)		mm	85 x 69 x 70.4	85 x 69 x 70.4
Weight		g	480	480
Combination with auxiliary elements				
Combinable with accessories and auxiliaries, by means of interface contact SN201-IH	Auxiliary contact		yes	yes
	Signal contact		yes	yes
	Shunt trip		yes	yes
	Undervoltage release		yes	yes
	Overvoltage release		yes	yes

RCBOs

DS203NC L AC

DS203NC L - AC type - C curve
Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 4 500 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3P+N	30	6	353928	DS203NC L C6 AC30	2CSR246040R1064		0.480	1
		8	343622	DS203NC L C8 AC30	2CSR246040R1084		0.480	1
		10	353829	DS203NC L C10 AC30	2CSR246040R1104		0.480	1
		13	343523	DS203NC L C13 AC30	2CSR246040R1134		0.480	1
		16	353720	DS203NC L C16 AC30	2CSR246040R1164		0.480	1
		20	343424	DS203NC L C20 AC30	2CSR246040R1204		0.480	1
		25	353621	DS203NC L C25 AC30	2CSR246040R1254		0.480	1
		32	343325	DS203NC L C32 AC30	2CSR246040R1324		0.480	1
	300	6	343226	DS203NC L C6 AC300	2CSR246040R3064		0.480	1
		8	343127	DS203NC L C8 AC300	2CSR246040R3084		0.480	1
		10	343028	DS203NC L C10 AC300	2CSR246040R3104		0.480	1
		13	342922	DS203NC L C13 AC300	2CSR246040R3134		0.480	1
		16	776727	DS203NC L C16 AC300	2CSR246040R3164		0.480	1
		20	342823	DS203NC L C20 AC300	2CSR246040R3204		0.480	1
		25	342724	DS203NC L C25 AC300	2CSR246040R3254		0.480	1
		32	358428	DS203NC L C32 AC300	2CSR246040R3324		0.480	1

RCBOs

DS203NC L A type

DS203NC L - A type - C curve
Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 4 500 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3P+N	30	6	354628	DS203NC L C6 A30	2CSR246140R1064		0.480	1
		8	344322	DS203NC L C8 A30	2CSR246140R1084		0.480	1
		10	354529	DS203NC L C10 A30	2CSR246140R1104		0.480	1
		13	344223	DS203NC L C13 A30	2CSR246140R1134		0.480	1
		16	354420	DS203NC L C16 A30	2CSR246140R1164		0.480	1
		20	344124	DS203NC L C20 A30	2CSR246140R1204		0.480	1
		25	354321	DS203NC L C25 A30	2CSR246140R1254		0.480	1
		32	498025	DS203NC L C32 A30	2CSR246140R1324		0.480	1
	300	6	499220	DS203NC L C6 A300	2CSR246140R3064		0.480	1
		8	344025	DS203NC L C8 A300	2CSR246140R3084		0.480	1
		10	354222	DS203NC L C10 A300	2CSR246140R3104		0.480	1
		13	343929	DS203NC L C13 A300	2CSR246140R3134		0.480	1
		16	354123	DS203NC L C16 A300	2CSR246140R3164		0.480	1
		20	343820	DS203NC L C20 A300	2CSR246140R3204		0.480	1
		25	354024	DS203NC L C25 A300	2CSR246140R3254		0.480	1
		32	343721	DS203NC L C32 A300	2CSR246140R3324		0.480	1

RCBOs

DS203NC L APR type

DS203NC L - APR type - C curve
Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal compromise between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA); protection and isolation of resistive and inductive loads.

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 4 500 A

Number of poles	Rated residual current IΔn mA	Rated current	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
		In A	EAN	Type code	Order code		kg	pc.
3P+N	30	6	079125	DS203NC L C6 APR30	2CSR246440R1064		0.480	1
		8	079026	DS203NC L C8 APR30	2CSR246440R1084		0.480	1
		10	078920	DS203NC L C10 APR30	2CSR246440R1104		0.480	1
		13	078821	DS203NC L C13 APR30	2CSR246440R1134		0.480	1
		16	078722	DS203NC L C16 APR30	2CSR246440R1164		0.480	1
		20	078623	DS203NC L C20 APR30	2CSR246440R1204		0.480	1
		25	078524	DS203NC L C25 APR30	2CSR246440R1254		0.480	1
		32	078425	DS203NC L C32 APR30	2CSR246440R1324		0.480	1

RCBOs

DS203NC AC ~ type

DS203NC - AC type - B curve
Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3P+N	30	6	077428	DS203NC B6 AC30	2CSR256040R1065		0.480	1
		8	077329	DS203NC B8 AC30	2CSR256040R1085		0.480	1
		10	077220	DS203NC B10 AC30	2CSR256040R1105		0.480	1
		13	077121	DS203NC B13 AC30	2CSR256040R1135		0.480	1
		16	077022	DS203NC B16 AC30	2CSR256040R1165		0.480	1
		20	076926	DS203NC B20 AC30	2CSR256040R1205		0.480	1
		25	790525	DS203NC B25 AC30	2CSR256040R1255		0.480	1
		32	076827	DS203NC B32 AC30	2CSR256040R1325		0.480	1
	100	6	076728	DS203NC B6 AC100	2CSR256040R2065		0.480	1
		8	076629	DS203NC B8 AC100	2CSR256040R2085		0.480	1
		10	076520	DS203NC B10 AC100	2CSR256040R2105		0.480	1
		13	076421	DS203NC B13 AC100	2CSR256040R2135		0.480	1
		16	076322	DS203NC B16 AC100	2CSR256040R2165		0.480	1
		20	076223	DS203NC B20 AC100	2CSR256040R2205		0.480	1
		25	076124	DS203NC B25 AC100	2CSR256040R2255		0.480	1
		32	076025	DS203NC B32 AC100	2CSR256040R2325		0.480	1
	300	6	353423	DS203NC B6 AC300	2CSR256040R3065		0.480	1
		8	353324	DS203NC B8 AC300	2CSR256040R3085		0.480	1
		10	266327	DS203NC B10 AC300	2CSR256040R3105		0.480	1
		13	266228	DS203NC B13 AC300	2CSR256040R3135		0.480	1
		16	266129	DS203NC B16 AC300	2CSR256040R3165		0.480	1
		20	266020	DS203NC B20 AC300	2CSR256040R3205		0.480	1
		25	265924	DS203NC B25 AC300	2CSR256040R3255		0.480	1
		32	790822	DS203NC B32 AC300	2CSR256040R3325		0.480	1

RCBOs

DS203NC AC type

DS203NC - AC type - C curve
Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3P+N	30	6	265825	DS203NC C6 AC30	2CSR256040R1064		0.480	1
		8	353225	DS203NC C8 AC30	2CSR256040R1084		0.480	1
		10	518228	DS203NC C10 AC30	2CSR256040R1104		0.480	1
		13	186823	DS203NC C13 AC30	2CSR256040R1134		0.480	1
		16	352228	DS203NC C16 AC30	2CSR256040R1164		0.480	1
		20	186724	DS203NC C20 AC30	2CSR256040R1204		0.480	1
		25	352129	DS203NC C25 AC30	2CSR256040R1254		0.480	1
		32	263920	DS203NC C32 AC30	2CSR256040R1324		0.480	1
	100	6	263821	DS203NC C6 AC100	2CSR256040R2064		0.480	1
		8	263722	DS203NC C8 AC100	2CSR256040R2084		0.480	1
		10	263623	DS203NC C10 AC100	2CSR256040R2104		0.480	1
		13	263524	DS203NC C13 AC100	2CSR256040R2134		0.480	1
		16	518327	DS203NC C16 AC100	2CSR256040R2164		0.480	1
		20	263425	DS203NC C20 AC100	2CSR256040R2204		0.480	1
		25	186021	DS203NC C25 AC100	2CSR256040R2254		0.480	1
		32	352020	DS203NC C32 AC100	2CSR256040R2324		0.480	1
	300	6	185925	DS203NC C6 AC300	2CSR256040R3064		0.480	1
		8	185826	DS203NC C8 AC300	2CSR256040R3084		0.480	1
		10	185727	DS203NC C10 AC300	2CSR256040R3104		0.480	1
		13	185628	DS203NC C13 AC300	2CSR256040R3134		0.480	1
		16	185529	DS203NC C16 AC300	2CSR256040R3164		0.480	1
		20	185420	DS203NC C20 AC300	2CSR256040R3204		0.480	1
		25	517825	DS203NC C25 AC300	2CSR256040R3254		0.480	1
		32	180821	DS203NC C32 AC300	2CSR256040R3324		0.480	1

RCBOs

DS203NC A type

DS203NC - A type - B curve
Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3P+N	30	6	078326	DS203NC B6 A30	2CSR256140R1065		0.480	1
		8	078227	DS203NC B8 A30	2CSR256140R1085		0.480	1
		10	078128	DS203NC B10 A30	2CSR256140R1105		0.480	1
		13	078029	DS203NC B13 A30	2CSR256140R1135		0.480	1
		16	077923	DS203NC B16 A30	2CSR256140R1165		0.480	1
		20	077824	DS203NC B20 A30	2CSR256140R1205		0.480	1
		25	077725	DS203NC B25 A30	2CSR256140R1255		0.480	1
		32	077626	DS203NC B32 A30	2CSR256140R1325		0.480	1
	100	6	080329	DS203NC B6 A100	2CSR256140R2065		0.480	1
		8	080220	DS203NC B8 A100	2CSR256140R2085		0.480	1
		10	080121	DS203NC B10 A100	2CSR256140R2105		0.480	1
		13	080022	DS203NC B13 A100	2CSR256140R2135		0.480	1
		16	079927	DS203NC B16 A100	2CSR256140R2165		0.480	1
		20	079828	DS203NC B20 A100	2CSR256140R2205		0.480	1
		25	079729	DS203NC B25 A100	2CSR256140R2255		0.480	1
		32	079620	DS203NC B32 A100	2CSR256140R2325		0.480	1
	300	6	079521	DS203NC B6 A300	2CSR256140R3065		0.480	1
		8	079422	DS203NC B8 A300	2CSR256140R3085		0.480	1
		10	079323	DS203NC B10 A300	2CSR256140R3105		0.480	1
		13	079224	DS203NC B13 A300	2CSR256140R3135		0.480	1
		16	305026	DS203NC B16 A300	2CSR256140R3165		0.480	1
		20	305125	DS203NC B20 A300	2CSR256140R3205		0.480	1
		25	400226	DS203NC B25 A300	2CSR256140R3255		0.480	1
		32	400028	DS203NC B32 A300	2CSR256140R3325		0.480	1

RCBOs

DS203NC A type

DS203NC - A type - C curve
Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3P+N	30	6	400127	DS203NC C6 A30	2CSR256140R1064		0.480	1
		8	058823	DS203NC C8 A30	2CSR256140R1084		0.480	1
		10	896524	DS203NC C10 A30	2CSR256140R1104		0.480	1
		13	768227	DS203NC C13 A30	2CSR256140R1134		0.480	1
		16	830924	DS203NC C16 A30	2CSR256140R1164		0.480	1
		20	839927	DS203NC C20 A30	2CSR256140R1204		0.480	1
		25	768524	DS203NC C25 A30	2CSR256140R1254		0.480	1
		32	831228	DS203NC C32 A30	2CSR256140R1324		0.480	1
	100	6	840220	DS203NC C6 A100	2CSR256140R2064		0.480	1
		8	896425	DS203NC C8 A100	2CSR256140R2084		0.480	1
		10	768128	DS203NC C10 A100	2CSR256140R2104		0.480	1
		13	830825	DS203NC C13 A100	2CSR256140R2134		0.480	1
		16	839828	DS203NC C16 A100	2CSR256140R2164		0.480	1
		20	896722	DS203NC C20 A100	2CSR256140R2204		0.480	1
		25	768425	DS203NC C25 A100	2CSR256140R2254		0.480	1
		32	831129	DS203NC C32 A100	2CSR256140R2324		0.480	1
	300	6	840121	DS203NC C6 A300	2CSR256140R3064		0.480	1
		8	830726	DS203NC C8 A300	2CSR256140R3084		0.480	1
		10	839729	DS203NC C10 A300	2CSR256140R3104		0.480	1
		13	896623	DS203NC C13 A300	2CSR256140R3134		0.480	1
		16	768326	DS203NC C16 A300	2CSR256140R3164		0.480	1
		20	831020	DS203NC C20 A300	2CSR256140R3204		0.480	1
		25	840022	DS203NC C25 A300	2CSR256140R3254		0.480	1
		32	631620	DS203NC C32 A300	2CSR256140R3324		0.480	1

DS203NC - A type - K curve
Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3P+N	30	6	376026	DS203NC K6 A30	2CSR256140R1067		0.480	1
		8	629726	DS203NC K8 A30	2CSR256140R1087		0.480	1
		10	375920	DS203NC K10 A30	2CSR256140R1107		0.480	1
		13	779322	DS203NC K13 A30	2CSR256140R1137		0.480	1
		16	769323	DS203NC K16 A30	2CSR256140R1167		0.480	1
		20	631521	DS203NC K20 A30	2CSR256140R1207		0.480	1
		25	375821	DS203NC K25 A30	2CSR256140R1257		0.480	1
		32	779223	DS203NC K32 A30	2CSR256140R1327		0.480	1
	100	6	593423	DS203NC K6 A100	2CSR256140R2067		0.480	1
		8	581628	DS203NC K8 A100	2CSR256140R2087		0.480	1
		10	569824	DS203NC K10 A100	2CSR256140R2107		0.480	1
		13	594727	DS203NC K13 A100	2CSR256140R2137		0.480	1
		16	582922	DS203NC K16 A100	2CSR256140R2167		0.480	1
		20	571124	DS203NC K20 A100	2CSR256140R2207		0.480	1
		25	592426	DS203NC K25 A100	2CSR256140R2257		0.480	1
		32	580621	DS203NC K32 A100	2CSR256140R2327		0.480	1

RCBOs

DS203NC APR type

DS203NC - APR type - C curve
Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal compromise between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA); protection and isolation of resistive and inductive loads.

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3P+N	30	6	349822	DS203NC C6 APR30	2CSR256440R1064		0.480	1
		8	180722	DS203NC C8 APR30	2CSR256440R1084		0.480	1
		10	349723	DS203NC C10 APR30	2CSR256440R1104		0.480	1
		13	261520	DS203NC C13 APR30	2CSR256440R1134		0.480	1
		16	261421	DS203NC C16 APR30	2CSR256440R1164		0.480	1
		20	261322	DS203NC C20 APR30	2CSR256440R1204		0.480	1
		25	261223	DS203NC C25 APR30	2CSR256440R1254		0.480	1
		32	261124	DS203NC C32 APR30	2CSR256440R1324		0.480	1
	100	6	274223	DS203NC C6 APR100	2CSR256440R2064		0.480	1
		8	517924	DS203NC C8 APR100	2CSR256440R2084		0.480	1
		10	261025	DS203NC C10 APR100	2CSR256440R2104		0.480	1
		13	180029	DS203NC C13 APR100	2CSR256440R2134		0.480	1
		16	349624	DS203NC C16 APR100	2CSR256440R2164		0.480	1
		20	179924	DS203NC C20 APR100	2CSR256440R2204		0.480	1
		25	179825	DS203NC C25 APR100	2CSR256440R2254		0.480	1
		32	179726	DS203NC C32 APR100	2CSR256440R2324		0.480	1
	300	6	179627	DS203NC C6 APR300	2CSR256440R3064		0.480	1
		8	179528	DS203NC C8 APR300	2CSR256440R3084		0.480	1
		10	179429	DS203NC C10 APR300	2CSR256440R3104		0.480	1
		13	518020	DS203NC C13 APR300	2CSR256440R3134		0.480	1
		16	176329	DS203NC C16 APR300	2CSR256440R3164		0.480	1
		20	351023	DS203NC C20 APR300	2CSR256440R3204		0.480	1
		25	176220	DS203NC C25 APR300	2CSR256440R3254		0.480	1
		32	350927	DS203NC C32 APR300	2CSR256440R3324		0.480	1

RCBOs

DS203NC A S type

DS203NC - A S type - C curve
Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA). Selective type.

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 6 000 A

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3P+N	100	16	021827	DS203NC C16 A S100	2CSR256240R2164		0.480	1
		20	021728	DS203NC C20 A S100	2CSR256240R2204		0.480	1
		25	021629	DS203NC C25 A S100	2CSR256240R2254		0.480	1
		32	021520	DS203NC C32 A S100	2CSR256240R2324		0.480	1
	300	16	297727	DS203NC C16 A S300	2CSR256240R3164		0.480	1
		20	373223	DS203NC C20 A S300	2CSR256240R3204		0.480	1
		25	373124	DS203NC C25 A S300	2CSR256240R3254		0.480	1
		32	077527	DS203NC C32 A S300	2CSR256240R3324		0.480	1

RCBOs

DS 200 technical features

DS 200

	Standards		
Electrical features	Operating characteristic: type (wave form of the earth leakage sensed)		
	Poles		
	Rated sensitivity IΔn		A
	Rated current In		A
	Rated voltage Ue	2P	V
		3P, 4P	V
	Insulation voltage Ui		V
	Operating voltage of circuit test Ut	2P	V
		3P	V
		4P	V
	Rated frequency		Hz
	Rated breaking capacity acc. to IEC/EN 61009	ultimate Icn	A
	Rated breaking capacity acc. to IEC/EN 60947-2 1P+N @230 VAC, 2P, 3P, 4P @400 VAC	ultimate Icu	kA
		service Ics	kA
	Rated residual breaking capacity IΔm		kA
	Rated impulse withstand voltage (1.2/50) Uimp		kV
	Dielectric test voltage at ind. freq. for 1 min.		kV
	Overvoltage category		
	Thermomagnetic release characteristic	B: 3 In ≤ Im ≤ 5 In	
		C: 5 In ≤ Im ≤ 10 In	
		K: 10 In ≤ Im ≤ 14 In	
	Surge current resistance (wave 8/20)		A
Mechanical features	Toggle	2P, 3P, 4P	
	Contact position indication		
	Electrical life		
	Mechanical life		
	Protection degree	housing	
		terminals	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH
	Reference temperature for setting of thermal element		°C
	Ambient temperature (with daily average ≤ +35 °C)		°C
	Storage temperature		°C
Installation	Terminal type	top	
		bottom 2P	
		3P/4P In ≤ 40 A	
		3P/4P 50 A ≤ In ≤ 63 A	
	Terminal size top/bottom per cable	2P	mm^2
		3P/4P In ≤ 40 A	mm^2
		3P/4P 50 A ≤ In ≤ 63 A	mm^2
	Tightening torque top/bottom	2P	Nm
		3P/4P In ≤ 40 A	Nm
		3P/4P 50 A ≤ In ≤ 63 A	Nm
	Mounting		
	Mounting position		
	Connection		

① Available depending on type and characteristic curve. For 2P RCBOs A type B-C curves up to 32 A, refer to DS202C 2 protected poles RCBOs in only two modules

② Prior to connection of aluminium conductors (≥ 4 mm^2) ensure that their contact points are cleaned, brushed and coated with grease

DS 200 AC	**DS 200 A**	**DS 200 M AC**	**DS 200 M A**
IEC/EN 61009-1; IEC/EN 61009-2-1; IEC/EN 60947-2			
AC	A	AC	A
2P, 3P, 4P			
0.03			
6 ≤In ≤ 63 ①			
230-240			
230/400 - 240/415			
500			
110 (170 for 30 mA) - 254			
195 (300 for 30 mA) - 440			
195 (300 for 30 mA) - 440			
50…60			
6000	6000	10000	10000
10	10	15	15
7.5	7.5	11.2	11.2
6	6	10	10
6			
2.5			
III, disconnector abilities			
■	■	■	■
■	■	■	■
	■		
NA			
black (MCB) sealable in ON-OFF position + blue (RCD)			
CPI on window			
10000			
20000			
IP4X			
IP2X			
28 cycles with 55°C/90-96% and 25°C/95-100%			
30			
-25…+55			
-40…+70			
failsafe bidirectional cylinder-lift terminal (shock protected) ②			
failsafe bidirectional cylinder-lift terminal (shock protected) ②			
cage (shock protected)			
failsafe bidirectional cylinder-lift terminal (shock protected) ②			
rigid: 35/25 flexible: 25/25			
rigid: 35/25 flexible: 25/16			
rigid : 35/25 flexible : 25/25			
2.8/2.8			
2.8/1.2			
2.8/2.8			
on DIN rail EN 60715 (35 mm) by means of fast clip device			
Any			
715 (35 mm) by means of fast clip devicefrom top and bottom			

RCBOs

DS 200 technical features

DS 200

Dimensions and weight	Dimensions (H x D x W)	2P	mm
		3P In ≤ 40 A	mm
		4P In ≤ 40 A	mm
		3P 50 A ≤ In ≤ 63 A	mm
		4P 50 A ≤ In ≤ 63 A	mm
	Weight	2P	g
		3P In ≤ 40 A	g
		4P In ≤ 40 A	g
		3P 50 A ≤ In ≤ 63 A	g
		4P 50 A ≤ In ≤ 63 A	g
Combination with auxiliary elements	Combinable with:	auxiliary contact	
		signal contact/auxiliary switch	
		shunt trip	
		undervoltage release	

DS 200 AC	DS 200 A	DS 200 M AC	DS 200 M A
85 x 69 x 70			
85 x 69 x 87.5			
85 x 69 x 105			
85 x 69 x 122.5			
85 x 69 x 140			
475			
625			
775			
775			
925			
yes			
yes			
yes			
yes			

RCBOs

DS 201 series 6000 - AC type, B characteristic

DS 202

DS 203

DS 204

DS 200 AC type, B characteristic
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial, residential.
Standard: IEC/EN 61009-1, IEC/EN 61009-2-1 and IEC/EN 60947-2
Icn = 6 kA

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	6	863502	DS202 AC-B6/0.03	2CSR252001R1065		0.440	1
		10	863601	DS202 AC-B10/0.03	2CSR252001R1105		0.440	1
		13	863700	DS202 AC-B13/0.03	2CSR252001R1135		0.440	1
		16	863809	DS202 AC-B16/0.03	2CSR252001R1165		0.440	1
		20	863908	DS202 AC-B20/0.03	2CSR252001R1205		0.440	1
		25	864004	DS202 AC-B25/0.03	2CSR252001R1255		0.440	1
		32	864103	DS202 AC-B32/0.03	2CSR252001R1325		0.440	1
		40	864202	DS202 AC-B40/0.03	2CSR252001R1405		0.440	1
		50 ①	864301	DS202 AC-B50/0.03	2CSR252001R1505		0.440	1
		63 ①	864400	DS202 AC-B63/0.03	2CSR252001R1635		0.440	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	6	865506	DS203 AC-B6/0.03	2CSR253001R1065		0.610	1
		10	865605	DS203 AC-B10/0.03	2CSR253001R1105		0.610	1
		13	865704	DS203 AC-B13/0.03	2CSR253001R1135		0.610	1
		16	865803	DS203 AC-B16/0.03	2CSR253001R1165		0.610	1
		20	865902	DS203 AC-B20/0.03	2CSR253001R1205		0.610	1
		25	866008	DS203 AC-B25/0.03	2CSR253001R1255		0.610	1
		32	866107	DS203 AC-B32/0.03	2CSR253001R1325		0.610	1
		40	866206	DS203 AC-B40/0.03	2CSR253001R1405		0.610	1
		50 ①	866305	DS203 AC-B50/0.03	2CSR253001R1505		0.650	1
		63 ①	866404	DS203 AC-B63/0.03	2CSR253001R1635		0.650	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	6	867500	DS204 AC-B6/0.03	2CSR254001R1065		0.780	1
		10	867609	DS204 AC-B10/0.03	2CSR254001R1105		0.780	1
		13	867708	DS204 AC-B13/0.03	2CSR254001R1135		0.780	1
		16	867807	DS204 AC-B16/0.03	2CSR254001R1165		0.780	1
		20	867906	DS204 AC-B20/0.03	2CSR254001R1205		0.780	1
		25	868002	DS204 AC-B25/0.03	2CSR254001R1255		0.780	1
		32	868101	DS204 AC-B32/0.03	2CSR254001R1325		0.780	1
		40	868200	DS204 AC-B40/0.03	2CSR254001R1405		0.780	1
		50 ①	868309	DS204 AC-B50/0.03	2CSR254001R1505		0.825	1
		63 ①	868408	DS204 AC-B63/0.03	2CSR254001R1635		0.825	1

① provided with additional terminals for remote tripping

RCBOs

DS 200 series 6000 - AC type, C characteristic

DS 202

DS 203

DS 204

DS 200 AC type, C characteristic
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1 and IEC/EN 60947-2
Icn = 6 kA

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	6	869504	DS202 AC-C6/0.03	2CSR252001R1064		0.440	1
		10	869603	DS202 AC-C10/0.03	2CSR252001R1104		0.440	1
		13	869702	DS202 AC-C13/0.03	2CSR252001R1134		0.440	1
		16	869801	DS202 AC-C16/0.03	2CSR252001R1164		0.440	1
		20	869900	DS202 AC-C20/0.03	2CSR252001R1204		0.440	1
		25	870005	DS202 AC-C25/0.03	2CSR252001R1254		0.440	1
		32	870104	DS202 AC-C32/0.03	2CSR252001R1324		0.440	1
		40	870203	DS202 AC-C40/0.03	2CSR252001R1404		0.440	1
		50 ①	870302	DS202 AC-C50/0.03	2CSR252001R1504		0.440	1
		63 ①	870401	DS202 AC-C63/0.03	2CSR252001R1634		0.440	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	6	871507	DS203 AC-C6/0.03	2CSR253001R1064		0.610	1
		10	871606	DS203 AC-C10/0.03	2CSR253001R1104		0.610	1
		13	871705	DS203 AC-C13/0.03	2CSR253001R1134		0.610	1
		16	871804	DS203 AC-C16/0.03	2CSR253001R1164		0.610	1
		20	871903	DS203 AC-C20/0.03	2CSR253001R1204		0.610	1
		25	872009	DS203 AC-C25/0.03	2CSR253001R1254		0.610	1
		32	872108	DS203 AC-C32/0.03	2CSR253001R1324		0.610	1
		40	872207	DS203 AC-C40/0.03	2CSR253001R1404		0.610	1
		50 ①	872306	DS203 AC-C50/0.03	2CSR253001R1504		0.650	1
		63 ①	872405	DS203 AC-C63/0.03	2CSR253001R1634		0.650	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	6	873501	DS204 AC-C6/0.03	2CSR254001R1064		0.780	1
		10	873600	DS204 AC-C10/0.03	2CSR254001R1104		0.780	1
		13	873709	DS204 AC-C13/0.03	2CSR254001R1134		0.780	1
		16	873808	DS204 AC-C16/0.03	2CSR254001R1164		0.780	1
		20	873907	DS204 AC-C20/0.03	2CSR254001R1204		0.780	1
		25	874003	DS204 AC-C25/0.03	2CSR254001R1254		0.780	1
		32	874102	DS204 AC-C32/0.03	2CSR254001R1324		0.780	1
		40	874201	DS204 AC-C40/0.03	2CSR254001R1404		0.780	1
		50 ①	874300	DS204 AC-C50/0.03	2CSR254001R1504		0.825	1
		63 ①	874409	DS204 AC-C63/0.03	2CSR254001R1634		0.825	1

① provided with additional terminals for remote tripping

RCBOs

DS 200 series 6000 - A type, B characteristic

DS 202

DS 203

DS 204

DS 200 A type, B characteristic
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1 and IEC/EN 60947-2
Icn = 6 kA

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	40	858201	DS202 A-B40/0.03	2CSR252101R1405		0.440	1
		50 ①	858300	DS202 A-B50/0.03	2CSR252101R1505		0.440	1
		63 ①	858409	DS202 A-B63/0.03	2CSR252101R1635		0.440	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	6	858508	DS203 A-B6/0.03	2CSR253101R1065		0.610	1
		10	858607	DS203 A-B10/0.03	2CSR253101R1105		0.610	1
		13	858706	DS203 A-B13/0.03	2CSR253101R1135		0.610	1
		16	858805	DS203 A-B16/0.03	2CSR253101R1165		0.610	1
		20	858904	DS203 A-B20/0.03	2CSR253101R1205		0.610	1
		25	859000	DS203 A-B25/0.03	2CSR253101R1255		0.610	1
		32	859109	DS203 A-B32/0.03	2CSR253101R1325		0.610	1
		40	859208	DS203 A-B40/0.03	2CSR253101R1405		0.610	1
		50 ①	859307	DS203 A-B50/0.03	2CSR253101R1505		0.650	1
		63 ①	859406	DS203 A-B63/0.03	2CSR253101R1635		0.650	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	6	859505	DS204 A-B6/0.03	2CSR254101R1065		0.780	1
		10	859604	DS204 A-B10/0.03	2CSR254101R1105		0.780	1
		13	859703	DS204 A-B13/0.03	2CSR254101R1135		0.780	1
		16	859802	DS204 A-B16/0.03	2CSR254101R1165		0.780	1
		20	859901	DS204 A-B20/0.03	2CSR254101R1205		0.780	1
		25	860006	DS204 A-B25/0.03	2CSR254101R1255		0.780	1
		32	860105	DS204 A-B32/0.03	2CSR254101R1325		0.780	1
		40	860204	DS204 A-B40/0.03	2CSR254101R1405		0.780	1
		50 ①	860303	DS204 A-B50/0.03	2CSR254101R1505		0.825	1
		63 ①	860402	DS204 A-B63/0.03	2CSR254101R1635		0.825	1

① provided with additional terminals for remote tripping

RCBOs

DS 200 series 6000 - A type, C characteristic

DS 202

DS 203

DS 204

DS 200 A type, C characteristic
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1 and IEC/EN 60947-2
Icn = 6 kA

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	40	861201	DS202 A-C40/0.03	2CSR252101R1404		0.440	1
		50 ①	861300	DS202 A-C50/0.03	2CSR252101R1504		0.440	1
		63 ①	861409	DS202 A-C63/0.03	2CSR252101R1634		0.440	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	6	861508	DS203 A-C6/0.03	2CSR253101R1064		0.610	1
		10	861607	DS203 A-C10/0.03	2CSR253101R1104		0.610	1
		13	861706	DS203 A-C13/0.03	2CSR253101R1134		0.610	1
		16	861805	DS203 A-C16/0.03	2CSR253101R1164		0.610	1
		20	861904	DS203 A-C20/0.03	2CSR253101R1204		0.610	1
		25	862000	DS203 A-C25/0.03	2CSR253101R1254		0.610	1
		32	862109	DS203 A-C32/0.03	2CSR253101R1324		0.610	1
		40	862208	DS203 A-C40/0.03	2CSR253101R1404		0.610	1
		50 ①	862307	DS203 A-C50/0.03	2CSR253101R1504		0.650	1
		63 ①	862406	DS203 A-C63/0.03	2CSR253101R1634		0.650	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	6	862505	DS204 A-C6/0.03	2CSR254101R1064		0.780	1
		10	862604	DS204 A-C10/0.03	2CSR254101R1104		0.780	1
		13	862703	DS204 A-C13/0.03	2CSR254101R1134		0.780	1
		16	862802	DS204 A-C16/0.03	2CSR254101R1164		0.780	1
		20	862901	DS204 A-C20/0.03	2CSR254101R1204		0.780	1
		25	863007	DS204 A-C25/0.03	2CSR254101R1254		0.780	1
		32	863106	DS204 A-C32/0.03	2CSR254101R1324		0.780	1
		40	863205	DS204 A-C40/0.03	2CSR254101R1404		0.780	1
		50 ①	863304	DS204 A-C50/0.03	2CSR254101R1504		0.825	1
		63 ①	863403	DS204 A-C63/0.03	2CSR254101R1634		0.825	1

① provided with additional terminals for remote tripping

RCBOs

DS 200 series 6000 - A type, K characteristic

DS 202

DS 203

DS 204

DS 200 A type, K characteristic
Function: protection and control against overloads and short-circuit in systems where motors, transformers and auxiliary circuits are present. Advantages: no unwanted release in case of currents peak up to 8 x In, according to the series; thanks to the high sensibility bimetal, the K curve switches offer protection of the sensible elements from overcurrents; they also allow the best protection of cables and lines.

Application: commercial, industrial.
Standard: IEC/EN 60947-2
Icn = 6 kA

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	6	930303	DS202 A-K6/0.03	2CSR252101R1067		0.475	1
		10	900702	DS202 A-K10/0.03	2CSR252101R1107		0.475	1
		13	930402	DS202 A-K13/0.03	2CSR252101R1137		0.475	1
		16	930501	DS202 A-K16/0.03	2CSR252101R1167		0.475	1
		20	930600	DS202 A-K20/0.03	2CSR252101R1207		0.475	1
		25	930709	DS202 A-K25/0.03	2CSR252101R1257		0.475	1
		32	930808	DS202 A-K32/0.03	2CSR252101R1327		0.475	1
		40	930907	DS202 A-K40/0.03	2CSR252101R1407		0.475	1
		50 ①	931003	DS202 A-K50/0.03	2CSR252101R1507		0.475	1
		63 ①	931102	DS202 A-K63/0.03	2CSR252101R1637		0.475	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	6	931201	DS204 A-K6/0.03	2CSR254101R1067		0.775	1
		10	931300	DS204 A-K10/0.03	2CSR254101R1107		0.775	1
		13	931409	DS204 A-K13/0.03	2CSR254101R1137		0.775	1
		16	931508	DS204 A-K16/0.03	2CSR254101R1167		0.775	1
		20	931607	DS204 A-K20/0.03	2CSR254101R1207		0.775	1
		25	931706	DS204 A-K25/0.03	2CSR254101R1257		0.775	1
		32	931805	DS204 A-K32/0.03	2CSR254101R1327		0.775	1
		40	931904	DS204 A-K40/0.03	2CSR254101R1407		0.775	1
		50 ①	932000	DS204 A-K50/0.03	2CSR254101R1507		0.775	1
		63 ①	932109	DS204 A-K63/0.03	2CSR254101R1637		0.775	1

① provided with additional terminals for remote tripping

RCBOs

DS 200 M series 10000 - AC type, B characteristic

DS 202

DS 203

DS 204

DS 200 M AC type, B characteristic
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 kA

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	6	932208	DS202 M AC-B6/0.03	2CSR272001R1065		0.440	1
		10	932307	DS202 M AC-B10/0.03	2CSR272001R1105		0.440	1
		13	932406	DS202 M AC-B13/0.03	2CSR272001R1135		0.440	1
		16	932505	DS202 M AC-B16/0.03	2CSR272001R1165		0.440	1
		20	932604	DS202 M AC-B20/0.03	2CSR272001R1205		0.440	1
		25	932703	DS202 M AC-B25/0.03	2CSR272001R1255		0.440	1
		32	932802	DS202 M AC-B32/0.03	2CSR272001R1325		0.440	1
		40	932901	DS202 M AC-B40/0.03	2CSR272001R1405		0.440	1
		50 ①	933007	DS202 M AC-B50/0.03	2CSR272001R1505		0.440	1
		63 ①	933106	DS202 M AC-B63/0.03	2CSR272001R1635		0.440	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	6	933205	DS203 M AC-B6/0.03	2CSR273001R1065		0.610	1
		10	933304	DS203 M AC-B10/0.03	2CSR273001R1105		0.610	1
		13	933403	DS203 M AC-B13/0.03	2CSR273001R1135		0.610	1
		16	933502	DS203 M AC-B16/0.03	2CSR273001R1165		0.610	1
		20	933601	DS203 M AC-B20/0.03	2CSR273001R1205		0.610	1
		25	933700	DS203 M AC-B25/0.03	2CSR273001R1255		0.610	1
		32	933809	DS203 M AC-B32/0.03	2CSR273001R1325		0.610	1
		40	933908	DS203 M AC-B40/0.03	2CSR273001R1405		0.610	1
		50 ①	934004	DS203 M AC-B50/0.03	2CSR273001R1505		0.650	1
		63 ①	934103	DS203 M AC-B63/0.03	2CSR273001R1635		0.650	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	6	934202	DS204 M AC-B6/0.03	2CSR274001R1065		0.780	1
		10	934301	DS204 M AC-B10/0.03	2CSR274001R1105		0.780	1
		13	934400	DS204 M AC-B13/0.03	2CSR274001R1135		0.780	1
		16	934509	DS204 M AC-B16/0.03	2CSR274001R1165		0.780	1
		20	934608	DS204 M AC-B20/0.03	2CSR274001R1205		0.780	1
		25	934707	DS204 M AC-B25/0.03	2CSR274001R1255		0.780	1
		32	934806	DS204 M AC-B32/0.03	2CSR274001R1325		0.780	1
		40	934905	DS204 M AC-B40/0.03	2CSR274001R1405		0.780	1
		50 ①	935001	DS204 M AC-B50/0.03	2CSR274001R1505		0.825	1
		63 ①	935100	DS204 M AC-B63/0.03	2CSR274001R1635		0.825	1

① provided with additional terminals for remote tripping

RCBOs

DS 200 M series 10000 - AC type, C characteristic

DS 202

DS 203

DS 204

DS 200 M AC type, C characteristic
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 kA

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	6	851509	DS202 M AC-C6/0.03	2CSR272001R1064		0.440	1
		10	851608	DS202 M AC-C10/0.03	2CSR272001R1104		0.440	1
		13	851707	DS202 M AC-C13/0.03	2CSR272001R1134		0.440	1
		16	851806	DS202 M AC-C16/0.03	2CSR272001R1164		0.440	1
		20	851905	DS202 M AC-C20/0.03	2CSR272001R1204		0.440	1
		25	852001	DS202 M AC-C25/0.03	2CSR272001R1254		0.440	1
		32	852100	DS202 M AC-C32/0.03	2CSR272001R1324		0.440	1
		40	852209	DS202 M AC-C40/0.03	2CSR272001R1404		0.440	1
		50 ①	852308	DS202 M AC-C50/0.03	2CSR272001R1504		0.440	1
		63 ①	852407	DS202 M AC-C63/0.03	2CSR272001R1634		0.440	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	6	852506	DS203 M AC-C6/0.03	2CSR273001R1064		0.610	1
		10	852605	DS203 M AC-C10/0.03	2CSR273001R1104		0.610	1
		13	852704	DS203 M AC-C13/0.03	2CSR273001R1134		0.610	1
		16	852803	DS203 M AC-C16/0.03	2CSR273001R1164		0.610	1
		20	852902	DS203 M AC-C20/0.03	2CSR273001R1204		0.610	1
		25	853008	DS203 M AC-C25/0.03	2CSR273001R1254		0.610	1
		32	853107	DS203 M AC-C32/0.03	2CSR273001R1324		0.610	1
		40	853206	DS203 M AC-C40/0.03	2CSR273001R1404		0.610	1
		50 ①	853305	DS203 M AC-C50/0.03	2CSR273001R1504		0.650	1
		63 ①	853404	DS203 M AC-C63/0.03	2CSR273001R1634		0.650	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	6	853503	DS204 M AC-C6/0.03	2CSR274001R1064		0.780	1
		10	853602	DS204 M AC-C10/0.03	2CSR274001R1104		0.780	1
		13	853701	DS204 M AC-C13/0.03	2CSR274001R1134		0.780	1
		16	853800	DS204 M AC-C16/0.03	2CSR274001R1164		0.780	1
		20	853909	DS204 M AC-C20/0.03	2CSR274001R1204		0.780	1
		25	854005	DS204 M AC-C25/0.03	2CSR274001R1254		0.780	1
		32	854104	DS204 M AC-C32/0.03	2CSR274001R1324		0.780	1
		40	854203	DS204 M AC-C40/0.03	2CSR274001R1404		0.780	1
		50 ①	854302	DS204 M AC-C50/0.03	2CSR274001R1504		0.825	1
		63 ①	854401	DS204 M AC-C63/0.03	2CSR274001R1634		0.825	1

① provided with additional terminals for remote tripping

RCBOs

DS 200 M series 10000 - A type, B characteristic

DS 202

DS 203

DS 204

DS 200 M A type, B characteristic
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 kA

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	40	846208	DS202 M A-B40/0.03	2CSR272101R1405		0.440	1
		50 ①	846307	DS202 M A-B50/0.03	2CSR272101R1505		0.440	1
		63 ①	846406	DS202 M A-B63/0.03	2CSR272101R1635		0.440	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	6	846505	DS203 M A-B6/0.03	2CSR273101R1065		0.610	1
		10	846604	DS203 M A-B10/0.03	2CSR273101R1105		0.610	1
		13	846703	DS203 M A-B13/0.03	2CSR273101R1135		0.610	1
		16	846802	DS203 M A-B16/0.03	2CSR273101R1165		0.610	1
		20	846901	DS203 M A-B20/0.03	2CSR273101R1205		0.610	1
		25	847007	DS203 M A-B25/0.03	2CSR273101R1255		0.610	1
		32	847106	DS203 M A-B32/0.03	2CSR273101R1325		0.610	1
		40	847205	DS203 M A-B40/0.03	2CSR273101R1405		0.610	1
		50 ①	847304	DS203 M A-B50/0.03	2CSR273101R1505		0.650	1
		63 ①	847403	DS203 M A-B63/0.03	2CSR273101R1635		0.650	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	6	847502	DS204 M A-B6/0.03	2CSR274101R1065		0.780	1
		10	847601	DS204 M A-B10/0.03	2CSR274101R1105		0.780	1
		13	847700	DS204 M A-B13/0.03	2CSR274101R1135		0.780	1
		16	847809	DS204 M A-B16/0.03	2CSR274101R1165		0.780	1
		20	847908	DS204 M A-B20/0.03	2CSR274101R1205		0.780	1
		25	848004	DS204 M A-B25/0.03	2CSR274101R1255		0.780	1
		32	848103	DS204 M A-B32/0.03	2CSR274101R1325		0.780	1
		40	848202	DS204 M A-B40/0.03	2CSR274101R1405		0.780	1
		50 ①	848301	DS204 M A-B50/0.03	2CSR274101R1505		0.825	1
		63 ①	848400	DS204 M A-B63/0.03	2CSR274101R1635		0.825	1

① provided with additional terminals for remote tripping

RCBOs

DS 200 M series 10000 - A type, C characteristic

DS 202

DS 203

DS 204

DS 200 M A type, C characteristic
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

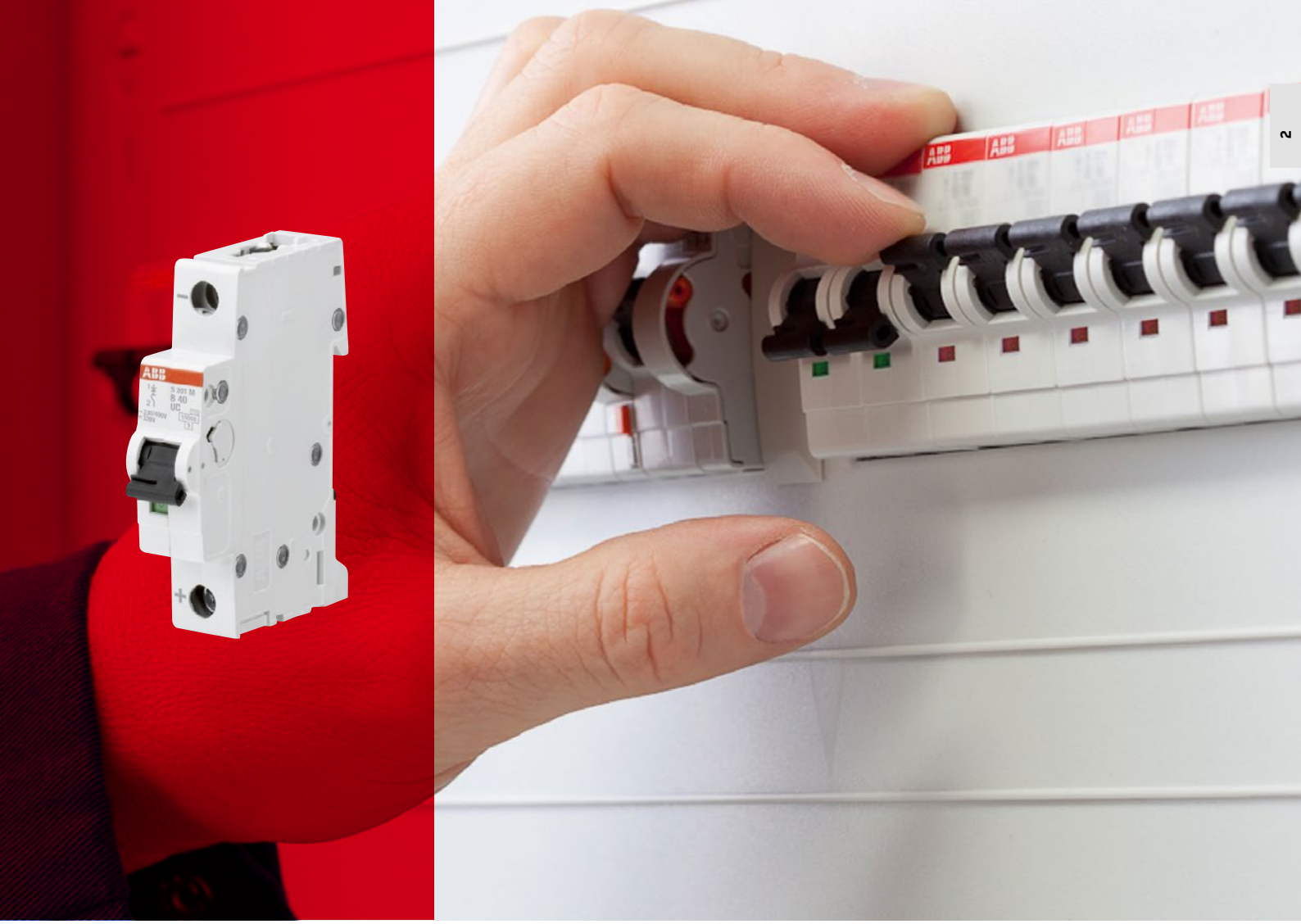
Application: commercial, industrial.
Standard: IEC/EN 61009-1; IEC/EN 61009-2-1
Icn = 10 kA

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	40	849209	DS202 M A-C40/0.03	2CSR272101R1404		0.440	1
		50 ①	849308	DS202 M A-C50/0.03	2CSR272101R1504		0.440	1
		63 ①	849407	DS202 M A-C63/0.03	2CSR272101R1634		0.440	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	6	849506	DS203 M A-C6/0.03	2CSR273101R1064		0.610	1
		10	849605	DS203 M A-C10/0.03	2CSR273101R1104		0.610	1
		13	849704	DS203 M A-C13/0.03	2CSR273101R1134		0.610	1
		16	849803	DS203 M A-C16/0.03	2CSR273101R1164		0.610	1
		20	849902	DS203 M A-C20/0.03	2CSR273101R1204		0.610	1
		25	850007	DS203 M A-C25/0.03	2CSR273101R1254		0.610	1
		32	850106	DS203 M A-C32/0.03	2CSR273101R1324		0.610	1
		40	850205	DS203 M A-C40/0.03	2CSR273101R1404		0.610	1
		50 ①	850304	DS203 M A-C50/0.03	2CSR273101R1504		0.650	1
		63 ①	850403	DS203 M A-C63/0.03	2CSR273101R1634		0.650	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	6	850502	DS204 M A-C6/0.03	2CSR274101R1064		0.780	1
		10	850601	DS204 M A-C10/0.03	2CSR274101R1104		0.780	1
		13	850700	DS204 M A-C13/0.03	2CSR274101R1134		0.780	1
		16	850809	DS204 M A-C16/0.03	2CSR274101R1164		0.780	1
		20	850908	DS204 M A-C20/0.03	2CSR274101R1204		0.780	1
		25	851004	DS204 M A-C25/0.03	2CSR274101R1254		0.780	1
		32	851103	DS204 M A-C32/0.03	2CSR274101R1324		0.780	1
		40	851202	DS204 M A-C40/0.03	2CSR274101R1404		0.780	1
		50 ①	851301	DS204 M A-C50/0.03	2CSR274101R1504		0.825	1
		63 ①	851400	DS204 M A-C63/0.03	2CSR274101R1634		0.825	1

① provided with additional terminals for remote tripping



Is it possible to switch off AC/DC?
Certainly.

The S 200 M UC impresses with its performance range and the accordingly large amount of approvals. Its high inbuilt short circuit breaking capacity across the entire model line, its flexible application for both direct and alternating currents and its approval and compliance in accordance with all major international and local standards make it truly unique. The miniature circuit breaker is a valuable addition to the existing System pro M compact® range which allows all known components to be combined effortlessly with this model line. Whether warehousing and project engineering, planning and installation or maintaining your equipment, the S 200 M UC is a simple and flexible solution.
For more information, see **www.abb.com**

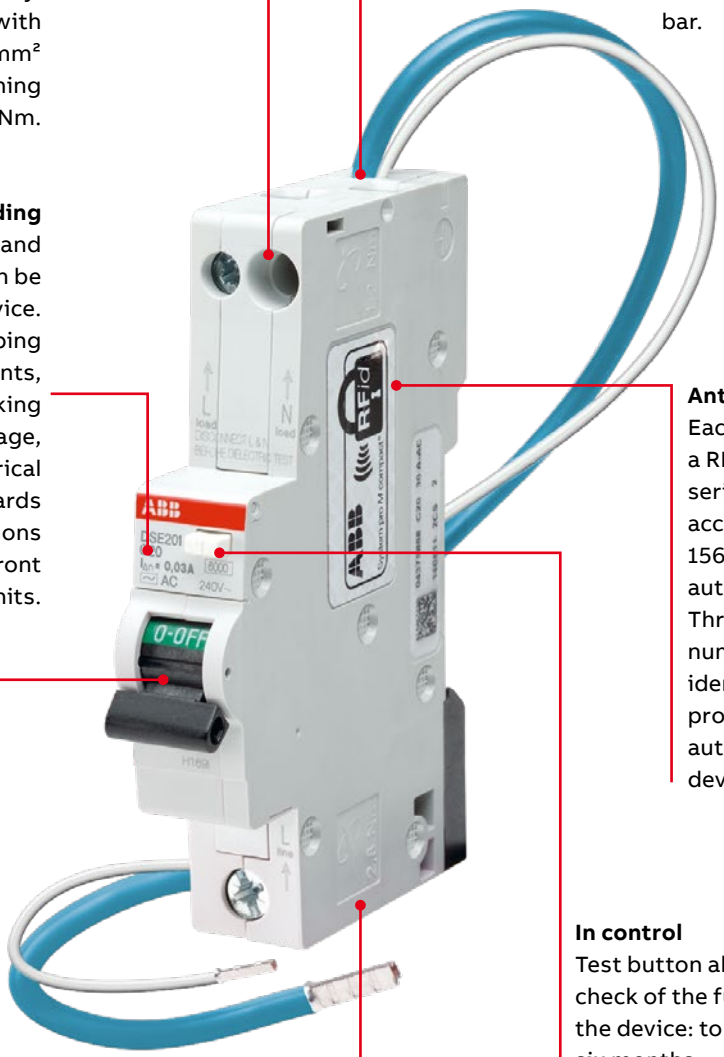
eRCBO, the value of quality

Made with attention to details

Space for insulated screwdrivers
The larger neutral hole allows the use of an insulated screwdriver to tighten the screw of neutral terminals, ensuring maximum operation safety. All versions are equipped with cage type terminals (16mm² load side), with tightening torque of 1.2 Nm.

Product coding
All the necessary technical and installation information can be found directly on the device. Product range, tripping characteristics, rated currents, sensitivity, type, breaking capacity, rated voltage, order code, EAN code, electrical scheme, reference standards and many other specifications are laser printed on the front and side of units.

Real contact position indicator on toggle
Directly connected to the moving contact of the device, it indicates the exact position of the contacts at all times (red: closed contacts, green: open contacts).



Easy to install
Fast installation is supported by the two flying leads for neutral cable and functional earth, each integrated in the device, which can be directly connected to the main neutral bar and main earth bar.

Anti counterfeiting
Each DSE201 is equipped with a RFID tag containing a unique serial number assigned by ABB according to ISO/IEC FCD 15693-3 standard in order to authenticate the product. Through this unique serial number, ABB can easily identify counterfeited products and verify the authenticity of each single device.

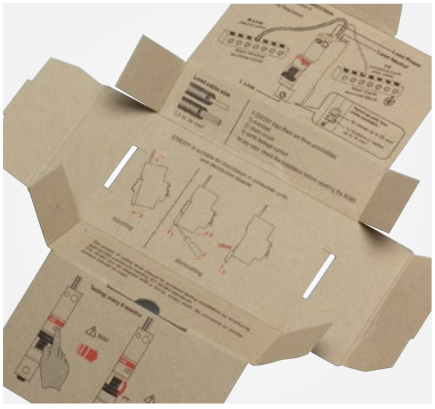
In control
Test button allows the regular check of the functionality of the device: to be pushed every six months.

Reduced height
Thanks to its reduced height, only 100 mm, DSE201 makes easier wiring operation inside the consumer unit or the distribution board.

With its breaking capacity of 6kA in only one module width and 100mm height, the DSE201 series is the perfect solution for a complete protection in residential and light commercial applications. At home, in the office or in a shop, these devices are essential for the safety of people, utilities and equipment, protecting not only against earth fault residual currents - due to loss of isolation or accidental contact with live parts - but also against overcurrents.

Double slot terminal
On the line side, the availability of a terminal with two slots allows to use different types of conductors: one housing is designed for cables up to 25 mm², the other for busbars or cables up to 10 mm².

Easy and flexible
The double clip eases dismounting even when the unit is installed in a high density system. A single device can be removed from the cluster without disconnecting other units. The same screwdriver used to tighten terminals can also be used to unlock the DIN rail fixing device of the unit.



Environmentally friendly
The user manual is an integral part of the package. The information have been printed inside the box to make easy the reading and to reduce consumption of paper.

DSE201

Technical features and overall dimensions

Electrical features			
Standards			IEC 61009-1; IEC 61009-2-2; AS/NZS 61009
Type (wave form of the earth leakage sensed)			AC, A
Number of poles			1P+N
Rated current I_n		A	6≤ In ≤ 50
Rated sensitivity $I_{\Delta n}$		mA	30
Rated voltage U_e		V	230-240
Insulation voltage U_i		V	500 V AC
Overvoltage category			III
Pollution degree			2
Max. operating voltage		V	264
Min. operating voltage for protection against IΔn residual sinusoidal alternating currents		V	85
Operating voltage of circuit test		V	195 - 264
Rated frequency		Hz	50/60
Rated breaking capacity acc. to IEC 61009	ultimate I_{cn}	A	6000
Rated residual breaking capacity $I_{\Delta m}$		kA	6
Rated impulse withstand voltage (1.2/50) U_{imp}		kV	4 kV (test voltage 6.2kV at sea level, 5kV at 2000m)
Dielectric test voltage at ind. freq. for 1 min.		kV	2.5 kV (50 / 60Hz, 1 min.)
Thermomagnetic release - characteristic	B: $3\ I_n \le I_m \le 5\ I_n$		■
	C: $5\ I_n \le I_m \le 10\ I_n$		■
Surge current resistance (wave 8/20)		A	NA
Mechanical data			
Housing			insulation group II, RAL 7035
Toggle			insulation group IIIA, black, sealable in ON-OFF positions
Contact position indication			CPI on toggle (I ON / 0 OFF)
Electrical life		operations	10000
Mechanical life		operations	20000
Protection degree	housing		IP4X
	terminals		IP2X
Shock resistance acc. to IEC/EN 60068-2-27			30g - 2 shocks - 13ms
Vibration resistance acc. to IEC/EN 60068-2-6			0.35mm or 5g - 20 cycles at 5...150...5 Hz without load
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH	28 cycles with 55°C/90-96% and 25°C/95-100%
Reference temperature for setting of thermal element		°C	30
Ambient temperature (with daily average ≤ +35 °C)		°C	-25...+55
Storage temperature		°C	-40...+70

Installation			
Terminal type	top (load side)		failsafe cage (shock protected)
	bottom (line side)		failsafe bi-directional cylinder-lift terminal (shock protected)
Terminal size for cables	load side (top)	mm^2	16
	line side (bottom)	mm^2	25
Terminal size for busbars	load side (top)		only for wire connection
	line side (bottom)	mm^2	10 (Standard ABB busbar / distribution board system)
Tightening torque	top (load side)	Nm	1.2
	bottom (line side)	Nm	2.8
Neutral load cable	Type		low smoke halogen free
	Lenght	mm	750
	Section	mm^2	2.5 mm^2 up to 20 A; 4 mm^2 up to 50 A
	Color		blue
Functional earth cable	Type		low smoke halogen free
	Lenght	mm	750
	Section	mm^2	0.75
	Color		white
Mounting			on DIN rail EN 60715 (35 mm) by means of fast clip device in consumer unit Type A according to IEC 61439-1&3, BS EN 61439-1&3, in distribution board Type B according to IEC 61439-1&3, BS EN 61439-1&3.
Supply from			bottom terminal
Dimensions and weight			
Dimensions (H x D x W)		mm	100 x 68.9 x 17.6
Weight		g	180
Combination with auxiliary elements			
Combinable with accessories and auxiliaries	no		

eRCBOs

DSE201 series 6000 A type, B and C characteristic

DSE201 ... A30

DSE201 A type, B and C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: residential, light commercial
Standard: IEC 61009-1; IEC 61009-2-2
Icn = 6 000 A

N. of poles	Rated residual current IΔn	Rated Current	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
	[mA]	In [A]		Type code	Order code		
B characteristic							
1P+N	30	6	399629	2CSR255151R1065	DSE201 B6 A30	0.180	1
		10	399728	2CSR255151R1105	DSE201 B10 A30	0.180	1
		16	658924	2CSR255151R1165	DSE201 B16 A30	0.180	1
		20	658429	2CSR255151R1205	DSE201 B20 A30	0.180	1
		25	659921	2CSR255151R1255	DSE201 B25 A30	0.180	1
		32	659426	2CSR255151R1325	DSE201 B32 A30	0.180	1
		40	658627	2CSR255151R1405	DSE201 B40 A30	0.180	1
		50	179337	2CSR255151R1505	DSE201 B50 A30	0.200	1
C characteristic							
1P+N	30	6	658122	2CSR255151R1064	DSE201 C6 A30	0.180	1
		10	659624	2CSR255151R1104	DSE201 C10 A30	0.180	1
		16	910923	2CSR255151R1164	DSE201 C16 A30	0.180	1
		20	659129	2CSR255151R1204	DSE201 C20 A30	0.180	1
		25	658726	2CSR255151R1254	DSE201 C25 A30	0.180	1
		32	658221	2CSR255151R1324	DSE201 C32 A30	0.180	1
		40	659723	2CSR255151R1404	DSE201 C40 A30	0.180	1
		50	349532	2CSR255151R1504	DSE201 C50 A30	0.200	1

eRCBOs

DSE201 series 6000 AC type, B and C characteristic

DSE201 ... A30

DSE201 AC type, B and C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: residential, light commercial
Standard: IEC 61009-1; IEC 61009-2-2
Icn = 6 000 A

N. of poles	Rated residual current IΔn	Rated Current	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
	[mA]	In [A]		Type code	Order code		
B characteristic							
1P+N	30	6	659228	2CSR255051R1065	DSE201 B6 AC30	0.180	1
		10	658825	2CSR255051R1105	DSE201 B10 AC30	0.180	1
		16	658320	2CSR255051R1165	DSE201 B16 AC30	0.180	1
		20	659822	2CSR255051R1205	DSE201 B20 AC30	0.180	1
		25	659327	2CSR255051R1255	DSE201 B25 AC30	0.180	1
		32	658528	2CSR255051R1325	DSE201 B32 AC30	0.180	1
		40	658023	2CSR255051R1405	DSE201 B40 AC30	0.180	1
		50	179238	2CSR255051R1505	DSE201 B50 AC30	0.200	1
C characteristic							
1P+N	30	6	659525	2CSR255051R1064	DSE201 C6 AC30	0.180	1
		10	910824	2CSR255051R1104	DSE201 C10 AC30	0.180	1
		16	659020	2CSR255051R1164	DSE201 C16 AC30	0.180	1
		20	660125	2CSR255051R1204	DSE201 C20 AC30	0.180	1
		25	660521	2CSR255051R1254	DSE201 C25 AC30	0.180	1
		32	660026	2CSR255051R1324	DSE201 C32 AC30	0.180	1
		40	660422	2CSR255051R1404	DSE201 C40 AC30	0.180	1
		50	349433	2CSR255051R1504	DSE201 C50 AC30	0.200	1

DSE201 M, unique solution

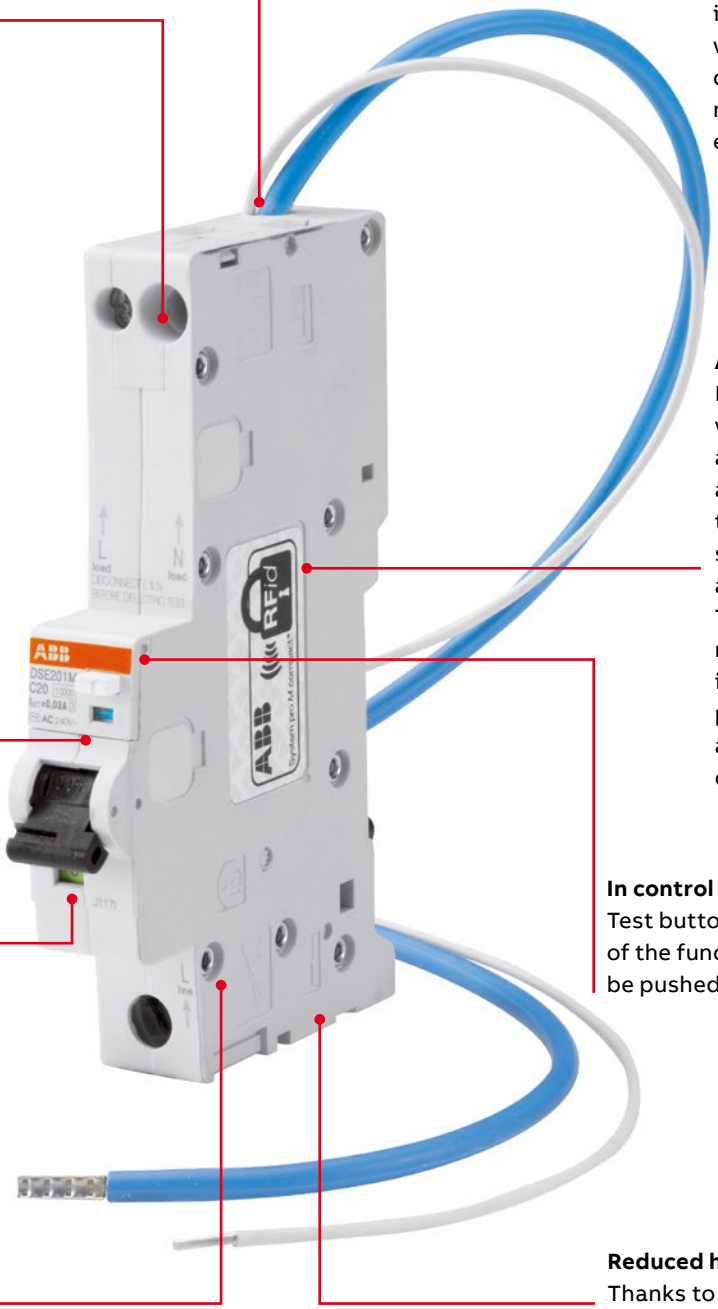
Features, which make operations friendly

Space for insulated screwdrivers
The larger neutral hole allows the use of an insulated screwdriver to tighten the screw of neutral terminals, ensuring maximum operation safety. All versions are equipped with cage type terminals (16mm² load side), with tightening torque of 1.2 Nm.

Earth fault indicator
Blue window in the front of the device to detect any earth fault trip: the cause of trip of the device can be identified in a short time, reducing the downtime for maintenance. DSE201 M is the only device equipped with an earth fault indicator between one module width electronic RCBOs.

Real contact position
indicator below the toggle
Directly linked to the moving contact of the device, the green/red window in the front of the device can identify the current position of the contacts (open/closed) independently on the toggle position.

Combination with auxiliary elements
A platform suitable for quick installation in combination with the standard auxiliary elements that can be mounted with RCDs and MCBs.



Easy to install
Fast installation is supported by the two flying leads for neutral cable and functional earth, each integrated in the device, which can be directly connected to the main neutral bar and main earth bar.

Anti counterfeiting
Each DSE201 is equipped with a RFID tag containing a unique serial number assigned by ABB according to ISO/IEC FCD 15693-3 standard in order to authenticate the product. Through this unique serial number, ABB can easily identify counterfeited products and verify the authenticity of each single device.

In control
Test button allows the regular check of the functionality of the device: to be pushed every six months.

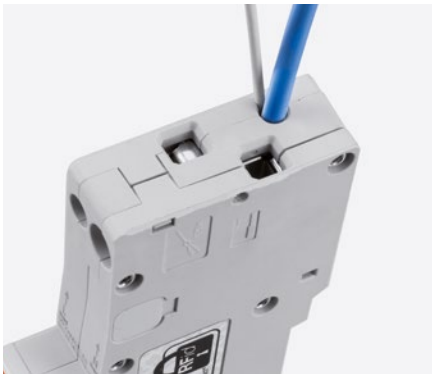
Reduced height
Thanks to its reduced height, only 115 mm, DSE201 M makes easier wiring operation inside the consumer unit or the distribution board.

DSE201 M, unique solution
Distinctive features

With its breaking capacity of 10kA in only one module width and 115mm height, DSE201 M series is the perfect solution for a complete protection in commercial and industrial applications, where space optimization is particularly required. The unique earth fault indicator window identifies any earth fault trip, making easier the trouble-shooting on the network and reducing the downtime for maintenance.

Device status at a glance
Earth fault indicator: blue window above the toggle to immediately detect and identify any earth fault trip, reducing downtime for maintenance. Contact position indicator (CPI): green/red window below the toggle to identify the real position of the contacts independently on the toggle position.

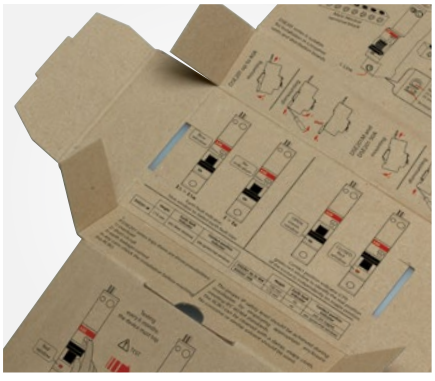
Double slot terminal
Easy to install. Fail-safe line side terminal to avoid improper connection. Two slots of different dimensions (35 mm^2 and 10 mm^2) available to allow the connection both with cables and busbars.



Load side
Load side terminal accepts cables, both rigid and flexible up to 16 mm^2. Flying leads are straight instead of pigtail ones to reduce the space required for wiring operations.

Easy and flexible
Double and bistable clips with a design for a secure fixing in any type of consumer unit or distribution board. Easy removal from a cluster of RCBOs/ MCBs supplied with Busbars.

Smart case
Main technical information are laser-printed on the front and left side of product to ensure long readability. On the right side, the tightening torque and the stripping length of the cable for a correct and safety installation of the unit are molded.



Smart package
Instruction manual printed inside the box with no additional paper wasted. Packaging is glue-less and takes advantage of the adhesive label containing the order information.

DSE201 M

Technical features and overall dimensions

Electrical features			
Standards			IEC 61009-1 ; IEC 61009-2-2; BS EN 61009-1; AS/NZS 61009
Type (wave form of the earth leakage sensed)			AC, A
Number of poles			1P+N
Rated current I_n		A	6≤ In ≤ 50
Rated sensitivity $I_{\Delta n}$		mA	10-30-100-300
Rated voltage U_e		V	230-240
Insulation voltage U_i		V	500 V AC
Overvoltage category			III
Pollution degree			2
Max. operating voltage		V	264
Min. operating voltage for protection against IΔn residual sinusoidal alternating currents		V	85
Operating voltage of circuit test		V	195-264
Rated frequency		Hz	50/60
Rated breaking capacity acc. to IEC 61009	ultimate I_{cn}	A	10000
Rated breaking capacity acc. to IEC 60947-2	ultimate I_{cu}	kA	15 (for 6A ≤ In ≤ 40A)
		kA	10 (for In = 50A)
	service I_{cs}	kA	7.5
Rated residual breaking capacity $I_{\Delta m}$		kA	10
Rated impulse withstand voltage (1.2/50) U_{imp}		kV	4 kV (test voltage 6.2kV at sea level, 5kV at 2000m)
Dielectric test voltage at ind. freq. for 1 min.		kV	2.5 kV (50 / 60Hz, 1 min.)
Thermomagnetic release - characteristic	B: 3 $I_n \le I_m \le 5\ I_n$		■
	C: 5 $I_n \le I_m \le 10\ I_n$		■
Surge current resistance (wave 8/20)		A	NA
Mechanical data			
Housing			insulation group II, RAL 7035
Toggle			insulation group II, black, sealable in ON-OFF positions
Earth fault indicator			blue window
Contact position indication			green/red Window
Electrical life		operations	10000
Mechanical life		operations	20000
Protection degree	in enclosure with cover		IP40
	terminals		IP20
Shock resistance acc. to IEC/EN 60068-2-27			30g - 2 shocks - 13ms
Vibration resistance acc. to IEC/EN 60068-2-6			0.35mm or 5g - 20 cycles at 5...150...5 Hz without load
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH	28 cycles with 55°C/90-96% and 25°C/95-100%
Reference temperature for setting of thermal element		°C	30
Ambient temperature (with daily average ≤ +35 °C)		°C	-25...+55
Storage temperature		°C	-40...+70

Installation			
Terminal type	top (load side)		failsafe cage (shock protected)
	bottom (line side)		failsafe bi-directional cylinder-lift terminal (shock protected)
Terminal size for cables	load side	mm^2	16
	line side (solid/ flexible)	mm^2	35/25
Terminal size for busbars	load side		only for wire connection
	line side	mm^2	10 (Standard ABB busbar / distribution board system)
Tightening torque	top (load side)	Nm	1.2
	bottom (line side)	Nm	2.8
Neutral load cable	Type		low smoke halogen free
	Lenght	mm	750
	Section	mm^2	2.5 mm^2 up to 20 A; 4 mm^2 up to 50 A
	Color		blue
Functional earth cable	Type		low smoke halogen free
	Lenght	mm	750
	Section	mm^2	0.75
	Color		white
Mounting			on DIN rail EN 60715 (35 mm) by means of fast clip device in consumer unit Type A according to IEC 61439-1&3, BS EN 61439-1&3 in distribution board Type B according to IEC 61439-1&3, BS EN 61439-1&3
Supply from			bottom terminal
Dimensions and weight			
Dimensions (H x D x W)		mm	115 x 68.9 x 17.6
Weight		g	200
Combination with auxiliary elements			
Auxiliary contact	yes		
Signal contact / auxiliary switch	yes		
Shunt trip	yes		
Undervoltage release	yes		
Overvoltage release	yes		
Auxiliary contact for MCBs bottom fitting	yes		

eRCBOs

DSE201 M series 10000 A type, B characteristic

DSE201 M ... A30

DSE201 M A type, B characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial
Standard: IEC 61009-1; IEC 61009-2-2; BS EN 61009-1
Icn = 10 000 A

N. of poles	Rated residual current IΔn	Rated Current	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
	[mA]	In [A]		Type code	Order code		
B characteristic							
1P+N	10	6	079231	2CSR275151R0065	DSE201 M B6 A10	0.200	1
		10	305033	2CSR275151R0105	DSE201 M B10 A10	0.200	1
		16	305132	2CSR275151R0165	DSE201 M B16 A10	0.200	1
		20	400233	2CSR275151R0205	DSE201 M B20 A10	0.200	1
		25	400035	2CSR275151R0255	DSE201 M B25 A10	0.200	1
		32	400134	2CSR275151R0325	DSE201 M B32 A10	0.200	1
		40	058830	2CSR275151R0405	DSE201 M B40 A10	0.200	1
		50	896531	2CSR275151R0505	DSE201 M B50 A10	0.200	1
1P+N	30	6	830832	2CSR275151R1065	DSE201 M B6 A30	0.200	1
		10	839835	2CSR275151R1105	DSE201 M B10 A30	0.200	1
		16	896739	2CSR275151R1165	DSE201 M B16 A30	0.200	1
		20	768432	2CSR275151R1205	DSE201 M B20 A30	0.200	1
		25	831136	2CSR275151R1255	DSE201 M B25 A30	0.200	1
		32	840138	2CSR275151R1325	DSE201 M B32 A30	0.200	1
		40	830733	2CSR275151R1405	DSE201 M B40 A30	0.200	1
		50	839736	2CSR275151R1505	DSE201 M B50 A30	0.200	1

eRCBOs

DSE201 M series 10000 A type, C characteristic

DSE201 M ... A300

DSE201 M A type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial
Standard: IEC 61009-1; IEC 61009-2-2; BS EN 61009-1
Icn = 10 000 A

N. of poles	Rated residual current IΔn	Rated Current	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
	[mA]	In [A]		Type code	Order code		
C characteristic							
1P+N	10	6	768234	2CSR275151R0064	DSE201 M C6 A10	0.200	1
		10	830931	2CSR275151R0104	DSE201 M C10 A10	0.200	1
		16	839934	2CSR275151R0164	DSE201 M C16 A10	0.200	1
		20	768531	2CSR275151R0204	DSE201 M C20 A10	0.200	1
		25	831235	2CSR275151R0254	DSE201 M C25 A10	0.200	1
		32	840237	2CSR275151R0324	DSE201 M C32 A10	0.200	1
		40	896432	2CSR275151R0404	DSE201 M C40 A10	0.200	1
		50	768135	2CSR275151R0504	DSE201 M C50 A10	0.200	1
1P+N	30	6	896630	2CSR275151R1064	DSE201 M C6 A30	0.200	1
		10	768333	2CSR275151R1104	DSE201 M C10 A30	0.200	1
		16	831037	2CSR275151R1164	DSE201 M C16 A30	0.200	1
		20	840039	2CSR275151R1204	DSE201 M C20 A30	0.200	1
		25	631637	2CSR275151R1254	DSE201 M C25 A30	0.200	1
		32	376033	2CSR275151R1324	DSE201 M C32 A30	0.200	1
		40	629733	2CSR275151R1404	DSE201 M C40 A30	0.200	1
		50	375937	2CSR275151R1504	DSE201 M C50 A30	0.200	1
1P+N	100	6	779339	2CSR275151R2064	DSE201 M C6 A100	0.200	1
		10	769330	2CSR275151R2104	DSE201 M C10 A100	0.200	1
		16	631538	2CSR275151R2164	DSE201 M C16 A100	0.200	1
		20	375838	2CSR275151R2204	DSE201 M C20 A100	0.200	1
		25	779230	2CSR275151R2254	DSE201 M C25 A100	0.200	1
		32	631439	2CSR275151R2324	DSE201 M C32 A100	0.200	1
		40	940739	2CSR275151R2404	DSE201 M C40 A100	0.200	1
		50	941330	2CSR275151R2504	DSE201 M C50 A100	0.200	1
1P+N	300	6	620235	2CSR275151R3064	DSE201 M C6 A300	0.200	1
		10	021834	2CSR275151R3104	DSE201 M C10 A300	0.200	1
		16	021735	2CSR275151R3164	DSE201 M C16 A300	0.200	1
		20	021636	2CSR275151R3204	DSE201 M C20 A300	0.200	1
		25	021537	2CSR275151R3254	DSE201 M C25 A300	0.200	1
		32	021438	2CSR275151R3324	DSE201 M C32 A300	0.200	1
		40	021339	2CSR275151R3404	DSE201 M C40 A300	0.200	1
		50	021230	2CSR275151R3504	DSE201 M C50 A300	0.200	1

eRCBOs

DSE201 M series 10000 AC type, B characteristic

DSE201 M ... A30

DSE201 M AC type, B characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial
Standard: IEC 61009-1; IEC 61009-2-2; BS EN 61009-1
Icn = 10 000 A

N. of poles	Rated residual current IΔn	Rated Current	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
	[mA]	In [A]		Type code	Order code		
B characteristic							
1P+N	10	6	938132	2CSR275051R0065	DSE201 M B6 AC10	0.200	1
		10	297734	2CSR275051R0105	DSE201 M B10 AC10	0.200	1
		16	373230	2CSR275051R0165	DSE201 M B16 AC10	0.200	1
		20	373131	2CSR275051R0205	DSE201 M B20 AC10	0.200	1
		25	077534	2CSR275051R0255	DSE201 M B25 AC10	0.200	1
		32	077435	2CSR275051R0325	DSE201 M B32 AC10	0.200	1
		40	077336	2CSR275051R0405	DSE201 M B40 AC10	0.200	1
		50	077237	2CSR275051R0505	DSE201 M B50 AC10	0.200	1
1P+N	30	6	076438	2CSR275051R1065	DSE201 M B6 AC30	0.200	1
		10	076339	2CSR275051R1105	DSE201 M B10 AC30	0.200	1
		16	076230	2CSR275051R1165	DSE201 M B16 AC30	0.200	1
		20	076131	2CSR275051R1205	DSE201 M B20 AC30	0.200	1
		25	076032	2CSR275051R1255	DSE201 M B25 AC30	0.200	1
		32	353430	2CSR275051R1325	DSE201 M B32 AC30	0.200	1
		40	353331	2CSR275051R1405	DSE201 M B40 AC30	0.200	1
		50	266334	2CSR275051R1505	DSE201 M B50 AC30	0.200	1

eRCBOs

DSE201 M series 10000 AC type, C characteristic

DSE201 M ... A300

DSE201 M AC type, C characteristic
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial
Standard: IEC 61009-1; IEC 61009-2-2; BS EN 61009-1
Icn = 10 000 A

N. of poles	Rated residual current IΔn	Rated Current	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
	[mA]	In [A]		Type code	Order code		
C characteristic							
1P+N	10	6	077138	2CSR275051R0064	DSE201 M C6 AC10	0.200	1
		10	077039	2CSR275051R0104	DSE201 M C10 AC10	0.200	1
		16	076933	2CSR275051R0164	DSE201 M C16 AC10	0.200	1
		20	790532	2CSR275051R0204	DSE201 M C20 AC10	0.200	1
		25	076834	2CSR275051R0254	DSE201 M C25 AC10	0.200	1
		32	076735	2CSR275051R0324	DSE201 M C32 AC10	0.200	1
		40	076636	2CSR275051R0404	DSE201 M C40 AC10	0.200	1
		50	076537	2CSR275051R0504	DSE201 M C50 AC10	0.200	1
1P+N	30	6	266235	2CSR275051R1064	DSE201 M C6 AC30	0.200	1
		10	266136	2CSR275051R1104	DSE201 M C10 AC30	0.200	1
		16	266037	2CSR275051R1164	DSE201 M C16 AC30	0.200	1
		20	265931	2CSR275051R1204	DSE201 M C20 AC30	0.200	1
		25	790839	2CSR275051R1254	DSE201 M C25 AC30	0.200	1
		32	265832	2CSR275051R1324	DSE201 M C32 AC30	0.200	1
		40	353232	2CSR275051R1404	DSE201 M C40 AC30	0.200	1
		50	518235	2CSR275051R1504	DSE201 M C50 AC30	0.200	1
1P+N	100	6	186830	2CSR275051R2064	DSE201 M C6 AC100	0.200	1
		10	352235	2CSR275051R2104	DSE201 M C10 AC100	0.200	1
		16	186731	2CSR275051R2164	DSE201 M C16 AC100	0.200	1
		20	352136	2CSR275051R2204	DSE201 M C20 AC100	0.200	1
		25	263937	2CSR275051R2254	DSE201 M C25 AC100	0.200	1
		32	263838	2CSR275051R2324	DSE201 M C32 AC100	0.200	1
		40	263739	2CSR275051R2404	DSE201 M C40 AC100	0.200	1
		50	263630	2CSR275051R2504	DSE201 M C50 AC100	0.200	1
1P+N	300	6	263531	2CSR275051R3064	DSE201 M C6 AC300	0.200	1
		10	518334	2CSR275051R3104	DSE201 M C10 AC300	0.200	1
		16	263432	2CSR275051R3164	DSE201 M C16 AC300	0.200	1
		20	186038	2CSR275051R3204	DSE201 M C20 AC300	0.200	1
		25	352037	2CSR275051R3254	DSE201 M C25 AC300	0.200	1
		32	185932	2CSR275051R3324	DSE201 M C32 AC300	0.200	1
		40	185833	2CSR275051R3404	DSE201 M C40 AC300	0.200	1
		50	185734	2CSR275051R3504	DSE201 M C50 AC300	0.200	1

RCD-blocks

DDA 800 technical features

DDA 800

	Standards		
Electrical features	Type (wave form of the earth leakage sensed)		
	Poles		
	Rated current In		A
	Rated sensitivity IΔn		A
	Rated voltage Ue		V
	Insulation voltage Ui		V
	Operating voltage of circuit test Ut		V
	Rated frequency		Hz
	Rated breaking capacity (Icn) acc. to IEC /EN 60947-2		A
	Rated residual breaking capacity IΔm	with S 800 C	kA
		with S 800 N	kA
		with S 800 S	kA
	Rated impulse withstand voltage (1.2/50) Uimp		kV
	Dielectric test voltage at ind. freq. for 1 min.		kV
	Surge current resistance (wave 8/20)		A
Mechanical features	Toggle		
	Electrical life		
	Mechanical life		
	Protection degree	housing	
		terminals	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH
	Ambient temperature (with daily average ≤ +35 °C)		°C
	Storage temperature		°C
	Terminal size for cables	flexible	mm^2
		rigid	mm^2
	Tightening torque		Nm
	Mounting		
Dimensions and weight	Dimensions (H x D x W)	2P	mm
		3P	mm
		4P	mm
	Weight	2P	g
		3P	g
		4P	g
Combination with MCBs	Combinable with:	S 800 N	
		S 800 S	

* only on 3P and 4P versions

DDA 800 AC	**DDA 800 A**		**DDA 800 A AP-R**	**DDA 800 A S**	
IEC/EN 60947-2 Ann. B					
AC	A		A	A	
2P, 3P, 4P					
63	63	100	63-100	63	100
0.03-0.3	0.03-0.3-0.5	0.3-0.5	0.03	0.3-1	0.3-0.5*-1
230/400 - 240/415 - 400/690					
690					
195-690					
50...60					
according to the breaking capacity of the associated MCB					
according to the Icu of the associated MCB					
according to the Icu of the associated MCB					
according to the Icu of the associated MCB					
6					
2.5					
NA			3000	5000	
blue operating just from OFF position					
10000					
20000					
IP4X					
IP2X					
28 cycles with 55°C/90-96% and 25°C/95-100%					
-25...+60					
-40...+70					
6...50					
6...70					
min. 3 / max. 4					
on DIN rail EN 60715 (35 mm) by means of rapid fixing device					
108.2 x 82.3 x 81					
108.2 x 82.3 x 117					
108.2 x 82.3 x 117					
300 for 63 A - 415 for 100 A					
400 for 63 A - 640 for 100 A					
460 for 63 A - 765 for 100 A					
yes					
yes					

RCD-blocks

DDA 800 AC ⊡ type for MCBs S800

DDA 802

DDA 803

DDA 804

DDA 800 AC type for MCBs S800
Function: RCD-block for assembly on site with MCBs S800 series up to 63 A. Protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with IΔn = 30 mA).

Application: commercial, industrial.
Standard: IEC/EN 60947-2 Ann. B

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	63	919704	DDA802AC-63/0.03	2CSB802001R1630		0.300	1
	300	63	919902	DDA802AC-63/0.3	2CSB802001R3630		0.300	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	63	922001	DDA803AC-63/0.03	2CSB803001R1630		0.400	1
	300	63	922209	DDA803AC-63/0.3	2CSB803001R3630		0.400	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	63	924401	DDA804AC-63/0.03	2CSB804001R1630		0.460	1
	300	63	924609	DDA804AC-63/0.3	2CSB804001R3630		0.460	1

RCD-blocks

DDA 800 A type for MCBs S800

DDA 802

DDA 803

DDA 804

DDA 800 A type for MCBs S800
Function: RCD-block for assembly on site with MCBs S800 up to 100 A. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with IΔn = 30 mA).

Application: commercial, industrial.
Standard: IEC/EN 60947-2 Ann. B

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	63	920007	DDA802 A-63/0.03	2CSB802101R1630		0.300	1
	300	63	920205	DDA802 A-63/0.3	2CSB802101R3630		0.300	1
		100	545033	DDA802 A-100/0.3	2CSB802101R3000		0.415	1
	500	63	920403	DDA802 A-63/0.5	2CSB802101R4630		0.300	1
		100	542636	DDA802 A-100/0.5	2CSB802101R4000		0.415	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	63	922308	DDA803 A-63/0.03	2CSB803101R1630		0.400	1
	300	63	922506	DDA803 A-63/0.3	2CSB803101R3630		0.400	1
		100	544135	DDA803 A-100/0.3	2CSB803101R3000		0.640	1
	500	63	922704	DDA803 A-63/0.5	2CSB803101R4630		0.400	1
		100	541738	DDA803 A-100/0.5	2CSB803101R4000		0.640	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	63	924807	DDA804 A-63/0.03	2CSB804101R1630		0.460	1
	300	63	925002	DDA804 A-63/0.3	2CSB804101R3630		0.460	1
		100	547532	DDA804 A-100/0.3	2CSB804101R3000		0.765	1
	500	63	925200	DDA804 A-63/0.5	2CSB804101R4630		0.460	1
		100	544937	DDA804 A-100/0.5	2CSB804101R4000		0.765	1

RCD-blocks

DDA 800 A type AP-R (high immunity) for MCBs S800

DDA 802

DDA 803

DDA 804

DDA 800 A AP-R type for MCBs S800

Function: RCD-block for assembly on site with MCBs S800 up to 100 A. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts (with IΔn = 30 mA).

Application: commercial, industrial.
Standard: IEC/EN 60947-2 Ann. B

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	63	921400	DDA802 A-63/0.03 AP-R	2CSB802401R1630		0.300	1
		100	544630	DDA802 A-100/0.03 AP-R	2CSB802401R1000		0.415	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	30	63	923800	DDA803 A-63/0.03 AP-R	2CSB803401R1630		0.400	1
		100	542230	DDA803 A-100/0.03 AP-R	2CSB803401R1000		0.640	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	63	927709	DDA804 A-63/0.03 AP-R	2CSB804401R1630		0.460	1
		100	547136	DDA804 A-100/0.03 AP-R	2CSB804401R1000		0.765	1

RCD-blocks

DDA 800 A type selective for MCBs S800

DDA 802

DDA 803

DDA 804

DDA 800 A selective type for MCBs S800
Function: RCD-block for assembly on site with MCBs S800 series up to 100 A. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents with an intentional tripping delay, which permits to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide).

Application: commercial, industrial.
Standard: IEC/EN 60947-2 Ann. B

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	300	63	920601	DDA802 A S-63/0.3	2CSB802201R3630		0.300	1
		100	542537	DDA802 A S-100/0.3	2CSB802201R3000		0.415	1
	1000	63	920809	DDA802 A S-63/1	2CSB802201R5630		0.300	1
		100	547433	DDA802 A S-100/1	2CSB802201R5000		0.415	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	300	63	922902	DDA803 A S-63/0.3	2CSB803201R3630		0.400	1
		100	544838	DDA803 A S-100/0.3	2CSB803201R3000		0.640	1
	500	100	542438	DDA803 A S-100/0.5	2CSB803201R4000		0.640	1
	1000	63	923206	DDA803 A S-63/1	2CSB803201R5630		0.400	1
		100	547334	DDA803 A S-100/1	2CSB803201R5000		0.640	1

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	300	63	926207	DDA804 A S-63/0.3	2CSB804201R3630		0.460	1
		100	544739	DDA804 A S-100/0.3	2CSB804201R3000		0.765	1
	500	100	542339	DDA804 A S-100/0.5	2CSB804201R4000		0.765	1
	1000	63	926504	DDA804 A S-63/1	2CSB804201R5630		0.460	1
		100	547235	DDA804 A S-100/1	2CSB804201R5000		0.765	1

RCBOs

DS800 technical features

DS800S

	Standards		
Electrical features	Operating characteristic: type (wave form of the earth leakage sensed)		
	Poles		
	Rated sensitivity IΔn		A
	Rated current In		A
	Rated voltage Ue		V
	Insulation voltage Ui		V
	Operating voltage of circuit test Ut		V
	Rated frequency		Hz
	Rated ultimate short-circuit breaking capacity Icu	240/415 V AC	kA
		254/440 V AC	kA
		289/500 V AC	kA
		400/690 V AC	kA
	Rated service short-circuit breaking capacity Ics	240/415 V AC	kA
		254/440 V AC	kA
		289/500 V AC	kA
		400/690 V AC	kA
	Rated impulse withstand voltage (1.2/50) Uimp		kV
	Dielectric test voltage at ind. freq. for 1 min.		kV
	Thermomagnetic release characteristic	B: 3 In ≤ Im ≤ 5 In	
		C: 5 In ≤ Im ≤ 10 In	
		D**: 10 In ≤ Im ≤ 20 In	
		K**: 8 In ≤ Im ≤ 14 In	
	Surge current resistance acc. to VDE 0432 Part 2 (wave 8/20)		A
Mechanical features	Toggle		
	Electrical life		
	Mechanical life		
	Protection degree	housing	
		terminals	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH
	Ambient temperature (with daily average ≤ + 35 °C)		°C
	Storage temperature		°C
Installation	Terminal size for cables	flexible	mm^2
		rigid	mm^2
	Tightening torque		Nm
	Mounting		
Dimensions and weight	Dimensions (H x D x W)	2P	mm
		3P	mm
		4P	mm
	Weight	2P	g
		3P	g
		4P	g
Combination with auxiliary elements	Combinable with:	auxiliary contact	
		signal contact/auxiliary switch	
		shunt trip	
		undervoltage release	

* 1A on 2P and 4P versions, while 0.3A only on 4P ones.
** as specified in standard IEC/EN 60947-2 the device withstands Im ≤ 6 In with guaranteed non intervention

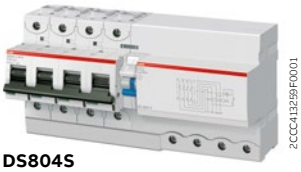
DS800S A	DS800N A	DS800S A S	DS800N A S	DS800S A AP-R	DS800N A AP-R
IEC/EN 60947-2					
A		A		A	
2P, 3P, 4P		2P,4P		2P, 3P, 4P	
0.3		0.3-1(*)		0.03	
125					
230/400-240/415-400/690					
690					
195-690					
50…60					
50	36	50	36	50	36
30	20	30	20	30	20
10	10	10	10	10	10
4.5	4.5	4.5	4.5	4.5	4.5
40	30	40	30	40	30
15	10	15	10	15	10
5	5	5	5	5	5
3	3	3	3	3	3
6					
2.5					
■	■	■	■	■	■
■	■	■	■	■	■
■	■	■	■	■	■
■		■		■	
NA	NA	5000	5000	3000	3000
black (MCB) sealable in ON-OFF position + blue (RCD) operating just from OFF position					
10000					
20000					
IP4X					
IP2X					
28 cycles with 55°C/90-96% and 25°C/95-100%					
-25…+60					
-40…+70					
6…50					
6…70					
min. 3 / max. 4					
on DIN rail EN 60715 (35 mm) by means of rapid fixing device					
108,2 x 82,3 x 133.5					
108,2 x 82,3 x 196					
108,2 x 82,3 x 223					
790					
1140					
1440					
yes					
yes					
yes					
yes					

RCBOs

DS800S series 50000 A type B, C, D and K characteristic

DS802S

DS803S



DS804S

DS800S, A type
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts; command and isolation of resistive and inductive loads.

Application: industrial.
Standard: IEC/EN 60947-2
Icu = 50 kA

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	B	300	125	211721	DS802S-B125/0.3A	2CCA862005R0845		0.790	1
	C	300	125	211738	DS802S-C125/0.3A	2CCA862005R0844		0.790	1
	D	300	125	211745	DS802S-D125/0.3A	2CCA862005R0841		0.790	1
	K	300	125	211752	DS802S-K125/0.3A	2CCA862005R0647		0.790	1

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	B	300	125	211769	DS803S-B125/0.3A	2CCA863005R0845		1.14	1
	C	300	125	211776	DS803S-C125/0.3A	2CCA863005R0844		1.14	1
	D	300	125	211783	DS803S-D125/0.3A	2CCA863005R0841		1.14	1
	K	300	125	211790	DS803S-K125/0.3A	2CCA863005R0647		1.14	1

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	B	300	125	211806	DS804S-B125/0.3A	2CCA864005R0845		1.44	1
	C	300	125	211813	DS804S-C125/0.3A	2CCA864005R0844		1.44	1
	D	300	125	211820	DS804S-D125/0.3A	2CCA864005R0841		1.44	1
	K	300	125	211837	DS804S-K125/0.3A	2CCA864005R0647		1.44	1

RCBOs

DS800N series 36000 A type B, C and D characteristics

DS802N

DS803N

DS804N

DS800N, A type
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts; command and isolation of resistive and inductive loads.

Application: industrial.
Standard: IEC/EN 60947-2
Icu = 36 kA

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	B	300	125	211844	DS802N-B125/0.3A	2CCA892005R0845		0.790	1
	C	300	125	211851	DS802N-C125/0.3A	2CCA892005R0844		0.790	1
	D	300	125	211868	DS802N-D125/0.3A	2CCA892005R0841		0.790	1

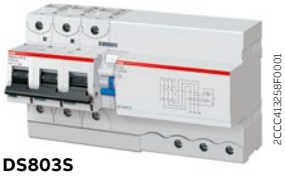
Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	B	300	125	211875	DS803N-B125/0.3A	2CCA893005R0845		1.14	1
	C	300	125	211882	DS803N-C125/0.3A	2CCA893005R0844		1.14	1
	D	300	125	211899	DS803N-D125/0.3A	2CCA893005R0841		1.14	1

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	B	300	125	211905	DS804N-B125/0.3A	2CCA894005R0845		1.44	1
	C	300	125	211912	DS804N-C125/0.3A	2CCA894005R0844		1.44	1
	D	300	125	211929	DS804N-D125/0.3A	2CCA894005R0841		1.44	1

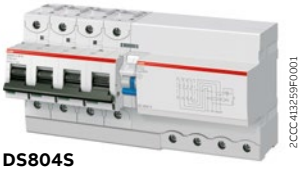
RCBOs

DS800S series 50000 A type selective B, C, D and K characteristics

DS802S



DS803S



DS804S

DS800S, A selective type
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents with an intentional tripping delay, which allows to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide); protection against indirect contacts; command and isolation of resistive and inductive loads.

Application: industrial.
Standard: IEC/EN 60947-2
Icu = 50 kA

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	B	1000	125	211516	DS802S-B125/1AS	2CCC862006R0845		0.790	1
	C	1000	125	211523	DS802S-C125/1AS	2CCC862006R0844		0.790	1
	D	1000	125	211530	DS802S-D125/1AS	2CCC862006R0841		0.790	1
	K	1000	125	211547	DS802S-K125/1AS	2CCC862006R0647		0.790	1

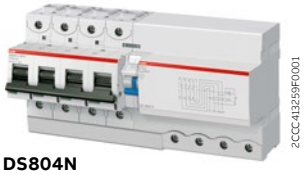
Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	B	300	125	211554	DS804S-B125/0.3AS	2CCC864005R0845		1.44	1
		1000	125	211592	DS804S-B125/1AS	2CCC864006R0845		1.44	1
	C	300	125	211561	DS804S-C125/0.3AS	2CCC864005R0844		1.44	1
		1000	125	211608	DS804S-C125/1AS	2CCC864006R0844		1.44	1
	D	300	125	211578	DS804S-D125/0.3AS	2CCC864005R0841		1.44	1
		1000	125	211615	DS804S-D125/1AS	2CCC864006R0841		1.44	1
	K	300	125	211685	DS804S-K125/0.3AS	2CCC864005R0647		1.44	1
		1000	125	211622	DS804S-K125/1AS	2CCC864006R0647		1:44	1

RCBOs

DS800N series 36000 A type selective B, C and D characteristics

DS802N

DS803N



DS804N

DS800N, A selective type
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents with an intentional tripping delay, which allows to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide); protection against indirect contacts; command and isolation of resistive and inductive loads.

Application: industrial.
Standard: IEC/EN 60947-2
Icu = 36 kA

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	B	1000	125	211639	DS802N-B125/1AS	2CCC892006R0845		0.790	1
	C	1000	125	211646	DS802N-C125/1AS	2CCC892006R0844		0.790	1
	D	1000	125	211653	DS802N-D125/1AS	2CCC892006R0841		0.790	1

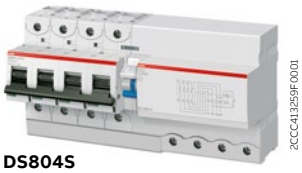
Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	B	300	125	211660	DS804N-B125/0.3AS	2CCC894005R0845		1.44	1
		1000	125	211691	DS804N-B125/1AS	2CCC894006R0845		1.44	1
	C	300	125	211677	DS804N-C125/0.3AS	2CCC894005R0844		1.44	1
		1000	125	211707	DS804N-C125/1AS	2CCC894006R0844		1.44	1
	D	300	125	211684	DS804N-D125/0.3AS	2CCC894005R0841		1.44	1
		1000	125	211714	DS804N-D125/1AS	2CCC894006R0841		1.44	1

RCBOs

DS800S series 50000 A type, AP-R (high immunity) B, C, D and K characteristics

DS802S

DS803S



DS804S

DS800S AP-R, A type
Function: protection against the effects of sinusoidal alternating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts (IΔn=30 mA); protection and isolation of resistive and inductive loads.

Application: industrial.
Standard: IEC/EN 60947-2
Icu = 50 kA

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	B	30	125	211301	DS802SB125 /.03AP-R	2CCB862004R0845		0.790	1
	C	30	125	211318	DS802SC125 /.03AP-R	2CCB862004R0844		0.790	1
	D	30	125	211325	DS802SD125 /.03AP-R	2CCB862004R0841		0.790	1
	K	30	125	211332	DS802SK125 /.03AP-R	2CCB862004R0647		0.790	1

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	B	30	125	211349	DS803SB125 /.03AP-R	2CCB863004R0845		1.14	1
	C	30	125	211356	DS803SC125 /.03AP-R	2CCB863004R0844		1.14	1
	D	30	125	211363	DS803SD125 /.03AP-R	2CCB863004R0841		1.14	1
	K	30	125	211370	DS803SK125 /.03AP-R	2CCB863004R0647		1.14	1

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	B	30	125	211387	DS804SB125 /.03AP-R	2CCB864004R0845		1.44	1
	C	30	125	211394	DS804SC125 /.03AP-R	2CCB864004R0844		1.44	1
	D	30	125	211400	DS804SD125 /.03AP-R	2CCB864004R0841		1.44	1
	K	30	125	211417	DS804SK125 /.03AP-R	2CCB864004R0647		1,44	1

RCBOs

DS800N series 36000 A type, AP-R (high immunity) B, C and D characteristics

DS802N

DS803N

DS804N

DS800N AP-R, A type
Function: protection against the effects of sinusoidal alternating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts (IΔn=30 mA); protection and isolation of resistive and inductive loads.

Application: industrial.
Standard: IEC/EN 60947-2
Icu = 36 kA

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	B	30	125	211424	DS802NB125 /.03AP-R	2CCB892004R0845		0.790	1
	C	30	125	211431	DS802NC125 /.03AP-R	2CCB892004R0844		0.790	1
	D	30	125	211448	DS802ND125 /.03AP-R	2CCB892004R0841		0.790	1

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3	B	30	125	211455	DS803NB125 /.03AP-R	2CCB893004R0845		1.14	1
	C	30	125	211462	DS803NC125 /.03AP-R	2CCB893004R0844		1.14	1
	D	30	125	211479	DS803ND125 /.03AP-R	2CCB893004R0841		1.14	1

Number of poles	Curve	Rated residual current IΔn mA	Rated current In A	Bbn 7612271 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	B	30	125	211486	DS804NB125 /.03AP-R	2CCB894004R0845		1.44	1
	C	30	125	211493	DS804NC125 /.03AP-R	2CCB894004R0844		1.44	1
	D	30	125	211509	DS804ND125 /.03AP-R	2CCB894004R0841		1.44	1

Residual current relays

RD2

RD2

Technical features		
Operating voltage	[V]	230÷400 a.c. (RD2) and 48÷150 a.c./d.c. (RD2-48)
Frequency	[Hz]	50÷60
Type		A
Operating temperature	[°C]	-5...+40
Power consumption	[W]	<3.4, 230 V a.c.
Sensitivity settings IΔn	[A]	0.03; 0.1; 0.3; 0.5; 1; 2
Tripping time settings	[s]	Fast (instantaneous); 0.3; 0.5; 1; 2; 5
Contact capacity	[A]	10 at 250 V a.c. (ohmic)
Contact type		NC-C-NO
Modules	[No.]	2
Protection degree		IP20
Standards		IEC/EN 62020

RD2 residual current relays

Residual current relays with external toroidal transformer can detect leakage currents. Through minidip it is possible to set sensitivity and intervention time.

Operating voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V	EAN	Type code	Order code		kg	pc.
230...400 a.c.	058007	RD2	2CSM142120R1201		0.125	1
48...150 a.c./d.c.	537809	RD2-48	2CSM242120R1201		0.125	1

Residual current relays

RD3

RD3

RD3M

RD3P

Technical features	RD3/RD3-48	RD3M/RD3M-48	RD3P/RD3P-48
Operating voltage	RD3: 230-400 Vac +10% / -15%	RD3M: 230-400 Vac +10% / -15%	RD3P: 230-400 Vac +10% / -15%
	RD3-48: 12-48 Vac/ Vdc +10% / -15%	RD3M-48: 12-48 Vac/ Vdc +10% / -15%	RD3P-48: 12-48 Vac/ Vdc +10% / -15%
Auxiliary supply frequency	50-60 Hz		
Frequency filter	-	Yes	Yes
Type	A (up to IΔn=5 A) AC (for higher current)		
Operating temperature	-25....+70 °C		
Power consumption	<3.6 W (RD3, RD3M, RD3P), <600 mW RD3-48, RD3M-48, RD3P-48)		
Sensitivity settings IΔn	0.03-0.1-0.3-0.5-1-2-3-5-10-30 A		
Tripping time settings Δt	0-0.06-0.2-0.3-0.5-1-2-3-5-10 s		
Pre-alarm threshold	-	60%	60%
Max. resistance connection between toroidal transformer and relay	3 Ω		
Max. length connection of remote reset button	15 m		
Output Contact capacity (7-8-9); (10-11-12)	8 A, 250 V a.c.		
Led bar indicator	-	-	Yes
Max. cable terminals section	2.5 mm²		
Modules	3		
Dimensions	52.8 × 85 × 64.7 mm		
Protection degree	IP20		
Standards	IEC/EN 60947-2 annex. M; IEC/EN 62020		

RD3 residual current relays

The RD3 family of electronic residual current relays provides residual current protection and monitoring functions according to IEC/EN 60947-2:2006 annex M and can be used in conjunction with all S 200 miniature circuit breakers and Tmax range moulded case devices up to T5, for industrial installations.

The RD3 residual current relays can provide status indications through two output contacts.

Operating voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V	EAN	Type code	Order code		kg	pc.
12-48 a.c./d.c.	748236	RD3-48	2CSJ201001R0001		0.13	1
230-400 a.c.	734833	RD3	2CSJ201001R0002		0.25	1
12-48 a.c./d.c.	733935	RD3M-48	2CSJ202001R0001		0.13	1
230-400 a.c.	747031	RD3M	2CSJ202001R0002		0.25	1
12-48 a.c./d.c.	734734	RD3P-48	2CSJ203001R0001		0.13	1
230-400 a.c.	733836	RD3P	2CSJ203001R0002		0.25	1

Front panel residual current relays

ELR

Technical features		ELR48P	ELR72	ELR72P	ELR96	ELR96P	ELR96PF	ELR96PD
Operating voltage	[V]	24, 48, 110, 230 a.c./ 24, 48, 115 d.c.	24, 48, 110, 230 a.c./ 24, 48, 110 d.c.	24, 48, 110 230, 400 a.c./ 24, 48 d.c.	24, 48, 110, 230, 400 a.c./ 24, 48 d.c.	24, 48, 110, 230, 400 a.c./ 24, 48 d.c.	110, 230, 400 a.c.	110, 230, 400 a.c.
Frequency	[Hz]	50 – 60						
Frequency filter		-	-	-	-	-	Yes	Yes
Type		A						
Operating temperature	[°C]	-10...+60						
Power consumption	[W]	<7						
Sensitivity setting IΔn	[A]	from 0,03 to 30						
Tripping time setting Dt	[s]	from 0 to 5						
Contacts	[no.]	2	1	2	1	2	2	2
Contact capacity	[A]	5 (250 V a.c.)						
Dimensions	[mm]	48 x 48	72 x 72	72 x 72	96 x 96	96 x 96	96x96	96 x 96
Digital display		-	-	-	-	-	-	Yes
Protection degree (with cover)		IP52						
Protection degree (without cover)		IP40						
Protection degree (terminals)		IP20						
Standards		IEC EN 60947-2 Annex M						

2CSC400001F0003

ELR48P

2CSC400002F0003

ELR72

2CSC400003F0003

ELR96

2CSC400004F0003

ELR96PD

ELR front panel residual current relay

Front panel residual current relays are electronic devices used in combination with an external toroidal transformer. They are according to the protection standard IEC/EN 60947-2 Annex-M.

The sensitivity can be set from 0.03 A to 30 A, while the tripping time from 0 to 5 seconds. Residual current relays are available in versions 48x48 mm, 72x72 mm, and 96x96 mm.

The Fail Safe function is available for versions ELR48P, ELR72P and ELR96P: the contacts switch when there is no auxiliary power.

The ELR96PF version is equipped with Fail Safe function, fault memory LED, and a frequency filter, that ensure continuity of service in the presence of harmonics.

ELR96PD has (in addition to these functions) a digital display for an instantaneous view of the residual current IΔn.

Operating voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V	EAN	Type code	Order code		kg	pc.
110 V a.c./d.c. - 230 V a.c.	748229	ELR48P	2CSG252211R1202		0.112	1
24-48 V a.c./d.c.	734826	ELR48V24P	2CSG452211R1202		0.112	1
110 V a.c./d.c. - 230 V a.c.	733928	ELR72	2CSG252120R1202		0.322	1
24-48 V a.c./d.c.	747024	ELR72V24	2CSG452120R1202		0.322	1
110-230-400 V a.c.	734727	ELR72P	2CSG152424R1202		0.322	1
24-48 V a.c./d.c.	733829	ELR72V24P	2CSG452424R1202		0.322	1
110-230-400 V a.c.	734628	ELR96	2CSG152130R1202		0.383	1
24-48 V a.c./d.c.	733720	ELR96V24	2CSG452130R1202		0.383	1
110-230-400 V a.c.	734529	ELR96P	2CSG152434R1202		0.383	1
24-48 V a.c./d.c.	733621	ELR96V24P	2CSG452434R1202		0.383	1
110-230-400 V a.c.	734420	ELR96PF	2CSG152435R1202		0.383	1
110-230-400 V a.c.	733522	ELR96PD	2CSG152436R1202		0.383	1

Toroidal transformers

TR

TR

Toroidal transformers

Technical features		TRM	TR1	TR2	TR3	TR4	TR4A	TR160	TR160A	TR5	TR5A
Core		closed	closed	closed	closed	closed	open	closed	open	closed	open
Available internal diameter	[mm]	29	35	60	80	110	110	160	160	210	210
Weight	[kg]	0.17	0.22	0.28	0.45	0.52	0.6	1.35	1.6	1.45	1.85
Minimum measurable current	[mA]	30	30	30	100	100	300	300	500	300	500
Installation position		Any									
Operating temperature	[°C]	-10...+70									
Storage temperature	[°C]	-20...+80									
Transformation ratio		500/1									
Dielectric test voltage at industrial freq. for 1 min.	[kV]	2.5									
Max. insulating voltage	[V a.c.]	1000									
Max. thermal overload	[kA]	40/1 sec.									
Connections		Screw terminal boards, max. section 2.5 mm²									
Protection degree		IP20									

Dimension Ø	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm	EAN	Type code	Order code		kg	pc.
29 (modular version)	020707	TRM	2CSM029000R1211		0.170	1
35	020301	TR1	2CSG035100R1211		0.212	1
60	020400	TR2	2CSG060100R1211		0.274	1
80	020509	TR3	2CSG080100R1211		0.454	1
110	020608	TR4	2CSG110100R1211		0.530	1
110 (openable version)	743408	TR4/A	2CSG110200R1211		0.600	1
160	743507	TR160	2CSG160100R1211		1.350	1
160 (openable version)	743606	TR160A	2CSG160200R1211		1.600	1
210	024804	TR5	2CSG210100R1211		1.534	1
210 (openable version)	065708	TR5/A	2CSG210200R1211		1.856	1

Electrical installation solutions for buildings

Arc Fault Detection Devices

Index

AFDD S-ARC1	3/2

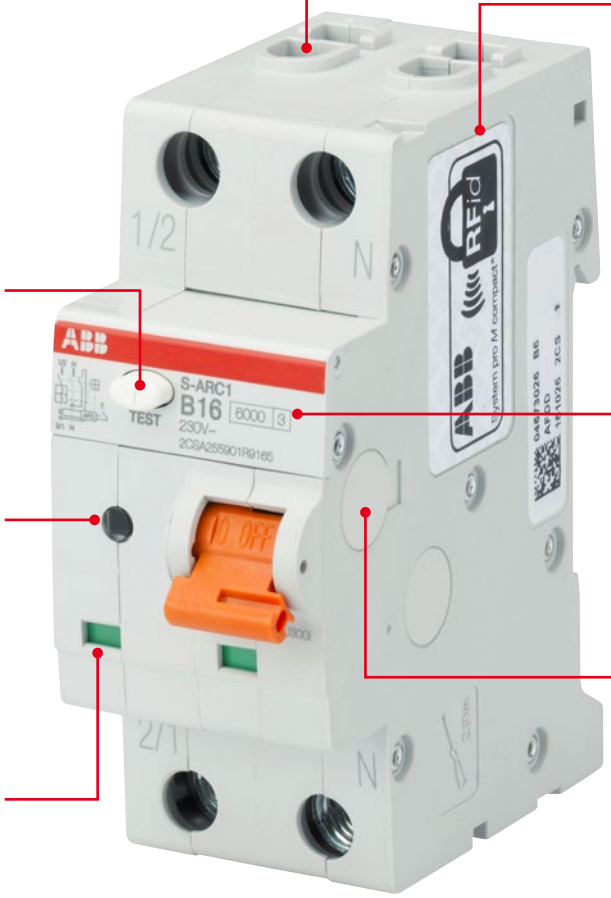
AFDD S-ARC1:
Arc Fault Detection Device Integrated with MCB

Easy to install
Twin terminals for separate feeding with busbar and cables. Connection possible both from top and bottom side.

Test pushbutton and self test
Test pushbutton to verify the correct functioning of the arc fault detection device. Internal self test is also continuously running in order to check the arc detection circuit.

LED for troubleshooting
LED troubleshooting indicator to monitor the operation of the AFDD and give indication of the cause of the trip.

Contact position indicator (CPI)
To always know the status of the contacts (red: closed; green: open) Independent from the toggle position



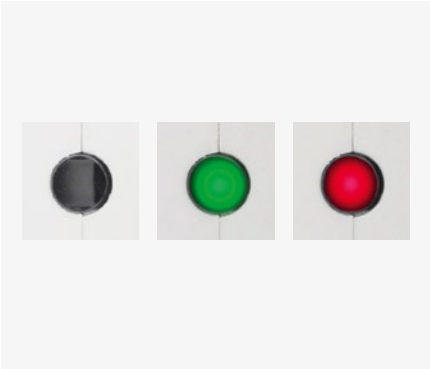
Anti counterfeiting
RFid tag containing a unique serial number assigned to ABB in order to authenticate the product.

Laser printed information
Information on the device are laser printed to ensure readability over time.

Combination with auxiliary elements
Platform suitable for combination with System pro M compact® accessories.

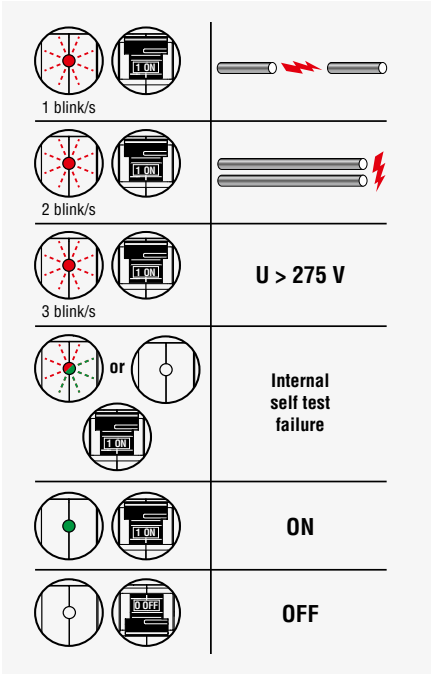
The S-ARC1 is the new 1P+N Arc Fault Detection Device (AFDD) with an integrated Miniature Circuit Breaker (MCB) in only two module width. Besides the overcurrent protection of the MCB, the S-ARC1 provides additional protection against series, parallel and earth arc faults. The series is perfectly integrated with ABB's System pro M compact® range. Combined with a Residual Current Circuit Breaker (RCCB) as upstream device, the S-ARC1 provides the best solution for complete protection of electrical installations in buildings.

LED for easy troubleshooting
LED to monitor the correct working conditions of the device and have an easier troubleshooting in case of trip. Consequently the downtime for maintenance can be reduced.
– Toggle ON: GREEN LED
– Toggle OFF: LED OFF
– Different indications after the trip, after reclosing the toggle



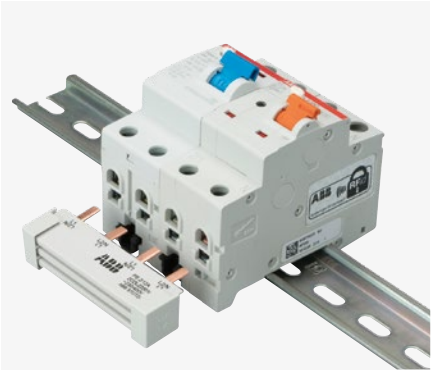
LED color	Blink/ sec	Signalling duration	Cause of trip
Green		Permanent	Manual trip, manual test , overcurrent
Red blinking	1	5 sec	Series arc
Red blinking	2	5 sec	Parallel arc
Red blinking	3	5 sec	Over voltage

In case of internal self test failure, the led can switch off or start blinking green/red alternatively.



Dedicated sticker for LED
Dedicated sticker that summarizes the LED function is present in addition to the instructions sheet.

Double slot terminals
Fail-safe terminals to avoid improper connection. Two slots of different dimensions (25 mm² and 10 mm²) available to allow the connection both with cables and busbars. Connection possible both from top and bottom side. Standard System pro M compact® clip ensures a stable fixing on DIN rail and easy and fast mounting and dismounting operations.



Compatibility with busbars
A quick and easy installation is possible in one step using a standard ABB System pro M compact® busbar: no additional cables required for the wiring.

All information on the device
Main technical information are laser-printed on the front and left side of product to ensure long readability.

AFDD

Technical features and overall dimensions

			S-ARC1	S-ARC1 M
Electrical features				
Standards			IEC/EN 62606; IEC/EN 60898-1	IEC/EN 62606; IEC/EN 60898-1
Number of poles			1P + N	1P + N
Rated current I_n		A	6≤ In ≤ 20	6≤ In ≤ 20
Rated voltage U_e		V	230-240	230-240
Insulation voltage U_i		V	500 V AC	500 V AC
Overvoltage category			III	III
Pollution degree			2	2
Min. operating voltage		V	170	170
Threshold for protection against overvoltage		V	275	275
Rated frequency		Hz	50/60	50/60
Rated breaking capacity acc. to IEC 60898-1	ultimate I_{cn}	A	6000	10000
Rated breaking capacity acc. to IEC 60947-2	ultimate I_{cu}	kA	7.5	10
	service I_{cs}	kA	6	7.5
Rated residual breaking capacity Icn1		A	6000	6000
Rated impulse withstand voltage (1.2/50) U_{imp}		kV	4 kV (test voltage 6,2 kV at sea level, 5 kV at 2 000 m)	4 kV (test voltage 6,2 kV at sea level, 5 kV at 2 000 m)
Dielectric test voltage at ind. freq. for 1 min.		kV	2 kV (50 / 60H z, 1 min.)	2 kV (50 / 60Hz, 1 min.)
Thermomagnetic release - characteristic	B: 3 I_n ≤ I_m ≤ 5 I_n		■	■
	C: 5 I_n ≤ I_m ≤ 10 I_n		■	■
Energy limitation class			3	3
Mechanical features				
Housing			Insulation group II, RAL 7035	Insulation group II, RAL 7035
Toggle			Insulation group IIIA, Orange RAL 2004, sealable in ON-OFF positions	Insulation group IIIA, Orange RAL 2004, sealable in ON-OFF positions
Contact position indication			Green/Red Window	Green/Red Window
Electrical life		opera-tions	10000	10000
Mechanical life		opera-tions	20000	20000
Protection degree acc. to EN 60529	housing		IP4X	IP4X
	terminals		IP2X	IP2X
Shock resistance acc. to IEC/EN 60068-2-27			30 g - 2 shocks - 13ms	30 g - 2 shocks - 13ms
Vibration resistance acc. to IEC/EN 60068-2-6			0,35mm or 5g - 20 cycles at 5…150…5 Hz without load	0,35mm or 5g - 20 cycles at 5…150…5 Hz without load
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH	28 cycles with 55 °C/90-96 % and 25 °C/95-100 %	28 cycles with 55 °C/90-96 % and 25 °C/95-100 %
Reference temperature for setting of thermal element		°C	30	30
Ambient temperature (with daily average ≤ +35 °C)		°C	-25…+55	-25…+55
Storage temperature		°C	-40…+70	-40…+70

Installation				
Terminal type	top / bottom		failsafe bi-directional cylinder-lift terminal (shock protected)	failsafe bi-directional cylinder-lift terminal (shock protected)
Terminal size for cables	top / bottom	mm^2	25/25	25/25
Terminal size for busbars	top / bottom	mm^2	10/10	10/10
Tightening torque	top / bottom	Nm	2.8	2.8
Stripping length of the cable		mm	12,5	12,5
Mounting			on DIN rail EN 60715 (35mm) by means of mounting clip	on DIN rail EN 60715 (35mm) by means of mounting clip
Mounting position			Any	Any
Supply from			Top/Bottom terminals	Top/Bottom terminals
Dimensions and weight				
Dimensions (H x D x W)		mm	85 x 69 x 35 mm	85 x 69 x 35 mm
Weight		g	180	180
Combinable with accessories and auxiliaries	Auxiliary contact, signal contact/auxiliary switch, shunt trip, undervoltage release, overvoltage release			

AFDD

S-ARC1, B and C characteristic

S-ARC1, B and C characteristics
Function: protection of end user single-phase circuits against short-circuit currents, overload, earth arc faults, parallel arc faults and series arc faults.

Application: residential, commercial
Standard: IEC 62606; EN 62606; IEC 60898-1; EN 60898-1
Icn = 6 000 A

B-Characteristic

No. of poles	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	6	750130	S-ARC1 B6	2CSA255901R9065		0.18	1
	10	178132	S-ARC1 B10	2CSA255901R9105		0.18	1
	13	750031	S-ARC1 B13	2CSA255901R9135		0.18	1
	16	178033	S-ARC1 B16	2CSA255901R9165		0.18	1
	20	749936	S-ARC1 B20	2CSA255901R9205		0.18	1

C-Characteristic

No. of poles	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	6	177937	S-ARC1 C6	2CSA255901R9064		0.18	1
	10	749837	S-ARC1 C10	2CSA255901R9104		0.18	1
	13	500735	S-ARC1 C13	2CSA255901R9134		0.18	1
	16	886136	S-ARC1 C16	2CSA255901R9164		0.18	1
	20	175438	S-ARC1 C20	2CSA255901R9204		0.18	1

AFDD

S-ARC1 M, B and C characteristic

S-ARC1 M, B and C characteristics
Function: protection of end user single-phase circuits against short-circuit currents, overload, earth arc faults, parallel arc faults and series arc faults.

Application: residential, commercial
Standard: IEC 62606; EN 62606; IEC 60898-1; EN 60898-1
Icn = 10 000 A

S-ARC1 M - B characteristics

No. of poles	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1P+N	6	374312	S-ARC1 M B6	2CSA275901R9065		0.18	1
	10	342113	S-ARC1 M B10	2CSA275901R9105		0.18	1
	13	342014	S-ARC1 M B13	2CSA275901R9135		0.18	1
	16	342212	S-ARC1 M B16	2CSA275901R9165		0.18	1
	20	341215	S-ARC1 M B20	2CSA275901R9205		0.18	1

S-ARC1 M - C characteristics

No. of poles	Rated current In A	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1P+N	6	339816	S-ARC1 M C6	2CSA275901R9064		0.18	1
	10	339717	S-ARC1 M C10	2CSA275901R9104		0.18	1
	13	339618	S-ARC1 M C13	2CSA275901R9134		0.18	1
	16	340416	S-ARC1 M C16	2CSA275901R9164		0.18	1
	20	340317	S-ARC1 M C20	2CSA275901R9204		0.18	1

Electrical installation solutions for buildings
Accessories for MCBs and RCDs

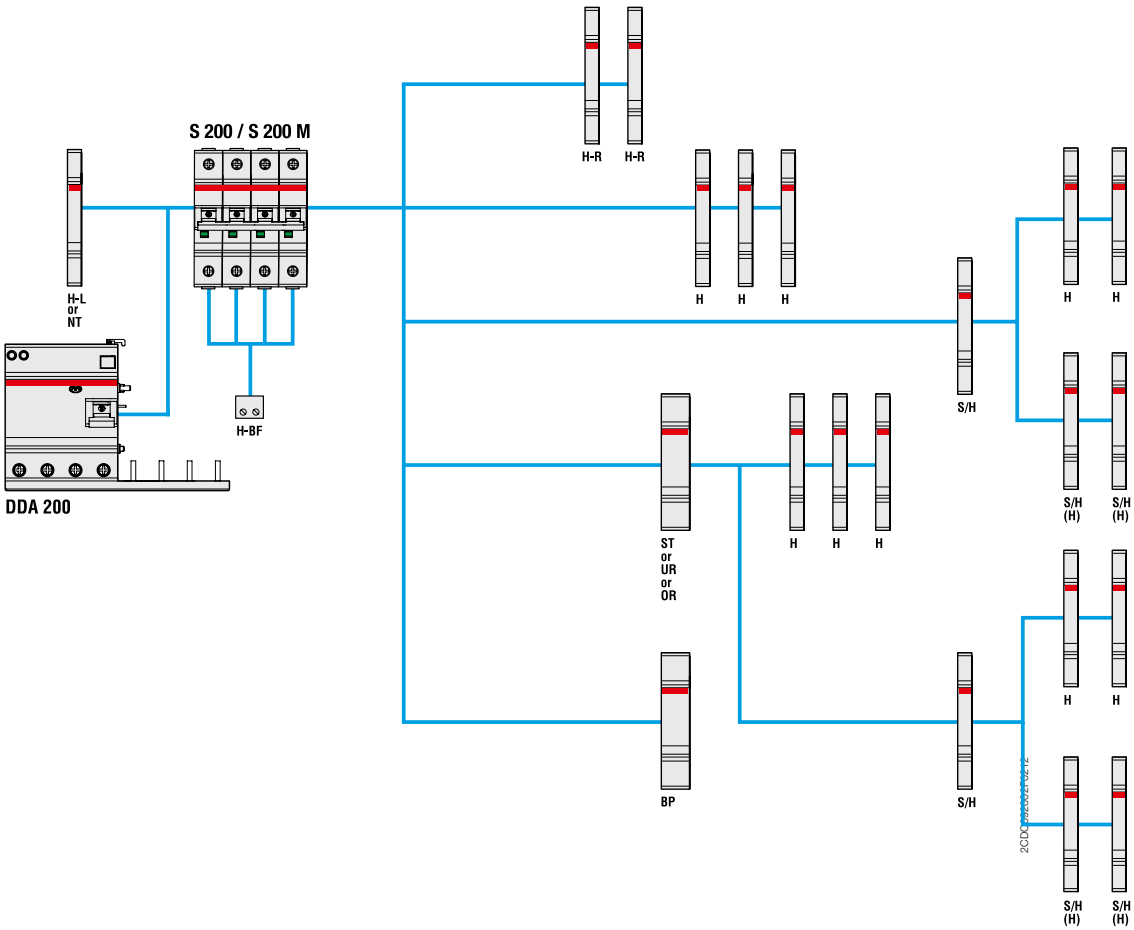
Index

Selection tables	4/2
Auxiliary elements for MCBs S200, SN 201, RCDs F 200, DS 200, DS201-DS202C, DS203NC, DSE201 M, AFDD S-ARC1 and Switch disconnectors SD 200 series	4/13
Accessories for MCBs, RCDs, AFDD and Switch Disconnectors	4/23
Motor operating and autoreclosing devices for MCBs, RCDs and Switch Disconnectors	4/24
Busbars and accessories for MCBs, RCDs and DS 200 series	4/28
Accessories for AFDD 1P+N, S-ARC1 busbars	4/35
Busbar systems selection table	4/36
Accessories for MCBs and RCDs busbars	4/51
Auxiliary elements for S750 DR	4/61
Accessories for S700	4 /63
Auxiliary elements and accessories for MCBs S800 and RCD-blocks DDA 800 series	4/64
Auxiliary elements for MCBs S500	4/75
UNIFIX rapid wiring system	4/77
Accessories for MCBs and RCDs Auxiliary switch S700 + H2WR	4/79

Auxiliary elements and accessories for MCBs and RCDs

Selection tables

Combination of auxiliary elements with S200, S200M, S200P, DDA200 + S200 or DS200 (for S200 80-100A no combination with DDA)

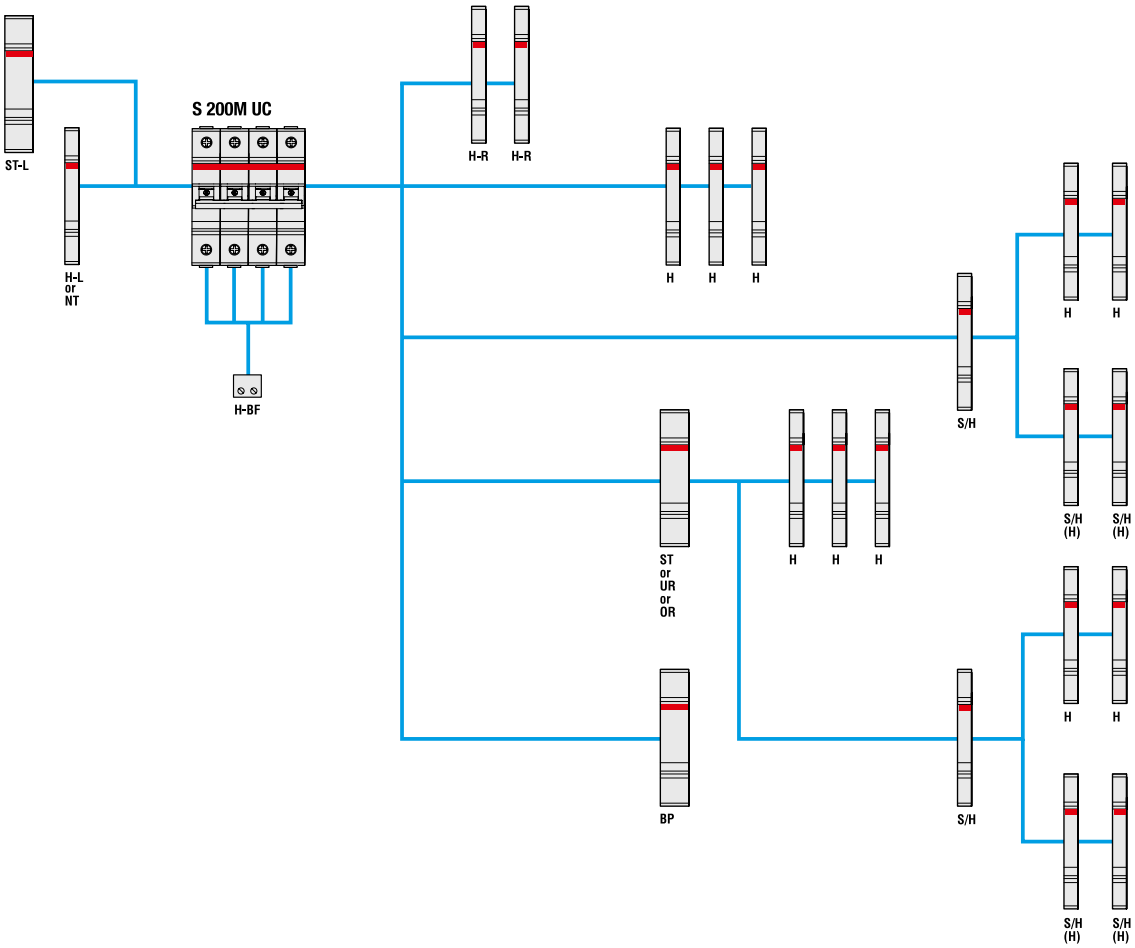


H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6-...R
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST	Shunt trip for S 200 MCB	S2C-A...
UR	Undervoltage release	S2C-UA
OR	Overvoltage release	S2C-OVP
H-L *	Auxiliary contact for S 200 MCBs to be mounted on the left	S2C-H...L
H-BF	Auxiliary contact for MCBs bottom fitting (1 for each pole of MCB)	S2C-H01/S2C-H10
BP	Mechanical tripping device	S2C-BP
NT	Switched neutral	S2C-Nt

In case of using rotary operating mechanism S2C-DH (only right side mountable) the auxiliary devices left side and bottom fitting auxiliary contact could be used.

* H-L and H-BF cannot be coupled with DS200.

Combination of auxiliary elements with S200M, S200MUC

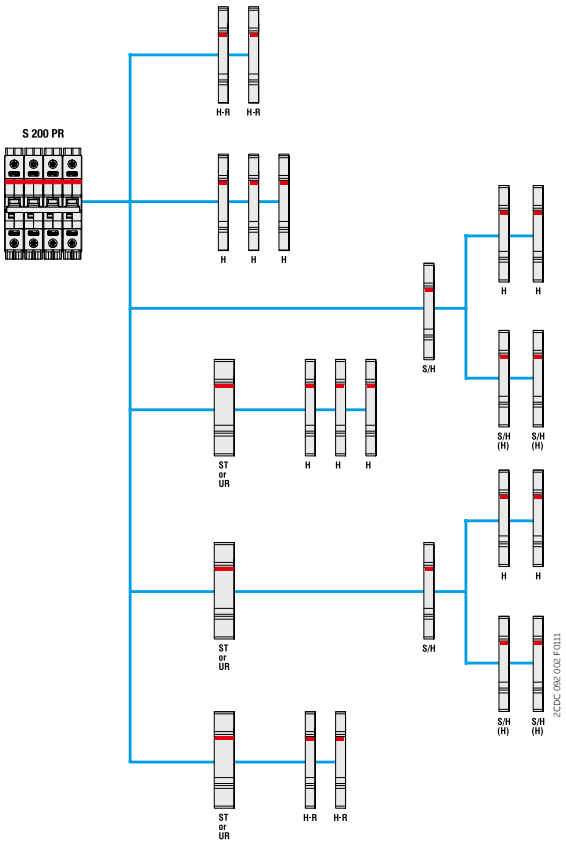


H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6-...R
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST	Shunt trip for S 200 MCB	S2C-A...
ST-L	Shunt trip to be mounted on the left	
UR	Undervoltage release	S2C-UA
OR	Overvoltage release	S2C-OVP
H-L	Auxiliary contact for S 200 MCBs to be mounted on the left	S2C-H...L
H-BF	Auxiliary contact for MCBs bottom fitting (1 for each pole of MCB)	S2C-H01/S2C-H10
BP	Mechanical tripping device	S2C-BP
NT	Switched neutral	S2C-Nt

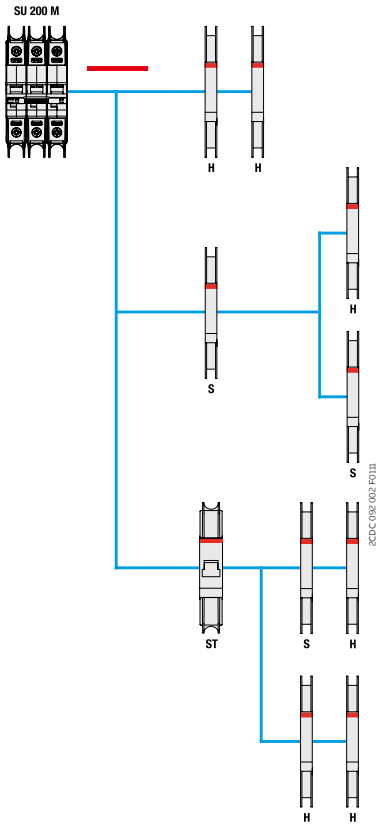
Auxiliary elements and accessories for MCBs and RCDs

Selection tables

Combination of auxiliary elements with S200PR



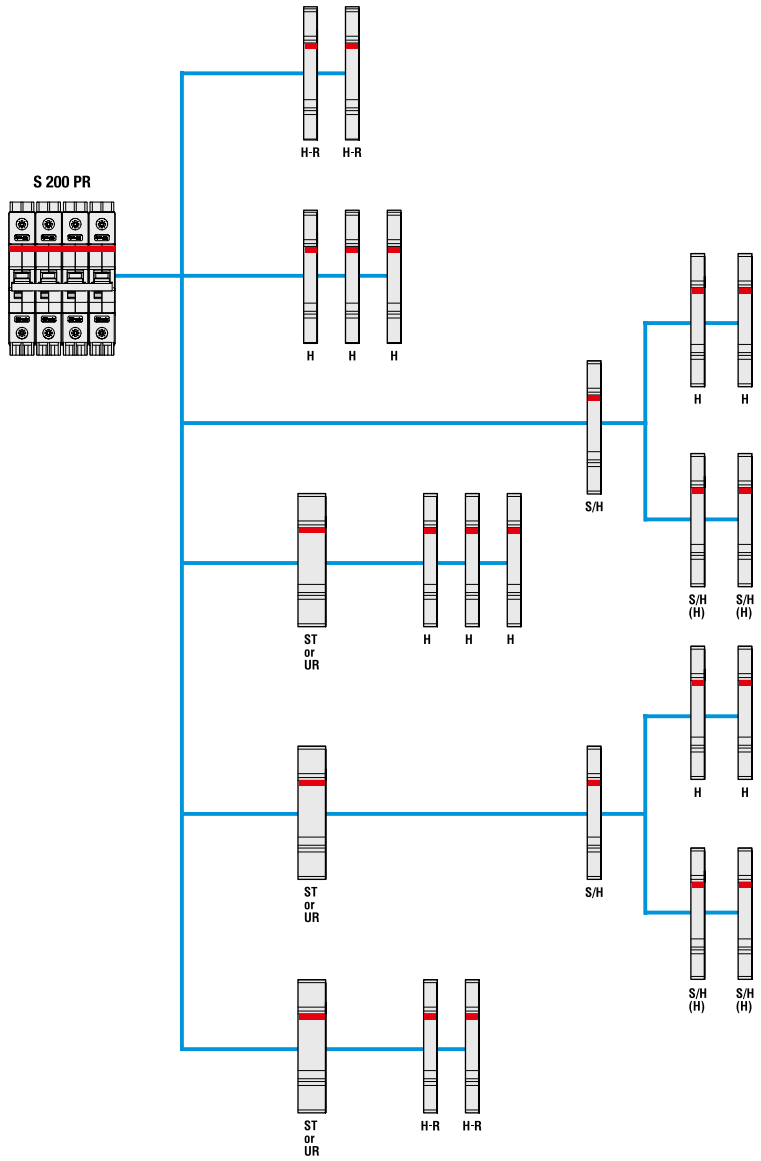
Combination of auxiliary elements with SU200M and S200UDC, SU200PR



H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6-...R
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST	Shunt trip	S2C-A...
UR	Undervoltage release	S2C-UA

H	Auxiliary contact	S2C-H6RU
S	Signal contact	S2C-S6RU
ST	Shunt trip	S2C-A...U

Combination of auxiliary elements with S200P

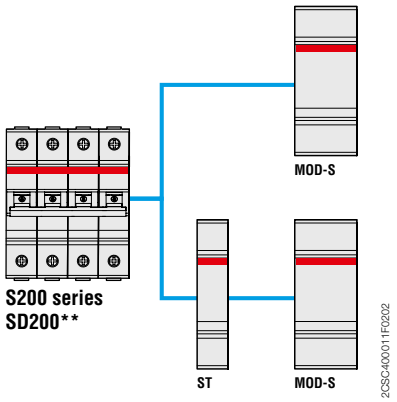


H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6-...R
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST	Shunt trip	S2C-A...
UR	Undervoltage release	S2C-UA

Auxiliary elements and accessories for MCBs and RCDs

Selection tables

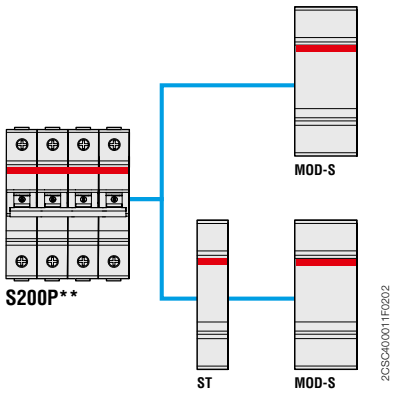
Combination of S200/SD200 with motor operating device



ST	Shunt trip for S 200 MCB	S2C-A...
MOD-S*	Motor operating device	S2C-CM...

* in case of using S 200 coupled with DDA 200, MOD-S doesn't operate in case of earth-leakage fault
** S200 series MCBs and SD200 switch disconnectors up to 3P or 2P+ST can be coupled with MOD-S

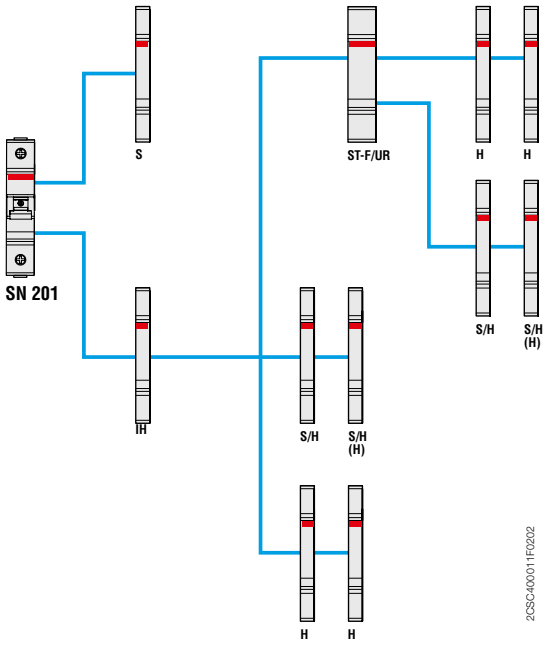
Combination of S200P with motor operating device



ST	Shunt trip for S 200 MCB S	S2C-A...
MOD-S*	Motor operating device	S2C-CM...

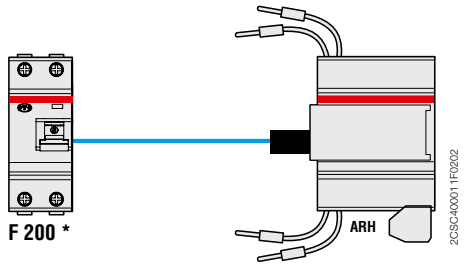
* in case of using S 200 coupled with DDA 200, MOD-S doesn't operate in case of earth-leakage fault
** S200P MCBs in all poles variants can be coupled with MOD-S

Combination of auxiliary elements with SN201



IH	Coupling interface/ auxiliary contact	SN201-IH
S	Signal contact	SN201-S
H	Auxiliary contact	S2C-H6R
S/H	Signal/auxiliary contact	S2C-S/H6R
S/H (H)	Signal/auxiliary contact used as auxiliary contact	S2C-S/H6R
ST-F	Shunt trip of F200 RCD	F2C-A
UR	Undervoltage release	S2C-UA

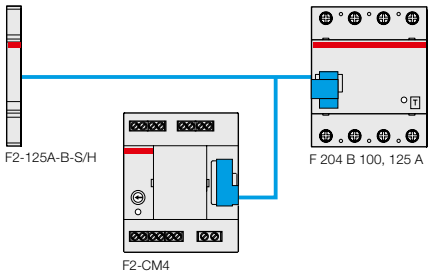
Combination of home automatic resetting unit with F200



ARH	Home automatic resetting unit	F2C-ARH

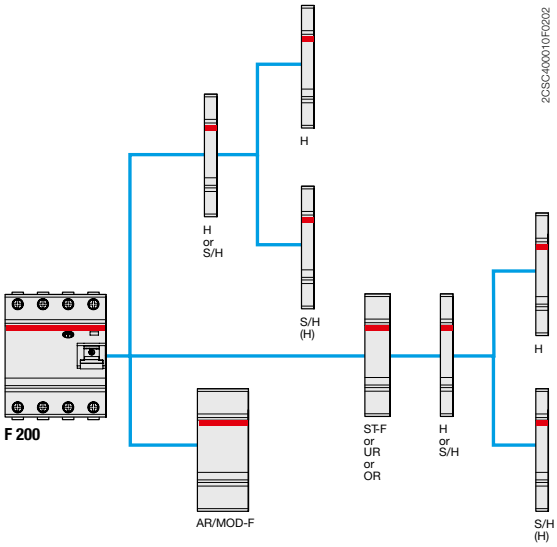
* F 202 30 mA or 100 mA (depending on ARH model), max 63 A

F200 B high ratings



F2-125A-B-S/H	Signal/Auxiliary contact
F2-CM4-MOD	

Combination of auxiliary elements with F200

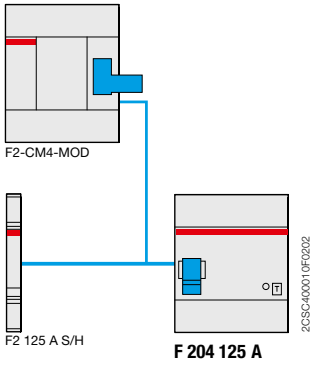


H	Auxiliary contact	S2C-H6R
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
UR	Undervoltage release	S2C-UA
OR	Overvoltage release	S2C-OVP
AR	Auto reclosing unit	F2C-ARI
MOD-F	Motor operating device	F2C-CM
ST-F	Shunt trip for F 200 RCCB	F2C-A

Auxiliary elements and accessories for MCBs and RCDs

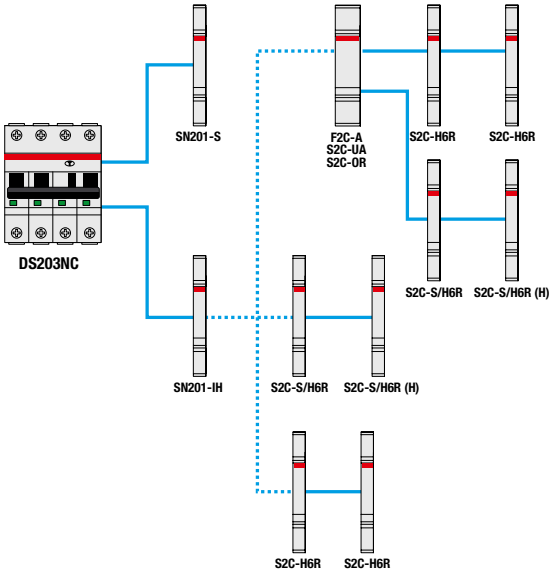
Selection tables

Combination of auxiliary elements with F204 125 A



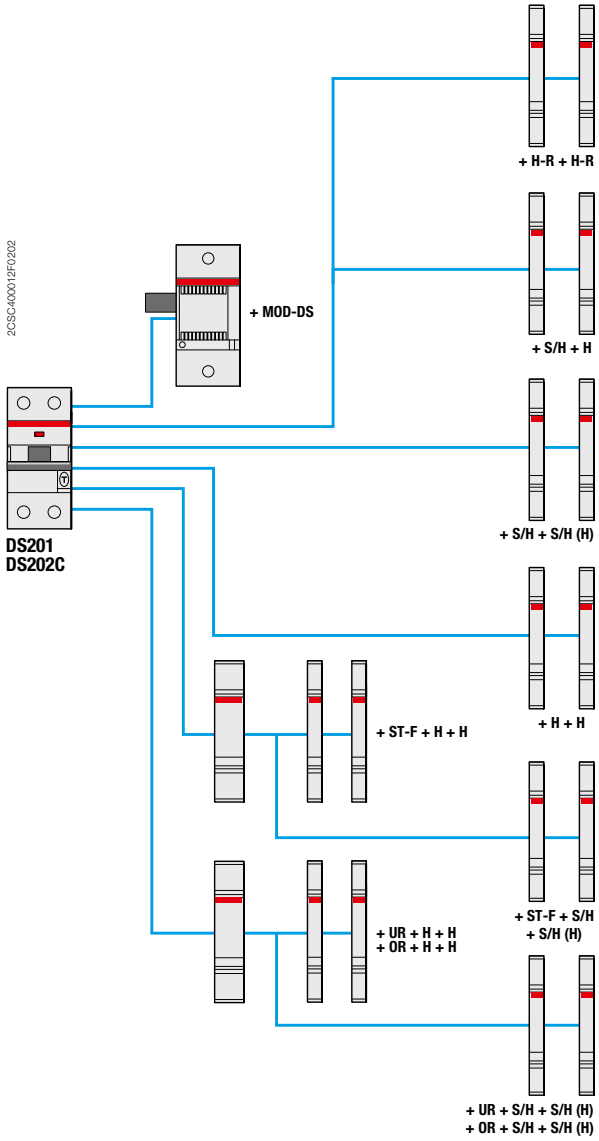
F2-125A-B-S/H	Signal/Auxiliary contact
F2-CM4-MOD	Motor operating device

Combination of auxiliary elements with DS203NC



SN201-IH	coupling interface / auxiliary contact
SN201-S	signal contact
S2C-H6R	auxiliary contact
S2C-S/H6R	signal/ auxiliary contact
S2C-S/H6R (H)	signal/ auxiliary contact used as auxiliary contact
F2C-A	shunt trip
S2C-UA	undervoltage release
S2C-OR	overvoltage release

Combination of auxiliary elements with DS201, DS202C

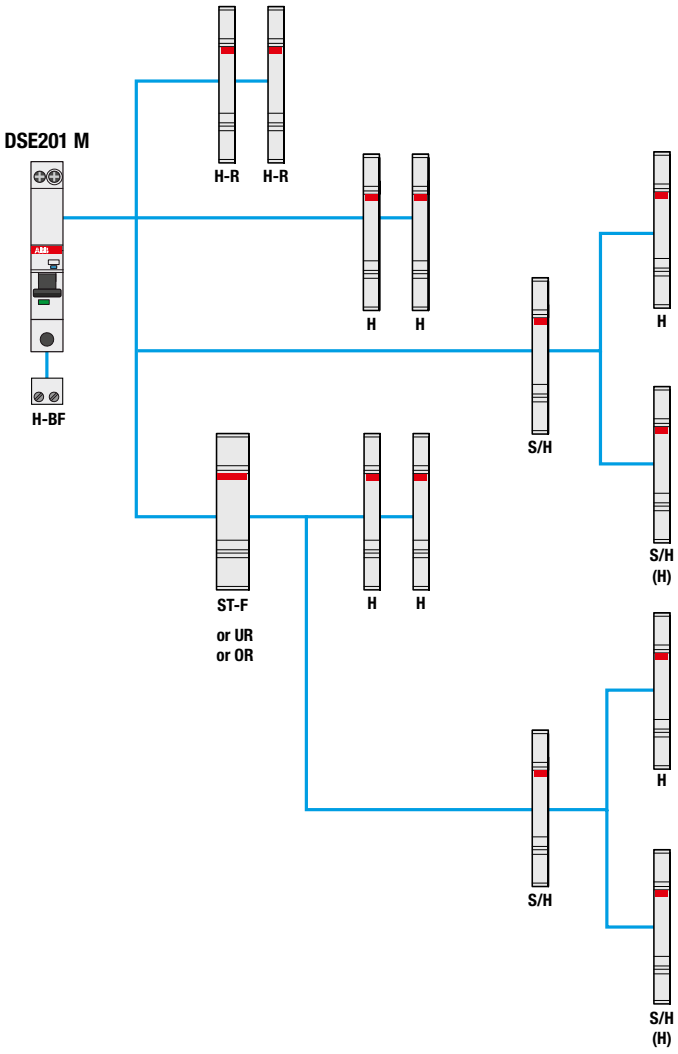


H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6R / S2C-H6-xxR
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST-F	Shunt trip for F 200 RCCB	F2C-A
UR	Undervoltage release	S2C-UA
OR	Overvoltage release	S2C-OVP
MOD-DS	Motor operating device	DS2C-CM

Auxiliary elements and accessories for MCBs and RCDs

Selection tables

Combination of auxiliary elements with DSE201 M

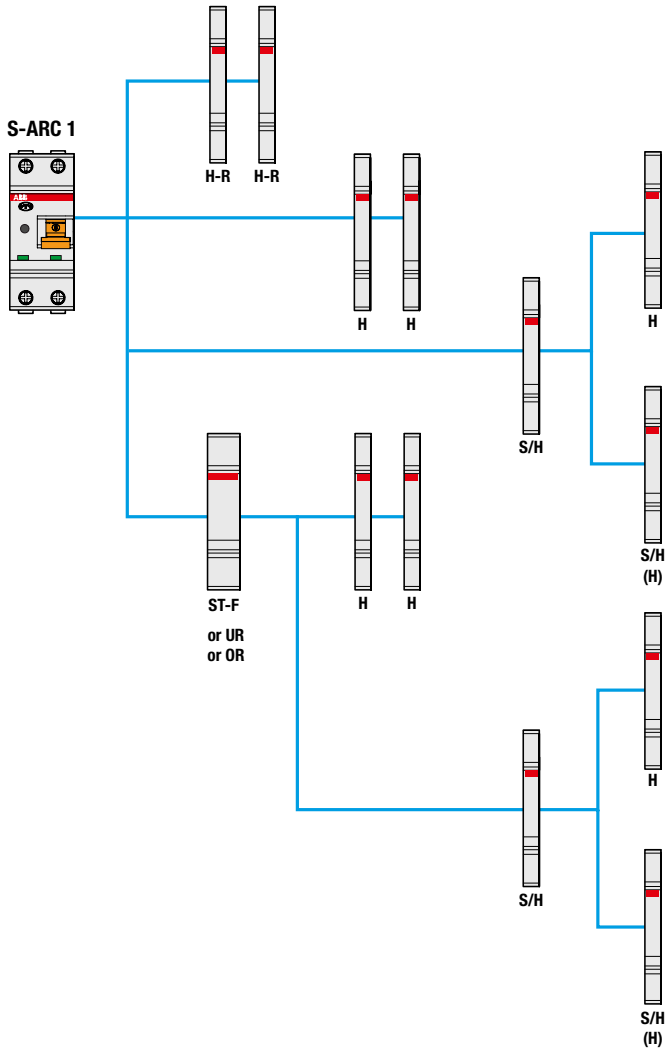


H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6R / S2C-H6-xxR
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST-F	Shunt trip for RCD	F2C-A
UR	Undervoltage release	S2C-UA
OR	Overvoltage release	S2C-OVP
H-BF	Auxiliary contact for bottom fitting	S2C-H01 / S2C-H10

Auxiliary elements and accessories for AFDD

Selection tables

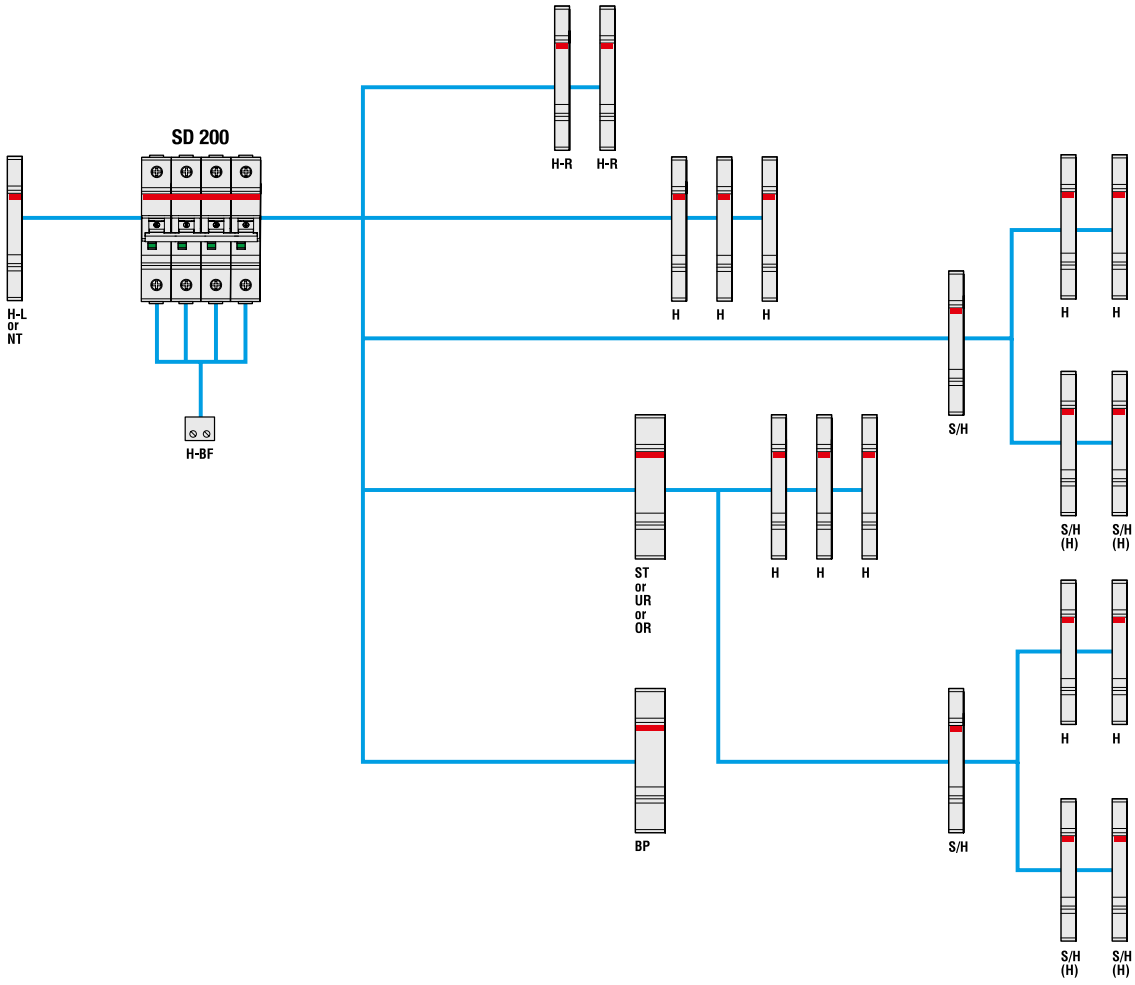
Combination of auxiliary elements with S-ARC1 and S-ARC1 M



H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6R / S2C-H6-xxR
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST-F	Shunt trip for RCD	F2C-A
UR	Undervoltage release	S2C-UA
OR	Overvoltage release	S2C-OVP

Auxiliary elements and accessories for Switch Disconnectors SD 200

Selection tables



H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6-...R
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
NT	Switched neutral	S2C-Nt
MOD-S	Motor operating device	S2C-CM
OR	Overvoltage release	S2C-OVP
BP	Mechanical tripping device	S2C-BP
ST	Shunt trip	S2C-A...
UR	Undervoltage release	S2C-UA

Auxiliary elements for

MCBs S 200, SN 201, RCDs F 200, DS 200, DS201-DS202C, DS203NC, DSE201 M, AFDD S-ARC1 and Switch disconnectors SD 200 series

Auxiliary elements

Auxiliary contact and signal/auxiliary contact		
		S2C-S/H6R, S2C-H6R, S2C-H11L, S2C-H20L and S2C-H02L
Utilization category		AC14 1A/400V, 2A/230V - DC12 1A/220V, 1,5A/110V - DC13 2A/60V, 4A/24V
Conventional free air thermal current	A	10
Min. operational current/voltage*		10 mA at 12 V; 5 mA at 24 V
Rated conditional short-circuit current	V	230 V AC 1,000 A with S201 K4
Overvoltage category		III
Rated impuls withstand voltage (1.2/50µs)	kV	4
Cross-section of conductors	mm^2	0.75…2.5 (up to 2 x 1.5 mm2 for S2C-H11L, S2C-H20L and S2C-H02L)
Tightening torque	Nm	1.2 (max. 0.8 for S2C-H11L, S2C-H20L and S2C-H02L)
Contact stability in vibration test according to IEC/EN 60 068-2-6		5g, 20 sweep cycles 5…150…5 Hz at 24 V AC/DC, 5 mA automatic reclosing < 10 ms
Mechanical service life		10000 operations
Dimensions (H x D x W)	mm	85 x 69 x 8.8

Auxiliary contact and signal/auxiliary contact		
		S2C-H6-11R, S2C-H6-20R, S2C-H6-02R
Utilization category		AC14: 1A/400V, 2A/230V DC12/DC13: 1A/50V, 2A/30V
Conventional free air thermal current	A	10
Min. rated operational current/ voltage*		10 mA at 12 V; 5 mA at 24 V
Rated conditional short-circuit current	V	230 V AC 1,000 A with S201 K4
Overvoltage category		III
Rated impuls withstand voltage (1.2/50µs)	kV	4
Cross-section of conductors	mm^2	0.75…2.5
Tightening torque	Nm	1.2
Contact stability in vibration test according to IEC/EN 60068-2-6		5g. 20 sweep cycles 5...150...5 Hz at 24 V AC/DC. 5mA automatic reclosing < 10 ms
Mechanical service life		10000 operations
Dimensions (H x D x W)	mm	85 x 69 x 8.8

* ensures safe contacting without current interruption by pollution layer

Auxiliary elements for

MCBs S 200, SN 201, RCDs F 200, DS 200, DS201-DS202C, DS203NC, DSE201 M, AFDD S-ARC1 and Switch disconnectors SD 200 series

S2C-S/H6R

S2C-H6-...

Signal/auxiliary contacts
Signal contacts indicate if a device tripped due to a failure (overcurrent/short-circuit for MCBs and RCBOs; earth fault for RCCBs and RCBOs). Auxiliary contacts indicate the position of the contacts, independent if a failure occurred or the device was operated manually.

S2C-S/H6R: choice through a selector between signal and auxiliary contact.

S2C-H6R and S2C-HxxR: Auxiliary contacts with contact configuration according the following table. All right-side mounted contacts are suitable for MCBs, RCDs, AFDD and switch disconnectors SD200 according the “Selection tables” which are displayed in the beginning of chapter 4.

S2C-HxxL: Auxiliary contacts with contact configuration according the following table. These contacts are left-side mounted and fit to S200 MCBs and switch disconnertors SD200 according the “Selection tables” which are displayed in the beginning of chapter 4. Especially when using a motor operating device this is a possibility to add a contact as the right side mounted ones do not fit within this combination.

S2C-Hxx: Unique bottom-fitting contact for the S200 compact range, DSE201 M and SD200 switch disconnectors. Simple and space-saving solution. Also intended for retrofitting.

Description	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Signal contact/ auxiliary switch 1CO	563819	S2C-S/H6R	2CDS200922R0001		0.04	1
Auxiliary contact 1CO	563826	S2C-H6R	2CDS200912R0001		0.04	1
Auxiliary contact 1NO/1NC	697941	S2C-H6-11R	2CDS200946R0001		0.04	1
Auxiliary contact 2NO	697958	S2C-H6-20R	2CDS200946R0002		0.04	1
Auxiliary contact 2NC	697965	S2C-H6-02R	2CDS200946R0003		0.04	1

Auxiliary contacts mounting on the left side

Description	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Auxiliary contact 1 NO/1NC	648820	S2C-H11L	2CDS200936R0001		0.04	1
Auxiliary contact 2 NO	648837	S2C-H20L	2CDS200936R0002		0.04	1
Auxiliary contact 2 NC	648844	S2C-H02L	2CDS200936R0003		0.04	1

S2C-H

Bottom-fitting auxiliary contact		
		S2C-H10 and S2C-H01
Conventional free air thermal current	A	7.5
Utilization category		AC14 2A/230V - DC 12 identical DC13 1A /50V, 2A/30V
Min. operational current/voltage*	V	10 mA at 12 V AC/DC
Rated conditional short-circuit current		230 VAC 1000 A, fault protection with S 201-K2 or Z2
Tightening torque	Nm	0.5
Cross-section of conductors	mm^2	0.75 to 2.5
Mechanical service life		10000 operations
Dimensions (HxDxW)		19 x 17 x 17.5

* ensures safe contacting without current interruption by pollution layer

Bottom-fitting auxiliary contacts for S 200, S 200 M, S 200 P, S 200 S, SD 200, DSE201 M

Description	**Bbn 4016779**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
1 NC	64551 5	S 2C-H01	2CDS200970R0001		0.01	1
1 NO	64552 2	S 2C-H10	2CDS200970R0002		0.01	1

packing unit 15 parts

Description	**Bbn 4016779**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
1 NC	64677 2	S 2C-H01 15x	2CDS200970R0011		0.01	15
1 NO	64681 9	S 2C-H10 15x	2CDS200970R0012		0.01	15

Auxiliary contact bridge for bottom-fitting auxiliary contacts

Wire jumper for integrated auxiliary contact S2C-H01/S2C-H10 for series connections (HKB) or parallel connections (HKB1).

Description	**Bbn 8012542**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
1/2 mod.	523134	HKB	GHV0360504R0100		0.001	1000
1 mod.	524209	HKB 1	GHV0360504R0101		0.001	1000

Signal and auxiliary contacts			
		SN201-S	**SN201-IH**
Terminals	mm^2	2x1,5	
Tightening torque	N	1.2	
Dimensions	mm	H: 85 x D: 68 x W: 8.9	H: 85 x D: 68,7 x W: 8.9
Rated voltage	V	230	
Rated current	A	2	

4

Auxiliary elements for

MCBs S 200, SN 201, RCDs F 200, DS 200, DS201-DS202C, DS203NC, DSE201 M, AFDD S-ARC1 and Switch disconnectors SD 200 series

SN201-S

Utilization category / contact capacity				
	SN201-S, SN201-IH			
AC14	Ue	V	400	230
	Ie	A	1	2
DC12	Ue	V	220	110
	Ie	A	1	1,5
DC13	Ue	V	60	24
	Ie	A	2	4

Signal contact for SN201 MCBs and DS203NC RCBOs

Function: indication of the device contact positions only after the automatic release of the MCBs/RCBOs due to overcurrent.

SN201-IH

Description	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Signal contact 1CO	104957	SN201-S	2CSS200924R0001		0.040	1

Auxiliary contact / interface module for SN201 MCBs and DS203NC RCBOs

Function: indication of the device contact positions. The auxiliary contact can be used as an interface module between SN201, DS203NC and other compact auxiliary elements.

Description	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Interface module/Aux. Contact 1CO	104858	SN201-IH	2CSS200923R0001		0.050	1

Signal and auxiliary contacts for F 200 125A and F 200 B			
			F2 125A-S/H
Rated current	AC	A	6
	DC	A	1
Min. rated voltage Ub min	AC	V	230
	DC	V	110
Connection cross section		mm^2	1...1.5
Tightening torque		Nm	0.8
Dimensions (H x D x W)		mm	85 x 69 x 8.8

Auxiliary/Signal contact for F 200 125A and F 200 B

Function: choice through a selector between indication of the position of the device's contacts and signalling of the earth fault. Suitable for RCCBs F 200 125A and F 200 B series

F2-125A-B-S/H

Description	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Auxiliary/Signal contact 1CO+1NC	600527	F2-125A-B-S/H	2CSF200922R0001		0.04	1

Clamping cover for F200 125A-F200 B type

Description	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	999638	CPV B	2CSF200988R0001			1

S2C-A

Shunt trip for S 200 MCBs										
			S2C-A1							
Rated voltage	AC	V	12…60							
	DC	V	12…60							
Max release duration		ms	<10							
Min. release voltage	AC	V	7							
	DC	V	10							
Power consumption	Ub	V	12 DC	12 AC	24 DC	24 AC	60 DC	60 AC		
	Ib max	A	2.2	2.5	4.5	5	14	8.8		
Coil resistance		Ω	3.7							
Terminals			Fale-safe bi-directional cylinder-lift-terminal							
Tightening torque		Nm	2.8							
Dimensions (H x D x W)		mm	85 x 69 x 17.5							
			S2C-A2							
Rated voltage	AC	V	110…415							
	DC	V	110…250							
Max release duration		ms	<10							
Min. release voltage	AC	V	55							
	DC	V	80							
Power consumption	Ub	V	110 DC	110 AC	220 DC	230 AC	415 AC			
	Ib max	A	0.4	0.5	1.1	1.0	2.7			
Coil resistance		Ω	225							
Terminals			Fale-safe bi-directional cylinder-lift-terminal							
Tightening torque		Nm	2.8							
Dimensions (H x D x W)		mm	85 x 69 x 17.5							

Shunt trips

Function: remote opening of the device when a voltage is applied. Suitable for MCBs S 200 series, RCBOs DS 200 series, SD 200 switch disconnectors series.

Shunt trips use a coil like MCBs for tripping. To trip a shunt it is necessary to choose the right voltage and make sure the corresponding Ibmax (as mentioned in the table above) is provided by the power supply used. If the power supply can provide higher currents the shunt trip will reduce the current to Ibmax due to its internal resistance.

As soon as the shunt tripped, the contact inside is open – the electrical circuit is disconnected even if the shunt trip is still powered on. The free-tripping mechanism of the shunt trip allows a restart of the MCB only after the shunt trip gets no external release signal anymore.

Rated voltage	**Bbn 4016779**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
AC/DC 12…60 V	570992	S2C-A1	2CDS200909R0001		0.15	1
AC 110…415 V/DC110…250 V	571005	S2C-A2	2CDS200909R0002		0.15	1

Auxiliary elements for

MCBs S 200, SN 201, RCDs F 200, DS 200, DS201-DS202C, DS203NC, DSE201 M, AFDD S-ARC1 and Switch disconnectors SD 200 series

F2C-A

Shunt trip for F 200 RCCBs							
			F2C-A1				
Rated voltage	AC	V	12...60				
	DC	V	12...60				
Max release duration		ms	10				
Min. release voltage	AC	V	6				
	DC	V	4.5				
Consumption on release	Ub	V	12 DC	12 AC	24 DC	60 DC	60 AC
	Ib max	A	0.88	0.65	1.58	5.8	5
Coil resistance		Ω	5.5				
Terminals		mm²	2x1.5				
Tightening torque		Nm	0.2				
Dimensions (H x D x W)		mm	85 x 69 x 17.5				
			F2C-A2				
Rated voltage	AC	V	110...415				
	DC	V	110...250				
Max release duration		ms	10				
Min. release voltage	AC	V	75				
	DC	V	55				
Consumption on release	Ub	V	110 DC	110 AC	250 DC	415 AC	
	Ib max	A	0.05	0.03	0.1	0.16	
Coil resistance		Ω	1355				
Terminals		mm²	2x1.5				
Tightening torque		Nm	0.2				
Dimensions (H x D x W)		mm	85 x 69 x 17.5				

Function: remote opening of the device when a voltage is applied. Suitable for RCCBs F 200 series and RCBOs DS201 - DS202C, DSE201 M, AFDD S-ARC1.
It can be used with MCBs SN201 and RCBOs DS203NC series by means of SN201-IH interface module.

Rated voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AC/DC 12...60V	974901	F2C-A1	2CSS200933R0011		0.15	1
AC 110...415V / DC 110...250V	975007	F2C-A2	2CSS200933R0012		0.15	1

2CSC400325F0201

S2C-UA

Undervoltage release							
			S2C-UA 12 DC	**S2C-UA 24 AC**	**S2C-UA 24 DC**	**S2C-UA 48 AC**	**S2C-UA 48 DC**
Standards			IEC/EN 60947-1				
Rated voltage	AC	V		24		48	
	DC	V	12		24		48
Frequency		Hz	50…60				
Release trip		V	0.35 Un ≥ V ≥ 0.7 Un				
Terminals		mm²	2x1.5				
Consumption		VA	2.2	3.6	2	3.6	2.1
Resistance to corrosion		°C/RH	constant atmosphere: 23/83 - 40/93 - 55/20; variable atmosphere: 25/95 - 40/93				
Protection degree			IPXXB/IP2X				
Tightening torque		Nm	0.4				
Dimensions (H x D x W)		mm	85 x 69 x 17.5				
			S2C-UA 110 AC	**S2C-UA 110 DC**	**S2C-UA 230 AC**	**S2C-UA 230 DC**	**S2C-UA 400 AC**
Standards			IEC/EN 60947-1				
Rated voltage	AC	V	110		230		400
	DC	V		110		230	
Frequency		Hz	50…60				
Release trip		V	0.35 Un M V M 0.7 Un				
Terminals		mm²	2x1.5				
Consumption		VA	3.5	2.2	3.7	2.3	2.4
Resistance to corrosion		°C/RH	constant atmosphere: 23/83 - 40/93 - 55/20; variable atmosphere: 25/95 - 40/93				
Protection degree			IPXXB/IP2X				
Tightening torque		Nm	0.4				
Dimensions (H x D x W)		mm	85 x 69 x 17.5				

Undervoltage releases

Function: protection of the load in the event of a voltage drop (between 70% and 35% of its rated value); positive safety (device's tripping when the voltage is disconnected) emergency stop by means of a button. Suitable for MCBs S 200 series, RCCBs F200 series and RCBOs DS201, DS202C, DSE201 M, AFDD S-ARC1 series, DS 200 series, SD 200 switch disconnectors series. It can be used with MCBs SN201 and RCBOs DS203NC series by means of SN201-IH interface module.

Rated voltage	**Bbn 8012542**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
12VDC	839705	S2C-UA 12 DC	2CSS200911R0001		0.09	1
24VAC	839804	S2C-UA 24 AC	2CSS200911R0002		0.09	1
24VDC	896401	S2C-UA 24 DC	2CSS200911R0007		0.09	1
48VAC	839903	S2C-UA 48 AC	2CSS200911R0003		0.09	1
48VDC	896500	S2C-UA 48 DC	2CSS200911R0008		0.09	1
110VAC	840008	S2C-UA 110 AC	2CSS200911R0004		0.09	1
110VDC	896609	S2C-UA 110 DC	2CSS200911R0009		0.09	1
230VAC	840107	S2C-UA 230 AC	2CSS200911R0005		0.09	1
230VDC	896708	S2C-UA 230 DC	2CSS200911R0010		0.09	1
400VAC	840206	S2C-UA 400 AC	2CSS200911R0006		0.09	1

Auxiliary elements for

MCBs S 200, SN 201, RCDs F 200, DS 200, DS201-DS202C, DS203NC, DSE201 M, AFDD S-ARC1 and Switch disconnectors SD 200 series

S2C-OVP

Overvoltage release				
			S2C - OVP2	S2C - OVP1
Rated voltage		VAC	230	
Rated frequency		Hz	50	
Max non-tripping voltage AC		V	253	
Max tripping voltage AC		V	290	275
Tripping time	@ 290V AC	s	t<1	
	@ 380V AC	s	t<0.1	
Peak current	@ 315V AC	A	1	
	@ 440V AC	A	1.8	
Max duration of impulse command		ms	7	
Operating temperature		°C	-5....+40	

Overvoltage release

Function: monitoring voltage between the neutral and phase; when an overvoltage reaches the threshold value, the OVP device causes the tripping of the associated MCB or RCCB. Suitable for MCBs of the S200 series up to 63 A, and RCCBs of the F200 series up to 100 A and RCBOs DS201 - DS202C, DSE201 M, AFDD S-ARC1 series, Suitable for SD 200 switch disconnectors series. It can be used with MCBs SN201 and RCBOs DS203NC series by means of SN201-IH interface module.

Description	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Overvoltage release (max tripping voltage AC: 275V)	748137	S2C-OVP1	2CSS200910R0005		0.100	1/5
Overvoltage release (max tripping voltage AC: 290V)	952039	S2C-OVP2	2CSS200993R0005		0.100	1/5

S2C-Nt

Hand operated neutral left side mounted		
		S2C-Nt
Rated current	A	max. 40
Terminal	mm^2	10; cage terminal
Tightening torque	Nm	1.2
Dimensions (H x D x W)	mm	85 x 69 x 8.8

Hand operated neutral

The hand operated neutral has to be mounted to the left side of the MCB and be snaped on the DIN rail. It is used for measuring duties where the neutral conductor must be in the open position. Due to the special design of the handle - when switching ON the MCB – the neutral will make before the MCB is closed. Suitable for SD 200 switch disconnectors series.
The S2C - Nt is not to switch with a tool (screw driver).

Description	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Max 40A	647625	S2C-Nt	2CDS200918R0001		0.06	1

S 2C-S6R U

S 2C-H6R U

Auxiliary contact and signal contact		
		S2C-H6R U, S2C-S6RU
Rating according UL 489 / CSA22-2 No.5		1A / 480 VAC 2A / 277 VAC 1.5 A / 125 VDC 2A / 60 VDC 4 A / 24 VDC
Conventional free air thermal current	A	10
Min. operational current/voltage*		10 mA at 12 V; 5 mA at 24 V
Rated conditional short-circuit current	V	230 V AC 1,000 A with S201 K4
Overvoltage category		III
Rated impuls withstand voltage (1.2/50µs)	kV	4
Cross section of conductors	mm²	0.75…2.5
Tightening torque	Nm	1.2
Contact stability in vibration test according to IEC/EN60068-2-6		5g, 20 sweep cycles 5…150…5 Hz according to DIN IEC 68-2-6 at 24 V AC/DC, 5 mA automatic reclosing < 10 ms
Mechanical service life		10000 operations
Dimensions (H x D x W)	mm	100 x 69 x 8.8

* ensures safe contacting without current interruption by pollution layer.

Accessories for S 200 U/S 200 UP/S 200 UDC

Auxiliary contact (switch)

Description	**Bbn 4016779**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
only for range U/UP/UDC	61561 7	S 2C-H6R U	2CDS200914R0001		0.035	1

Signal contact (bell alarm)

Description	**Bbn 4016779**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
only for range U/UP/UDC	64677 2	S 2C-S6R U	2CDS200924R0001		0.035	1

Auxiliary elements for

MCBs S 200, SN 201, RCDs F 200, DS 200, DS201-DS202C, DS203NC, DSE201 M, AFDD S-ARC1 and Switch disconnectors SD 200 series

S 2C-A1 U

Shunt trip											
			S2C-A1 U								
Rated voltage	AC	V	12...60								
	DC	V	12...60								
Max release duration		ms	<10								
Min. release voltage	AC	V	7								
	DC	V	10								
Power consumption	Ub	V	12 DC	12 AC	24 DC	24 AC	60 DC	60 AC			
	Ib max	A	2.2	2.5	4.5	5	14	8.8			
Coil resistance		Ω	3.7								
Terminals			Fale-safe bi-directional cylinder-lift-terminal								
Tightening torque		Nm	2.8								
Dimensions (H x D x W)		mm	100 x 69 x 17.5								
			S2C-A2 U								
Rated voltage	AC	V	110...415								
	DC	V	110...250								
Max release duration		ms	<10								
Min. release voltage	AC	V	55								
	DC	V	80								
Power consumption	Ub	V	110 DC	110 AC	220 DC	230 AC	415 AC				
	Ib max	A	0.4	0.5	1.1	1.0	2.7				
Coil resistance		Ω	225								
Terminals			Fale-safe bi-directional cylinder-lift-terminal								
Tightening torque		Nm	2.8								
Dimensions (H x D x W)		mm	100 x 69 x 17.5								

Shunt trip only for range U/UP/UDC

Description	**Bbn 4016779**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
12 - 60 V AC/DC	64472 3	S 2C-A1 U	2CDS200908R0001		0.15	1
110-415 V AC,110-250V DC	64473 0	S 2C-A2 U	2CDS200908R0002		0.15	1

Auxiliary elements for
MCBs, RCDs and Switch Disconnectors

S 2C-TC20 U

IP20 Terminal cover						
Description	**Bbn 4016779**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
only for range U/UP/UDC	87756 5	S 2C-TC20 U	2CDS200917R0001		0.0002	20

S 2C-BP

Mechanical tripping device

Function: it causes the automatic tripping of the circuit-breakers which it is associated to, when the panel or the door of the electrical switchboard are opened or removed.
Suitable for MCBs S 200 series (on both sides of the devices) and for DS 200 (only on the right side, because on the left side there's RCD-block DDA 200). Suitable for SD 200 switch disconnectors series.

Description	**Bbn 8012542**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
Mechanical tripping device	941309	S2C-BP	2CSS200998R0001		0.048	1

S 2C-EST

Plug-in base

Function: it is possible to transform a standard circuit-breaker of the S 200 and F 200 range in a plug-in device which can be pulled out of the circuit where it is installed in one operation. Suitable for MCBs S 200 series and for RCCBs F 200 series up to 63 A and RCBOs DS201, DS202C and AFDD S-ARC1 series.

Description	**Bbn 8012542**	**Order details**		**Price 1 piece**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
Plug-in base	940708	S2C-EST	2CSS200999R0001		0.115	1

Motor operating and autoreclosing devices for
MCBs, RCDs and Switch Disconnectors

S2C-CM

2CSC400248F0201

Motor operating devices				
			S2C-CM	F2C-CM
Supply		V	12 ... 30 V a.c. +10% - 15% (50-60Hz); 12 ... 48 V d.c. +10% - 15%	
Power consumption during the operation	12 V a.c.	VA	< 15	
	24 V a.c.	VA	< 22	
	30 V a.c.	VA	< 25	
	12 ... 48 Vd.c.	VA	< 20	
Power consumption at rest		VA	< 1.5	
Make-time at ambient temperature		sec	< 1	
Opening time at ambient temperature		sec	< 0.5	
Number of operations			< 20.000	
Operating temperature		°C	- 25 ... + 55	
Cables length of control circuit		m	< 1500	
Cables cross-section		mm^2	< 2.5	
Signal contact (terminals 3 – 4 – 5) Current carrying capacity			1NA + 1NC (change-over contact) 5 A (250 V AC) (inductive-ohmic load)	
Auxiliary contact (terminals 6 – 7 – 8) Current carrying capacity			1NA + 1NC (change-over contact) 3 A (250 V AC) (inductive-ohmic load)	
Remote control*			By means of dry contacts	
Remote control terminals			Terminal 9 = make contact; Terminal 10 = opening contact Terminal 11 = common reference for control contacts, +5V d.c. (supplied by the motor operating device)	

* Note: In case of the device opening due to a fault, please wait 8 seconds before attempting to reclose the motor operator.

Motor operating devices			
			DS2C-CM
Supply		V	12 ... 30 V a.c. +10% - 15% (50-60Hz); 12 ... 48 V d.c. +10% - 15%
Insulation voltage		V	2500 for 1 minute
Power consumption during the operation	12 V a.c.	VA	< 15
	24 V a.c.	VA	< 22
	30 V a.c.	VA	< 25
	12 ... 48 V d.c.	VA	< 20
Power consumption at rest		VA	< 1.5
Remote control *			by means of dry contacts
Make-time at ambient temperature		sec	< 1
Opening time at ambient temperature		sec	< 0.5
Time before attempting to reclose the motor operator		sec	8
Number of operations			< 20.000
Operating temperature		°C	- 25 ... + 55
Storage temperature		°C	- 40 ... + 70
Mounting			on DIN rail EN 60715 by means of fast clip device
Protection degree (EN 60529)			terminals: IP2X
			enclosure: IP4X
Cables length of control circuit		m	< 1500
Cables cross-section		mm^2	< 2.5
Signal contact (terminals 3 – 4 – 5)			1NO + 1NC (change-over contact)
Current carrying capacity			5 A (250 V AC) (resistive load)
Auxiliary contact (terminals 6 – 7 – 8)			1NO + 1NC (change-over contact)
Current carrying capacity			3 A (250 V AC) (resistive load)
Remote control terminals			Terminal 9 = make contact; Terminal 10 = opening contact Terminal 11 = common reference for control contacts, +5 V d.c. (supplied by the motor operating device)

* Note: In case of the device opening due to a fault, please wait 8 seconds before attempting to reclose the motor operator.

Motor operating devices

Function: S2C-CM, F2C-CM and DS2C-CM allow the remote control (opening or closing) of the coupled device. Suitable for S200 series MCBs and SD200 switch disconnectors, F 200 RCCBs and RCBOs DS201 and DS202C.

Description	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Motor operating device for 1P S200 series MCBs and SD200 switch disconnectors	026259	S2C-CM1	2CSS201997R0013		0.166	1
Motor operating device for 2P and 3P S200 series MCBs and SD200 switch disconnectors	026358	S2C-CM2/3	2CSS203997R0013		0.166	1
Motor operating device for 4P S200P MCBs	026457	S2C-CM4	2CSS204997R0013		0.166	1
Motor operating device for 2P and 4P F200 RCCBs	026556	F2C-CM	2CSF200997R0013		0.166	1
Motor operating device for 1P+N and 2P DS201, DS202C RCBOs	135951	DS2C-CM	2CSR201997R0013		0.166	1
Motor operating device for F200 125A RCCB	020721	F2-125A-24V-CM4	2CSF200997R1214		0,36	1
Motor operating device for F200 125A RCCB	600626	F2-125A-230V-CM4	2CSF200997R1205		0,36	1

Motor operating and autoreclosing devices for
MCBs, RCDs and Switch Disconnectors

F2C-ARI

Auto-reclosing unit				
			F2C-ARI	F2C-ARI30
Supply		V	12 ... 30 V a.c. +10% - 15% (50-60Hz); 12 ... 48 V d.c. +10% - 15%	
Number of automatic reset attempts			3	
Time of reset of the auto-reset meter		sec	12	45
Power consumption during the operation	12 V a.c.	VA	< 15	
	24 V a.c.	VA	< 22	
	30 V a.c.	VA	< 25	
	12...48 V d.c.	VA	< 20	
Power consumption at rest		VA	< 1.5	
Waiting time between auto-reset attempts		sec	3	30
Closing time at ambient temperature		sec	< 1	
Opening time at ambient temperature		sec	< 0.5	
Number of operations			< 20.000	
Operating temperature		°C	- 25 ... + 55	
Cables length of control circuit		m	< 1500	
Cables cross-section		mm^2	< 2.5	
Signaling contact to signal a locked state following three auto-reset attempts (terminals 3–4–5)			1NA + 1NC (change-over contact)	
Current carrying capacity			5 A (250 V AC) (ohmic load)	
Auxiliary contact (terminals 6–7–8)			1NA + 1NC (change-over contact)	
Current carrying capacity			3 A (250 V AC) (ohmic load)	
Remote control			By means of dry contacts	
Remote control terminals			Terminal 9 = closing and remote reset contact for locked state; Terminal 10 = opening contact	
			Terminal 11 = common reference for control contacts, +5V d.c. (supplied by the motor operating device)	

Auto-reclosing units

Function: F2C-ARI and F2C-ARI30 allow the auto-reclosing of the coupled device in case of unwanted tripping. Suitable for F 200 RCCBs up to 100 A.

Description	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Auto-reclosing unit for 2P and 4P F200 RCCBs	026655	F2C-ARI	2CSF200996R0013		0.166	1
Auto-reclosing unit for 2P and 4P F200 RCCBs (30")	064350	F2C-ARI30	2CSF200995R0013		0.166	1

2CSC400678F0001

F2C-ARH

2CSC400014F0202

F2C-ARH-T

Home automatic resetting unit		
		F2C-ARH /F2C-ARH-T
Power supply	VAC	230
Number of automatic reclosing attempts		1
Reset time for counter of automatic reclosing attempts	sec	12
Power absorbed during the operation	VA	(t<0.5s) 20 max
Power consumption in stand-by	W	0.4 max
Number of operations		≤ 10.000
Operating temperature	°C	-25 ... + 55
Signal contact cable section	mm^2	≤ 2.5
Signal contact for the locked state (terminals 1-2)		1NA (change-over contact)
Signal contact rated current	A	3 (250V AC)

Home automatic resetting unit (for domestic and similar applications)

Function: it recloses the associated residual current device, only after having checked that there are no effective faults in the system protected by the RCCB.

Suitable for 2-pole RCCB series with 30 mA or 100 mA sensitivities, max 63 A

Description	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Home automatic resetting unit (30 mA)	732433	F2C-ARH	2CSF200992R0005		0.200	1
Home automatic resetting unit (100 mA)	658535	F2C-ARH100	2CSF200990R0005		0.200	1

Home automatic resetting unit with autotest (for domestic and similar applications)

Function: it recloses the associated residual current device, only after having checked that there are no effective faults in the system protected by RCCB.

Suitable for 2-pole RCCB series with 30 mA or 100 mA sensitivities, max 63 A.

F2C-ARH-T allows the RCCB automatic test every six months.

Description	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Home automatic resetting unit (30 mA) with RCCB autotest	733232	F2C-ARH-T	2CSF200991R0005		0.200	1
Home automatic resetting unit (100 mA) with RCCB autotest	593836	F2C-ARH-T100	2CSF200989R0005		0.200	1

Busbars and accessories for
MCBs S 200, RCDs F 200 and DS 200 series

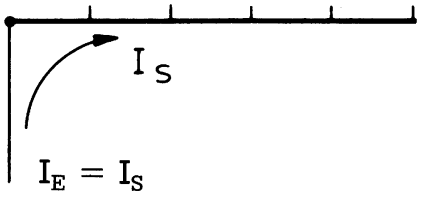
			Busbars PS				Busbars PS...SP		
Suitable for			MCB: S200, S200M, S200P RCD: F200, DDA-blocks				MCB: S200, S200P		
Electrical Data	Standards		for IEC applications IEC/EN 60947-1				for IEC / UL applications IEC/EN 60947-1 UL1077		
	Approvals		—				UL 1077		
	Rated voltage Ue		1P, 2P, 3P, 4P: 690 V AC, 690 V DC				1P, 2P, 3P, 4P: 480 V AC		
	Rated frequency	Hz	50 / 60 Hz, DC				50 / 60 Hz		
	Current carrying capacity / Phase (35°C ambient temperature)	A		10 mm²	16 mm²	30 mm²		10 mm²	16 mm²
			End feeding ①	63 A	80 A	120 A	End feeding ①	63 A	80 A
			Non-end feeding ①	100 A	130 A	160 A	Non-end feeding ①	100 A	130 A
	Short-circuit withstand capacity	kA	25 kA in series with fuse NH3 355 A gG 500 V				10 kA in series with fuse NH3 355 A gG 500 V		
Mechanical Data	Housing		light grey, RAL 7035						
	Enviromental conditions acc. to		DIN EN 60068						
	Overvoltage category		III						
	Pollution degree		2						
Installation	Cross-Section Busbar		10 mm², 16 mm², 30 mm²				10 mm², 16 mm²		
	Mounting position		optional						
	Supply		Feed on terminal of the device (supply side optional) or use of feeder terminal range AST; SZ-ESK				Feed on terminal of the device (supply side optional) or use of feeder terminals AST 35/15 SP; SZ-ESK SP		
Accessories	Shock-protection caps		BSK, SZ-BSK				BSK SP		
	Feeder terminals		range AST, SZ-ESK				AST 35/15 SP SZ-ESK SP		
	End caps		range END, PS-END, PSB-END				PS-END SP; PS-END1 SP		
			Feeder Terminals AST , SZ-ESK				**Feeder Terminals AST 35/15 SP and SZ-ESK SP**		
Electrical Data	Max. operating voltage	V	690 V AC, 690 V DC				480 V AC		
	Current carrying capacity / phase	A	see below ①				115 A ①		
	Cross-Section	mm²	SZ-ESK	6 - 35 mm²	100 A		SZ-ESK SP	35 mm² / 2AWG flexible with ferrules	
				6 - 50 mm²	125 A			50 mm² / 1AWG solid / stranded	
		mm²	AST	6 - 25 mm²	80 A		AST 35/15 SP	25 mm² / 3AWG flexible with ferrules	
				6 - 50 mm²	125 A			35 mm² / 2AWG solid / stranded	
Instruction of installation			When cutting the busbar, ensure that the insulation profile exceeds the copper bar by approx. 10 mm on each side. Shock protection only with mounted end caps ensured. For DC applications the required increased clearence and creepage distances needs to be ensured.				When cutting the busbar, ensure that the installation profile exceeds the copper bar by approx. 10 mm on each side. Shock protection only with mounted end caps ensured.		

① In case of feed in from the middle of the busbar it needs to be ensured, that the sum of junction currents per side must not exceed the max busbar current Is/phase. Irrespective of the current carrying capacity (Is) of the busbar, the max. rated current of the devices terminal may not be exceeded.

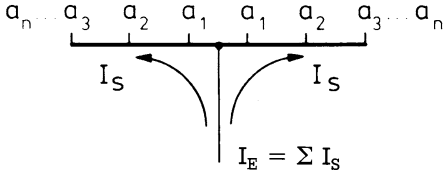
Busbars PS...BP	**Busbars PS...BP-C**	**Busbars PS..DC**
MCB: SU200M, S200UDC, S200U, S200UP	MCB: SU200M, S200UDC, S200U, S200UP	MCBs, Fuseholders E90
for IEC / UL applications IEC/EN 60947-1 UL489	for IEC / UL applications IEC/EN 60947-1 UL508	for IEC applications IEC/EN 60947-1
UL 489	UL 489	-
1P, 2P, 3P: 480 V AC	600 V AC/DC	690 V AC / 1000 V DC
50 / 60 Hz	50 Hz (IEC) / 60 Hz (UL)	50 / 60 Hz, DC
16 mm²		
80 A (115A for cubicle size ≥ 30"x30"x10")	End feeding ① 100 A	End feeding ① 100 A
	Non-end feeding ① 200 A	Non-end feeding ① 160 A
10 kA in series with fuse NH3 355 A gG 500 V	10 kA 3 cycles @ 600 V / 140 kA Fuse Class J 200 A	25 kA/0,1 s, 100 kA in series with fuse NH3 355 A gG
16 mm²	25 mm²	30 mm²
Feed on terminal of the device (supply side optional) or use of feeder terminals AST 35/15 BP; SZ-ESK BP	Feed on terminal of the device (supply side optional) or use of feeder terminal AST 35/58 BP-C	Feed on terminal of the device (supply side optional) or use of feeder terminal AST 35/18 DC or AST 35/45 DC
BSK BP	BSK BP-C	
AST 35/15 BP SZ-ESK BP	AST 35/58 BP-C	AST 35/18 DC (for use with 1-phase busbar) AST 35/45 DC (for use with 2-phase busbar)
-	PS-END 3 BP-C	PS-END0, PS-END3

Feeder Terminals AST 35/15 BP and SZ-ESK BP		**Feeder Terminals AST 35/58 BP-C**	
480 V AC		1000 V AC/DC	
115 A ①		115 A use 75° wire 95 A use 60° wire	
SZ-ESK BP	35 mm² / 2AWG flexible with ferrules	AST 35/58 BP-C	28mm² / 2AWG
	50 mm² / 1AWG solid / stranded		
AST 35/15 BP	25 mm² / 3AWG flexible with ferrules		
	35 mm² / 2AWG solid / stranded		

Cutting of busbar is not permitted.	Shock protection only with mounted end caps ensured. For DC applications the required increased clearence and creepage distances needs to be ensured.	The copper bus has to be cut to a length that is app. 10 mm less than the corresponding length of the plastic busbar housing. Toch-safe only when used with the required end caps. Independant from the rated voltage of the devices like busbars or feeder terminals the creepage distances and distances over the air needs to be considered. This is depending on the particular application as well as on the complete assembling.



Feed in from the end of the busbar

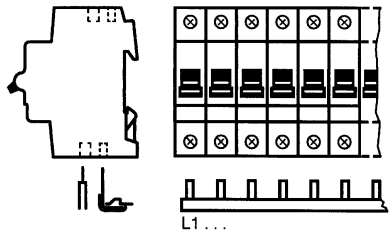


Feed in from the middle of the busbar

Accessories for MCBs and RCDs

Busbars

PS 1/...
PS 1/.../16
PS 1/.../30



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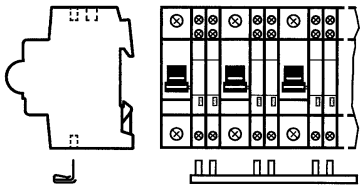
PS 1/29/6



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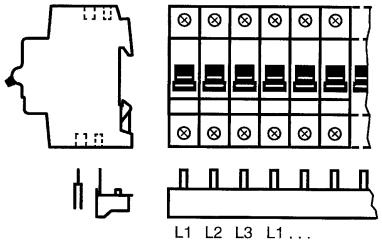
PS 3/...
(2CDL231 ...)



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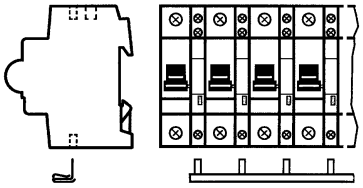
PS 1/38/6



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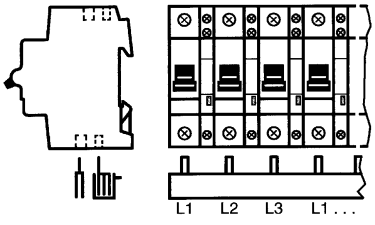
PS 3/39 H
PS 3/39/16 H



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PS 1/57/6 H
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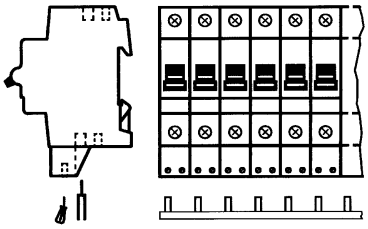

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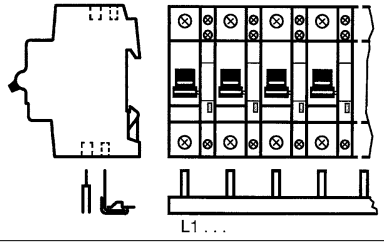
PS 1/38 H
PS 1/38/16 H



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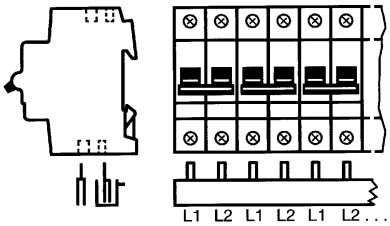
PS 2/12
PS 2/58
PS 2/58/16
PS 2/12 A
PS 2/58/16 A
PS 2/58 SP
PS 2/58/16 SP



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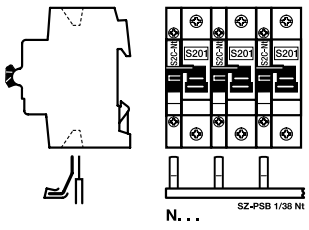
PS 1/38 NT



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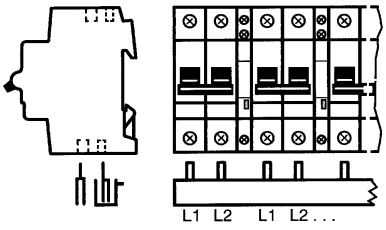
PS 2/48 H
PS 2/48/16 H
PS 2/48/16 HA
PS 2/48/16 SP



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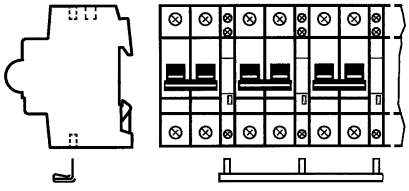
PS
1/23/6



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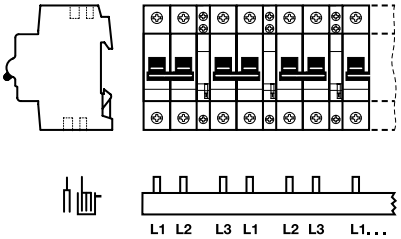
PS 3/46/16 H-IT



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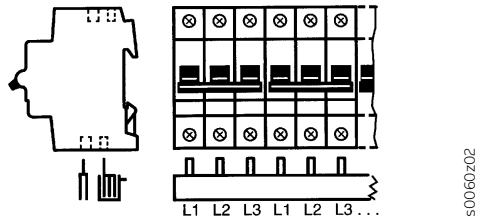
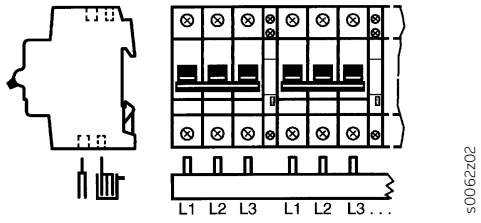
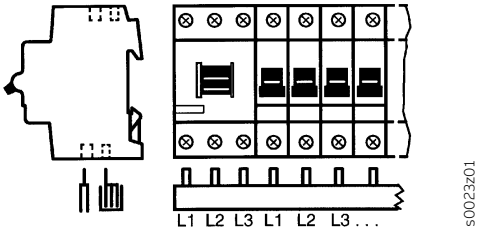
PS 3/12
PS 3/12 A
PS 3/12/16
PS 3/60
PS 3/60/16
PS 3/60/30
PS 3/60 A
PS 3/60/16 A
PS 3/60 SP
PS 3/60/16 SP



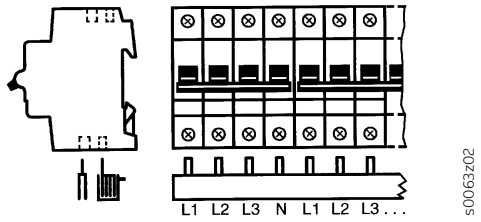
PS 3/48 H
PS 3/48/16 H
PS 3/48/16 HA
PS 3/48/16 SP



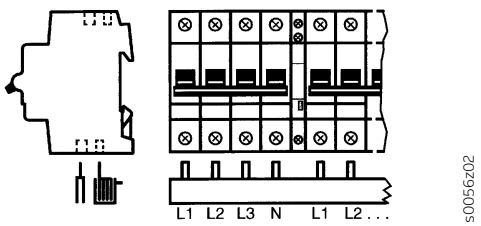
PS 3/12 E 463



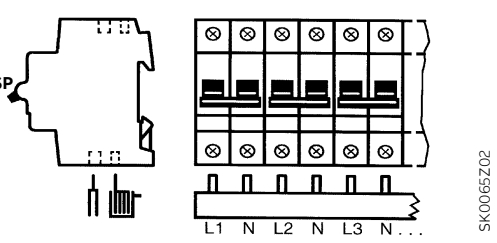
PS 4/12
PS 4/12/16
PS 4/60
PS 4/60/16
PS 4/12 A
PS 4/60/16 A
PS 4/60/16 SP



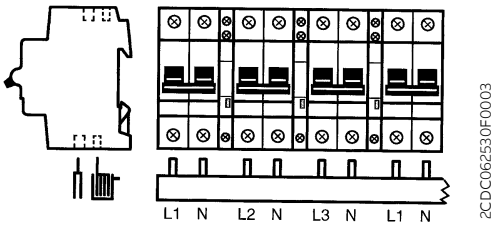
PS 4/52/16 H
PS 4/52/16 HA
PS 4/52/16 SP



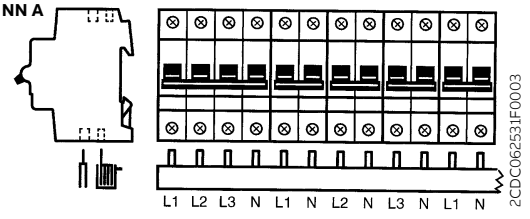
PS 4/12 NA
PS 4/58 N
PS 4/58/16 N
PS 4/58/16 NA
PS 4/58/16 N SP



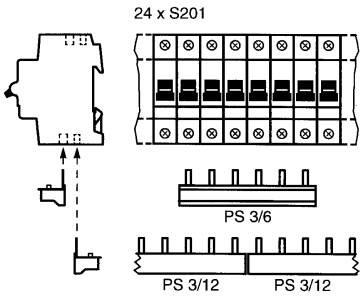
PS 4/48/16
NH A



PS 4/58/ NN A
PS 4/58/16 NN A



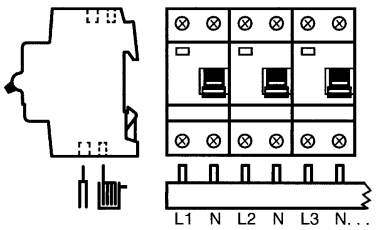
Example for overlap



Accessories for MCBs and RCDs

Busbars

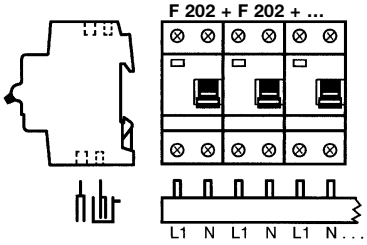
PS 4/12 NA
PS 4/58 N
PS 4/58/16 N
PS 4/58/16 NA



2CDC062443F0004

PS 2/12
PS 2/12/16
PS 2/58
PS 2/58/16
PS 2/12 A
PS 2758/16 A

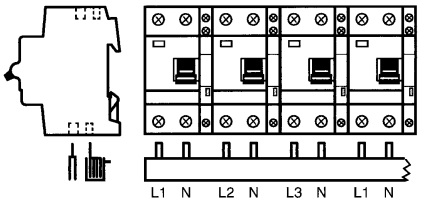
F 202 + F 202 + ...



2CDC062437F0004

PS 4748/16 NH A

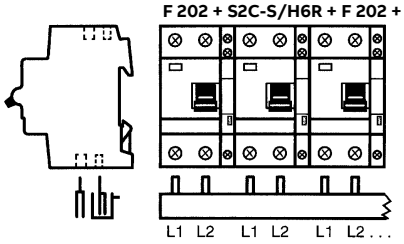
F 202 + S2C-S/H6R + F 202 + S



2CDC062440F0004

PS 2/48 H
PS 2/48/16 H
PS 2/48/16 HA

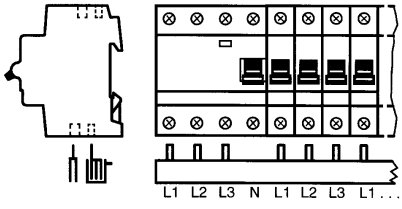
F 202 + S2C-S/H6R + F 202 + ...



2CDC062438F0004

PS 3/12 FI
(2CDL230 ...)
PS 3/9 FI
PS 3/10 FI
PS 3/57 FI

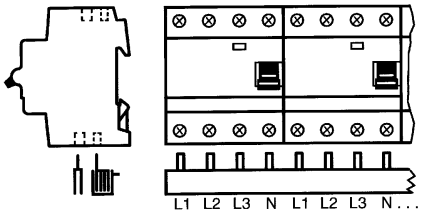
F 204 + S 200 + S 200 + ...



s0058z02

PS 4/12
PS 4/12/16
PS 4/60
PS 4/60/16
PS 4/12 A
PS 4/60/16 A

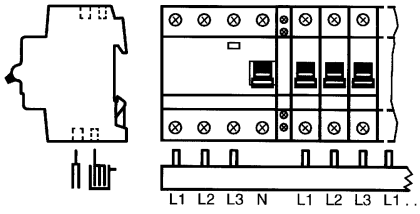
F 204 + F 204 + ...



s0064z02

PS 3/12 FI H

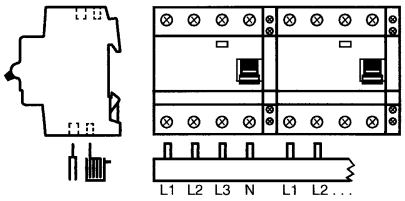
F 204 + S2C-S/H6R + S 200 + S 200 ...



s0139z02

PS 4/52/16 H
PS 4/52/16 HA

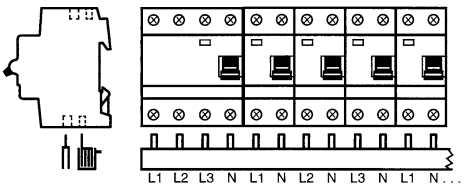
F 204 + S2C-S/H6R + ...



2CDC062441F0004

PS 4/58 NN A
PS 4/58/16 NN A

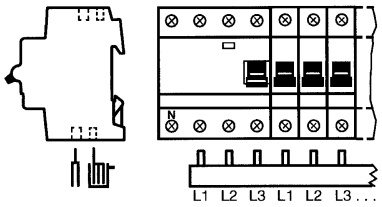
F 204 + F 202 + F 202 + ...



2CDC062442F0004

PS 3/11
PS 3/12
PS 3/12 A
PS 3/12/16
PS 3/60
PS 3/60/16
PS 3/60 A
PS 3/60/16 A

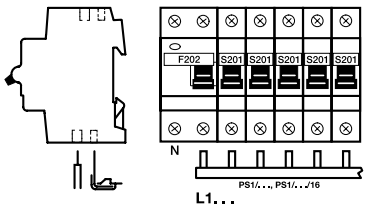
F 204 (N links) + S 200 + S 200 ...



2CDC062439F0004

PS 1/3
PS 1/6
PS 1/9
PS 1/60
PS 1/60/16

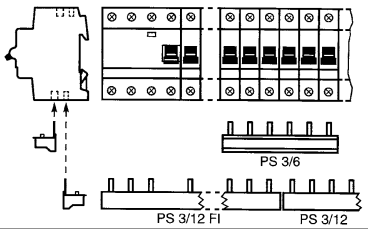
F 202 + S 201 + S 201 + ...



2CDC062141F0008

Example for overlapping

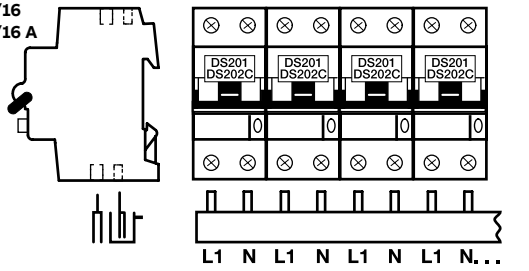
1 x 1 x F 204 + 20 x S 201



s0251z02

PS 2/12
PS 2/12 A
PS 2/58
PS 2/58/16
PS 2/58/16 A

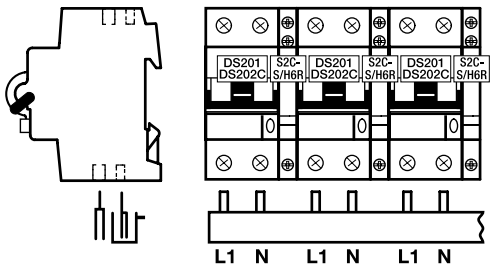
DS 201 **DS 201 ...**
DS 202 C **DC 202 C ...**



2CDC062054F0009

PS 2/48 H
PS 2/48/16 H
PS 2/48/16 HA

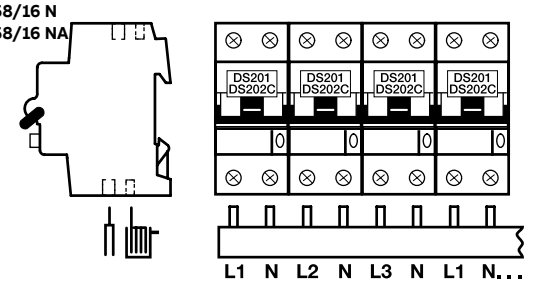
DS201 + S2C-S/H6R + DS201 ...
DS202C + S2C-S/H6R + DS202C ...



2CDC062053F0009

PS 4/12 NA
PS 4/58 N
PS 4/58/16 N
PS 4/58/16 NA

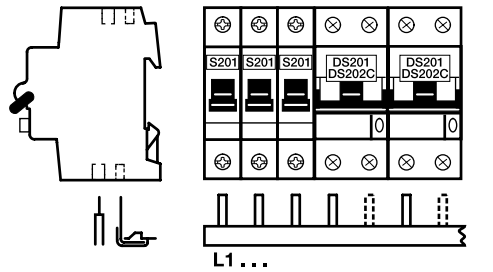
DS 201 **DS 201** **...**
DS 202 C **DC 202 C** **...**



2CDC062056F0009

PS 2/48 H
PS 2/48/16 H
PS 2/48/16 HA

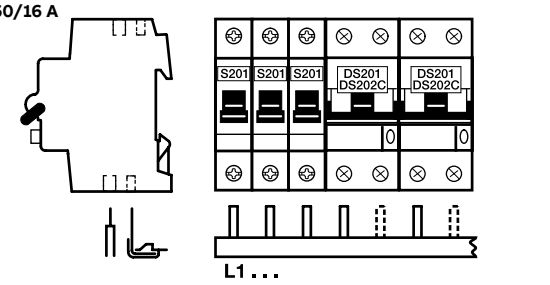
DS 201 + S2C-S/H6R + DS 201...
DS 202 + S2C-S/H6R + DS 202 C...



2CDC062052F0009

PS 1/12 A
PS 1/60 A
PS 1/60/16 A

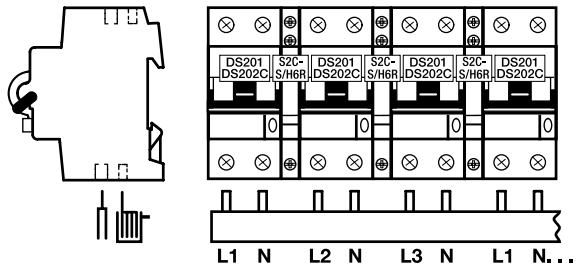
S 201 S 201 S 201 DS 201 ...
DS 202 C ...



2CDC062052F0009

PS 4/48 NHA
PS 4/48/16 NHA

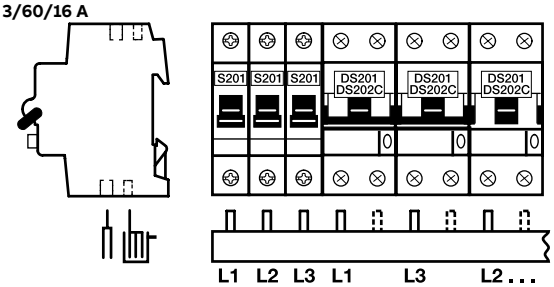
DS 201 + S2C-S/H6R + DS 201 ...
DS 202 + S2C-S/H6R + DS 202 ...



2CDC062057F0009

PS 3/12 A
PS 3/60 A
PS 3/60/16 A

S 201 S 201 S 201 DS 201 DS 201
DS 202 C DS 202 C

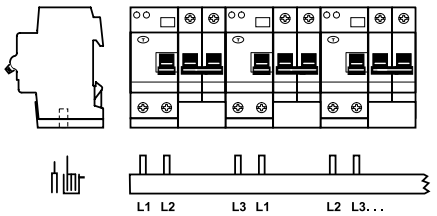


2CDC062055F0009

Accessories for MCBs and RCDs

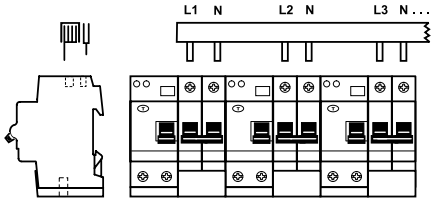
Busbars

PS 3/30-DDA 202
PS 3/30/16-DDA 202 **DS 202 + DS 202 + (DDA 202 + S 202) + (DDA 202 + S 202) ...**



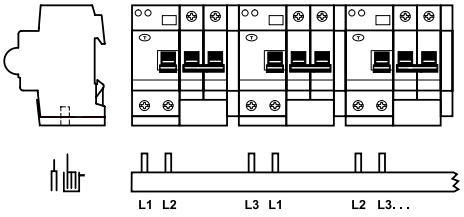
2CDC062139F0007

PS 4/30/16N-DDA 202 T
DS 202 + DS 202 + (DDA 202 + S 202) ...



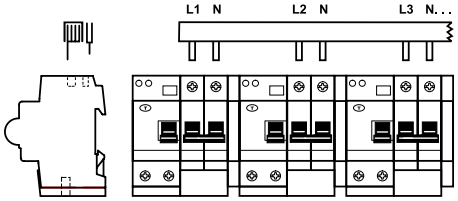
2CDC062138F0007

PS 3/26/16H-DDA 202
DS 202 + S2C-S/H6R + DS 202 + S2C-S/H6R + DDA 202 + S 202 + S2C-S/H6R + DDA 202 + S 202 + S2C-S/H6R ...



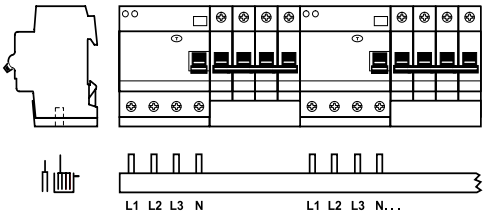
2CDC062140F0007

PS 4/30/16NH-DDA 202 T
DS 202 + S2C-S/H6R + DS 202 + S2C-S/H6R + (DDA 202 + S 202) + S2C-S/H6R + (DDA 202 + S 202) + S2C-S/H6R ...



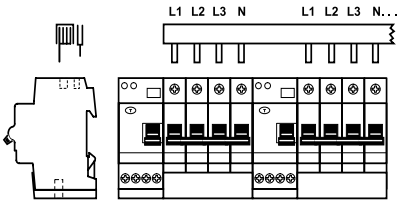
2CDC062142F0007

PS 4/32-DDA 204 **PS 4/32/16-DDA 204**
DS 204 (50/63 A) + (DDA 204 (63 A) + S 204) ...



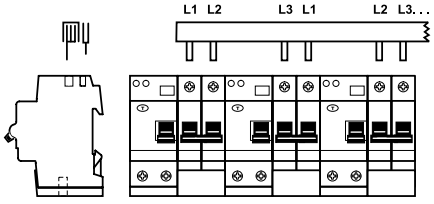
2CDC062136F0007

PS 4/40/16-DDA 204 T
DS 204 (m 40 A) + DS 204 (m 40 A) + DDA 204 (m 40 A) + S 204 + DDA 204 (m 40 A) + S 204 ...



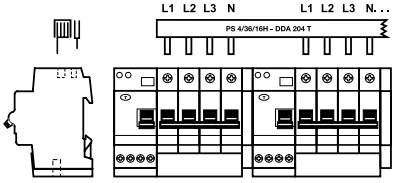
2CDC062120F0008

PS 3/30/16-DDA 202 T
DS 202 + DS 202 + DA 202 + S 202 + DDA 202 + S 202 ...



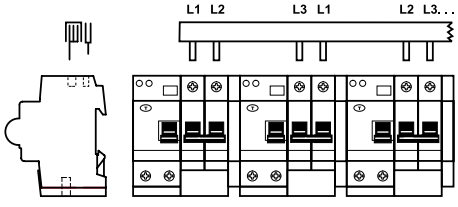
2CDC062137F0007

PS 4/36/16 H-DDA 204 T
DS 204 (m 40 A) + S2C-S/H6R + DS 204 (m 40 A) + S2C-S/H6R + DDA 204 (m 40 A) + S 204 + S2C-S/H6R + DDA 204 (m 40 A) + S 204 + S2C-S/H6R



2CDC062143F0008

PS 3/28/16 H-DDA 202 T
DS 202 + S2C-S/H6R + (DDA 202 + S 202) + S2C-S/H6R ...



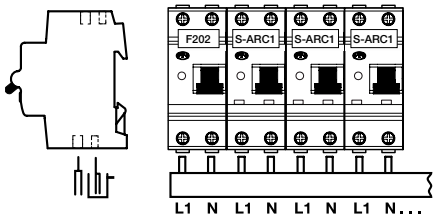
2CDC062141F0007

Accessories for AFDD 1P+N, S-ARC1

Busbars

PS 2/12
PS 2/12 A
PS 2/12/16
PS 2/58
PS 2/58/16
PS 2/58/16 A

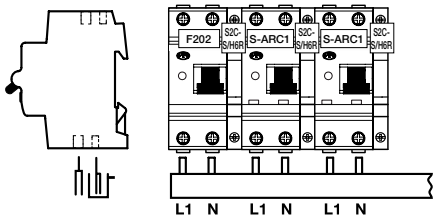
F202 S-ARC1 ...



2CDC062001F0017

PS 2/48 H
PS 2/48/16 H
PS 2/48/16 HA

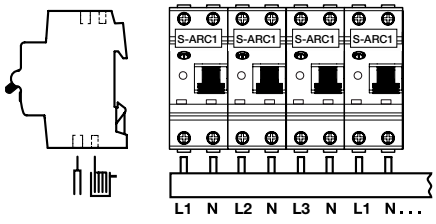
F202 + S2C-S/H6R + S-ARC1 ...



2CDC062002F0017

PS 4/12 NA
PS 4/58 N
PS 4/58/16 N
PS 4/58/16 NA

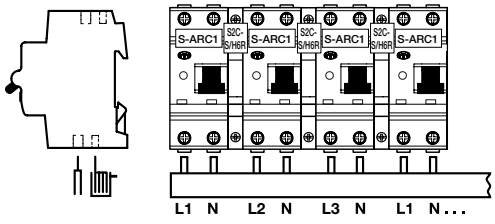
S-ARC1 S-ARC1 ...



2CDC062003F0017

PS 4/48 NHA
PS 4/48/16 NHA

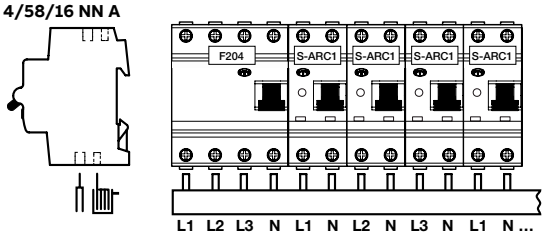
S-ARC1 + S2C-S/H6R + S-ARC1 ...



2CDC062004F0017

PS 4/12 NN A
PS 4/12/16 NN A
PS 4/58 NN A
PS 4/58/16 NN A

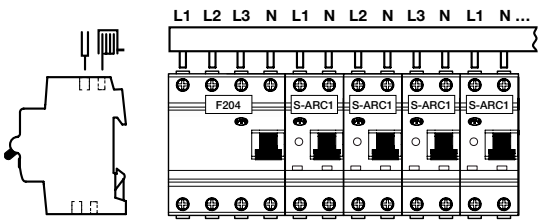
F204 + S-ARC1 + S-ARC1 + S-ARC1 + S-ARC1 + ...



2CDC062005F0017

PS 4/12 NNT
PS 4/12/16 NNT

F204 + S-ARC1 + S-ARC1 + S-ARC1 + S-ARC1 + ...



2CDC06200XF0017

Busbar systems

Selection table

Short description
ABB busbar systems enable the safe and economic cross connection of MCBs, RCCBs and RCBOs.

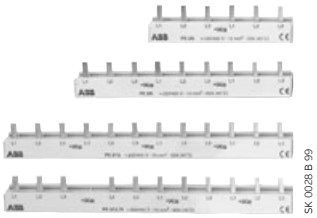
For a correct busbar selection the following points need to be considered:
MCB terminal type (Twin terminal or cage terminal)
Number of poles (1, 2, 3, 4, 1+N or 3+N)
Device type (MCB, RCCB or RCBO)
Combinations (e.g. RCCB + MCB or RCCB 3+N + RCCB 1+N)
Use of side mounted auxiliary elements on MCB *)
Busbar diameter (for current carrying capacity calculation)
Number of modules (choice of standard busbar or busbar for cutting)

PS	[ ] /	[ ][ ] /	[ ][ ]	[ ][ ][ ]
	1	2 3	4 5	6 7 7
Phases				
1 phase	1			
2 phases	2			
3 phases	3			
4 phases	4			
Number of pins				
Diameter				
10 mm²			- -	
6 mm²			6 -	
16 mm²			1 6	
30 mm²			3 0	
Application				
Cross connection of RCCB and MCB (4th pin removed for RCCB 3+N)				F I
Use of neutral conductor (phase sequence e.g. L1-N-L2-N-L3-N-L1...)			N	
Space for 1 side mounted auxiliary contact			H	
Space for 2 side mounted auxiliary contacts				H 2
Pins for breaking off				A
Cross connection of devices 3P+N + 1P+N (phase sequence L1-L2-L3-N-L1-N-L2-N-L1-N-...)				N N
Busbars for IT networks				I T
Busbars acc. to UL 489 (Branch Protection)				B P
Busbars acc. to UL 1077 (Supplementary Protection)				S P

Note: Combinations of above applications are possible

*) only right side mounted auxiliary elements and bottom fixed auxiliary contacts can be considered for busbar connection

PS 1/2 - PS 1/12



PS 3/6 - PS 3/12

Pre-assembled busbars (not to be cut)

1-phase busbars, pin distance 17.6 mm, end caps PS-END 0

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
2	1	10	0.01	463003	PS1/2	2CDL210001R1002		0.01	180
3	1	10	0.03	514651	PS1/3	2CDL210001R1003		0.03	120
4	1	10	0.03	648233	PS1/4	2CDL210001R1004		0.03	100
6	1	10	0.03	463102	PS1/6	2CDL210001R1006		0.03	60
9	1	10	0.04	463201	PS1/9	2CDL210001R1009		0.04	30
12	1	10	0.05	463300	PS1/12	2CDL210001R1012		0.05	30
12	1	10a	0.05	682985	PS1/12A ②	2CDL210010R1012		0.05	30

3-phase busbars, pin distance 17.6 mm

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
6	3	10	0.04	463409	PS3/6	2CDL231001R1006		0.04	60
9	3	10	0.07	463508	PS3/9	2CDL231001R1009		0.07	30
12	3	10	0.10	463607	PS3/12	2CDL231001R1012		0.10	30
12	3	10	0.10	463706	PS3/12FI *	2CDL231002R1012		0.09	50

* phase sequence: L1, L2, L3, free, L2, L3, L1, ...

Busbars suitable for cutting

1-phase busbars, pin distance 17.6 mm, end caps PS-END 0

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
60	1	10	0.26	514668	PS1/60	2CDL210001R1060		0.26	20
60	1	10	0.26	682992	PS1/60A ②	2CDL210010R1060		0.28	50
60	1	16	0.41	516655	PS1/60/16	2CDL210001R1660		0.41	20
60	1	16	0.41	683005	PS1/60/16A ②	2CDL210010R1660		0.39	50
5	1	30	0.04	653244	PS1/5/30 ①	2CDL210001R3005		0.04	100
10	1	30	0.09	653268	PS1/10/30 ①	2CDL210001R3010		0.09	100
11	1	30	0.09	653275	PS1/11/30 ①	2CDL210001R3011		0.10	100
14	1	30	0.120	653282	PS1/14/30 ①	2CDL210001R3014		0.120	50
15	1	30	0.130	653299	PS1/15/30 ①	2CDL210001R3015		0.130	50
18	1	30	0.150	653305	PS1/18/30 ①	2CDL210001R3018		0.150	50
19	1	30	0.160	653312	PS1/19/30 ①	2CDL210001R3019		0.160	50
60	1	30	0.520	653596	PS1/60/30	2CDL210001R3060		0.520	20

1-phase busbars, connection of 1-pole devices with auxiliary, end caps PS-END 0

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
38	1	10	0.27	586139	PS1/38H	2CDL210001R1038		0.27	30
38	1	16	0.45	586146	PS1/38/16H	2CDL210001R1638		0.45	30

① inclusive of end caps
② pre-cutted pins

Busbars and accessories for
MCBs S 200, RCDs F 200 and DS 200 series

1-phase busbars, connection of neutral (blue insulation), end caps END 1.1

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
28	1	10	0.24	629546	PS1/28N	2CDL210001R1028		0.14	50
28	1	16	0.32	629560	PS1/28/16N	2CDL210001R1628		0.20	50
57	1	10	0.24	579728	PS1/57NA ②	2CDL210011R1057		0.14	50
57	1	10	0.24	629539	PS1/57N	2CDL210001R1057		0.14	50
57	1	16	0.32	579735	PS1/57/16NA ②	2CDL210011R1657		0.20	50
57	1	16	0.32	629553	PS1/57/16N	2CDL210001R1657		0.20	50

1-phase busbars, connection of auxiliaries, end caps END 1.1 except PS 1/57/6

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
23	1	6	0.16	584739	PS1/23/6	2CDL210005R0623		0.09	50
29	1	6	0.14	580823	PS1/29/6	2CDL210005R0629		0.10	50
38	1	6	0.14	580816	PS1/38/6	2CDL210005R0638		0.09	50
57	1	6	0.11	585309	PS1/57/6	2CDL210005R0657		0.08	50

1-phase busbars, connection of hand operated neutral S2C-Nt (blue insulation),end caps END 1.1

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
38	1	10	0.410	655361	PS1/38 NT	2CDL210002R1038			10

2-phase busbars, pin distance 17.6 mm, end caps PS-END

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
12	2	10	0.07	556521	PS2/12 ①	2CDL220001R1012		0.08	50
12	2	10	0.07	584616	PS2/12A ①②	2CDL220010R1012		0.08	50
12	2	16	0.11	646918	PS2/12/16	2CDL220001R1612		0.09	50
58	2	10	0.32	556552	PS2/58	2CDL220001R1058		0.36	10
58	2	16	0.55	556569	PS2/58/16	2CDL220001R1658		0.49	10
58	2	16	0.55	584746	PS2/58/16A ②	2CDL220010R1658		0.49	10
58	2	30	1.81	654272	PS2/58/30 ③④	2CDL220001R3058		1.81	10

Note: PS...A is a busbar with removable pin

2-phase busbars, connection of 2-pole devices with auxiliary, end caps PS-END

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
48	2	10	0.47	556538	PS2/48H	2CDL220001R1048		0.35	10
48	2	16	0.68	556545	PS2/48/16H	2CDL220001R1648		0.48	10
48	2	16	0.68	584630	PS2/48/16HA ②	2CDL220012R1648		0.48	10

① inclusive of end caps
② pre-cutted pins
③ use end cap PS-END 3
④ removal of installed MCB not possible

3-phase busbars, pin distance 17.6 mm, end caps PS-END

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
11	3	10	0.10	649926	PS3/11 ①	2CDL230001R1011		0.08	50
12	3	10	0.09	576116	PS3/12 ①	2CDL230001R1012		0.09	50
12	3	10	0.09	584647	PS3/12A ①②	2CDL230010R1012		0.09	50
12	3	16	0.16	562805	PS3/12/16 ①	2CDL230001R1612		0.12	50
60	3	10	0.51	514699	PS3/60	2CDL230001R1060		0.47	10
60	3	10	0.51	563758	PS3/60A ②	2CDL230010R1060		0.47	10
60	3	16	0.76	514705	PS3/60/16	2CDL230001R1660		0.65	10
60	3	16	0.76	563765	PS3/60/16A ②	2CDL230010R1660		0.65	10
60	3	30	2.65	654289	PS3/60/30 ③⑤	2CDL230001R3060		2.65	10

3-phase busbars, connection of 1-pole devices with auxiliary, end caps PS-END

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
39	3	10	0.51	556590	PS3/39H	2CDL230001R1039		0.43	10
39	3	16	0.76	556606	PS3/39/16H	2CDL230001R1639		0.60	10

3-phase busbars, connection of 2-pole devices (Phase+N) with auxiliary, end caps PS-END

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
24	3	10	0.80	556576	PS3/24H	2CDL230001R1024		0.41	10

3-phase busbars, connection of 2-pole devices (Phase+Phase) with auxiliary, end caps PS-END

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
46	3	16	0.98	662109	PS3/46/16H-IT	2CDL230006R1648		0.98	10

3-phase busbars, connection of 3-pole devices with auxiliary, end caps PS-END

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
48	3	10	0.51	556613	PS3/48H	2CDL230001R1048		0.43	10
48	3	16	0.76	556644	PS3/48/16H	2CDL230001R1648		0.60	10
48	3	16	0.76	584654	PS3/48/16HA ②	2CDL230012R1648		0.60	10

3-phase busbars, connection of 1+N or RCBOs, end caps PS-END

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
30	3	10	0.50	556583	PS3/30	2CDL230001R1030		0.42	10

① inclusive of end caps
② pre-cutted pins
③ use end cap PS-END 3
④ use end cap PS-END 3.1
⑤ removal of installed MCB not possible

Busbars and accessories for
MCBs S200, RCDs F200, DS200 and AFDD

3-phase busbars, N of the RCD omitted, end caps PS-END

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
9	3	10	0.10	517515	PS3/9FI ①	2CDL230002R1009		0.06	50
10	3	10	0.10	517522	PS3/10FI ①	2CDL230002R1010		0.07	50
12	3	10	0.11	571074	PS3/12FI ①	2CDL230002R1012		0.09	50
57	3	10	0.55	556651	PS3/57FI	2CDL230002R1057		0.46	10

3-phase busbars, N of the RCD omitted, with auxilary at RCD end caps PS-END

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
12	3	10	0.11	571081	PS3/12FIH ①	2CDL230003R1012		0.09	50

4-phase busbars, pin distance 17.6 mm, end caps PS-END 1

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
12	4	10	0.12	656054	PS4/12 ①	2CDL240101R1012		0.11	30
12	4	10	0.12	656061	PS4/12A ①②	2CDL240110R1012		0.11	30
12	4	16	0.24	656078	PS4/12/16 ①	2CDL240101R1612		0.16	30
60	4	10	0.80	656085	PS4/60	2CDL240101R1060		0.64	10
60	4	16	1.21	656092	PS4/60/16	2CDL240101R1660		0.89	10
60	4	16	1.21	656108	PS4/60/16A ②	2CDL240110R1660		0.89	10
60	4	30	3.37	654296	PS4/60/30 ④⑤	2CDL240001R3060		3.37	10

Note: PS...A is a busbar with removable pin

4-phase busbars, connection of 4-pole F204 with 1+N S-ARC1, end caps PS-END 1 , Bottom side installation

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
12	4	10	0,105	060301	PS4/12NN ①	2CDL240102R1012		0.110	30
12	4	16	0,149	060332	PS4/12/16NN ①	2CDL240102R1612		0.145	30

ase busbars, connection of 4-pole F204 with 1+N S-ARC1, end caps PS-END 1 , Top side installation

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
12	4	10	0,105	060356	PS4/12NNT ①	2CDL240103R1012		0.110	30
12	4	16	0,149	060370	PS4/12/16NNT ①	2CDL240103R1612		0.145	30

① inclusive of end caps
② pre-cutted pins
③ use end cap PS-END 3
④ use end cap PS-END 3.1
⑤ removal of installed MCB not possible

4-phase busbars, connection of 4-pole devices with auxiliary, end caps PS-END 1

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
52	4	16	1.30	656115	PS4/52/16H	2CDL240101R1652		0.78	10
52	4	16	1.30	656122	PS4/52/16HA ②	2CDL240212R1652		0.78	10

4-phase busbars, connection of 1+N or RCBOs, end caps PS-END 1

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
12	4	10	0.14	656139	PS4/12NA ①②	2CDL240213R1012		0.10	30
58	4	10	0.80	656146	PS4/58N	2CDL240101R1058		0.59	10
58	4	16	1.21	656153	PS4/58/16N	2CDL240101R1658		0.77	10
58	4	16	1.21	656221	PS4/58/16NA ②	2CDL240213R1658		0.77	10

4-phase busbars, connection of 1+N or RCBOs with auxiliary, end caps PS-END 1

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
48	4	16	1.48	656160	PS4/48/16NHA ②	2CDL240114R1648		0.76	10

4-phase busbars, connection of 4-pole RCD with 1+N , end caps PS-END 1

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
58	4	10	0.80	656177	PS4/58NNA ②	2CDL240110R1058		0.58	10
58	4	16	1.21	656184	PS4/58/16NNA ②	2CDL240110R1658		0.80	10

① inclusive of end caps
② pre-cutted pins
③ use end cap PS-END 3
④ use end cap PS-END 3.1
⑤ removal of installed MCB not possible

Busbars and accessories for

MCBs S 200, RCDs F 200 and DS 200 series

PS2/6/16 BP

BSK BP

AST35/15BP

SZ-ESK BP

Pre-assembled busbars (not to be cut) acc. to UL 489, suitable for SU200M, S200UDC, S200U and S200UP

1-phase busbars, pin distance 17.6 mm, UL 489

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
6	1	16	0.04	644969	PS 1/6/16 BP	2CDL210489R1606		0.05	1
12	1	16	0.07	644976	PS 1/12/16 BP	2CDL210489R1612		0.11	1
18	1	16	0.11	644983	PS 1/18/16 BP	2CDL210489R1618		0.16	1

2-phase busbars, pin distance 17.6 mm, UL489

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
6	2	16	0.07	644990	PS 2/6/16 BP	2CDL220489R1606		0.06	1
12	2	16	0.14	645003	PS 2/12/16 BP	2CDL220489R1612		0.13	1
18	2	16	0.21	645010	PS 2/18/16 BP	2CDL220489R1618		0.20	1

3-phase busbars. pin distance 17.6 mm. UL 489

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
6	3	16	0.11	645027	PS 3/6/16 BP	2CDL230489R1606		0.07	1
12	3	16	0.22	645034	PS 3/12/16 BP	2CDL230489R1612		0.15	1
18	3	16	0.33	645041	PS 3/18/16 BP	2CDL230489R1618		0.24	1

Shock-protection caps for PS...BP (UL 489)

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
	3 parts			656368	BSK BP	2CDL200489R0001		0.001	10

Feeder Terminals for PS...BP (UL 489)

Technical features		
	Feeder terminals SZ-ESK BP, AST 35/15 BP	
Max. operating voltage	480 V AC	
Max. current	80 A (115 A for cubicle size ≥ 30" x 30" x 10") ①	
Protection degree	IP 20	
Wire range	SZ-ESK PB:	35 mm² / 2AWG flexible with ferrule
		50 mm² / 1AWG solid/stranded
	AST 35/15 BP:	25 mm² / 3AWG flexible with ferrule
		35 mm² / 2AWG solid/stranded

① regardless of the rated current of the feeder terminal the maximum current rating of the device terminal may not be exceeded

Insulated with pin contact

Conn. capacity	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²	kg	EAN	Type code	Order code		kg	pc.
35	0.035	710350	AST 35/15 BP	2CDL201489R3515		0.035	25
Single-pole terminal, can be mounted side by side, feed on the pin of the busba							
50		710367	SZ-ESK BP	2CDL201489R5001		0.038	50

① inclusive of end caps
② pre-cutted pins
③ use end cap PS-END 3
④ use end cap PS-END 3.1
⑤ removal of installed MCB not possible

Busbars and accessories for
MCBs SU200 M, S200 UDC, S200 U and S200 UP

Busbars PS....BP-C suitable for MCBs acc. to UL489: SU200M, S200 UDC, S200U and S200UP

1-phase busbars, pin distance 17.6 mm, end caps PS-END 3 BP-C

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
57	1	25	0,47	949910	PS1/57/25BP-C	2CDL210489R5725		0,775	10

1-phase busbars, connection of 1-pole devices with auxiliary, end caps PS-END 3 BP-C

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
37	1	25	0,5	949934	PS1/37/25HBP-C	2CDL210489R3725		0,661	10

2-phase busbars, pin distance 17.6 mm, end caps PS-END 3 BP-C

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
56	2	25	0,888	949941	PS2/56/25BP-C	2CDL220489R5625		0,969	10

2-phase busbars, connection of 2-pole devices with auxiliary, end caps PS-END 3 BP-C

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
46	2	25	0,87	949958	PS2/46/25HBP-C	2CDL220489R4625		0,943	10

3-phase busbars, pin distance 17.6 mm, end caps PS-END 3 BP-C

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
57	3	25	1,31	949965	PS3/57/25BP-C	2CDL230489R5725		1,198	10

3-phase busbars, connection of 3-pole devices with auxiliary, end caps PS-END 3 BP-C

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
48	3	25	1,28	949972	PS3/48/25HBP-C	2CDL230489R4825		1,129	10
39	3	25	1,305	949989	PS3/39/25HBP-C	2CDL230489R3925		1,115	10

Shock-protection caps for PS....BP-C

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
	3 parts			950077	BS BP-C	2CDL200489R0002		0.005	10

Busbars PS....BP-C suitable for MCBs acc. to UL489: SU200M, S200 UDC, S200U and

Terminal insulated with pin contact

Conn. capacity mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	kg	EAN	Type code	Order code		kg	pc.
25	0,038	950060	AST 35/58 BP-C	2CDL201489R3558		0.045	10

Busbars and accessories for
MCBs S 200, SN 201, RCDs F 200 and DS 200 series

Busbars (suitable for cutting) UL 1077 suitable for MCBs S200 and S200P

1-phase busbars, pin distance 17.6 mm, end caps PS-END 0

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
60	1	10	0.26	830409	PS 1/60 SP	2CDL210111R1060		0.26	20
60	1	16	0.41	830423	PS 1/60/16 SP	2CDL210111R1660		0.41	20

1-phase busbars, connection of 1-pole devices with auxiliary, PS-END 0

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
38	1	10	0.27	830430	PS 1/38H SP	2CDL210111R1038		0.27	30
38	1	16	0.45	830447	PS 1/38/16H SP	2CDL210111R1638		0.45	30

2-phase busbars, pin distance 17.6 mm, end caps PS-END SP

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
58	2	10	0.42	646413	PS 2/58 SP	2CDL220111R1058			10
58	2	16	0.69	646420	PS 2/58/16 SP	2CDL220111R1658			10

2-phase busbars, connection of 2-pole devices with auxiliary, end caps PS-END SP

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
48	2	16	0.68	646437	PS 2/48/16 HSP	2CDL220112R1648			10

3-phase busbars, pin distance 17.6 mm, end caps PS-END SP

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
60	3	10	0.68	646444	PS 3/60 SP	2CDL230111R1060			10
60	3	16	1.02	646451	PS 3/60/16 SP	2CDL230111R1660			10

3-phase busbars, connection of 3-pole devices with auxiliary, end caps PS-END SP

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
48	3	16	1.16	646468	PS 3/48/16 HSP	2CDL230112R1648			10

4-phase busbars, pin distance 17.6 mm, PS-END 1 SP

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
60	4	16	1.97	656191	PS 4/60/16 SP	2CDL240311R1660			10

BSK SP

4-phase busbars, connection of 4-pole devices with auxiliary, end caps PS-END 1 SP

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
52	4	16	1.90	656207	PS 4/52/16H SP	2CDL240312R1652			10

AST 35/15 SP

4-phase busbars, connection of 1+N and RCBO, end caps PS-END 1 SP

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
58	4	16	1.86	656214	PS4/58/16N SP	2CDL240313R1658			10

Shock-protection caps for PS...SP (UL 1077)

SZ-ESK SP

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code		kg	pc.
	5 parts		0.001	710398	BSK SP	2CDL200111R0001			100

Feeder Terminals for PS...SP (UL 1077)

Terminal, insulated with pin contact

Conn. capacity	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²	kg	EAN	Type code	Order code		kg	pc.
35	0.038	710374	AST 35/15 SP	2CDL200111R3515		0.025	25

Feeder Terminal single-pole terminal, can be mounted side by side, feed on the pin of the busbar

Conn. capacity	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²	kg	EAN	Type code	Order code		kg	pc.
50	0.038	710381	SZ-ESK SP	2CDL200111R5001		0.032	50

Suitable for MCBs S 200 and S200 P – UL 1077 (Supplementary Protection)

Technical features		
	Feeder terminals SZ-ESK SP, AST 35/15 SP	
Max. operating voltage	480 VAC	
Max. current	115 A ①	
Protection degree	IP 20	
Wire range	SZ-ESK SP:	35 mm² / 2AWG flexible with ferrule
		50 mm² / 1AWG solid/stranded
	AST 35/15 SP:	25 mm² / 3AWG flexible with ferrule
		35 mm² / 2AWG solid/stranded

① regardless of the rated current of the feeder terminal the maximum current rating of the device terminal

Busbars and accessories for

MCBs S 200, SN 201, RCDs F 200 and DS 200 series

4-phase busbars, pin distance 17.6 mm, PS-END 1 SP

No. of pins	Phases	mm²	Cu-No. kg	Bbn 4016779 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
60	4	16	1.97	656191	PS 4/60/16 SP	2CDL240311R1660			10

4-phase busbars, connection of 4-pole devices with auxiliary, end caps PS-END 1 SP

No. of pins	Phases	mm²	Cu-No. kg	Bbn 4016779 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
52	4	16	1.90	656207	PS 4/52/16H SP	2CDL240312R1652			10

4-phase busbars, connection of 1+N and RCBO, end caps PS-END 1 SP

No. of pins	Phases	mm²	Cu-No. kg	Bbn 4016779 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
58	4	16	1.86	656214	PS4/58/16N SP	2CDL240313R1658			10

Shock-protection caps for PS...SP (UL 1077)

No. of pins	Phases	mm²	Cu-No. kg	Bbn 4016779 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
	5 parts		0.001	710398	BSK SP	2CDL200111R0001			100

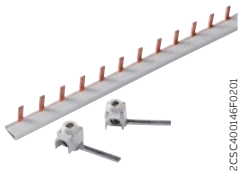
Feeder Terminals for PS...SP (UL 1077)

Terminal, insulated with pin contact

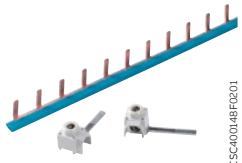
Conn. capacity mm²	Cu-No. kg	Bbn 4016779 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
35	0.038	710374	AST 35/15 SP	2CDL200111R3515		0.025	25

Feeder Terminal single-pole terminal, can be mounted side by side, feed on the pin of the busbar

Conn. capacity mm²	Cu-No. kg	Bbn 4016779 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
50	0.038	710381	SZ-ESK SP	2CDL200111R5001		0.032	50



BS9+FEED-IN



BS9 NA+FEED-IN

Busbars for SN 201 range (Maximum rated current 63 A)

No. pins	Phases	Cross section	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
		mm²	EAN	Type code	Order code	piece	kg	pc.
12	1	10	047650	BS9 1/12	2CSL910001R1012		0.050	10
12	1	10	047759	BS9 1/12 NA	2CSL910011R1012		0.050	10
56	1	10	047353	BS9 1/56	2CSL910001R1056		0.140	10
56	1	10	047452	BS9 1/56 NA	2CSL910011R1056		0.140	10
12	3	10	047551	BS9 3/12	2CSL930001R1012		0.090	5
57	3	10	047858	BS9 3/57	2CSL930001R1057		0.470	5

Busbars for F200/S200 and SN 201 range (Maximum rated current 63 A)

No. pins	Phases	Cross section	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
		mm²	EAN	Type code	Order code	piece	kg	pc.
2 + 10 x 1+N	2	10	046950	BF2-S9 UP 1N/12	2CSL920009R1012		0,110	5
4 + 8 x 1+N	4	10	047056	BF2-S9 UP 3N/12	2CSL940009R1012		0,110	5
2 + 10 x 1+N	2	10	047155	BF2-S9 DOWN 1N/12	2CSL920002R1012		0,110	5
4 + 8 x 1+N	4	10	047254	BF2-S9 DOWN 3N/12	2CSL940002R1012		0,110	5

Terminals, insulated

Conn. capacity	Type of connec-tion	Terminal lug L	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²		mm	EAN	Type code	Order code		kg	pc.
25	pin	15	047957	FEED-IN 25/15 1P	2CSL980001R2515		0.010	5
25	pin	30	048053	FEED-IN 25/30 3P	2CSL980001R2530		0.010	5

End caps

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	064251	BS9-END 3P ①	2CSL980001R0001		0.001	20

① In combination with BS9 3/57

Busbars and accessories for
MCBs S 200, SN 201, RCDs F 200 and DS 200 series

Busbars (suitable for cutting) for DDA 200 and DS 200 – bottom mounting (RCD)

3-phase busbars, connection of DDA 202 and DS 202, end caps PSB-END 3 (phase sequence L1-L2-free-free-L3-L1.....without N)

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
30	3	10	0.97	647472	PS 3/ 30-DDA 202	2CDL230202R1030		0.41	10
30	3	16	1.46	647502	PS 3/30/ 16-DDA 202	2CDL230202R1630		0.55	10

3-phase busbars, connection of DDA 202 and DS 202 with auxiliary, end caps PSB-END 3 (phase sequence L1-L2-aux.(free)-free-free-L3-L1-aux.(free).....without N)

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
26	3	16		648912	PS 3/26/ 16H-DDA 202	2CDL230202R1626			

4-phase busbars, connection of DDA 204 63 A and DS 204 50 A and 63 A, end caps PSB-END 4 (phase sequence L1-L2-L3-N-free-free-free-free-L1.....)

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
32	4	10	1.41	647458	PS 4/ 32-DDA 204	2CDL240204R1032		0.56	10
32	4	16	2.12	647465	PS 4/32/ 16-DDA 204	2CDL240204R1632		0.77	10

Busbars (suitable for cutting) for DDA 200 and DS 200 – top side mounting (MCB)

2-phase busbars, connection of DDA 202 and DS 202, end caps PSB-END 3 (phase sequence L1-L2/N-free-free-.....)

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
30	2	16	0.512	697675	PS 2/30/ 16N-DDA 202T	2CDL020202R1630			10

3-phase busbars, connection of DDA 202 and DS 202, end caps PSB-END 3 (phase sequence L1-L2-free-free-L3-L1.....without N)

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
30	3	16	1.25	652629	PS 3/30/ 16-DDA 202T	2CDL033202R1630			10

3-phase busbars, connection of DDA 202 and DS 202 with auxiliary, end caps PSB-END 3 (phase sequence L1-L2-aux.(free)-free-free-L3-L1-aux.(free).....without N)

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
28	3	16	1.31	652636	PS 3/28/ 16H-DDA 202T	2CDL034202R1628			10

4-phase busbars, connection of DDA 202 and DS 202, end caps PSB-END 4 (phase sequence L1-N-free-free-L2-N...)

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
30	4	16	1.67	652852	PS 4/30/ 16N-DDA 202T	2CDL040202R1630			10

4-phase busbars, connection of DDA 202 and DS 202 with auxiliary, end caps PSB-END 4 (phase sequence L1-N-aux.(free)-free-free-L2-N-aux.(free)...)

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
30	4	16	1.72	652599	PS 4/30/ 16NH-DDA 202T	2CDL041202R1630			10

4-phase busbars, connection of DDA 204 25 A and 40 A and DS 204 up to 40 A, end caps PSB-END 4 (phase sequence L1-L2-L3-N-free-free-L1.....)

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
40	4	16	1.79	652605	PS 4/40/ 16-DDA 204T	2CDL040204R1640			10

4-phase busbars, connection of DDA 204 25 A and 40 A and DS 204 up to 40 A with auxiliary, end caps PSB-END 4 (phase sequence L1-L2-L3-N-aux.(free)-free-free-free-free-L1)

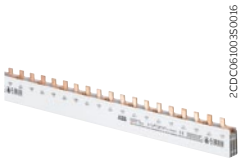
No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
36	4	16	1.73	652612	PS 4/36/ 16H-DDA 204T	2CDL041204R1636			10

End caps

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
				638913	END 1.1	2CDL200011R0011		0.001	50
				652261	PS-END 0	2CDL200001R0004		0.001	50
				514729	PS-END	2CDL200001R0001		0.001	50
				570114	PS-END 1	2CDL200001R0002		0.001	50
				646505	PS-END SP	2CDL200110R0001		0.001	50
				646512	PS-END 1 SP	2CDL200110R0002		0.001	50
				654302	PS-END 3	2CDL200001R3001		0.001	50
				654319	PS-END 3.1	2CDL200001R3002		0.001	50
				556304 ①	PSB-END 3	GHV0361325R0001		0.001	50
				556403 ①	PSB-END 4	GHV0361325R0002		0.001	50
				950060	PS-END 3 BP-C	2CDL200489R0003		0.001	50

① bbn-No. 4012233

Busbars and accessories for
MCBs S200 and fuse holder E90



Busbars PS...DC (cuttable) for use with end caps PS-END0 and PS-END3

No. of phases	Phase secquence	bbn 40 16779 EAN	Type	Order code	Pack unit pcs.	Weight 1 pc. kg
1	L1-L1-L1...	960168	PS1/60/30DC	2CDL210130R6030	10	0,485
	L1-Aux (free)-L1-Aux (free)... 1)	960175	PS1/39/30HDC	2CDL210130R3930	10	0,435
2	L1-L2-L1-L2...	960199	PS2/60/30DC	2CDL220130R6030	10	0,94
	L1-Aux (free)-L2-Aux (free)... 1)	960212	PS2/38/30HDC	2CDL220130R3830	10	0,85

1) for devices with auxiliary contact (half module) after each phase sequence or for devices with 27 mm module width

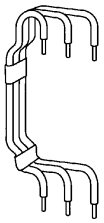
Accessories

Description	bbn 40 16779 EAN	Type	Order code	Pack unit pcs.	Weight 1 pc. kg
Tooth covers, for 5 pins (pin distance 17.6 mm)	420006	SZ-BSK	2CDL200001R0011	10	0,003
End caps 1-phase busbar	652261	PS-END0 2)	2CDL200001R0004	25	0,001
End caps 2-phase busbar	654302	PS-END3	2CDL200001R3001	50	0,001
Feeder terminal in combination with 1-phase busbar	962483	AST35/18DC	2CDL200130R3518	10	0,025
Feeder terminal in combination with 2-phase busbar	962490	AST35/45DC	2CDL200130R3545	10	0,032

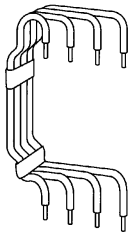
2) 1 pair (= left and right end cap)

Accessories

for S 200, SN 201, F 200, DS 200 and other series



RV 3



RV 4

SZ-BSK

BSK

identification label

Rail connectors

For wiring of component rails in the consumer unit, rail-to-rail clearance 125 mm. In the case of the 4-pole connector, the color of the N conductor is blue.

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
	3-pole	10		512381	RV 3	GHV0360504R0023		0.080	25
	4-pole	10		512244	RV 4	GHV0360504R0024		0.114	25

Auxiliary contact bridge for bottom-fitting auxiliary contacts

Wire jumper for integrated auxiliary contact (MCB S200 H or auxiliary contacts S2C-H01/ S2C-H10) for series connections (HKB) or parallel connections (HKB1).

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
	1/2 mod.				523134	GHV0360504R0100		0.001	1000
	1 mod.				524209	GHV0360504R0101		0.001	1000

Shock-protection caps for PS...

No. of pins	Phases	mm²	Cu-No.	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code	piece	kg	pc.
	5 parts			420006	SZ-BSK	2CDL200001R0011		0.003	10
	5 parts			649834	BSK*	2CDL200001R0012		0.003	10

* closed version

Shock-protection caps for busbars

PS...BP - see page 4/41
PS...SP - see page 4/44

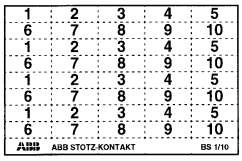
Labelling system

Package comes with 40 labels, marked or blank. Blank labels can be labeled by hand with an indelible, waterproof pen or using a computerised labelling system (plotter).

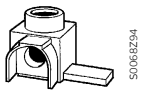
Description	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
identification labels blank	478106	BS	GHS2001946R0001		0.004	30
identification labels with pictograms	478205	BS Pikto	GHS2001946R0002		0.004	30
identification labels marked 4 x 1 – 10	478304	BS 1/10	GHS2001946R0003		0.004	30
identification labels marked 2 x 1 – 20	478403	BS 1/20	GHS2001946R0004		0.004	30
identification labels marked 1 – 40	478502	BS 1/40	GHS2001946R0005		0.004	30
identification labels marked 41 – 80	585910	BS 41 – 80	GHS2001946R0006		0.004	30
identification labels marked 81 – 120	585927	BS 81 – 120	GHS2001946R0007		0.004	30
identification labels marked 121 – 160	585934	BS 121/160	GHS2001946R0008		0.004	30

Accessories

for S 200, SN 201, F 200, DS 200 and other series

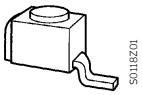


BS 1/10 Sk 0103 Z99



S0068Z94

Ast 25/15 QS
Ast 25/15 Q
Ast 25/30 QS
Ast 25/30 Q
Ast 50/15 QS
Ast 50/15 Q
Ast 50/18 Q
Ast 50/32 Q



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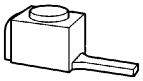
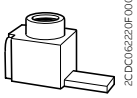
SZ-Ast 95 gk



SZ-Ast 95



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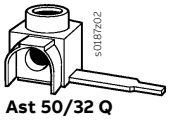
Ast 25/15 S
Ast 50/15 S
Ast 50/15
Ast 50/18



s0187z02

Ast 50/32 Q

Identification system ILS

The ILS individual identification sytem for labels is a DIN A5 polyester film for ink jet and laser printers with high temperature resistance. (If laser printers are used, please check whether self-adhesive film with thickness of 250 µm can be fed.) Adhesive coating 3MTM9471 LE has obtained UL approval (file No. MH 11410). There are two types of sheet: uncut for making individual labels or precut with 23 stripes (6 x 191 mm each) for labelling 11 devices (1-module width) per stripe. Word template can be downloaded from www.abb.de/stotz-kontakt. Can also be used as write-on labels (ink, ballpoint pen, pencil, marker).

Description	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
1 sheet DIN A5 uncut for laser printer	663076	ILS-L	2CDL200002R0003		0.011	1
1 sheet DIN A5 precut in 23 stripes (6 x 191 mm) for laser printer	663083	ILS-LS	2CDL200002R0004		0.011	1
1 sheet DIN A5 uncut for inkjet printer	663090	ILS-I	2CDL200002R0005		0.011	1
1 sheet DIN A5 precut in 23 stripes (6 x 191 mm) for inkjet printer	663106	IILS-IS	2CDL200002R0006		0.011	1

Terminals, insulated with pin contact

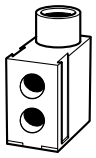
Technical features			
Connection capacity	6-25 mm²	6-50 mm²	25-95 mm²
Max. electrical load	63 A	100 A	225 A
Max. operating voltage	600 V AC	600 V AC	690 V AC
Max. tightening torque	2 Nm	3 Nm	19 Nm

The terminals are single-phase. When combined in a multi-phase installation the required clearance and creepage distances needs to be considered!

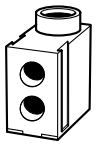
Conn. capacity	Terminal lug	Type of connection	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²	LxW mm		kg	EAN	Type code	Order code		kg	pc.
6-25	15/4	90°	0.012	656535	Ast 25/15 QS	2CDL200010R2515			50
6-25	15/4	straight	0.012	656542	Ast 25/15 S	2CDL200011R2515			50
6-25	15/6	90°	0.012	656474	Ast 25/15 Q	2CDL200000R2515			50
6-25	22/4	90°	0.012	669436	Ast 25/22 QS	2CDL200010R2522			50
6-25	30/4	90°	0.012	656481	Ast 25/30 QS	2CDL200010R2530			50
6-25	30/6	90°	0.014	656498	Ast 25/30 Q	2CDL200000R2530			50
6-50	15/4	90°	0.014	656504	Ast 50/15 QS	2CDL200000R5015			50
6-50	15/4	straight	0.014	656566	Ast 50/15 S	2CDL200011R5015			50
6-50	15/7	90°	0.014	656559	Ast 50/15 Q	2CDL200010R5015			50
6-50	15/7	straight	0.014	656511	Ast 50/15	2CDL200001R5015			50
5-50	17.5/7	90°	0.019	656580	Ast 50/18 Q	2CDL200100R5018			50
6-50	17.5/7	straight	0.019	656573	Ast 50/18	2CDL200101R5018			50
6-50	32/6	90°	0.017	656528	Ast 50/32 Q	2CDL200000R5032			50
25-95	21/6.5	straight	0.06	522618	SZ-Ast 95 gk*	GHV0360501R0012		0.067	50
25-95	21/6.5	straight	0.06	522625	SZ-Ast 95*	GHV0360501R0013		0.067	50

Abbreviations: Q terminal 90° * not for pro M compact S narrow connection pin

SZ-ESK 2



SZ-ESK 3



SZ-ESK 3 S

Feeder terminals

Single-pole terminals can be mounted side by side with multipole terminals.

Conn. capacity	Terminal lug	Type of connection	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²	LxW mm		kg	EAN	Type code	Order code		kg	pc.
6-35				646765	SZ-ESK 2	2CDL200001R3501		0.024	10
6-50				652575	SZ-ESK 3	2CDL200003R5001		0.025	10
6-50				652889	SZ-ESK 3 S	2CDL200003R5003		0.024	10

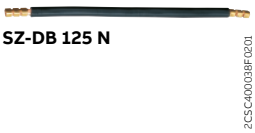
Flexible connecting wires

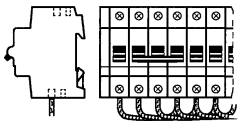
Advantages: smaller dimensions for the same cross-section (more space in terminal)
nearly no transition resistances
more reliability; conductor sleeves could be loosen under specific conditions

SZ-DB 121

SZ-DB 232 N

SZ-DB 125 N





example 1
wiring of devices
consisting of modules
with different lengths
with SZ-DB 125 N or 312

with fork-type cable lug (black)

Conn. capacity	Lenght		Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²			EAN	Type code	Order code		kg	pc.
6	125	0.006	55650 2	SZ-DB 121	GHV0361425R0001		0.025	1000/50
10	135	0.010	55670 0	SZ-DB 122 N	GHV0361425R0031		0.02	500/25
6	260	0.014	55680 9	SZ-DB 231 N	GHV0361425R0032		0.02	500/25
10		0.022	55690 8	SZ-DB 232 N	GHV0361425R0033		0.04	250/25
10	330	0.029	55700 4	SZ-DB 311	GHV0361425R0034		0.05	100/25

with fork-type cable lug and ultrasonic compacted cable ends (black)

Conn. capacity	Lenght		Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²			EAN	Type code	Order code		kg	pc.
6	125	0.007	55660 1	SZ-DB 123	GHV0361425R0006		0.01	1000/50
10	135	0.012	55710 3	SZ-DB 124 N	GHV0361425R0035		0.02	500/25
6	260	0.014	55720 2	SZ-DB 235	GHV0361425R0036		0.02	500/25
10		0.024	55730 1	SZ-DB 236	GHV0361425R0037		0.04	250/25

with ultrasonic compacted cable ends (black)

Conn. capacity	Lenght		Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²			EAN	Type code	Order code		kg	pc.
6	125	0.007	55740 0	SZ-DB 125 N	GHV0361425R0038		0.01	1000/50
6	260	0.015	55750 9	SZ-DB 233 N	GHV0361425R0039		0.02	500/25
10	135	0.013	55760 8	SZ-DB 126 N	GHV0361425R0040		0.02	500/25
10	260	0.025	55770 7	SZ-DB 234 N	GHV0361425R0041		0.04	250/25
10	330	0.032	55780 6	SZ-DB 312	GHV0361425R0042		0.05	100/25

with ultrasonic compacted cable ends (blue)

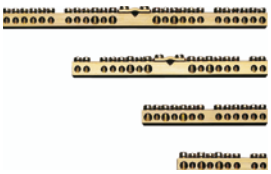
Conn. capacity	Lenght		Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²			EAN	Type code	Order code		kg	pc.
10	135	0.013	66352 6	SZ-DB 10/135 N	2CDL200301R0135		0.02	25
10	260	0.025	66353 3	SZ-DB 10/260 N	2CDL200301R0260		0.04	25
10	330	0.032	66354 0	SZ-DB 10/330 N	2CDL200301R0330		0.05	25

Accessories

for S 200, SN 201, F 200, DS 200 and other series

SZ-6/3

2CSC400452F0201



SZ-KLB 8, 12, 16, 24

2CSC400451F0201

Neutral and protective-conductor terminals with insulation holder for quick fastening onto DIN rails EN 50 022

Input	Output	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
mm²	mm²	EAN	Type code	Order code	piece	kg	pc.
1 x 16	6 x to 16	50592 5a	SZ-6/3	GHV0360876R0003		0.022	10
1 x 16	2 x to 16 6 x to 10	59660 7	SZ-KLB 8	GJI2320131R0001		0.025	30
1 x 16	2 x to 16 10 x to 10	59530 3	SZ-KLB 12	GJI2320071R0013		0.035	30
1 x 35	4 x to 16 12 x to 10	59540 2	SZ-KLB 16	GJI2320072R0017		0.077	30
1 x 35	4 x to 16 20 x to 10	59550 1	SZ-KLB 24	GJI2320073R0016		0.100	30

Holders for SZ-KLB terminals

Screw-fixing

SZ-KLB 8 and 12 each 1 piece required

SZ-KLB 16 and 24 each 2 pieces required

SZ-Ktr

2CSC400438F0201

Conn. capacity	Lenght	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
mm²		EAN	Type code	Order code	piece	kg	pc.
		59450 4	SZ-Ktr	GJI2024027R0001		0.003	100

Neutral and protective-conductor terminals with insulation holder for quick fastening onto DIN rails EN 50 022

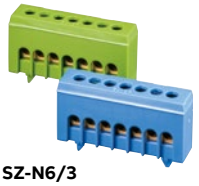
Neutral with blue insulation holder; type C finger safe, conductor opening closed on one side

SZ-Ktr with KLB

2CSC400335F0201

Input	Output	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
mm²	mm²	EAN	Type code	Order code	piece	kg	pc.
1 x 16	6 x 16	55570 3	SZ-N 6/3	GHV0360876R0001		0.027	20
1 x 16	11 x 16	55580 2	SZ-N 11/3	GHV0360876R0002		0.043	20
1 x 16	6 x 16	57095 4 ①	SZ-N 6/3 C	GHV0360876R0011		0.028	20
1 x 16	6 x 16	57096 1 ①	SZ-N 11/3 C	GHV0360876R0012		0.046	20

Protective conductor with green/yellow insulation holder; type C finger safe, conductor opening closed on one side



SZ-N6/3

2CSC400444F0201

Conn. capacity	Lenght	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
mm²		EAN	Type code	Order code	piece	kg	pc.
1 x 16	6 x 16	55600 7	SZ-PE 6/3	GHV0360876R0004		0.027	20
1 x 16	11 x 16	55610 6	SZ-PE 11/3	GHV0360876R0005		0.043	20
1 x 16	6 x 16	57097 8 ①	SZ-PE 6/3 C	GHV0360876R0014		0.028	20
1 x 16	11 x 16	57098 5 ①	SZ-PE 11/3 C	GHV0360876R0015		0.046	20

① bbn-No. 40 16779

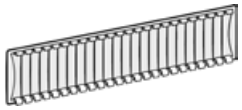
SZ-N11/3

2CSC400440F0201

SZ-BP 1

SZ-B

SZ-BP 2



SZ-BP 12 G

SZ-BP R

SZ-VP 1500

END

SZ-FDT 2

Blanking plates

For device covers with materials of a thickness of 1 to 3 mm, width: 1 module = 17.5 mm; color: grey RAL 7035, white RAL 9001

Input	Output	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²	mm²	EAN	Type code	Order code		kg	pc.
46/grey	213	06050 4	SZ-BP 1	GHL5301904R0001		0.028	100
46/white	17.5	12857 4 a	SZ-BP	GHS2701913R0001		0.005	
46/grey	17.5	12861 1 a	SZ-BP 2	GHS2701913R0002		0.005	
46/grey	220	65227 8 a	SZ-BP 12 G	2CDL000001R1220		0.022	50
46/white	220	66355 7 b	SZ-BP 12 W	2CDL000001R2220		0.020	50

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Locking devices for SZ-BP 12 G	652285 a	SZ-BP R	2CDL000001R1001		0.001	30

Sealing plate

Seal-proof locking of stamped-out device covers.
Detachable only from the inside of the device cover.
Can be used for device covers with 1.5 to 3 mm material thickness.

Height of cutout/color	Width	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm	mm	EAN	Type code	Order code		kg	pc.
46/grey	1500	60290 2	SZ-VP 1500	GJI9959038R0001		0.366	10

End bracket

Prevents lateral shifting of built-in devices mounted on DIN rails according to DIN EN 60 715, 35 x 7.5 mm.

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	59090 2	END	GJI1001814R0001		0.02	50

Filling piece

e.g. for heat dissipation of closely mounted devices that generate much heat. Width 8.75 mm, as spacer, two different heights, breakable, for DIN rails according to DIN EN 60 715, 35 x 7.5 mm.

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
8.75	06070 2	SZ-FST 2	GHL5301908R0002		0.01	25

Spring piece

Holder for device covers, various heights available (in connection with FST 2 filling piece)

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	06080 1	SZ-FDT 2	GHL5301908R0005		0.002	25

Accessories

for S 200, SN 201, F 200, DS 200 and other series

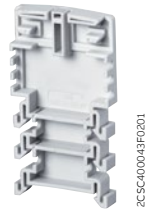
SZ-FST 2 + SZ-FDT 2

Filling piece

Two different heights, breakable, for DIN rails according to DIN EN 60 715, 35 x 7.5 mm
for MCBs S 220 (3 different heights)

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
8.75	59410 8	SZ-FST	GJI1480003R0001		0.01	25

① bbn-Nr. 4016779



SZ-FST

Spring catch for mounting devices onto DIN rails (DIN EN 60715, 35 x 7.5)

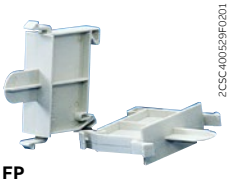
	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
for screw type M4	64560 2	SZ-FB 45.53-3	GJI1842013P0003		0.03	50
for screw type M5	64580 0	SZ-FB 45.53-1	GJI1842013P0004		0.03	50

SZ-FB 45.53-1

SZ-FB 45.53-3

False poles

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
False pole - 1 module	061304	FP1	16021765		0.01	100
False pole - 2 modules	061403	FP2	16021773		0.014	50
False pole - 4 modules	061502	FP4	16021781		0.022	30
False pole - 6 modules	061601	FP6	16021799		0.031	20
Support for false pole	061700	SFP	16021831		0.012	10



FP

DIN rails

DIN rails (DIN EN 60 715 – 35 x 7.5) for individual installation with 2 screws on an even surface (1 module = 17.5 mm)

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
for 1 module	13580 6	DSW 1	GHS2101926R0001		0.060	10
for 2 modules	13590 5	DSW 2	GHS2101926R0002		0.012	10
for 3 modules	13600 1	DSW 3	GHS2101926R0003		0.018	10
for 4 modules	13610 0	DSW 4	GHS2101926R0004		0.024	10
for 6 modules	13620 9	DSW 6	GHS2101926R0006		0.036	10

SKV-GTS 1

DIN rail DIN EN 60 715, 35 x 7.5, material thickness 1 mm, surface protected, galvanised.

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
241	04090 2	SKV-GTS 1	GHL1101915R0001		0.09	40

SZ-SI 45.460

DIN rails DIN EN 60715, 35 x 7.5, material thickness 1 mm, surface galvanised.

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
1000	59730 7	SZ-SI 45.460	GJI2322218R0001		0.35	10
2000	59760 4	SZ-TS 7.5 L2	GJI2322218R0007		0.70	20

SZ-TS 7.5 L2

DIN rails DIN EN 60715, 35 x 15, material thickness 1.5 mm, surface galvanised

	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
2000	59780 2	SZ-SI 45.472	GJI2322218R0010		1.30	10
2000	59770 3	SZ-TS 15 L2	GJI2322218R0009		0.78	10

SZ-SI 45.472

SZ-TS 15 L2

4

Accessories

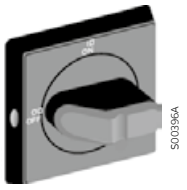
for S 200, SN 201, F 200, DS 200 and other series

S2C-DH

Rotary operating mechanism

For the actuation of 2-, 3- or 4pole miniature circuit-breakers in closed distribution boards for driveaxles of 5 or 6 mm2 (square)

	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
	57960 5	S2C-DH	GHS2001901R0003		0.175	1

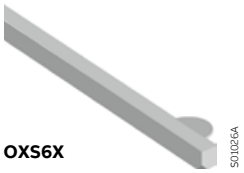


OH

Handles

Handle IP 65, 65 x 65 mm, padlockable with max. 3 padlocks (bail diameter 5 - 8 mm), door interlock in ON-position, adjustable*

Color	Suitable for switches	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
		EAN	Type code	Order code	piece	kg	pc.
Black	OT16...40F	40978 8	OHBS2AJ	1SCA105213R1001			1
Yellow-red	OT16...40F	41226 9	OHYS2AJ	1SCA105296R1001			1
Silver	OT16...40F	41199 6	OHSS2AJ	1SCA105278R1001			1
Grey	OT16...40F	41186 6	OHGS2AJ	1SCA105265R1001			1



OXS6X

Handle IP 65, 65 x 65 mm, padlockable with max. 3 padlocks (bail diameter 5 - 8 mm), door interlock in ON-position

Color	Suitable for switches	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
		EAN	Type code	Order code	piece	kg	pc.
Black	OT16...40F	41140 8	OHBS2AJ1	1SCA105215R1001			1
Yellow-red	OT16...40F	41227 6	OHYS2AJ1	1SCA105297R1001			1
Silver	OT16...40F	41210 8	OHSS2AJ1	1SCA105279R1001			1
Grey	OT16...40F	41187 3	OHGS2AJ1	1SCA105266R1001			1

* OH_2_J enables selection of MCB behavior when opening panel door (remain switched on or switch off).
OH_2_J1 will cause MCB to switch off when opening panel door.

Axle extension

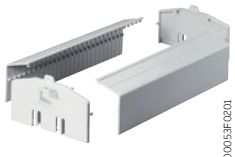
Type and order numbers are for one piece. For selector type handles. Shaft diameter 6 mm.

Lenght	Suitable for switches	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
		EAN	Type code	Order code	piece	kg	pc.
85	OT16...40F	36571 8	OXS6X85	1SCA101647R1001		0.02	10
105	OT16...40F	42411 8	OXS6X105	1SCA108043R1001		0.02	10
120	OT16...40F	36578 7	OXS6X120	1SCA101654R1001		0.03	10
130	OT16...40F	36577 0	OXS6X130	1SCA101655R1001		0.03	10
160	OT16...40F	36580 0	OXS6X160	1SCA101656R1001		0.04	10
180	OT16...40F	36583 1	OXS6X180	1SCA101659R1001		0.04	10
250	OT16...40F	36584 8	OXS6X250	1SCA101660R1001		0.05	10
330	OT16...40F	36585 5	OXS6X330	1SCA101661R1001		0.05	10

SZ-ES 68/83

SA 1

SA 2



KA 27 H + KA 27 S

PCD 2 N

PCD 4 N

Elevation piece

Compensates for different size of built-in devices with a mounting height of 68 mm and power MCBs of series S500 (83 mm)

	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
	53390 9	SZ-ES 68/83	GHV0211425R0001		0.003	100

Locking device for MCBs and switches

Prevents unauthorised or dangerous operation of the operating lever. An adaptor makes it possible to block the operating lever whether switched ON or OFF. The lever is blocked with a padlock having a cross bar section of 3 or, as the case may be, 6 mm max. For multipole devices, one lock may be fitted per pole.

The lock adaptor can be used for all MCBs of the S 200, S 280 series, RCBOs DS201-DS202C as well as for switches E 200.

		Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
		EAN	Type code	Order code	piece	kg	pc.
locking devices for padlock bar	3 mm	58760 5	SA 1	GJF1101903R0001		0.004	10
	6 mm	58790 2	SA 1E	GJF1101903R0004		0.004	10
padlock with 2 keys		58770 4	SA 2	GJF1101903R0002		0.02	10
padlock, identical locking with 2 keys		96940 1	SA 2 i	GJF1109999R0001		0.02	10
lock adaptor incl. padlock with 3 keys in transparent box		58780 3	SA 3	GJF1101903R0003		0.05	10

Terminal cover KA 27

Provides overall touch protection of live parts. Suitable for installations acc. to DIN EN 50274 (DIN VDE 0660 Part 514) and BGV A2.

End parts can be snapped onto mounting rails EN 60 715, 35 mm. Covers are 486 mm = 27 modules (18 mm each) long. Knockouts for each half module for individualised use.

	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
cover, 1 piece	13630 8	KA 27 H	GHS2101933R0001		0.104	10
end part, 1 piece	13640 7	KA 27 S	GHS2101934R0001		0.027	10

Terminal covers with base plate, protection IP 40

Material: high-impact and flame-retardant (UL 94 V-0),
color: white (RAL 9016), glow-wire test 960 °C according to IEC 695-2-1

The base plate has an integrated top-hat rail for snap-on fixing of MCBs, RCDs, modular built-in devices, etc.

	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
for 2 modules	12402 6	PCD 2 N	GHS2701921R0002		0.09	1
for 4 modules	12404 0	PCD 4 N	GHS2701921R0004		0.15	1
for 6 modules	12406 4	PCD 6 N	GHS2701921R0006		0.2	1

Accessories

for S 200, SN 201, F 200, DS 200 and other series

Flanges

	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Flange for rear board fixing 1 module - IP40	304401	ME 1	16219300		0.040	1
Flange for rear board fixing 2 modules - IP40	304500	ME 2	16219318		0.045	1
Flange for rear board fixing 3 modules - IP40	304609	ME 3	16219326		0.055	1
Flange for rear board fixing 4 modules - IP40	304708	ME 4	16219334		0.060	1
Flange for rear board fixing 6 modules - IP40	304807	ME 6	16219342		0.070	1
Flange for rear board fixing 8 modules - IP40	304906	ME 8	16219359		0.080	1

Auxiliary elements for
S750 DR series

S750DR-AUX

Electrical data									
Standards		DIN EN 62019 (VDE 0640), IEC/EN 62019							
		DIN EN 60947-5-1 (VDE 0660-200), IEC/EN 60947-5-1							
Conventional free air thermal current Ith		6 A							
Utilisation categories		AC14		AC15		DC12		DC13	
	Ue	400 V	230 V	400 V	230 V	250 V	125 V	60 V	24 V
	Ie (max)	2 A	6 A	2 A	6 A	0.5 A	1.5 A	2 A	4 A
Rated insulation voltage U acc. to IEC/EN 60664-1		690 V AC							
Overvoltage category		IV							
Pollution Degree		3							
Protection degree acc. to IEC/EN 60529		IP20							
Min. switching power DC		5V DC/5 mA, 12V DC/5 mA							
Rated impuls withstand voltage Uimp (1.2/50 µs)		6 kV							
Installation									
Cross-section of	1 conductor	0.75 - 2.5 mm² solid, flexibel with and without insulated ferrule conductors							
	2 conductor	2 x 0.75 - 2 x 2.5 mm² solid, flexibel with and without insulated ferrule							
Tightening torque		0.8 Nm							
Mechanical data									
Vibration resistance according to IEC/ EN 60 068-2-6		5 g, 20 cycles at 5 ...150...5 Hz with 24 V AC/DC, 5 mA, without switching operation							
Mechanical endurance		10,000 ops.							
Pole dimensions (H x D x W)		128 x 77 x 8.7							
Mounting									
		Only 1 auxiliary contact mountable on the right site							
		Not mountable to S751DR/3							

Auxiliary elements for
S750 DR

S750DR-AUX

Auxiliary contact S750DR-AUX
Two change-over contacts indicate the contact position of the S750 DR pole(s) independently and potential-free. A test button can be used to verify the correct indication of the contact position without switching the pole(s).
The change-over contacts fulfill the requirements of electrical separation of the main circuit connected to the pole(s).
The S750DR-AUX can be mounted on S750 DR 1-4 pole-devices without tools.

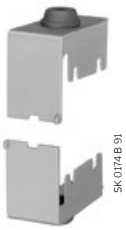
	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Auxiliary contact	941891	S750DR-AUX	2CDH700901R0001		0.07	1

Accessories for
S 700

S 700 BT 3

S 700 KA 1

S 700 KA 2/3



S 700 KA 4

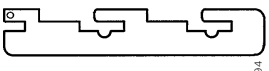
S 700 KA 5

S 700 SPA

S 700 SPB 1
S 700 SPB 2

S 700 QA

S 700 SA 1



S 700-SPE

Mounting adapters

DIN rail adapter for mounting S 700 onto 1 or 2 DIN rails 35 mm acc. to EN 50022 (distance of DIN rails 125 mm when using 2 DIN rails)

	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
no. to be used: S701: 1 pc. S 702, S703, S704: 2 pc	28440 0	S 700 BT 3	GHS7001902R0003			10

Busbar adapter for mounting onto 40 mm busbar systems, 4 or 5 pole, with busbars 5 x 12 mm or 10 x 12 mm

	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
single phase: L1 or L2 or L3 (adjustable)	25430 4 ①	S 700 SA 1	GHS7001917R0001		0.105	1
3-phase	52793 4 ①	S 700 QA	GHS7001106R0001		0.35	1

Terminal covers, 2 per pole

	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
within the shape of S 700	52050 3	S 700 KA 1	GHS7001903R0001		0.001	6
for cutouts of 160 mm	52090 9	S 700 KA 2	GHS7001907R0001		0.01	6
for cutouts of 175 mm	52100 5	S 700 KA 3	GHS7001908R0001		0.01	6
with cable entry	52140 1	S 700 KA 4	GHS7001913R0001		0.015	6
for IP20 protection (front)	24300 1 ①	S 700 KA 5	GHS7001903R0005		0.003	6

Handle covers, 1 per pole

	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
to prevent manual switch-off	52060 2	S 700 SPA	GHS7001905R0001		0.001	10
to prevent manual switch-off/-on, transparent	52070 1	S 700 SPB 1	GHS7001906R0001		0.002	10
to prevent manual switch-off/-on, grey	52080 0	S 700 SPB 2	GHS7001906R0002		0.002	10

Locking for 3 mm padlock

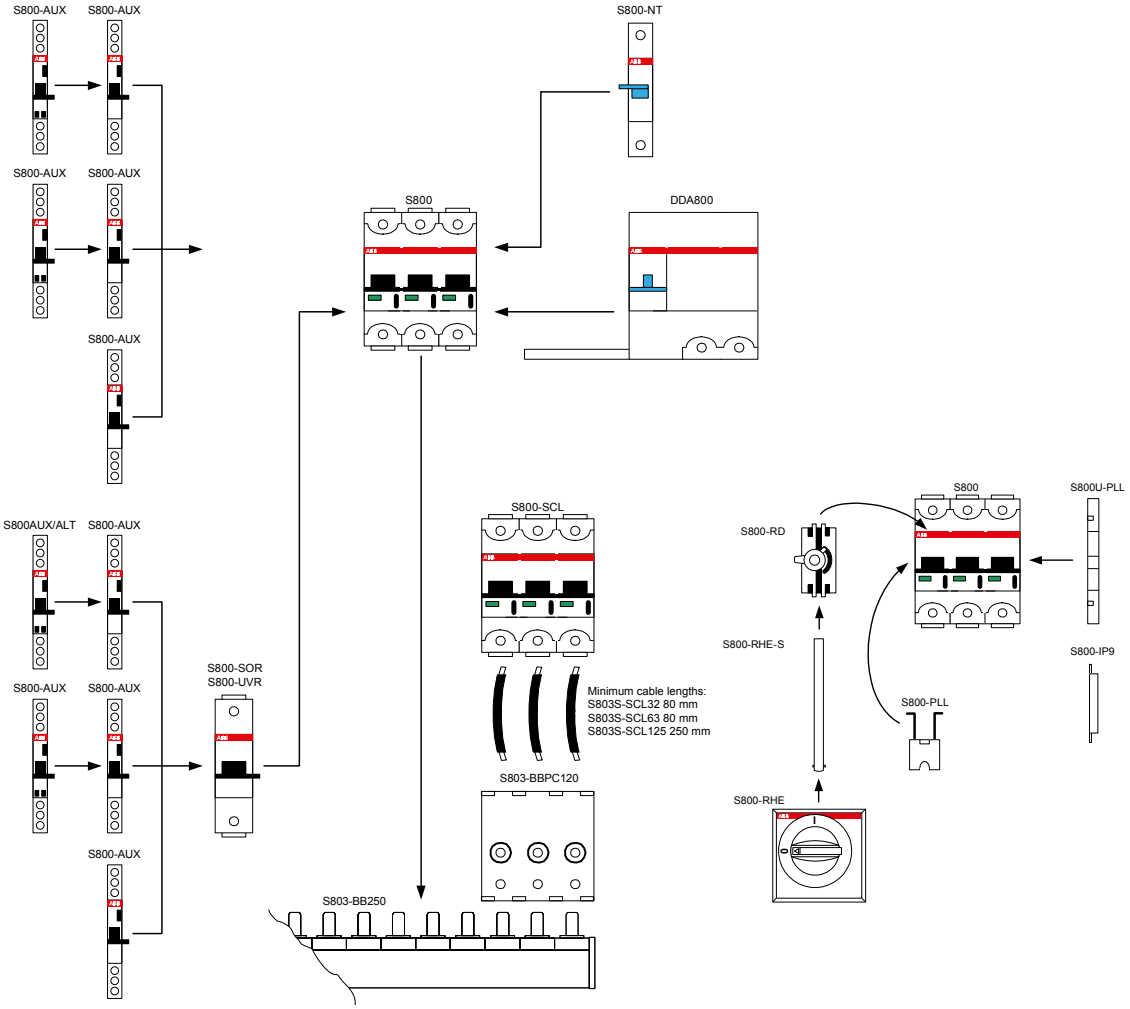
	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
locking plate 3 pole	52110 4	S 700 SPE	GHS7001909R0001		0.002	10

① bbn-No. 4016779

Auxiliary elements for MCBs S800 series

Selection table

Combination between auxiliary elements and S800



S800-AUX	Auxiliary contact for external display
S800-AUX/ALT	Combined auxiliary and signal contact for the external display
S800-NT	Disconnectable neutral conductor 63A
S800-SOR	Shunt opening release
DDA800	RCD block
S803-BB	Busbar system
S800RD	Rotary drive
S800-RHE	Rotary handle
S800-IP	Intermediate piece
S800-PLL/S800U-PLL	Padlock device/Locking device for American market
S800-UVR	Undervoltage release
S803-SCL/S800-SCL-SR	Short-circuit current limiter/Short-circuit current limiter self resetting

Auxiliary elements for
S800

S800-RSU

Remote switch unit S800-RSU-H		
Operating voltage	[V]	24 DC
Current consumption Irms	[A]	2.5
Stand-by current	[mA]	< 50
Switching time OFF-ON	[ms]	< 500
Switching time ON-OFF	[ms]	< 250
Ambient operation temperature	[°C]	-25...+70
Switching cycles over lifetime		10000
Standard		IEC 60947-2 Annex N
Protection		IP20
Weight	[g]	300
Connection		10 pole Micro Fit 3.0

Short circuit limiter S803S-SCL			
Max. rated continuous current In		[A]	32, 63, 125
Poles			3
Rated operating voltage Ue (AC) 50/60Hz		[V]	400/690
Rated insulation voltage Ui		[V]	690
Rated impulse withstand voltage Uimp		[kW]	8
Ultimate short-circuit breaking capacity Icu in accordance with IEC 60947-2	400VAC	[kA]	100
	440VAC	[kA]	100
	690VAC	[kA]	50
Valid combination see: http://www.abb.com/product Low Voltage Products and Systems/Modular DIN Rail Products/ High Performance Circuit Breakers HPCBs/Software			
Service short-circuit breaking capacity Ics in accordance with IEC 60947-2			100% Icu
Rated frequency		[Hz]	50/60
Mounting position			any
Disconnector proporties according to IEC 60947-2			yes
Standard			IEC 60947-2
Connection Cu		[mm²]	1...25 strand
			1...35 cable
Connection Cu > 32 A		[mm²]	6...50 strand
			6...70 cable
Tightening torque		[Nm]	min. 3/max. 4
Supply			any
Mounting on DIN top hat rail			EN 60715
Permissible ambient temperature for operations		[°C]	-25...+60
Storage temperature		[°C]	-40...+70
Type of protection			IP20 IP40 (only actuation side)
Classification in accordance with NF-16-101, NF16-102			I3F2
Resistance to vibration			IEC 60068-2-27; IEC 60068-2; EN 61373 Cat.1/class B

Auxiliary elements for
S800

Self-resetting short-circuit current limiter

			S800S-SCL-SR	S803W-SCL-SR	S803HV-SCL-SR in combination with S803HV-K
Rated operational current Ie		A	32, 63, 100		
Pole			1, 2, 3	3	3
Rated operational voltage Ue					
(AC) according to IEC 60947-2	50/60 Hz	V	400/690	690	580/1000
(AC) according to UL 508	50/60 Hz V			600	
Rated insulation voltage Ui		V	690		1000
Rated impulse withstand voltage U_{imp}		kV	8		
Rated ultimate short-circuit breaking capacity Icu = Ics according to IEC 60947-2 *					
(AC) 50/60 Hz 240/415 V		kA	100		
(AC) 50/60 Hz 254/440 V		kA	100		
(AC) 50/60 Hz 289/500 V		kA	65		
(AC) 50/60 Hz 400/690 V		kA	50		
(AC) 50/60Hz 580/1000 V					15
Short-circuit rating according to UL 508 *					
(AC) 50/60 Hz 480 V		kA	65		
(AC) 50/60 Hz 600 V		kA	65		
*) Valid only for approved combinations Please have a look to coordination tables in chapter 2, of Electrical installation solutions for buildings - Technical details					
Rated frequency		Hz	50/60		
Mounting position			any		
Connections Cu		mm^2	1 … 50 rigid (solid/stranded)		
		mm^2	1 … 70 flexible		
				14–1 AWG	
Tightening torque		Nm	3.5		
		in. lbs.		min. 26.5 / max. 25	
Feeding			optional		
Mouting on DIN top hat rail E			N 60715		
Ambient air temperature		°C	–40 … +70		–25 … +60
Storage temperature		°C	–40 … +85		–40 … +70
Degree of protection			IP20		
Classification acc. to NF F 16-101, NF F 16-102			I3, F2		
Damp Heat			IEC 60068-2-30, 55 °C / 95 % r.h.		
Vibration			IEC 60068-2-6, 5–10 Hz / 3 mm and 10–500 Hz / 2 g at 0.5 x Ie		
Random Vibration			IEC 60068-2-64, 5–500 Hz / 2 g at 0.5 x Ie		
Resistance to climatic conditions			IEC 60068-2-1 /-2-2 /-2-30		
Standard			IEC 60947-2	IEC 60947-2	IEC 60947-2
			IEC 60947-4-1	IEC 60947-4-1	
				UL 508, CSA 22.2 No. 14	

Auxiliary contact S800-AUX		
Utilisation category		AC15 400/2A
		AC15 240/6A
		DC13 250/0.55A
		DC13 125V/1.1A
		DC13 60V/2A
		DC13 24V/4A
Continuous thermal current In	[A]	6
Rated insulation voltage Ui	[V]	690
Number of contacts		2
Rated impulse withstand voltage Uimp	[kV]	6
Pollution degree		3
Function of contact		Changeover contacts
Connection Cu	[mm²]	1 x 2.5
		2 x 1.5
Tightening torque	[Nm]	1
AC/DC supply		any
Mounting on DIN top hat rail		EN 60715
Type of protection		IP20
Permissible ambient temperature for operations	[°C]	-25...+60
Storage temperature	[°C]	-40...+70
Mech. device service life		6000 switching cycles
Icu with S450E	[A]	1000
Resistance to vibration		IEC 60068-2-6; EN 61373 Cat.1/class B 5g, 20 frequency cycle 5...150...5Hz at 24V AC/DC, 5mA brief interrupt <10ms

Auxiliary elements for
S800

Combined auxiliary and signal contact S800 AUX/ALT		
Utilisation category		AC15 400/2A
		AC15 240/6A
		DC13 250/0.55A
		DC13 125V/1.1A
		DC13 60V/2A
		DC13 24V/4A
Continuous thermal current In	[A]	6
Rated insulation voltage Ui	[[A]]	690
Number of contacts		2 (1x AUX, 1 x AUX/ALT)
Rated impulse withstand voltage Uimp	[kV]	6
Pollution degree		3
Function of contact		Changeover contacts
Connection Cu	[mm^2]	1 x 2.5
		2 x 1.5
Tightening torque	[Nm]	1
AC/DC supply		any
Mounting on DIN top hat rail		EN 60715
Type of protection		IP20
Permissible ambient temperature for operations	[°C]	-25...+60
Storage temperature	[°C]	-40...+70
Mech. device service life		6000 switching cycles
Icu with S450E	[A]	1000
Resistance to vibration		IEC 60068-2; EN 61373 Cat.1/class B 5g, 20 frequency cycle 5...150...5Hz at 24V AC/DC, 5mA brief interrupt <10ms

Shunt Operation Release S800-SOR					
		S800-SOR24	**S800-SOR130**	**S800-SOR250**	**S800-SOR400**
Rated voltage Ue	[V AC/DC]	24	48...130	110...250	220...400/250 a
Operating range	[%] Ue	70...110			
Rated insulation voltage Ui	[V]	690			
Coil pull in consumption	[W/VA]	16.6/17 a	41.9...307.3	23...119	45...148.1
			42...310 ①	20...105 ①	
Rated frequency	[Hz]	DC; 50/60			
Pollution degree		3			
Connection Cu	[mm²]	1...25 strand			
		1...35 cable			
Tightening torque	[Nm]	min.3/ max.4			
AC/DC supply		any			
DIN top hat rail		EN 60715			
Type of protection		IP20			
		IP40 (only actuation side)			
Permissible ambient temperature of operations	[°C]	-25...+60			
Storage temperature	[°C]	-40...+70			
Resistance to vibration		IEC 60068-2-6; EN61373 Cat.1/class B			

① according to UL 489

Undervoltage Release S800-UVR						
			S800-UVR36	**S800-UVR60**	**S800-UVR130**	**S800-UVR250**
Rated voltage Ue		[V AC/DC]	24...36	48...60	110...130	220...250
Operating range	Operating opening	[%] Ue	35...70			
	Operating closing	[%] Ue	85			
Rated insulation voltage Ui		[V]	690			
Coil pull in consumption		[W/VA]	1.11...1.14/1.2	1.14...1.25/1.3 ①	1.3...1.41/1.4 ①	1.71...1.91/1.9 ①
Rated frequency		[Hz]	DC; 50/60			
Pollution degree			3			
Standard			IEC 60947-5-1, UL 489			
Connection Cu		[mm²]	1...25 strand			
			1...35 cable			
Tightening torque		[Nm]	min.3/ max.4			
AC/DC supply			any			
DIN top hat rail			EN 60715			
Type of protection			IP20			
			IP40 (only actuation side)			
Permissible ambient temperature of operations		[°C]	-25...+60			
Storage temperature		[°C]	-40...+70			
Resistance to vibration			IEC 60068-2-6; EN61373 Cat.1/class B			

① according to UL 489

Auxiliary elements for
S800

Busbar S803-BB250			
Max. rated continuous current In	Side supply	[A]	125
	Central supply	[A]	250
Conditional short circuit current Ip		[kA eff]	100 protected by Tmax
Poles			3
Rated operating voltage Ue (AC) 50/60Hz		[V]	400/690
Rated insulation voltage Ui		[V]	690
Rated impulse withstand voltage Uimp		[kV]	8
Rated frequency		[Hz]	50
Standards			EN 60439-2:2000
Material of the bars			E-Cu 58 half-hard rolled F25
Material of the insulation profile			Cycoloy C 3600; UL94 V-0 at 1.5mm
Material of the end caps			Polyamide PA66+PA6; UL94 V-0 at 0.4mm Free of halogen and phosphorus
Busbar cross-sections		[mm²]	60
Overvoltage category			III
Polution degree			2

Busbar Power Connector S803-BBPC120		
Max. rated continuous current In	[A]	250
Poles		3
Rated operating voltage Ue	[V]	400/690
Rated frequency	[Hz]	50
Standards		EN 60439-2:2000
Material of the terminals		CuZn39Pb2; material no.: 2.0380
Casing material		Polyamide PA66+PA6; UL94 V-0 at 0.4mm Free of halogen and phosphorus
Tightening torque		
At supply end	[Nm]	19
At busbar end	[Nm]	3
Connection cross-section	[mm²]	1.6...120
Polution degree		2

S800-RSU

Remote switching unit

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Remote switching unit	411244	S800-RSU-H	2CCS800900R0501		0.300	1

S800-RSU-CP

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
S800-RSU cable with plug	412869	S800-RSU-CP	2CCS800900R0541		0,35	1
10-pole Micro Fit 3.0 plug	412845	S800-RSU-P	2CCS800900R0551		0	1

Accessories for
S800

S800S-SCL

S800S-SCL-R

S800S-SCL-SR

S800W-SCL-SR

S803HV-SCL-SR
for S800HV

Short-circuit current limiters with cage terminal

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
A	EAN	Type code	Order code	piece	kg	pc.
32	208912	S803S-SCL32	2CCS800900R0291		0.735	1
63	208929	S803S-SCL63	2CCS800900R0301		0.735	1
125	208905	S803S-SCL125	2CCS800900R0281		0.735	1

Short-circuit current limiters with ring terminal cable connection

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
32	408916	S803S-SCL32-R	2CCS800900R0332		0.735	1
63	208950	S803S-SCL63-R	2CCS800900R0331		0.735	1
125	208936	S803S-SCL125-R	2CCS800900R0311		0.735	1

Self-resetting short-circuit limiter IEC version

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
A	EAN	Type code	Order code	piece	kg	pc.
32	412012	S801S-SCL32-SR	2CCS801901R0539		0,25	1
63	412036	S801S-SCL63-SR	2CCS801901R0599		0,25	1
100	411992	S801S-SCL100-SR	2CCS801901R0639		0,25	1
32	412074	S802S-SCL32-SR	2CCS801901R0539		0,5	1
63	412098	S802S-SCL63-SR	2CCS801901R0599		0,5	1
100	412050	S802S-SCL100-SR	2CCS801901R0639		0,5	1
32	411930	S803S-SCL32-SR	2CCS803901R0539		0,75	1
63	411947	S803S-SCL63-SR	2CCS803901R0599		0,75	1
100	411954	S803S-SCL100-SR	2CCS803901R0639		0,75	1

Self-resetting short-circuit limiter World version

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
A	EAN	Type code	Order code	piece	kg	pc.
32	412319	S803W-SCL32-SR	2CCS803917R0539		0,75	1
63	412326	S803W-SCL63-SR	2CCS803917R0599		0,75	1
100	412302	S803W-SCL100-SR	2CCS803917R0639		0,75	1

Self-resetting short-circuit limiter for S800HV

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
A	EAN	Type code	Order code	piece	kg	pc.
32	437008	S803HV-SCL32-SR	2CCF019047R0001		0.75	1
63	437107	S803HV-SCL63-SR	2CCF019048R0001		0.75	1
100	437114	S803HV-SCL100-SR	2CCF019049R0001		0.75	1

Accessories for
S800

S800-AUX

S800-AUX-ALT

S800-NT

S800-SOR

S800-UVR

Auxiliary contact

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Auxiliary contact	206802	S800-AUX	2CCS800900R0011		0.049	1

Combined auxiliary and signal contact

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Auxiliary/signal contact	206819	S800-AUX/ALT	2CCS800900R0021		0.050	1

Separating neutral

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Separating neutral 63A	208196	S800-NT	2CCS800900R0061		0.115	1

Shunt operation releases

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
2VAC/DC	212070	S800-SOR12	2CCS800900R0191		0.15	1
24VAC/DC	208318	S800-SOR24	2CCS800900R0191		0.15	1
48...130VAC/DC	208349	S800-SOR130	2CCS800900R0221		0.15	1
110...250VAC/DC	208332	S800-SOR250	2CCS800900R0211		0.15	1
220...400VAC/DC	208356	S800-SOR400	2CCS800900R0231		0.15	1

Under voltage releases

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
24...36VAC/DC	208363	S800-UVR36	2CCS800900R0241		0.15	1
48...60VAC/DC	208370	S800-UVR60	2CCS800900R0251		0.15	1
110...130VAC/DC	208387	S800-UVR130	2CCS800900R0261		0.15	1
220...250VAC/DC	208394	S800-UVR250	2CCS800900R0271		0.15	1

S800-RD

S800-RHE-H

S800-RHE-M

S800-RHE-S

Rotary drive adapter for 3-4-pole High Performance MCB

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Rotary Drive	208172	S800-RD	2CCS800900R0041		0.080	1

Anthracite/Standard rotary handle for door assembly

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Anthracite rotary handle	625771	S800-RHE-H	1SDA060150R1		0.21	1

Red/Emergency rotary handle for door assembly

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Red rotary handle	625764	S800-RHE-EM	1SDA060151R1		0.21	1

Axial extension of rotary drive – rotary handle 500mm

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Axial extension 500mm for RHE	626242	S800-RHE-S	1SDA060179R1		0.19	1

IP54 protection for rotary handle

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
IP54 kit	626259	S800-RHE-IP54	1SDA060180R1		0.075	1

Accessories for

MCBs S800 and RCD-blocks DDA 800 series

S800-IP9

S800-PLL

S800U-PLL

S800N-CT

S800-RT

Intermediate piece

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Intermediate Piece 9mm	208202	S800-IP9	2CCS800900R0031		0.011	1

Padlock device

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Padlock Lever Lock with 4mm hasp	208189	S800-PLL	2CCS800900R0051		0.0015	1

UL locking device

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
UL locking device	215057	S800U-PLL	2CCS800017R0001		0.03	2

Interchangeable adapter kit

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Cage Terminal	212049	S800N-CT2125	2CCS800900R0181		0.03	2
Cage Terminal	212032	S800N-CT4125	2CCS800900R0151		0.06	4

Interchangeable adapter kit

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Ring Terminal cable connection	208240	S800-RT2125	2CCS800900R0161		0.03	2
Ring Terminal cable connection	208219	S800-RT4125	2CCS800900R0131		0.06	4

Auxiliary elements for
MCBs S500 and RCD-blocks DDA 800 series

S803-BB

S803-BBPC

S800-BBIC

S802-LINK50

S802-LINK120

Busbar

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Busbar 250 A	208288	S803-BB250	2CCS800900R0071		1.5	1

Supply block

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Busbar Power Connector 120 mm²	208301	S803-BBPC120	2CCS800900R0101		0.46	1

Contact protection cap

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Busbar Isolation Cap	208967	S800-BBIC	2CCS800900R0081		0.02	12

End cap

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
End cap	208295	S800-END	2CCS800900R0091		0.04	10

S 800-ILS

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Identification Labeling System 1 68x6x11.5 mm	208271	S800-ILS	2CCS800900R0121		0.011	1

Pole connectors

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Pole connector 50A	211295	S802-LINK50	2CCS800900R0411		0,03	10
Pole connector 125A	419103	S802-LINK125	2CCS800900R0562		0,015	2

Auxiliary elements for

MCBs S500 and RCD-blocks DDA 800 series

S500-H

S500-S

S500-RSU

DDA 800-RT

Auxiliary elements and accessories for S500

Auxiliary contact

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
1 NO and 1 NC contact	0305506	S500-H11	2CCF008681R0001		0.06	1
2 NO contacts	0305513	S500-H20	2CCF008682R0001		0.06	1

Signal contact

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
1 NO and 1 NC contact	0305537	S500-S11	2CCF008684R0001		0.06	1
2 NO contacts	0305544	S500-S20	2CCF008685R0001		0.06	1

Remote switch unit

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Remote switch unit	1407780	S500-RSU-H	2CCF017987R0001		0.3	1

Auxiliary elements and accessories for DDA 800 RCD-blocks

Description	Bbn 7612271	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Ring tongue terminal kit	987406	DDA 800-RT	2CSB100913R0001		0.01	1/12

Plug-in systems

UNIFIX rapid wiring system

UNIFIX – Rapid Wiring System
UNIFIX makes bench pre-cabling possible, with installation in the switchboard only carried out at a later time, without any limit to the types or combination of apparatus you may need to install…and this becomes even easier, thanks to the rigid coupled connectors, standardized for the different types of apparatus.
Unifix H allows modular and moulded-case circuit-breakers up to 250A to be mounted on an apparatus frame, which can be connected directly to the rear busbar system. This means many fewer conductors circulating inside the switchboard with considerable advantages in terms of space taken up, connections needed to be checked, and cabling times, with consequent cost savings.
Unifix L means traditional wire cabling on the supply side of the circuit-breakers can be replaced. It is thanks to the characteristics of its connections that cabling can be done rapidly and without any possibility of error, obtaining a more essential switchboard without conductors and cabling ducts around. Flexibility is its strong point: several independent circuits can be realized on the same DIN rail, and circuit-breakers of different types, with different polarity and characteristics can be mounted.

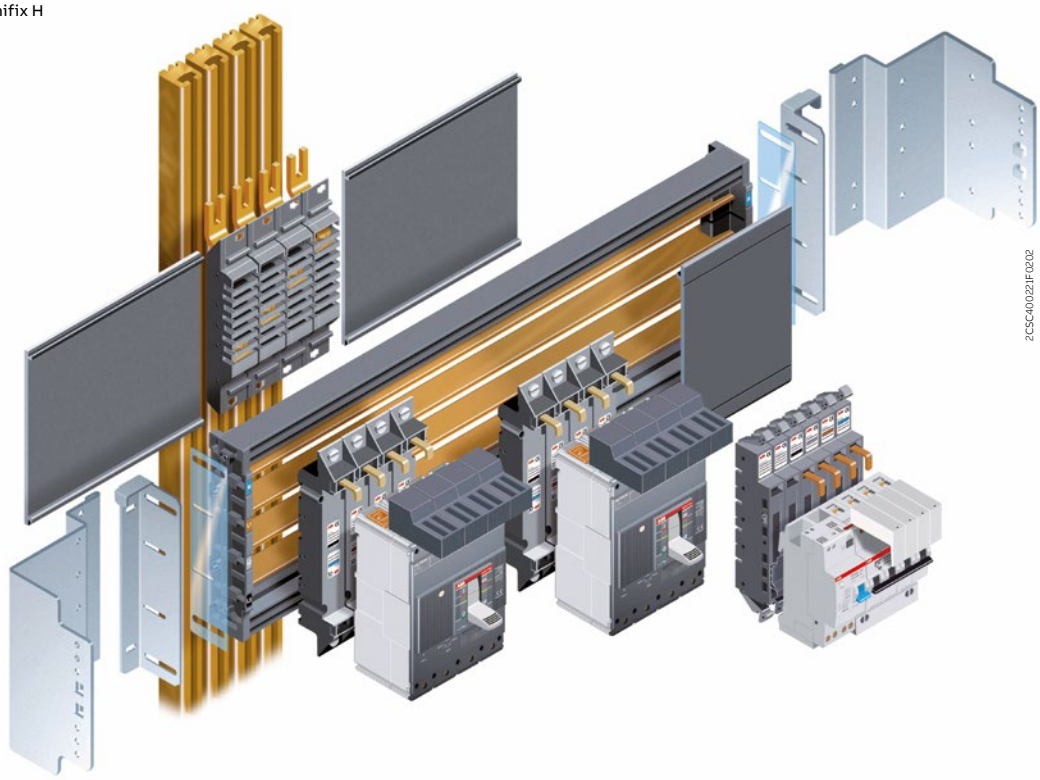
Customer Benefits with UNIFIX
Wiring Time The use of Unifix reduces considerably wiring time.
Use of Standard Devices Unifix can be applied to all standard versions of ABB Sace modular devices, Tmax T1 - T2 - T3 - XT1 - XT3 moulded-case circuit breakers
Flexible Unifix has variable modular capacity, it is possible to place both circuit-breakers with different polarities side by side on the same line and auxiliary elements.
Reduce Space Space taken up by Unifix is extremely low

For order codes and technical details please check the Distribution Switchgear Catalogue 1STC008001D0203, pages 3/19-20, 4/18-19-20, 5/50-51-52

Plug-in systems

UNIFIX rapid wiring system

Unifix H



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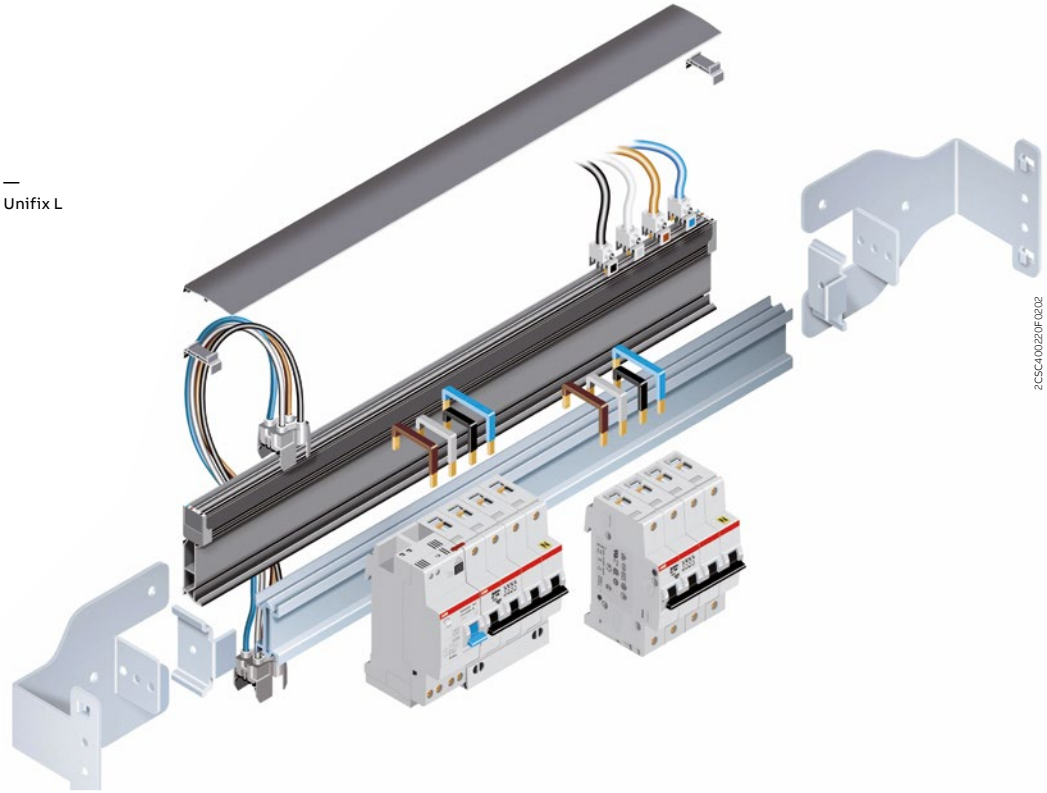
Unifix L



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Accessories for MCBs and RCDs

Auxiliary switch S700 + H2WR

Auxiliary switch S700 + H2WR	
2 Switch-over contacts	
Conv. thermal current Ith	10 A
Min. operating voltage	24 V AC/DC
Min. switching power	5 VA ①
Short-circuit withstand capability	1000 A @ 230 V AC with S 200 K6 back-up
Isolation coordination	
– overvoltage category	III
– pollution degree	2
– surge withstand capability	4 kV (1.2/50 µs)
Wiring	up to 2 x 1.5 mm²
Contact reliability under	5 g, 20 cycles 5…150…5 Hz @ 24 V AC/DC, 5 mA –> contact

① The min. operating current under operating conditions acc. to EN 60204-1 and EN 60439-1 (indoor installation): 24 V AC/DC, 5 mA (AC 12, DC 12)

AC 14	Ue	400 V	230V
	Ie	2 A	6 A
DC 12	Ue	220 V	110 V
	Ie	1 A	1.5 A
DC 13	Ue	60 V	24 V
	Ie	2 A	4 A

Electrical installation solutions for buildings
Protection and safety

Index

OVR Type 1 SPDs, single pole 5/16
OVR Type 1 SPDs TNC 230 V networks 5/17
OVR Type 1 SPDs TNS/TT 230 V 1Ph+N networks 5/20
OVR Type 1 SPDs TNS/TT 230 V 3Ph+N networks 5/22
OVR Type 1 SPDs Single pole neutral 5/24
OVR Type 1+2 SPDs Single pole 5/26
OVR Type 1+2 SPDs TNC 230 and 400 V networks 5/30
OVR Type 1+2 SPDs TNS/TT 230 1Ph+N and 3Ph+N networks 5/32
OVR Type 1+2 SPDs TNS/TT 400 V 1Ph+N and 3Ph+N networks 5/34
OVR Type 2 SPDs for 57 V networks 5/36
OVR Type 2 SPDs non pluggable 5/38
OVR Type 2 pluggable QuickSafe® SPDs Single pole 230 V networks 5/40
OVR Type 2 pluggable QuickSafe® SPDs Single pole 400 V networks 5/46
OVR Type 2 pluggable QuickSafe® SPDs TNC 230 V networks 5/48
OVR Type 2 SPDs TNC 230 V networks, pluggable and non-pluggable versions 5/49
OVR Type 2 pluggable QuickSafe® SPDs TNC 400 V networks 5/50
OVR Type 2 pluggable QuickSafe® SPDs TNS 230 V networks 5/52
OVR Type 2 pluggable QuickSafe® SPDs TNS 400 V networks 5/54
OVR Type 2 pluggable QuickSafe® SPDs TNS/TT 230 and 400 V 1Ph+N networks 5/56
OVR Type 2 pluggable QuickSafe® SPDs TNS/TT 230 and 400 V 3Ph+N networks 5/58
OVR Type 2 pluggable QuickSafe® SPDs TNS/TT 230 and 400 V 3Ph+N networks 5/60
OVR Type T2-T3 pluggable QuickSafe® SPDs Single pole - 230 V and 440 V networks 5/62
OVR Type T2-T3 pluggable QuickSafe® SPDs TNC - 230 V 3Ph + PEN networks 5/64
OVR Type T2-T3 QuickSafe® SPDs TNS/TT - 230 V 1Ph+N networks 5/66
OVR Type T2-T3 QuickSafe® SPDs TT - 230 V and 400 V 3Ph+N networks 5/68
OVR Type T2-T3 StreetLight SPDs TT/TN - 230 V 1Ph+N networks 5/70
OVR Plus - Autoprotected SPDs TNS/TT 230 V networks 5/72
OVR PV SPDs Photovoltaic networks 5/74
OVR WT SPDs - Wind turbine networks 5/76
Accessories for OVR 5/78
OVR SPDs – UL Version 5/83
OVR SPDs for Power Protection (AC) – UL Version 5/84
OVR Type 2 SPDs - Single pole 5/86
OVR Type 2 SPDs - Single phase networks 5/87
OVR Type 2 SPDs - Delta networks 5/92
OVR Type 2 SPDs - Split phase networks 5/94
OVR Type 2 SPDs - Grounded Wye networks 5/95
OVRHSP/OVRHSR Facility Wide Protection – 4,000A and below 5/102
OVRHTE Sub and Mid-Level Distribution – 1,000A and below 5/104
OVRHT3B Sub Distribution and Panelboard – 400A and below 5/106
OVRHS3U Sub Distribution and Panelboard – 400A and below 5/108
OVRHT3C Sub Distribution and Panelboard – 400A and below 5/110
OVRHLD Equipment Level Protection – 100A and below 5/112
OVR SL Series 5/116
OVR SL X Series 5/118
OVR D Series 5/120
OVR E Series 5/122
OVR H Series 5/124
OVR SL 3-Wire Series 5/126
OVR SL LED 4-20 mA Series 5/128
OVR Q Series 5/130
OVR RTD Series 5/132
OVR KT & KE Series 5/134
OVR TN/RJ11 & ISDN/RJ45 Series 5/136
OVR TN, TNQ & SL TN Series 5/138
OVR Cat-5 & Cat-6 Series 5/140
OVR RS485, RS485Q & SL RS485 Series 5/142
OVR RF Series 5/144
OVR CCTV Series 5/146
OVR 240-16A 5/148
OVR TV Series 5/150
Protector accessories 5/154
E 90 fuse switch disconnectors 5/157
E 90h fuseholders 5/159
E 90 PV fuse disconnectors 5/160
E 90 PV 1500 fuse holder 5/161
E 90 50/125 fuse disconnectors 5/162
E 90 CC fuseholders 5/163
E 90 J fuse fuseholders 5/164
Cylindrical fuses E 9F 5/165
ILTS-E D0 Fuse-switch-disconnectors 5/174
ISS D0 Fuse carriers 5/175
Busbars and accessories for ILTS-E and ISS 5/176
Electronic Protection Devices for use behind 24 V DC Switch Mode Power Supplies 5/178
SQZ3 phase and sequence relay 5/181
RH/RL maximum and minimum current/voltage relays 5/182
E 236 undervoltage monitoring relays 5/183
H+Line products 5/188
ISOLTESTER-DIG insulation monitoring devices 5/190
SELVTESTER insulation monitoring devices for insulated networks at 24 V AC/DC 5/192
QSD remote signalling panel 5/193
TI switchboards and devices for medical locations 5/194
QSO selection table 5/195
QSO switchboards and components for medical locations 5/196
ISL industrial insulation monitoring devices 5/199

Protection and safety

Overvoltage protection overview – IEC/EN standards

International safety standards establish a requirement for assessing protection against transient overvoltages (surges) as an integral part of satisfactory electrical system design. A summary is provided within IEC 60364 standard for electrical installations of buildings regarding the requirements of surge protective devices (SPDs)

IEC 60364 assesses the need to protect AC power circuits, although cross-references transient overvoltage or surge protection on other metallic services including data, signal and telecommunications lines, as defined by IEC/EN 62305 Standard for Lightning Protection.

It covers transient overvoltages of atmospheric origin (lightning) or as a result of electrical switching, through two sections:

- **Section 443** which defines the criteria for risk assessment to use SPDs, considering factors such as levels of consequential loss due to overvoltages and the equipment rated impulse voltage
- **Section 534** which outlines the parameters for selection and installation of SPDs as appropriate, to ensure satisfactory protection of the structure itself and its contents, its personnel and electronic systems and electrical equipment

Risk assessment

Section 443 establishes that SPD are required where the consequences caused by overvoltage leads to:

(a) results in serious injury to, or loss of, human life, (e.g. hospitals, care homes, home dialysis equipment)

(b) results in interruption of public services and/or damage to cultural heritage, (e.g. power stations, data centres, heritage status buildings like museums, castles)

(c) results in interruption of commercial or industrial activity (e.g. banks, hotels, supermarkets, industrial plants, farms)

(d) affects a large number of collocated individuals (e.g. offices, universities, schools, residential tower blocks)

For all other cases than above a simplified risk assessment to determine the Calculated Risk Level CRL shall be conducted.

Note that a comprehensive risk assessment method to (IEC/EN 62305-2) must be used for high risk installations such as nuclear or chemical sites where the consequences of transient overvoltages could lead to explosions, harmful chemical or radioactive emissions thus affecting the environment.

In all cases, IEC/ EN 62305 which would require installation of equipotential bonding SPDs where a structural lightning protection system (LPS) is installed, or there is a risk of a direct lightning stroke to a service line.

Selection & installation of SPDs

Section 534 provides guidance on the selection and installation of SPDs to limit transient overvoltages.

The selection of an SPD is dependent on its location within the installation, the equipment rated impulse voltage at this location, and the expected transient overvoltage energy that the SPD is required to limit. The largest transient overvoltages are expected at the service entrance, i.e. at the origin of the installation.

Additionally transient overvoltages can be anticipated at sensitive and critical equipment as a result of electrical switching within the installation. SPDs should therefore be installed as appropriate at main distribution board level, subdistribution board level to protect sensitive equipment, and locally to protect critical equipment.
Where multiple SPDs are installed on the same conductor, these should coordinate with each other to ensure protection levels are not compromised within the system.

Where SPDs are required they must tested in line with SPD product standards IEC/EN 61643 series. Power SPDs are classified to IEC/EN 61643-11 by Class /Type respectfully. High energy Class I/Type 1 tested SPDs (Type 1) must be installed at the service entrance where a structural LPS is installed or there is an overhead metallic service line at risk from a direct lightning stroke.

Class I tested/Type I SPDs however do not provide protection to electronic systems. Transient overvoltage SPDs (Class II tested/Type 2 and Class III tested/Type 3) are required downstream to protect sensitive and critical equipment. These SPDs protect against the transient overvoltages caused by indirect lightning (inductive or resistive coupling) and the electrical switching of large inductive loads.
Combined Class/Type SPDs are classified with more than one Class test/Type, e.g. Class I+II tested SPD to IEC or Type 2+3 to EN. Such SPDs can provide both lightning current with overvoltage protection in addition to protection between all conductor combinations (or modes of protection) within a single unit. Combined Type SPDs provide high surge current handling combined with better overvoltage protection levels (Up) a performance parameter of an SPD.

The most important characteristic for an SPD is its voltage protection level (Up) and not its energy withstand (e.g. I_{imp}). SPDs with lower voltage protection levels (or let-through voltage) offer much better protection to sensitive and critical electronic systems, including:

- Minimal equipment stress (i.e. keeping circuit degradation to a minimum)
- Reduced risk from additive inductive voltages on the SPDs connecting leads
- Reduced risk from downstream voltage oscillations

Protection and safety

IEC/ EN 61643 SPD standard series focus

ABB SPDs meet the performance parameters defined in International & European SPD product standards:

- IEC/**EN 61643-11** Surge protective devices connected to low-voltage power systems - requirements and tests.
- IEC/**EN 61643-21** Surge protective devices connected to telecommunications and signalling networks - performance requirements and testing methods.

These parts of the IEC/EN 61643 standard apply for all SPDs providing protection against lightning (direct and indirect) and transient overvoltages.

IEC/EN 61643-11 covers AC mains protection, for 50/60 Hz AC power circuits and equipment rated up to 1000 VRMS AC and 1500 V DC.

IEC/EN 61643-21 covers telecommunications and signalling networks with nominal system voltages up to 1000 VRMS AC and 1500 V DC.

Within these parts to the standard is defined:

- The electrical requirements for SPDs, including voltage protection and current limiting levels, status indication and minimum test performance.
- The mechanical requirements for SPDs, to ensure an appropriate quality of connection, and mechanical stability when mounted.
- The safety performance of the SPD, including its mechanical strength and its ability to withstand heat, overstress and insulation resistance.

The standard establishes the importance of testing SPDs to determine their electrical, mechanical and safety performance.

Electrical tests include impulse durability, current limiting, and transmission tests. Mechanical and safety tests establish levels of protection against direct contact, water, impact, the SPD installed environment etc.

For voltage and current limiting performance, an SPD is tested according to its Type (or Class to IEC), which defines the level of lightning current or transient overvoltage it is expected to limit/divert away from sensitive equipment.

Tests include Class I impulse current (10/350 waveform), Class I & II nominal discharge current (8/20 waveform), Class I & II voltage impulse and Class III combination wave tests for SPDs installed on power lines, and Class D (high energy), C (fast rate of rise), and B (slow rate of rise) for those on data, signal and telecoms lines.

SPDs are tested with the connections or terminations following manufacturer's instructions, as per the expected SPD installation.

Measurements are taken at the connectors/terminals. Three samples of an SPD are tested and all must pass before approval is granted.

SPDs which have been tested to IEC/EN 61643 should be suitably labelled and marked, to include the relevant performance data for their application.

SPD application and installation standards Within IEC/EN 61643 there are two further standards which provide recommendations on the selection and installation of SPDs.

These are:

- IEC/EN 61643-12 Surge protective devices connected to low-voltage power systems - selection and application principles.
- IEC/EN 61643-22 Surge protective devices connected to telecommunications and signalling networks - selection and application principles.

These application standards should be used with IEC/EN 61643-11 and IEC/EN 61643-21 respectively. Each application standard provides information and guidance on:

- Risk assessment and evaluating the need for SPDs in low-voltage systems, with reference to IEC/EN 62305. Lightning Protection standard and IEC 60364 Electrical installations for buildings.
- Important characteristics of an SPD (e.g. voltage protection level) in conjunction with the protection needs of equipment (i.e. its rated impulse voltage or impulse immunity – voltage).
- Selection of SPDs considering the entire installation environment, including their classification, function and performance.
- Coordination of SPDs throughout the installation (for power and data lines) and between SPDs and RCDs or overcurrent protective devices.

Through following the guidance in these documents, appropriate specification of SPDs to meet the installation requirement can be achieved.

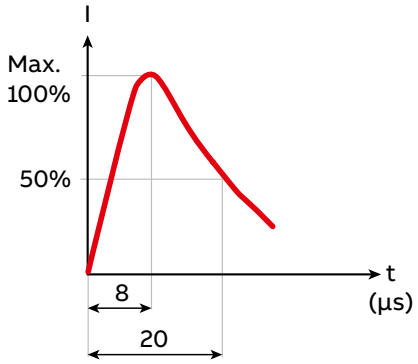
ABB also provide SPDs tested to UL standards - a summary of the differences in between IEC SPD test standards and UL SPD test standards terminology follows.

IEC and UL SPD test standards–terminology

IEC 61643-11 Terminology	Description	UL 1449 Terminology
I_{imp}	The maximum surge current rating for an SPD when subjected to a 10 x 350µs wave shape	No equivalent
I_{max}	The maximum surge current rating for an SPD when subjected to an 8 x 20µs wave shape	Single surge current rating
I_n	Nominal surge discharge current 8 x 20µs wave shape	I_N
I_{SCCR}	Short Circuit Current Rating (withstand)	SCCR
U_P	Voltage Protection Level, let thru voltage level of the SPD when subjected to a test surge	VPR
U_C	Maximum Continuous Operational Voltage SPD can be exposed to without failure.	MCOV
U_N	Nominal Operational Voltage, or application voltage	Operational voltage

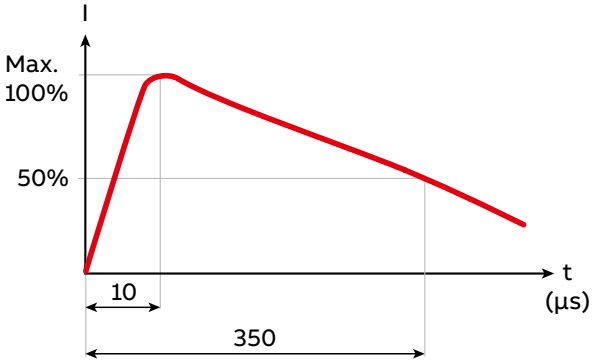
8 x 20µs wave shape

- Used for IEC Class II test (EN Type 2)
- I_{max} is the surge current value designation for IEC
- I_n is also tested using this wave shape
- UL single surge current rating

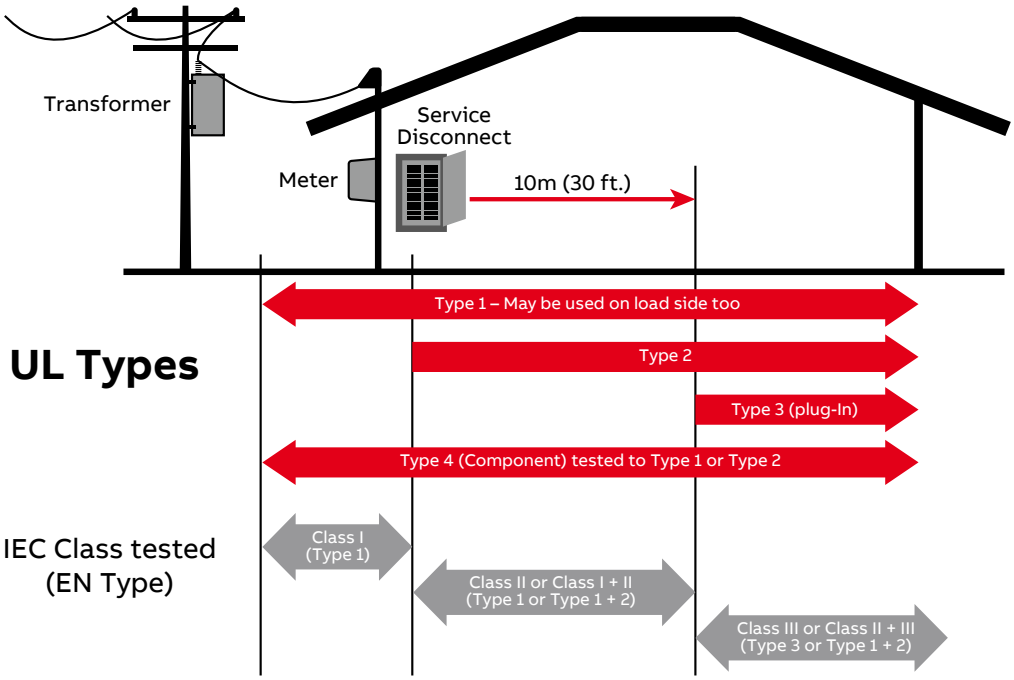


10 x 350µs wave shape (IEC only)

- Used for IEC 61643-11/ Class I tested SPD or EN 61643-11 Type 1
- SPD must survive 5 impulses increasing in magnitude to max I_{imp}
- I_{imp} is then the surge current value designation if SPD passes
- There is no equivalent test in the UL standard



UL Types vs IEC Class tested SPDs and Locations

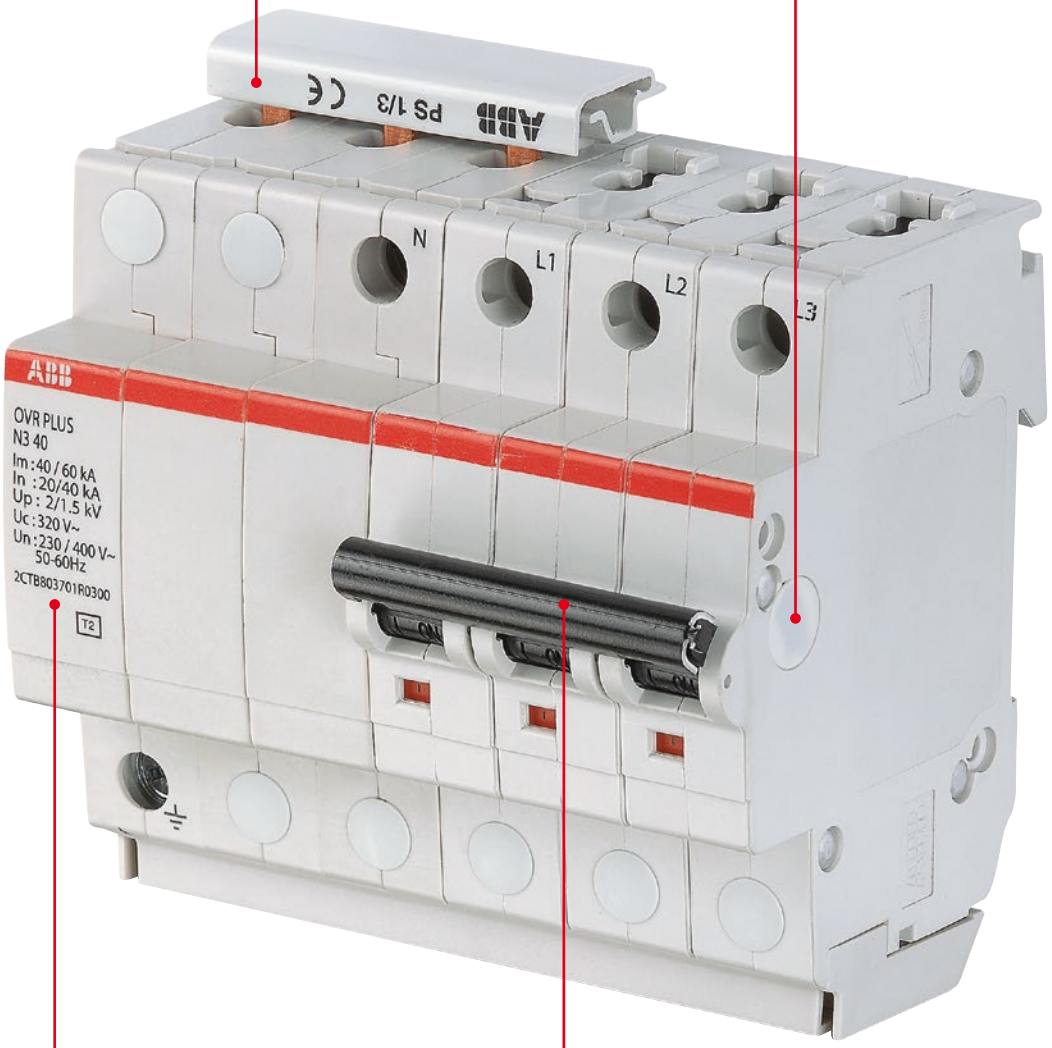


OVR Plus, OVR T1-T2, T2 and T2-T3 ranges. The details make the difference

A complete range for your surge protection

Standard pro M terminals design for a better coordination with the complete ABB System pro M compact® modular range.

Possibility to add an auxiliary contact on the OVR Plus range with the standard ABB option S2C-H6R



Clear information on the front of the product indicating the technical characteristics of the OVR.

The MCB toggle indicates the status of the OVR PLUS range.
Toggle on: OVR PLUS is active Toggle off: You can switch on again. The OVR PLUS has proteted your installation and is still active
Toggle off: You cannot switch on again. You have to change the OVR PLUS.

The bidirectional cylindrical terminal block of the **OVR Plus** range allows a complete coordination with the ABB range with considerable time savings in wiring operations. All the devices allow connection through busbars, both from above and from below.

The pluggable feature of ABB **OVR T1-T2, T2 and T2-T3** surge protective devices (SPDs) facilitates maintenance. Should one or more worn cartridges need to be replaced, the electrical circuit does not have to be isolated nor do the wires have to be removed.

The end-of-life indicator of the SPD signals the status of the device.
A mechanical indicator turns from green to red when the SPD reaches the end of its life, when the end-of-life indicator is fitted.

The toggle of the miniature circuit breaker indicates the status of the **OVR Plus** range.
If the toggle is on, the surge protection is active. If the toggle is off and can be switched on again, the device has protected your equipment. If the toggle is off and cannot be swicthed on. The device must be changed.

The configuration allows to use the **OVR Plus** range on TT and TNS network in Phase + Neutral and 3 Phases + Neutral with a high surge capacity up to 40kA Imax.

Surge and lightning protection solutions

Coordination and wiring principals

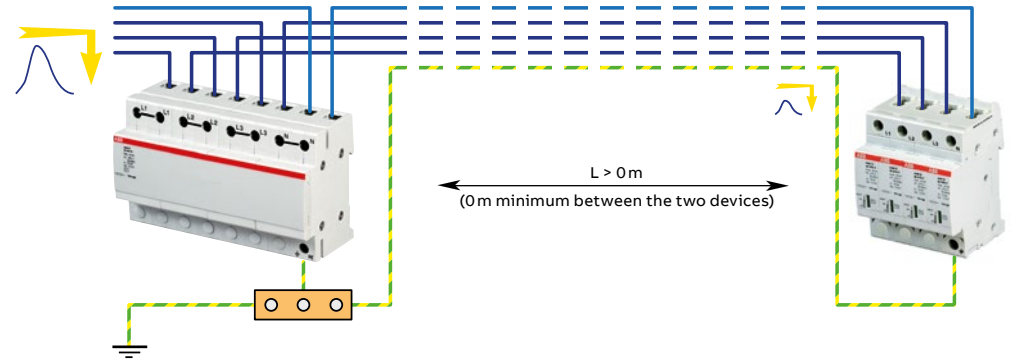
The SPD installed at the line entrance of an installation may not ensure an effective protection to the whole system. As a matter of fact, the selection of the voltage protection level (Up) of SPDs depends on many parameters: Type of equipment to be protected, the length of the connections to the SPDs, the length in between the SPDs and the equipment to be protected.

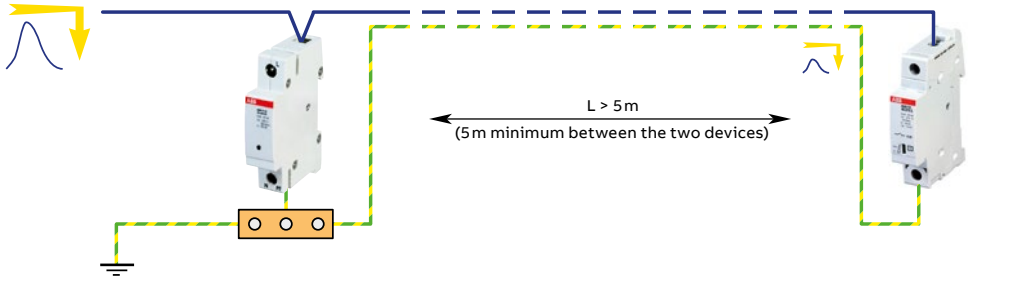
NOTE:
The first SPD is diverting most of the surge current to the ground, and the second SPD will ensure a good protection level to the equipment.

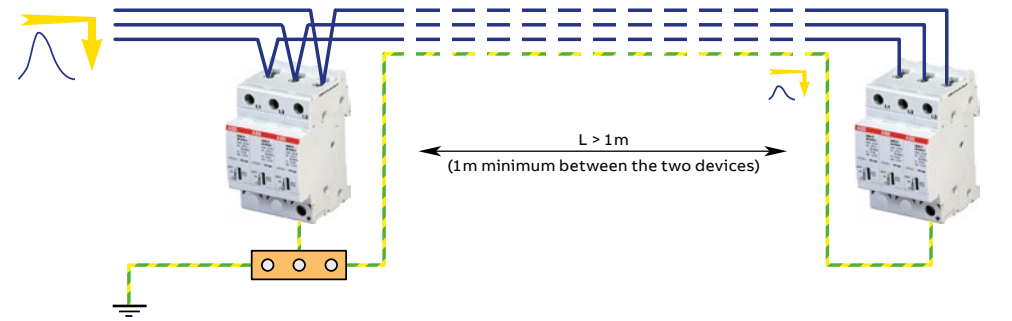
It is what we call the stepping protection.

Coordination required if :
The protection level (Up) of the SPDs is not low enough to protect the equipment.
If the distance in between the SPDs and the equipment is >10 m.

Coordination between Type 1, Type 1+2, Type 2 (with and without Safety System) and Type 2+3 surge protective device







Type of Surge Protective Devices	Miniature circuit breaker maximum ratings * curve B or C Prospective short circuit current at SPD location (IP)				Fuses maximum ratings* (gG)			Moulded Case Circuit Breaker
	IP ≤ 6 kA	IP ≤ 10 kA	IP ≤ 15 kA	IP ≤ 50 kA	IP ≤ 7 kA	IP ≤ 50 kA	IP ≤ 100 kA	IP<= 50kA
Type 1								
OVR T1 25 kA non-pluggable Iimp 25 kA; Uc 255, 440 V		-	-	-	125 A fuse	125 A fuse	-	-
OVR T1 25 kA non-pluggable Iimp = 25 kA/Ifi = 7 kA; Uc 255 V		-	-	-	125 A fuse	-	-	-
Type 1+2								
OVR T1+2 non-pluggable Iimp 25 kA/Ifi = 15 kA; Uc 255 V		-	-	-	125 A fuse	125 A fuse (IP < 15 kA)	-	-
OVR T1-T2 pluggable Safety Reserve QuickSafe® Iimp 12.5 kA; Uc 275, 440V		-	-	-	160 A fuse	160 A fuse	160 A fuse	XT4S 250A Ekip LSI (I≤3In)
Type 2								
Type 2 pluggable Imax 120 kA; Uc 440V	S 200 M - 50	S 200 M - 50	S 200 P - 50	S 800 S - 50	50 A fuse	50 A fuse	-	-
OVR T2 pluggable Safety Reserve QuickSafe® Imax 40 and 80 kA; Uc 275, 440 V	S 200 M - 63	S 200 M - 63	S 200 P - 63	S 800 S - 125	160 A fuse	160 A fuse	160 A fuse	XT4S 250A Ekip LSI (I≤3In)
Type 2 pluggable QuickSafe® Imax 40 kA; Uc 275, 350, 440, 600 V	S 200 M - 63	S 200 M - 63	S 200 P - 63	S 800 S - 125	125 A fuse	125 A fuse	125 A fuse	XT4S 250A Ekip LSI (I≤3In)
OVR T2 non-pluggable Imax 20 and 40 kA Uc 275	S 200 M - 50	S 200 M - 50	S 200 P - 50	S 800 S - 50	50 A fuse	50 A fuse	-	-
Type 2+3								
OVR T2-T3 pluggable QuickSafe® Imax 20 kA; Uc 275, 350, 440, 600 V	S 200 M - 63	S 200 M - 63	S 200 P - 63	S 800 S - 125	125 A fuse	125 A fuse	125 A fuse	XT4S 250A Ekip LSI (I≤3In)

* Maximum ratings, must be in accordance with the installation to follow coordination rules with main or upstream short circuit protection(s).

Service entrance SPDs	PE connection cable size
Type 1	16 mm²
Type 1+2	16 mm²
Type 2	4 mm²
Type 2+3	4 mm²

Backup disconnection

Type 2 QuickSafe® Characteristics	Prospective short circuit current at SPD location (Ip)	Circuit breaker* (curve B or C)	Fuses* (gG)
Maximum rating			
In: 5, 20, 30 kA Uc: 275, 350, 440, 600 V	0.625 kA < Ip < 100 kA	S800S B or C - 125 A**	E90/125 125 A fuse (without Safety Reserve System) 160 A fuse (with Safety Reserve System)

*: The backup disconnection of the SPD shall always be coordinated with the circuit breakers used in the installation.
**: up to Ip ≤ 50kA

Protection and safety

OVR surge protective devices selection tables

Protected lines	Impulse current	Max. discharge current	Nominal current	Follow current interrupting rating	Voltage protection level	Nominal voltage	Max. cont. operating voltage	Type	Order code
	Iimp 10/350	Imax 8/20	In	Ifi	Up	Un	Uc		
	kA	kA	kA	kA	kV	V	V		
Type 1 OVR non-pluggable									
Uc 255 V									
1	25	60	25	50	2.5	230	255	OVR T1 25-255	2CTB815101R0100
2	25	60	25	50	2.5	230/400	255	OVR T1 2L 25-255	2CTB815101R1200
2	25	60	25	50	2.5	230/400	255	OVR T1 2L 25-255 TS	2CTB815101R1100
3	25	60	25	50	2.5	230/400	255	OVR T1 3L 25-255	2CTB815101R1300
3	25	60	25	50	2.5	230/400	255	OVR T1 3L 25-255 TS	2CTB815101R0600
4	25	60	25	50	2.5	230/400	255	OVR T1 4L 25-255	2CTB815101R1400
4	25	60	25	50	2.5	230/400	255	OVR T1 4L 25-255 TS	2CTB815101R0800
1+1	25	60	25	50	2.5	230	255	OVR T1 1N 25-255	2CTB815101R1500
1+1	25	60	25	50	2.5	230	255	OVR T1 1N 25-255 TS	2CTB815101R1000
3+1	25	60	25	50	2.5	230/400	255	OVR T1 3N 25-255	2CTB815101R1600
3+1	25	60	25	50	2.5	230/400	255	OVR T1 3N 25-255 TS	2CTB815101R0700
1	25	60	25	7	2.5	230	255	OVR T1 25-255-7	2CTB815101R8700
3+1	25	60	25	7	2.5	230/400	255	OVR T1 3N 25-255-7	2CTB815101R8800
Uc 440 V									
1	25	60	25	50	2.5	400/690	440	OVR T1 25-440-50	2CTB815101R9300
Neutral									
1	25	60	25	0.1	4	400	690	OVR T1 25 N	2CTB815101R9700
1	50	100	50	0.1	1.5	230	255	OVR T1 50 N	2CTB815101R0400
1	100	100	25	0.1	2	230	255	OVR T1 100 N	2CTB815101R0500
Type T1-T2 OVR pluggable and non-pluggable									
Uc 255-275 V									
1	25	60	25	15	1.5	230	255	OVR T1+2 25-255 TS	2CTB815101R0300
1+1	25	60	25	15	1.5	230	255	OVR T1+2 1N 25-255 TS	2CTB815101R4400
3	25	60	25	15	1.5	230/400	255	OVR T1+2 3L 25-255 TS	2CTB815101R4300
3+1	25	60	25	15	1.5	230/400	255	OVR T1+2 3N 25-255 TS	2CTB815101R4500
4	25	60	25	15	1.5	230/400	255	OVR T1+2 4L 25-255 TS	2CTB815101R4200
1	12.5	80	20	-	1.4	230	275	OVR T1-T2 12.5-275s P TS QS	2CTB815710R0000
1+1	12.5	80	20	-	1.4	230	275	OVR T1-T2 1N 12.5-275s P TS QS	2CTB815710R0100
3	12.5	80	20	-	1.4	230/400	275	OVR T1-T2 3L 12.5-275s P TS QS	2CTB815710R0600
3+1	12.5	80	20	-	1.4	230/400	275	OVR T1-T2 3N 12.5-275s P TS QS	2CTB815710R0700
4	12.5	80	20	-	1.4	230/400	275	OVR T1-T2 4L 12.5-275s P TS QS	2CTB815710R1100
1	12.5	80	20	-	1.4	230	275	OVR T1-T2 12.5-275s P QS	2CTB815710R1200
1+1	12.5	80	20	-	1.4	230	275	OVR T1-T2 1N 12.5-275s P QS	2CTB815710R1300
3	12.5	80	20	-	1.4	230/400	275	OVR T1-T2 3L 12.5-275s P QS	2CTB815710R1800
3+1	12.5	80	20	-	1.4	230/400	275	OVR T1-T2 3N 12.5-275s P QS	2CTB815710R1900
4	12.5	80	20	-	1.4	230/400	275	OVR T1-T2 4L 12.5-275s P QS	2CTB815710R2300

Protected lines	Impulse current	Max. discharge current	Nominal current	Follow current interrupting rating	Voltage protection level	Nominal voltage	Max. cont. operating voltage	Type	Order code
	Iimp 10/350	Imax 8/20	In	Ifi	Up	Un	Uc		
	kA	kA	kA	kA	kV	V	V		
Uc 440 V									
1	12.5	80	20	-	1.9	400	440	OVR T1-T2 12.5-440s P TS QS	2CTB815710R2900
1+1	12.5	80	20	-	1.9	400	440	OVR T1-T2 1N 12.5-440s P TS QS	2CTB815710R3000
3	12.5	80	20	-	1.9	400/690	440	OVR T1-T2 3L 12.5-440s P TS QS	2CTB815710R3500
3+1	12.5	80	20	-	1.9	400/690	440	OVR T1-T2 3N 12.5-440s P TS QS	2CTB815710R3600
4	12.5	80	20	-	1.9	400/690	440	OVR T1-T2 4L 12.5-440s P TS QS	2CTB815710R4000
1	12.5	80	20	-	1.9	400	440	OVR T1-T2 12.5-440s P QS	2CTB815710R4100
1+1	12.5	80	20	-	1.9	400	440	OVR T1-T2 1N 12.5-440s P QS	2CTB815710R4200
3	12.5	80	20	-	1.9	400/690	440	OVR T1-T2 3L 12.5-440s P QS	2CTB815710R4700
3+1	12.5	80	20	-	1.9	400/690	440	OVR T1-T2 3N 12.5-440s P QS	2CTB815710R4800
4	12.5	80	20	-	1.9	400/690	440	OVR T1-T2 4L 12.5-440s P QS	2CTB815710R5200
Neutral									
1	50	100	50	0.1	1.4	230	275	OVR T1-T2 N 50-275s P QS	2CTB815710R5300
1	50	100	50	0.1	1.9	400	440	OVR T1-T2 N 50-440s P QS	2CTB815710R5300
Cartridges									
1	12.5	80	20	-	1.4	230	275	OVR T1-T2 12.5-275s C QS	2CTB815710R2600
1	12.5	80	20	-	1.9	400	440	OVR T1-T2 12.5-440s C QS	2CTB815710R5500
1	50	100	50	-	1.4	230	275	OVR T1-T2 N 50-275s C QS	2CTB815710R2700
1	50	100	50	-	1.9	400	440	OVR T1-T2 N 50-440s C QS	2CTB815710R5600
Type 2 OVR non-pluggable									
Uc 275 V									
1	–	20	5	-	1.0	230	275	OVR T2 20-275	2CTB804200R0100
1	–	40	20	-	1.4	230	275	OVR T2 40-275	2CTB804201R0100
1	–	20	5	-	1.0	230	275	OVR T2 20-275 (x20)	2CTB804200R1100
1	–	40	20	-	1.4	230	275	OVR T2 40-275 (x20)	2CTB804201R1100
Type 2 OVR pluggable									
Uc 75 V									
1	–	20	5	-	0.3	57	75	OVR T2 20-75 P	2CTB803851R2800
1	–	20	5	-	0.3	57	75	OVR T2 20-75 P TS	2CTB803851R2700
2	–	20	5	-	0.3	57	75	OVR T2 2 20-75 P	2CTB803852R1700
2	–	20	5	-	0.3	57	75	OVR T2 2 20-75 P TS	2CTB803852R1600
Uc 275 V									
1	2	40	20	-	1.25	230	275	OVR T2 40-275 P TS QS	2CTB803871R1700
1+1	2	40	20	-	1.25	230	275	OVR T2 1N 40-275 P TS QS	2CTB803972R0500
3	2	40	20	-	1.25	230/400	275	OVR T2 3L 40-275 P TS QS	2CTB803873R2500
3+1	2	40	20	-	1.5	230/400	275	OVR T2 3N 40-275 P TS QS	2CTB803973R0500
4	2	40	20	-	1.25	230/400	275	OVR T2 4L 40-275 P TS QS	2CTB803873R5200
1	2	40	20	-	1.25	230	275	OVR T2 40-275 P QS	2CTB803871R2300
1+1	2	40	20	-	1.25	230	275	OVR T2 1N 40-275 P QS	2CTB803972R1100
3	2	40	20	-	1.25	230/400	275	OVR T2 3L 40-275 P QS	2CTB803873R2400
3+1	2	40	20	-	1.5	230/400	275	OVR T2 3N 40-275 P QS	2CTB803973R1100
4	2	40	20	-	1.25	230/400	275	OVR T2 4L 40-275 P QS	2CTB803873R5600
1	2	40	20	-	1.4	230	275	OVR T2 40-275s P TS QS	2CTB815704R0000
1+1	2	40	20	-	1.4	230	275	OVR T2 1N 40-275s P TS QS	2CTB815704R0200
3	2	40	20	-	1.4	230/400	275	OVR T2 3L 40-275s P TS QS	2CTB815704R0600
3+1	2	40	20	-	1.5	230/400	275	OVR T2 3N 40-275s P TS QS	2CTB815704R0800
4	2	40	20	-	1.4	230/400	275	OVR T2 4L 40-275s P TS QS	2CTB815704R1100
1	2	40	20	-	1.4	230	275	OVR T2 40-275s P QS	2CTB815704R1200
1+1	2	40	20	-	1.4	230	275	OVR T2 1N 40-275s P QS	2CTB815704R1400

Protection and safety

OVR surge protective devices selection tables

Protected lines	Impulse current	Max. discharge current	Nominal current	Follow current interrupting rating	Voltage protection level	Nominal voltage	Max. cont. operating voltage	Type	Order code
	Iimp 10/350	Imax 8/20	In	Ifi	Up	Un	Uc		
	kA	kA	kA	kA	kV	V	V		
3	2	40	20	-	1.4	230/400	275	OVR T2 3L 40-275s P QS	2CTB815704R1800
3+1	2	40	20	-	1.5	230/400	275	OVR T2 3N 40-275s P QS	2CTB815704R2000
4	2	40	20	-	1.4	230/400	275	OVR T2 4L 40-275s P QS	2CTB815704R2300
1	6.25	80	20	-	1.4	230	275	OVR T2 80-275s P TS QS	2CTB815708R0000
1+1	6.25	80	20	-	1.4	230	275	OVR T2 1N 80-275s P TS QS	2CTB815708R0200
3	6.25	80	20	-	1.4	230/400	275	OVR T2 3L 80-275s P TS QS	2CTB815708R0600
3+1	6.25	80	30	-	1.8	230/400	275	OVR T2 3N 80-275s P TS QS	2CTB815708R0800
4	6.25	80	20	-	1.4	230/400	275	OVR T2 4L 80-275s P TS QS	2CTB815708R1100
1	6.25	80	20	-	1.4	230	275	OVR T2 80-275s P QS	2CTB815708R1200
1+1	6.25	80	20	-	1.4	230	275	OVR T2 1N 80-275s P QS	2CTB815708R1400
3	6.25	80	20	-	1.4	230/400	275	OVR T2 3L 80-275s P QS	2CTB815708R1800
3+1	6.25	80	30	-	1.8	230/400	275	OVR T2 3N 80-275s P QS	2CTB815708R2000
4	6.25	80	20	-	1.4	230/400	275	OVR T2 4L 80-275s P QS	2CTB815708R2300
Neutral									
1	2	80	30	0.1	1.4	230	275	OVR T2-T3 N 80-275 P QS	2CTB803973R1900
1	6.25	80	30	0.1	1.4	230	275	OVR T2 N 80-275s P QS	2CTB815708R2500
Cartridges									
1	2	80	30	-	1.4	230	275	OVR T2-T3 N 80-275 C QS	2CTB803876R0000
1	2	40	20	-	1.25	230	275	OVR T2 40-275 C QS	2CTB803876R1000
1	6.25	40	20	-	1.4	230	275	OVR T2 40-275s C QS	2CTB815704R2600
1	6.25	80	20	-	1.4	230	275	OVR T2 80-275s C QS	2CTB815708R2600
1	6.25	80	30	-	1.4	230	275	OVR T2 N 80-275s C QS	2CTB815708R2800
Uc 350V									
1	2	40	20	-	1.5	230	350	OVR T2 40-350 P QS	2CTB803881R2300
1	2	40	20	-	1.5	230	350	OVR T2 40-350 P TS QS	2CTB803881R1700
1+1	2	40	20	-	1.7	230	350	OVR T2 1N 40-350 P QS	2CTB803982R1100
1+1	2	40	20	-	1.7	230	350	OVR T2 1N 40-350 P TS QS	2CTB803982R0500
3	2	40	20	-	1.5	230/400	350	OVR T2 3L 40-350 P QS	2CTB803883R2400
3	2	40	20	-	1.5	230/400	350	OVR T2 3L 40-350 P TS QS	2CTB803883R2500
3+1	2	40	20	-	1.7	230/400	350	OVR T2 3N 40-350 P QS	2CTB803983R1100
3+1	2	40	20	-	1.7	230/400	350	OVR T2 3N 40-350 P TS QS	2CTB803983R0500
Neutral									
1	2	80	30	0.1	1.4	230	350	OVR T2 N 80-350 P QS	2CTB803983R1900
Cartridges									
1	2	80	30	0.1	1.4	230	350	OVR T2 N 80-350 C QS	2CTB803886R0000
1	2	40	20	-	1.5	230	350	OVR T2 40-350 C QS	2CTB803886R1000
Uc 440V									
1		60	60	-	2.5	400	440	OVR T2 120-440s P TS	2CTB803951R1300
1	2	40	20	-	1.8	400	440	OVR T2 40-440 P QS	2CTB803871R1200
1	2	40	20	-	1.8	400	440	OVR T2 40-440 P TS QS	2CTB803871R0500
3	2	40	20	-	1.8	400/690	440	OVR T2 3L 40-440 P TS QS	2CTB803873R2700
4	2	40	20	-	1.8	400/690	440	OVR T2 4L 40-440 P QS	2CTB803873R5100
4	2	40	20	-	1.8	400/690	440	OVR T2 4L 40-440 P TS QS	2CTB803873R5300
3+1	2	40	20	-	2.1	400/690	440	OVR T2 3N 40-440 P QS	2CTB803973R1400

Protected lines	Impulse current	Max. discharge current	Nominal current	Follow current interrupting rating	Voltage protection level	Nominal voltage	Max. cont. operating voltage	Type	Order code
	Iimp 10/350	Imax 8/20	In	Ifi	Up	Un	Uc		
	kA	kA	kA	kA	kV	V	V		
3+1	2	40	20	-	2.1	400/690	440	OVR T2 3N 40-440 P TS QS	2CTB803973R1500
3	2	40	20	-	1.8	400/690	440	OVR T2 3L 40-440 P QS	2CTB803873R2800
1	2	40	20	-	1.8	400	440	OVR T2 40-440s P TS QS	2CTB815704R2900
3+1	2	40	20	-	1.8	400/690	440	OVR T2 3N 40-440s P TS QS	2CTB815704R3700
1	2	40	20	-	1.8	400	440	OVR T2 40-440s P QS	2CTB815704R4100
1	6.25	80	20	-	1.8	400	440	OVR T2 80-440s P TS QS	2CTB815708R2900
3	6.25	80	20	-	1.8	400/690	440	OVR T2 3L 80-440s P TS QS	2CTB815708R3500
3+1	6.25	80	20	-	1.8	400/690	440	OVR T2 3N 80-440s P TS QS	2CTB815708R3700
4	6.25	80	20	-	1.8	400/690	440	OVR T2 4L 80-440s P TS QS	2CTB815708R4000
1	6.25	80	20	-	1.8	400	440	OVR T2 80-440s P QS	2CTB815708R4100
3	6.25	80	20	-	1.8	400/690	440	OVR T2 3L 80-440s P QS	2CTB815708R4700
3+1	6.25	80	20	-	1.8	400/690	440	OVR T2 3N 80-440s P QS	2CTB815708R4900
4	6.25	80	20	-	1.8	400/690	440	OVR T2 4L 80-440s P QS	2CTB815708R5200
1+1	2	40	20	-	1.9	400	440	OVR T2 1N 40-440 P TS QS	2CTB803972R1400
Neutral									
1	6.25	80	30	0.1	2	400	440	OVR T2 N 80-440s P QS	2CTB815708R5400
1	2	80	30	0.1	1.4	400	440	OVR T2-T3 N 80-440 P QS	2CTB803973R2000
Cartridges									
1	2	80	20	-	1.8	400	440	OVR T2 40-440 C QS	2CTB803876R0400
1	2	40	20	-	1.8	400	440	OVR T2-T3 40-440s C QS	2CTB815704R5500
1	6.25	80	20	-	1.8	400	440	OVR T2 80-440s C QS	2CTB815708R5500
1	6.25	80	30	-	1.4	400	440	OVR T2-T3 N 80-440 C QS	2CTB803886R0100
1	6.25	80	30	-	2	400	440	OVR T2 N 80-440s C QS	2CTB815708R5700
Uc 600V									
1	2	40	20	-	2.3	400	600	OVR T2 40-600 P TS QS	2CTB803881R0500
3	2	40	20	-	2.3	400/690	600	OVR T2 3L 40-600 P TS QS	2CTB803883R2700
4	2	40	20	-	2.3	400/690	600	OVR T2 4L 40-600 P TS QS	2CTB803883R5300
Cartridges									
1	-	40	20	-	2.3	400	600	OVR T2 40-600 C QS	2CTB803886R0400
Uc 760V									
3	-	40	15	-	2.9	400/690	440	OVR T2 3L 40 400/690 P	2CTB803853R4500
3	-	40	15	-	2.9	400/690	440	OVR T2 3L 40 400/690 P TS	2CTB803853R4600
Cartridges									
1		40	20	-	2.9	400	440	OVR T2 40-400/690 C	2CTB803854R1100

Type T2-T3 OVR Pluggable

Uc 275V									
1	2	20	5	-	0.9	230	275	OVR T2-T3 20-275 P QS	2CTB803871R2400
1	2	20	5	-	0.9	230	275	OVR T2-T3 20-275 P TS QS	2CTB803871R2500
1+1	2	20	5	-	1.4	230	275	OVR T2-T3 1N 20-275 P QS	2CTB803972R1200
1+1	2	20	5	-	1.4	230	275	OVR T2-T3 1N 20-275 P TS QS	2CTB803972R1300
3	2	20	5	-	0.85	230/400	275	OVR T2-T3 3L 20-275 P QS	2CTB803873R3400
3	2	20	5	-	0.85	230/400	275	OVR T2-T3 3L 20-275 P TS QS	2CTB803873R3500
3+1	2	20	5	-	1.4	230/400	275	OVR T2-T3 3N 20-275 P QS	2CTB803973R1200
3+1	2	20	5	-	1.4	230/400	275	OVR T2-T3 3N 20-275 P TS QS	2CTB803973R1600
Neutral									
1	-	80	30	0.1	1.4	230	275	OVR T2-T3 N 80-275 P QS	2CTB803973R1900

Protection and safety

OVR surge protective devices selection tables

Protected lines	Impulse current	Max. discharge current	Nominal current	Follow current interrupting rating	Voltage protection level	Nominal voltage	Max. cont. operating voltage	Type	Order code
	Iimp 10/350	Imax 8/20	In	Ifi	Up	Un	Uc		
	kA	kA	kA	kA	kV	V	V		
Cartridges									
1	-	20	5	-	1.4	230	275	OVR T2 20-275 C QS	2CTB803876R1200
1	-	80	30	-	1.4	230/400	275	OVR T2-T3 N 80-275 C QS	2CTB803876R0000
Uc 440V									
1	2	20	5	-	1.4	400	440	OVR T2-T3 20-440 P QS	2CTB803871R1100
1	2	20	5	-	1.4	400	440	OVR T2-T3 20-440 P TS QS	2CTB803871R1300
3+1	2	20	5	-	1.4	400/690	440	OVR T2-T3 3N 20-440 P QS	2CTB803973R1300
Neutral									
1		80	30	0.1	1.4	400	440	OVR T2-T3 N 80-440 P QS	2CTB803973R2000
Cartridges									
1	-	80	5	-	1.4	400	440	OVR T2 20-440 C QS	2CTB803876R0600
1	-	80	30	-	1.4	400	440	OVR T2-T3 N 80-440 C QS	2CTB803886R0100
Type T2-T3 OVR non-pluggable Street Light									
1+1	-	15	5	-	1.1	230	275	OVR T2-T3 N1 15-275s SL	2CTB804500R0200
1+1	-	15	5	-	1.1	230	275	OVR T2-T3 N1 15-275s SL (x20)	2CTB804500Z1200
Type T2 OVR autoprotected non-pluggable									
1+1	-	20	5	-	1.3	230	275	OVR PLUS N1 20	2CTB803701R0700
1+1	-	40	20	-	1.6	230	275	OVR PLUS N1 40	2CTB803701R0100
3+1	-	20	5	-	1.3	230/400	275	OVR PLUS N3 20	2CTB803701R0400
3+1	-	40	20	-	1.5	230/400	275	OVR PLUS N3 40	2CTB803701R0300
Type 2 OVR pluggable PV applications									
Uc 670 V DC									
1+1 DC	2	40	20	0.3 (Iscpv)	2.8/1.4	600	600	OVR PV T2 40-600 P QS	2CTB804153R2800
1+1 DC	2	40	20	0.3 (Iscpv)	2.8/1.4	600	600	OVR PV T2 40-600 P TS QS	2CTB804153R2900
1+1 DC	2	40	20	0.3 (Iscpv)	2.8/1.4	600	600	OVR PV T2 40-600 P QS BULK (30)	2CTB804153Z2800
1+1 DC	2	40	20	0.3 (Iscpv)	2.8/1.4	600	600	OVR PV T2 40-600 P TS QS BULK (30)	2CTB804153Z2900
Cartridges									
1+1 DC	2	40	20	10.000 (Iscpv)	2.8/1.4	600	600	OVR PV T2 40-600 C QS	2CTB804153R3100
1+1 DC	2	40	20	10.000 (Iscpv)	2.8/1.4	600	600	OVR PV MC C QS	2CTB804153R3500

Protected lines	Impulse current	Max. discharge current	Nominal current	Follow current interrupting rating	Voltage protection level	Nominal voltage	Max. cont. operating voltage	Type	Order code
	Iimp 10/350	Imax 8/20	In	Ifi	Up	Un	Uc		
	kA	kA	kA	kA	kV	V	V		
Uc 1100 V DC									
1+1 DC	-	40	20	10.000 (Iscpv)	3.8	1000	1100	OVR PV T2 40-1000 P QS	2CTB804153R2400
1+1 DC	2	40	20	10.000 (Iscpv)	3.8	1000	1100	OVR PV T2 40-1000 P TS QS	2CTB804153R2500
1+1 DC	2	40	20	10.000 (Iscpv)	3.8	1000	1100	OVR PV T2 40-1000 P QS BULK (30)	2CTB804153Z2400
1+1 DC	2	40	20	10.000 (Iscpv)	3.8	1000	1100	OVR PV T2 40-1000 P TS QS BULK (30)	2CTB804153Z2500
2+2 DC	2	40	20	10.000 (Iscpv)	3.8	1000	1100	OVR PV T2 40-1000 P TS TWIN QS	2CTB804153R2300
2+2 DC	2	40	20	10.000 (Iscpv)	3.8	1000	1100	OVR PV T2 40-1000 P TS TWIN QS BULK (18)	2CTB804153Z2300
Cartridges									
1+1 DC or 2+2DC	2	40	20	10.000 (Iscpv)	3.8	1000	1100	OVR PV T2 40-1000 C QS	2CTB804153R3200
Uc 1500 V DC									
1+1 DC	2	40	10	10.000 (Iscpv)	4.5	1500	1500	OVR PV T2 40-1500 P QS	2CTB804153R2600
1+1 DC	2	40	10	10.000 (Iscpv)	4.5	1500	1500	OVR PV T2 40-1500 P TS QS	2CTB804153R2700
1+1 DC	2	40	10	10.000 (Iscpv)	4.5	1500	1500	OVR PV T2 40-1500 P QS BULK (30)	2CTB804153Z2600
1+1 DC	2	40	10	10.000 (Iscpv)	4.5	1500	1500	OVR PV T2 40-1500 P TS QS BULK (30)	2CTB804153Z2700
Cartridges									
1+1 DC	2	40	10	10.000 (Iscpv)	4.5	1500	1500	OVR PV T2 40-1500 C QS	2CTB804153R3300
Type T1+T2 OVR pluggable WT Applications									
Uc 690 V									
3	2	40	20	-	6	400/690	690	OVR WT 3L 690 P TS	2CTB235402R0000
3	2	40	20	-	6	400/690	690	OVR WT 3L 690 P (enclosed)	2CTB235401R0000
Cartridges									
1	2	40	20	-	6	400	440	OVR T2 40 440 C	2CTB803854R0400

Protection and safety

OVR Type 1 surge protective devices, Single pole

OVR T1

Technical features

Types			OVR T1 25-255-7	OVR T1 25-440-50	OVR T1 25-255
with auxiliary contact (TS)			–	–	–
Technology			Spark-gap	Spark-gap	Spark-gap
Electrical features					
Standard			IEC 61643-1/EN 61643-11		
Type/test class			T1/I	T1/I	T1/I
Protected lines			1	1	1
Types of networks			TNC/TT(L-N)-TNS	TNC-IT(230)-TT(L-N)-TNS	TNC/TT(L-N)-TNS
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system			± 10%	± 10%	± 10%
Nominal voltage Un		[V]	230/400	400/690	230/400
Maximum continuous operating voltage Uc		[V]	255	440	255
Maximum impulse current Iimp (10/350)		[kA]	25	25	25
Maximum impulse current Tot. Iimp (10/350)		[kA]	25	25	25
Nominal discharge current In (8/20)		[kA]	25	25	25
Follow current interrupting rating Ifi		[kA]	7	50	50
Voltage protection level Up at In		[kV]	≤ 2.5	≤ 2.5	≤ 2.5
Voltage protection level Ures at 3 kA		[kV]	≤ 0.9	≤ 1.3	≤ 0.9
TOV (Temporary overvoltage) withstand Ut					
	(L-N: 5 s /N-PE: 200 ms)	[V]	650/–	690/–	450/–
Response time		[ns]	≤ 100	≤ 100	≤ 100
Residual current IPE		[µA]	10	10	10
Short-circuit withstand capability Isccr		[kA]	50	50	50
Backup protection	Fuse (gG)	[A]	≤ 125	≤ 125	≤ 125
	Circuit breaker (B or C curve)	[A]	≤ 125	≤ 125	≤ 125
Pluggable cartridge			No	No	No
Integrated thermal disconnector			–	–	–
State indicator			Yes	No	No
Safety reserve			No	No	No
Auxiliary contact			No	No	No
Installation					
Wire range (L, N, PE)	Solid wire	[mm²]	2.5…50	2.5…50	2.5…50
	Stranded wire	[mm²]	2.5…35	2.5…35	2.5…35
Stripping length (L, N, PE)		[mm]	15	15	15
Tightening torque (L, N, PE)		[Nm]	3.5	3.5	3.5
Auxiliary contact (TS)					
Contact complement			–	–	–
Minimum load			–	–	–
Maximum load			–	–	–
Connection cross-section		[mm²]	–	–	–
Miscellaneous characteristics					
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude		[m]	2000	2000	2000
Degree of protection			IP20	IP20	IP20
Fire resistance according to UL 94			V0	V0	V0
Dimensions	height x width x depth	[mm]	85 x 17.8 x 70.8	90 x 35 x 64.8	90 x 35 x 64.8
		[inches]	3.34 x 0.70 x 2.78	3.54 x 1.38 x 2.55	3.54 x 1.38 x 2.55
Dimensions with auxiliary contact (TS)	height x width x depth	[mm]	–	–	–
		[inches]	–	–	–

Type 1 surge protective devices are designed to discharge high current surges without any destruction of the installation. These surge protective devices are characterized by their capacity to withstand impulse current with 10/350 µs wave form which simulate natural lightning current.
Type 1 SPDs can be installed at the entrance in the main switch board for a global protection of the electrical installation.

Follow current interrupting rating 7 kA

Poles	Impulse current Iimp 10/350	Follow current interrupting rating Ifi	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code		kg
1	25	7	2.5	230	255	514110	OVR T1 25-255-7	2CTB815101R8700		0.16

Follow current interrupting rating 50 kA

Poles	Impulse current Iimp 10/350	Follow current interrupting rating Ifi	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code		kg
1	25	50	2.5	400	440	514929	OVR T1 25-440-50	2CTB815101R9300		0.31
1	25	50	2.5	230	255	510877	OVR T1 25-255	2CTB815101R0100		0.31

Protection and safety

OVR Type 1 surge protective devices TNC 230 V networks

2CSC400021F0013

OVR T1 3L 25-255

Technical features

Types			**OVR T1 3L 25-255**
with auxiliary contact (TS)			**OVR T1 3L 25-255 TS**
Technology			Spark-gap
Electrical features			
Standard			IEC 61643-1/EN 61643-11
Type/test class			T1/I
Protected lines			3
Types of networks			TNC
Type of current			AC 47-63 Hz
Voltage regulation of the system network			± 10%
Nominal voltage Un		[V]	230/400
Maximum continuous operating voltage Uc		[V]	255
Maximum impulse current Iimp (10/350)		[kA]	25
Maximum impulse current Tot. Iimp (10/350)		[kA]	75
Nominal discharge current In (8/20)		[kA]	25
Follow current interrupting rating Ifi		[kA]	50
Voltage protection level Up at In		[kV]	≤ 2.5
Voltage protection level Ures at 3 kA		[kV]	≤ 0.9
TOV (Temporary overvoltage) withstand Ut	(L-N: 5 s /N-PE: 200 ms)	[V]	450/–
Response time		[ns]	≤ 100
Residual current IPE		[µA]	10
Short-circuit withstand capability Isccr		[kA]	50
Backup protection	Fuse (gG)	[A]	≤ 125
	Circuit breaker (B or C curve)	[A]	≤ 125
Pluggable cartridge			No
Integrated thermal disconnector			–
State indicator			TS Option
Safety reserve			No
Auxiliary contact			TS Option
Installation			
Wire range (L, N, PE)	Solid wire	[mm²]	2.5…50
	Stranded wire	[mm²]	2.5…35
Stripping length (L, N, PE)		[mm]	15
Tightening torque (L, N, PE)		[Nm]	3.5
Auxiliary contact (TS)			
Contact complement			1 NO - 1 NC
Minimum load			12 V DC - 10 mA
Maximum load			250 V AC - 1 A
Connection cross-section		[mm²]	1.5
Miscellaneous characteristics			
Stocking and operating temperature		[°C]	-40 to +80
Maximal Altitude		[m]	2000
Degree of protection			IP20
Fire resistance according to UL 94			V0
Dimensions	height x width x depth	[mm]	90 x 106.8 x 64.8
		[inches]	3.54 x 4.2 x 2.55
with auxiliary contact (TS)	height x width x depth	[mm]	90 x 124.6 x 64.8
		[inches]	3.54 x 4.91 x 2.55

Type 1 surge protective devices are designed to discharge high current surges without any destruction of the installation. These surge protective devices are characterized by their capacity to withstand impulse current with 10/350 µs wave form which simulate natural lightning current.
Type 1 SPDs can be installed at the entrance in the main switch board for a global protection of the electrical installation.

Follow current interrupting rating 50 kA

Poles	Impulse current Iimp 10/350	Follow current interrupting rating Ifi	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code		kg
3	25	50	2.5	230/400	255	510907	OVR T1 3L 25-255	2CTB815101R1300		0.94
3	25	50	2.5	230/400	255	510952	OVR T1 3L 25-255 TS	2CTB815101R0600		1.00

Protection and safety

OVR Type 1 surge protective devices TNS/TT 230 V 1Ph+N networks

OVR T1 1N 25-255

Technical features

Types			**OVR T1 1N 25-255**	**OVR T1 2L 25-255**
with auxiliary contact (TS)			**OVR T1 1N 25-255 TS**	**OVR T1 2L 25-255 TS**
Technology			Spark-gap + GDT	Spark-gap + GDT
Electrical features				
Standard			IEC 61643-1/ EN 61643-11	IEC 61643-1/ EN 61643-11
Type/test class			T1/I	T1/I
Protected lines			1+1	2
Types of networks			TNS-TT	TNS
Type of current			AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 10%	± 10%
Nominal voltage Un		[V]	230	230/400
Maximum continuous operating voltage Uc		[V]	255	255
Maximum impulse current Iimp (10/350)		[kA]	25	25
Maximum impulse current Tot. Iimp (10/350)		[kA]	50	50
Nominal discharge current In (8/20)		[kA]	25	25
Follow current interrupting rating Ifi		[kA]	50	50
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	2.5/–/2.5	≤ 2.5
Voltage protection level Ures at 3 kA (L-N/N-PE/L-PE)		[kV]	0.9/–/0.9	≤ 0.9
TOV (Temporary overvoltage) withstand Ut	(L-N: 5 s /N-PE: 200 ms)	[V]	450/1200	450/–
Response time		[ns]	≤ 100	≤ 100
Residual current IPE		[µA]	10	10
Short-circuit withstand capability Isccr		[kA]	50	50
Backup protection	Fuse (gG)	[A]	≤ 125	≤ 125
	Circuit breaker (B or C curve)	[A]	≤ 125	≤ 125
Pluggable cartridge			No	No
Integrated thermal disconnector			–	–
State indicator			TS Option	TS Option
Safety reserve			No	No
Auxiliary contact			TS Option	TS Option
Installation				
Wire range (L, N, PE)	Solid wire	[mm²]	2.5…50	2.5…50
	Stranded wire	[mm²]	2.5…35	2.5…35
Stripping length (L, N, PE)		[mm]	15	15
Tightening torque (L, N, PE)		[Nm]	3.5	3.5
Auxiliary contact (TS)				
Contact complement			1 NO - 1 NC	1 NO - 1 NC
Minimum load			12 V DC - 10 mA	12 V DC - 10 mA
Maximum load			250 V AC - 1 A	250 V AC - 1 A
Connection cross-section		[mm²]	1.5	1.5
Miscellaneous characteristics				
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80
Maximal Altitude		[m]	2000	2000
Degree of protection			IP20	IP20
Fire resistance according to UL 94			V0	V0
Dimensions	height x width x depth	[mm]	90 x 71.2 x 64.8	90 x 71.2 x 64.8
		[inches]	3.54 x 2.8 x 2.55	3.54 x 2.8 x 2.55
with auxiliary contact (TS)	height x width x depth	[mm]	90 x 89 x 64.8	90 x 89 x 64.8
		[inches]	3.54 x 3.5 x 2.55	3.54 x 3.5 x 2.55

Type 1 surge protective devices are designed to discharge high current surges without any destruction of the installation. These surge protective devices are characterized by their capacity to withstand impulse current with 10/350 µs wave form which simulate natural lightning current.
Type 1 SPDs can be installed at the entrance in the main switch board for a global protection of the electrical installation.

Follow current interrupting rating 50 kA

Poles	Impulse current Iimp 10/350	Follow current interrupting rating Ifi	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code		kg
1+1	25	50	2.5	230	255	510921	OVR T1 1N 25-255	2CTB815101R1500		0.53
1+1	25	50	2.5	230	255	510976	OVR T1 1N 25-255 TS	2CTB815101R1000		0.64
2	25	50	2.5	230	255	510891	OVR T1 2L 25-255	2CTB815101R1200		0.63
2	25	50	2.5	230	255	510945	OVR T1 2L 25-255 TS	2CTB815101R1100		0.64

Protection and safety

OVR Type 1 surge protective devices TNS/TT 230 V 3Ph+N networks

OVR T1 3N 25-255-7

Technical features

Types			**OVR T1 4L 25-255**	**OVR T1 3N 25-255**	**OVR T1 3N 25-255-7**
with auxiliary contact (TS)			**OVR T1 4L 25-255 TS**	**OVR T1 3N 25-255 TS**	**–**
Technology			Spark-gap	Spark-gap + GDT	Spark-gap + GDT
Electrical features					
Standard			IEC 61643-1/EN 61643-11		
Type/test class			T1/I	T1/I	T1/I
Protected lines			4	3+1	3+1
Types of networks			TNS	TNS-TT	TNS-TT
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 10%	± 10%	± 10%
Nominal voltage Un		[V]	230/400	230/400	230/400
Maximum continuous operating voltage Uc		[V]	255	255	255
Maximum impulse current Iimp (10/350)		[kA]	25	25	25
Maximum impulse current Tot. Iimp (10/350)		[kA]	100	100	100
Nominal discharge current In (8/20)		[kA]	25	25	25
Follow current interrupting rating Ifi		[kA]	50	50	7
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	2.5/–/–	2.5/2.0/2.5	2.0/2.0/2.0
Voltage protection level Ures at 3 kA (L-N/N-PE/L-PE)		[kV]	≤ 0.9	0.9/0.9/0.9	0.9/0.9/0.9
TOV (Temporary overvoltage) withstand Ut	(L-N: 5 s /N-PE: 200 ms)	[V]	450/–	450/1200	650/1200
Response time		[ns]	≤ 100	≤ 100	≤ 100
Residual current IPE		[µA]	10	10	1000
Short-circuit withstand capability Isccr		[kA]	50	50	50
Backup protection	Fuse (gG)	[A]	≤ 125	≤ 125	≤ 125
	Circuit breaker (B or C curve)	[A]	≤ 125	≤ 125	≤ 125
Pluggable cartridge			No	No	No
Integrated thermal disconnector			–		–
State indicator			TS option	TS option	Yes
Safety reserve			No	No	No
Auxiliary contact			TS option	TS option	No
Installation					
Wire range (L, N, PE)	Solid wire	[mm²]	2.5…50	2.5…50	2.5…50
	Stranded wire	[mm²]	2.5…35	2.5…35	2.5…35
Stripping length (L, N, PE)		[mm]	15	15	15
Tightening torque (L, N, PE)		[Nm]	3.5	3.5	3.5
Auxiliary contact (TS)					
Contact complement			1 NO - 1 NC	1 NO - 1 NC	–
Minimum load			12 V DC - 10 mA	12 V DC - 10 mA	–
Maximum load			250 V AC - 1 A	250 V AC - 1 A	–
Connection cross-section		[mm²]	1.5	1.5	–
Miscellaneous characteristics					
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude		[m]	2000	2000	2000
Degree of protection			IP20	IP20	IP20
Fire resistance according to UL 94			V0	V0	V0
Dimensions	height x width x depth	[mm]	90 x 142.4 x 64.8	90 x 142.4 x 64.8	85 x 89 x 70.8
		[inches]	3.54 x 5.61 x 2.55	3.54 x 5.61 x 2.55	3.35 x 3.50 x 2.79
with auxiliary contact (TS)	height x width x depth	[mm]	90 x 160.2 x 64.8	90 x 160.2 x 64.8	–
		[inches]	3.54 x 6.31 x 2.55	3.54 x 6.31 x 2.55	–

Type 1 surge protective devices are designed to discharge high current surges without any destruction of the installation. These surge protective devices are characterized by their capacity to withstand impulse current with 10/350 µs wave form which simulate natural lightning current.
Type 1 SPDs can be installed at the entrance in the main switch board for a global protection of the electrical installation.

Follow current interrupting rating 7 kA

Poles	Impulse current Iimp 10/350	Follow current interrupting rating Ifi	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code		kg
3+1	25	7	2	230/400	255	514127	OVR T1 3N 25-255-7	2CTB815101R8800		0.84

Follow current interrupting rating 50 kA

Poles	Impulse current Iimp 10/350	Follow current interrupting rating Ifi	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code		kg
4	25	50	2.5	230/400	255	510914	OVR T1 4L 25-255	2CTB815101R1400		1.16
4	25	50	2.5	230/400	255	510969	OVR T1 4L 25-255 TS	2CTB815101R0800		1.26
3+1	25	50	2.5	230/400	255	510938	OVR T1 3N 25-255	2CTB815101R1600		1.16
3+1	25	50	2.5	230/400	255	510983	OVR T1 3N 25-255 TS	2CTB815101R0700		1.26

Protection and safety

OVR Type 1 surge protective devices Single pole neutral

OVR T1 100 N

Technical features

Types			OVR T1 25 N	OVR T1 50 N	OVR T1 100 N
with auxiliary contact (TS)			–	–	–
Technology			Gas discharge tube (GDT)	Gas discharge tube (GDT)	Gas discharge tube (GDT)
Electrical features					
Standard			IEC 61643-1/EN 61643-11		
Type/test class			T1/I	T1/I	T1/I
Protected lines			1	1	1
Types of networks			TT(N-PE)-TNS(N-PE)	TT(N-PE)-TNS(N-PE)	TT(N-PE)-TNS(N-PE)
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 10%	± 10%	± 10%
Nominal voltage Un		[V]	400	230	230
Maximum continuous operating voltage Uc		[V]	690	255	255
Maximum impulse current Iimp (10/350)		[kA]	25	50	100
Maximum impulse current Tot. Iimp (10/350)		[kA]	25	50	100
Nominal discharge current In (8/20)		[kA]	25	25	25
Follow current interrupting rating Ifi		[kA]	0.1	0.1	0.1
Voltage protection level Up at In		[kV]	≤ 4	≤ 1.5	≤ 2
Voltage protection level Ures at 3 kA		[kV]	–	0.9	0.9
TOV (Temporary overvoltage) withstand Ut	(L-N: 5 s /N-PE: 200 ms)	[V]	–/1200	–/1200	–/1200
Response time		[ns]	≤ 100	≤ 100	≤ 100
Residual current IPE		[µA]	10	10	10
Short-circuit withstand capability Isccr		[kA]	50	50	50
Backup protection	Fuse (gG)	[A]	–	–	–
	Circuit breaker (B or C curve)	[A]	–	–	–
Pluggable cartridge			No	No	No
Integrated thermal disconnector			–		–
State indicator			No	No	No
Safety reserve			No	No	No
Auxiliary contact			No	No	No
Installation					
Wire range (L, N, PE)	Solid wire	[mm²]	2.5…50	2.5…50	2.5…50
	Stranded wire	[mm²]	2.5…35	2.5…35	2.5…35
Stripping length (L, N, PE)		[mm]	15	15	15
Tightening torque (L, N, PE)		[Nm]	3.5	3.5	3.5
Auxiliary contact (TS)					
Contact complement			–	–	–
Minimum load			–	–	–
Maximum load			–	–	–
Connection cross-section		[mm²]	–	–	–
Miscellaneous characteristics					
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude		[m]	2000	2000	2000
Degree of protection			IP20	IP20	IP20
Fire resistance according to UL 94			V0	V0	V0
Dimensions	height x width x depth	[mm]	85 x 17.8 x 64.8	85 x 35.6 x 64.8	85 x 35.6 x 64.8
		[inches]	3.35 x 0.70 x 2.55	3.35 x 1.40 x 2.55	3.35 x 1.40 x 2.55
with auxiliary contact (TS)	height x width x depth	[mm]	–	–	–
		[inches]	–	–	–

Type 1 and Type 1+2 surge protective devices are designed to discharge high current surges without any destruction of the installation. These surge protective devices are characterized by their capacity to withstand impulse current with 10/350 µs wave form which simulate natural lightning current.
Type 1+2 ABB surge protective devices have a high impulse current withstand capacity with ensuring a low protection level (Up).
Type 1 and Type 1+2 SPDs can be installed at the entrance in the main switch board for a global protection of the electrical installation.

Type 1 Neutral

Poles	Impulse current Iimp 10/350	Follow current interrupting rating Ifi	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code		kg
1	25	0.1	4	440	690	517043	OVR T1 25 N	2CTB815101R9700		0.15
1	50	0.1	1.5	230	255	510853	OVR T1 50 N	2CTB815101R0400		0.29
1	100	0.1	2	230	255	510860	OVR T1 100 N	2CTB815101R0500		0.29

Protection and safety

OVR Type 1+2 surge protective devices Single pole

OVR T1-T2 12.5-275s P QS

Technical features

Types			**OVR T1-T2 12.5-275s P QS**
with auxiliary contact (TS)			**OVR T1-T2 12.5-275s P TS QS**
Technology			Varistor
Electrical features			
Standard			IEC 61643-11/EN 61643-11
Type/test class			T1-T2/I - II
Protected lines			1
System network			TT (L-N) - TNS - TNC
Type of current			AC 47-63 Hz
Voltage regulation of the system network			± 20 %
Nominal system voltage Un		[V]	230
Max. cont. operating voltage Uc		[V]	275
Maximum impulse current Iimp (10/350)		[kA]	12.5
Nominal discharge current In 8/20)		[kA]	20
Maximum discharge current Imax (8/20)		[kA]	80
Follow current interrupting rating Ifi		[kA]	-
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	1.4/-/1.4
Voltage protection level Ures at 3 kA		[kV]	0.5
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	337/
Response time		[ns]	< 25
Short-circuit withstand capability Isccr		[kA]	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 160
	circuit breaker (B or C curve)	[A]	≤ 125
Pluggable cartridge			Yes
Integrated thermal disconnector			Yes
State indicator			Yes
Safety reserve			Yes
Auxiliary contact			Yes (TS option)
Installation			
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5
Tightening torque (L, N, PE)		[Nm]	2.8
Auxiliary contact (TS)			
Contacts information			1 NO - 1 NC
Min. load			12 V DC - 10 mA
Max. load			250 V AC - 1A
Connection cross-section		[mm²]	6.5
Miscellanous characteristics			
Stocking and operating temperature		[°C]	-40 to +80
Maximal Altitude		[m]	5000
Degree of protection			IP 20 - Indoor
Fire resistance according to UL 94			V-0
Dimensions			
height x width x depth		[mm]	88 x 17.8 x 76.7
		[inches]	3.46 x 0.70 x 3.02
Dimensions with auxilary contact (TS)			
height x width x depth		[mm]	95.8 x 17.8 x 76.7
		[inches]	3.77 x 0.70 x 3.02
Replacement Cartridges			
Phase Product ID			OVR T1-T2 12.5-275s C QS 2CTB815710R2600
Neutral Product ID			-

OVR T1-T2 12.5-440s P QS	**OVR T1-T2 N 50-275s P QS**	**OVR T1-T2 N 50-440s P QS**	**-**
OVR T1-T2 12.5-440s P TS QS			**OVR T1+2 25-255 TS**
Varistor	GDT	GDT	Spark-gap + Varistor
IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
T1-T2/I - II	T1-T2/I - II	T1-T2/I - II	T1+2/I - II
1	N	N	1
TT (L-N) - TNS - TNC	TT (N-PE) - TNS (N-PE)	TT (N-PE) - TNS (N-PE)	TT (L-N) - TNS - TNC
AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
± 10%	± 20%	± 10%	± 10%
400	230	400	230
440	275	440	255
12.5	50	50	25
20	50	50	25
80	100	100	60
-	-	-	15
1.9/-/1.9	-/1.4/-	-/1.9/-	1.5/-/1.5
0.5	-	-	1.0
581/	-/1200	-/1200	334/-
< 25	≤10	≤10	< 100
100	≤100	≤100	≤50
≤ 160	-	-	≤125
≤ 125	-	-	≤125
Yes	Yes	Yes	No
Yes	No	No	Yes
Yes	No	No	Yes
Yes	No	No	No
Yes (TS option)	No	No	Yes
2.5 ... 35	2.5 ... 50	2.5 ... 50	2.5 ... 50
2.5 ... 25	2.5 ... 35	2.5 ... 35	2.5 ... 35
12.5	12.5	12.5	15
2.8	3.5	3.5	3.5
1 NO - 1 NC			1 NO - 1 NC
12 V DC - 10 mA			12 V DC - 10 mA
250 V AC - 1A			250 VAC - 1 A
6.5			1.5
-40 to +80	-40 to +80	-40 to +80	-40 to +80
5000	5000	5000	2000
IP 20 - Indoor	IP 20 - Indoor	IP 20 - Indoor	IP 20 - Indoor
V-0	V0	V0	V0
88 x 35.6 x 76.7	88 x 17.8 x 76.7	88 x 17.8 x 76.7	
3.46 x 1.4 x 3.02	3.46 x 0.7 x 3.02	3.46 x 0.7 x 3.02	
95.8 x 35.6 x 76.7			93.5 x 35.6 x 65
3.77 x 1.4 x 3.02			3.68 x 1.4 x 2.56
OVR T1-T2 12.5-440s C QS 2CTB815710R5500			
-	OVR T1-T2 N 50-275s C QS 2CTB815710R2700	OVR T1-T2 N 50-440s C QS 2CTB815710R5600	

Protection and safety

OVR Type 1+2 surge protective devices Single pole

Type 1 and Type 1+2 surge protective devices are designed to discharge high current surges without any destruction of the installation. These surge protective devices are characterized by their capacity to withstand impulse current with 10/350 µs wave form which simulate natural lightning current.

Type 1+2 ABB surge protective devices have a high impulse current withstand capacity with ensuring a low protection level (Up).
Type 1 and Type 1+2 SPDs can be installed at the entrance in the main switch board for a global protection of the electrical installation.

Poles	Impulse current Iimp 10/350	Max. discharge current Imax 8/20	Follow current interrupting rating Ifi	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660 308	Order details		Weight 1 piece
	kA	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1	12.5	80	-	1.4	230	275	524881	OVR T1-T2 12.5-275s P TS QS	2CTB815710R0000	0.15
1	12.5	80	-	1.4	230	275	524959	OVR T1-T2 12.5-275s P QS	2CTB815710R1200	0.15
1	12.5	80	-	1.9	400	440	525055	OVR T1-T2 12.5-440s P TS QS	2CTB815710R2900	0.30
1	12.5	80	-	1.9	400	440	525123	OVR T1-T2 12.5-440s P QS	2CTB815710R4100	0.30
1	50	100	-	1.4	230	275	525024	OVR T1-T2 N 50-275s P QS	2CTB815710R2400	0.15
1	50	100	-	1.9	400	440	525192	OVR T1-T2 N 50-440s P QS	2CTB815710R5300	0.14
1	25	60	15	1.5	230	255	510884	OVR T+2 25 -255 TS	2CTB815101R0300	0.27

Is it possible to keep the lights on?
Absolutely.

Thanks to continuous innovation on surge protection. ABB improves the protection of the lighting systems equipment by launching the new OVR T2-T3 N1 15-2758 SL.
OVR SL is a very compact SPD, equipped with a patented thermal disconnector and a safety reserve system. This new range is specifically designed in order to prevent the risks of overheating and fires in LED lighting systems.
www.abb.com/lowvoltage

Protection and safety

OVR Type 1+2 surge protective devices TNC 230 and 400 V networks

Technical features

Types			OVR T1-T2 3L 12.5-275s P QS	OVR T1-T2 3L 12.5-440s P QS	
with auxiliary contact (TS)			OVR T1-T2 3L 12.5-275s P TS QS	OVR T1-T2 3L 12.5-440s P TS QS	OVR T1+2 3L 25-255 TS
Technology			Varistor	Varistor	Spark-gap + Varistor
Electrical features					
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T1-T2/I - II	T1-T2/I - II	T1+2/I - II
Protected lines			3	3	3
System network			TNC	TNC	TNC
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20%	± 10%	± 10%
Nominal system voltage Un		[V]	230/400	400/690	230/400
Max. cont. operating voltage Uc		[V]	275	440	255
Maximum impulse current Iimp (10/350)		[kA]	12.5	12.5	25
Max.Imp current Tot Iimp (10/350)		[kA]	37.5	37.5	75
Nominal discharge current In (8/20)		[kA]	20	20	25
Maximum discharge current Imax (8/20)		[kA]	80	80	60
Follow current interrupting rating Ifi		[kA]	-	-	-
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	-/-/1.4	-/-/2	-/-/1.5
Voltage protection level Ures at 3 kA		[kV]	0.5	0.8	1.0
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	337/–	581/–	334/-
Response time		[ns]	≤ 25	≤ 25	< 100
Short-circuit withstand capability Isccr		[kA]	100	100	≤50
Backup protection maximum rating	fuse (gG)	[A]	≤ 160	≤ 160	≤125
	circuit breaker (B or C)	[A]	≤ 125	≤ 125	≤125
Pluggable cartridge			Yes	Yes	No
Integrated thermal disconnector			Yes	Yes	Yes
State indicator			Yes	Yes	Yes
Safety reserve			Yes	Yes	No
Auxiliary contact			Yes (TS option)	Yes (TS option)	Yes
Installation					
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35	2.5 ... 50
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25	2.5 ... 35
Stripping length (L, N, PE)		[mm]	12.5	12.5	15
Tightening torque (L, N, PE)		[Nm]	2.8	2.8	3.5
Auxiliary contact (TS)					
Contacts information			1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC
Min. load			12 DC - 10 mA	12 DC - 10 mA	12 V DC - 10 mA
Max. load			250 V AC - 1A	250 V AC - 1A	250 VAC - 1 A
Connection cross-section		[mm²]	1.5	1.5	1.5
Miscellanous characteristics					
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000	2000
Degree of protection			IP 20 - Indoor	IP 20 - Indoor	IP 20 - Indoor
Fire resistance according to UL 94			V-0	V-0	V0
Dimensions					
height x width x depth		[mm]	88 x 53.4 x 76.7	88 x 106.8 x 76.7	
		[inches]	3.46 x 2.1 x 3.02	3.46 x 4.2 x 3.02	
Dimensions with auxilary contact (TS)					
height x width x depth		[mm]	95.8 x 53.4 x 76.7	95.8 x 106.8 x 76.7	93.5 x 106.8 x 65
		[inches]	3.77 x 2.1 x 3.02	3.77 x 4.2 x 3.02	3.68 x 4.2 x 2.56
Replacement Cartridges					
Phase Product ID			OVR T1-T2 12.5-275s C QS 2CTB815710R2600	OVR T1-T2 12.5-440s C QS 2CTB815710R5500	OVR T1+2 25-255 c 2CTB815101R3700

Type 1 and Type 1+2 surge protective devices are designed to discharge high current surges without any destruction of the installation. These surge protective devices are characterized by their capacity to withstand impulse current with 10/350 µs wave form which simulate natural lightning current.
Type 1+2 ABB surge protective devices have a high impulse current withstand capacity with ensuring a low protection level (Up).
Type 1 and Type 1+2 SPDs can be installed at the entrance in the main switch board for a global protection of the electrical installation.

Poles	Impulse current Iimp 10/350	Max discharge current Imax 8/20	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
3	12.5	80	1.4	230/400	275	524911	OVR T1-T2 3L 12.5-275s P TS QS	2CTB815710R0600	0.45
3	12.5	80	1.4	230/400	275	524980	OVR T1-T2 3L 12.5-275s P QS	2CTB815710R1800	0.45
3	12.5	80	1.9	400/690	440	525086	OVR T1-T2 3L 12.5-440s P TS QS	2CTB815710R3500	0.90
3	12.5	80	2	400/690	440	525154	OVR T1-T2 3L 12.5-440s P QS	2CTB815710R4700	0.90
3	25	60	1.5	230/400	255	513397	OVR T1+T2 3L 25-255 TS	2CTB815101R4300	0.85

Protection and safety

OVR Type 1+2 surge protective devices TNS/TT 230 1Ph+N and 3Ph+N networks

Technical features

Types			OVR T1-T2 1N 12.5-275s P QS	OVR T1-T2 3N 12.5-275s P QS
with auxiliary contact (TS)			**OVR T1-T2 1N 12.5-275s P TS QS**	**OVR T1-T2 3N 12.5-275s P TS QS**
Technology			Varistor + GDT	Varistor + GDT
Electrical features				
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T1-T2/I - II	T1-T2/I - II
Protected lines			1+1	3+1
System network			TT - TNS	TT - TNS
Type of current			AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20%	± 20%
Nominal system voltage Un		[V]	230	230/400
Max. cont. operating voltage Uc		[V]	275	275
Maximum impulse current Iimp (10/350)		[kA]	12.5	12.5
Max.Imp current Tot Iimp (10/350)		[kA]	25	50
Nominal discharge current In (8/20)		[kA]	20	20
Maximal discharge current Imax (8/20) kA		[kA]	80	80
Follow current interrupting rating Ifi		[kA]		
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	1.4/1.4/1.5	1.4/1.4/1.5
Voltage protection level Ures at 3 kA		[kV]	0.5	0.5
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	337/1200	337/1200
Response time		[ns]	≤ 25	≤ 25
Short-circuit withstand capability Isccr		[kA]	100	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 160	≤ 160
	circuit breaker (B or C curve)	[A]	≤ 125	≤ 125
Pluggable cartridge			Yes	Yes
Integrated thermal disconnector			Yes	Yes
State indicator			Yes	Yes
Safety reserve			Yes	Yes
Auxiliary contact			Yes (TS option)	Yes (TS option)
Installation				
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5	12.5
Tightening torque (L, N, PE)		[Nm]	2.8	2.8
Auxiliary contact (TS)				
Contacts information			1 NO - 1 NC	1 NO - 1 NC
Min. load			12 V DC - 10 mA	12 V DC - 10 mA
Max. load			250 V AC - 1A	250 V AC - 1A
Connection cross-section		[mm²]	1.5	1.5
Miscellanous characteristics				
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000
Degree of protection			IP 20 - Indoor	IP 20 - Indoor
Fire resistance according to UL 94			V-0	V-0
Dimensions				
height x width x depth		[mm]	88 x 35.6 x 76.7	88 x 71.2 x 76.7
		[in]	3.46 x 1.4 x 3.02	3.46 x 2.8 x 3.02
Dimensions with auxilary contact (TS)				
height x width x depth		[mm]	95.8 x 35.6 x 76.7	95.8 x 71.2 x 76.7
		[in]	3.46 x 1.4 x 3.02	3.77 x 2.8 x 3.02
Replacement Cartridges				
Phase Product ID			OVR T1-T2 12.5-275s C QS 2CTB815710R2600	OVR T1-T2 12.5-275s C QS 2CTB815710R2600
Neutral Product ID			OVR T1-T2 N 50-275s C QS 2CTB815710R2700	OVR T1-T2 N 50-275s C QS 2CTB815710R2700

OVR T1-T2 4L 12.5-275s P QS			
OVR T1-T2 4L 12.5-275s P TS QS	**OVR T1+2 1N 25-255 TS**	**OVR T1+2 3N 25-255 TS**	**OVR T1+2 4L 25-255 TS**
Varistor	Varistor + GDT	Spark-gap + GDT	Spark-gap
IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
T1-T2/I - II	T1+2/I - II	T1+2/I - II	T1+2/I - II
3+N	1+N	3+N	3+N
TNS	TT - TNS	TT - TNS	TNS
AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
± 20%	± 10%	± 10%	± 10%
230/400	230	230/400	230/400
275	255	255	255
12.5	25	25	25
50	50	100	100
20	25	25	25
80	60	60	60
-	15	15	15
2.8/1.4/1.4	1.5	1.5	1.5
0.5	1.0	1.0	1.0
337/	334/-	334/-	334/-
≤ 25	< 100	< 100	< 100
100	≤50	≤50	≤50
≤ 160	≤125	≤125	≤125
≤ 125	≤125	≤125	≤125
Yes	No	No	No
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	No	No	No
Yes (TS option)	Yes	Yes	Yes
2.5 ... 35	2.5 ... 50	2.5 ... 50	2.5 ... 50
2.5 ... 25	2.5 ... 35	2.5 ... 35	2.5 ... 35
12.5	15	15	15
2.8	3.5	3.5	3.5
1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC
12 V DC - 10 mA	12 V DC - 10 mA	12 V DC - 10 mA	12 V DC - 10 mA
250 V AC - 1A	250 V AC - 1 A	250 V AC - 1 A	250 V AC - 1 A
1.5	1.5	1.5	1.5
-40 to +80	-40 to +80	-40 to +80	-40 to +80
5000	2000	2000	2000
IP 20 - Indoor	IP 20 - Indoor	IP 20 - Indoor	IP 20 - Indoor
V-0	V0	V0	V0
88 x 71.2 x 76.7	93.5 x 71.2 x 65	93.5 x 142.4 x 65	93.5 x 142.4 x 65
3.46 x 2.8 x 3.02	3.68 x 2.8 x 2.56	3.68 x 5.61 x 2.56	3.68 x 5.61 x 2.56
95.8 x 71.2 x 76.7			
3.77 x 2.8 x 3.02			
OVR T1-T2 12.5-275s C QS 2CTB815710R2600	OVR T1+2 25-255 c 2CTB815101R3700	OVR T1+2 25-255 c 2CTB815101R3700	OVR T1+2 25-255 c 2CTB815101R3700

Protection and safety

OVR Type 1+2 surge protective devices TNS/TT 400 V 1Ph+N and 3Ph+N networks

Technical features

Types			OVR T1-T2 1N 12.5-440s P QS	OVR T1-T2 3N 12.5-440s P QS	OVR T1-T2 4L 12.5-440s P QS
with auxiliary contact (TS)			OVR T1-T2 1N 12.5-440s P TS QS	OVR T1-T2 3N 12.5-440s P TS QS	OVR T1-T2 4L 12.5-440s P TS QS
Technology			Varistor + GDT	Varistor + GDT	Varistor
Electrical features					
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T1-T2/I - II	T1-T2/I - II	T1-T2/I - II
Protected lines			1+1	3+1	4
System network			TT- TNS	TT- TNS	TNS
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 10%	± 10%	± 10%
Nominal system voltage Un		[V]	400	400/690	400/690
Max. cont. operating voltage Uc		[V]	440	440	440
Maximum impulse current Iimp (10/350)		[kA]	12.5	12.5	12.5
Max.Imp current Tot Iimp (10/350)		[kA]	25	50	50
Nominal discharge current In (8/20)		[kA]	20	20	20
Maximal discharge current Imax (8/20) kA		[kA]	80	80	80
Follow current interrupting rating Ifi		[kA]			
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	1.9/1.9/2	1.9/1.9/2	3.8/1.9/1.9
Voltage protection level Ures at 3 kA		[kV]	0.8	0.8	0.8
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	581/1200	581/1200	581/
Response time		[ns]	≤ 25	≤ 25	≤ 25
Short-circuit withstand capability Isccr		[kA]	100	100	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 160	≤ 160	≤ 160
	circuit breaker (B or C curve)	[A]	≤ 125	≤ 125	≤ 125
Pluggable cartridge			Yes	Yes	Yes
Integrated thermal disconnector			Yes	Yes	Yes
State indicator			Yes	Yes	Yes
Safety reserve			Yes	Yes	Yes
Auxiliary contact			Yes (TS option)	Yes (TS option)	Yes (TS option)
Installation					
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5	12.5	12.5
Tightening torque (L, N, PE)		[Nm]	2.8	2.8	2.8
Auxiliary contact (TS)					
Contacts information			1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC
Min. load			12 V DC - 10 mA	12 V DC - 10 mA	12 V DC - 10 mA
Max. load			250 V AC - 1 A	250 V AC - 1 A	250 V AC - 1 A
Connection cross-section		[mm²]	1.5	1.5	1.5
Miscellanous characteristics					
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000	5000
Degree of protection			IP 20 - Indoor	IP 20 - Indoor	IP 20 - Indoor
Fire resistance according to UL 94			V-0	V-0	V-0
Dimensions					
height x width x depth		[mm]	88 x 53.4 x 76.7	88 x 124.6 x 76.7	88 x 142.4 x 76.7
		[in]	3.46 x 2.1 x 3.02	3.46 x 4.91 x 3.02	3.46 x 5.61 x 3.02
Dimensions with auxilary contact (TS)					
height x width x depth		[mm]	95.8 x 53.4 x 76.7	95.8 x 124.6 x 76.7	95.8 x 142.4 x 76.7
		[in]	3.77 x 2.1 x 3.02	3.77 x 4.91 x 3.02	3.77 x 5.61 x 3.02
Replacement Cartridges					
Phase Product ID			OVR T1-T2 12.5-440s C QS 2CTB815710R5500	OVR T1-T2 12.5-440s C QS 2CTB815710R5500	OVR T1-T2 12.5-440s C QS 2CTB815710R5500
Neutral Product ID			OVR T1-T2 N 50-440s C QS 2CTB815710R5600	OVR T1-T2 N 50-440s C QS 2CTB815710R5600	

OVR T1-T2 1N 12.5-440s P TS QS

Type 1 and Type 1+2 surge protective devices are designed to discharge high current surges without any destruction of the installation. These surge protective devices are characterized by their capacity to withstand impulse current with 10/350 µs wave form which simulate natural lightning current.

Type 1+2 ABB surge protective devices have a high impulse current withstand capacity with ensuring a low protection level (Up).
Type 1 and Type 1+2 SPDs can be installed at the entrance in the main switch board for a global protection of the electrical installation.

Poles	Impulse current Iimp 10/350	Max. discharge current Imax 8/20	Follow current interrupting rating Ifi	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660 308	Order details		Weight 1 piece
	kA	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1+1	12.5	80	-	1.4	230	275	524966	OVR T1-T2 1N 12.5-275s P QS	2CTB815710R1300	0.30
1+1	12.5	80	-	1.4	230	275	524898	OVR T1-T2 1N 12.5-275s P TS QS	2CTB815710R0100	0.30
1+1	12.5	80	-	1.9	400	440	525130	OVR T1-T2 1N 12.5-440s P QS	2CTB815710R4200	0.45
1+1	12.5	80	-	1.9	400	440	525062	OVR T1-T2 1N 12.5-440s P TS QS	2CTB815710R3000	0.45
3+1	12.5	80	-	1.4	230/400	275	524997	OVR T1-T2 3N 12.5-275s P QS	2CTB815710R1900	0.60
3+1	12.5	80	-	1.4	230/400	275	524928	OVR T1-T2 3N 12.5-275s P TS QS	2CTB815710R0700	0.60
3+1	12.5	80	-	1.9	400/690	440	525161	OVR T1-T2 3N 12.5-440s P QS	2CTB815710R4800	1.05
3+1	12.5	80	-	1.9	400/690	440	525093	OVR T1-T2 3N 12.5-440s P TS QS	2CTB815710R3600	1.05
4	12.5	80	-	1.4	230/400	275	525017	OVR T1-T2 4L 12.5-275s P QS	2CTB815710R2300	0.60
4	12.5	80	-	1.4	230/400	275	524942	OVR T1-T2 4L 12.5-275s P TS QS	2CTB815710R1100	0.60
4	12.5	80	-	1.9	400/690	440	525185	OVR T1-T2 4L 12.5-440s P QS	2CTB815710R5200	1.20
4	12.5	80	-	1.9	400/690	440	525116	OVR T1-T2 4L 12.5-440s P TS QS	2CTB815710R4000	1.20
1+1	25	60	15	1.5	230	255	513519	OVR T1+2 1N 25-255 TS	2CTB815101R4400	0.54
3+1	25	60	15	1.5	230/400	255	513526	OVR T1+2 3N 25-255 TS	2CTB815101R4500	1.07
4	25	60	15	1.5	230/400	255	513434	OVR T1+2 4L 25-255 TS	2CTB815101R4200	1.07

Protection and safety

OVR Type 2 surge protective devices for 57 V networks

Technical features

Types			OVR T2 20-75 P	OVR T2 2 20-75 P
with auxiliary contact (TS)			OVR T2 20-75 P TS	OVR T2 2 20-75 P TS
Technology			Varistor	Varistor
Electrical features				
Standard			IEC 61643-1/EN 61643-11	IEC 61643-1/EN 61643-11
Type/test class			T2/II	T2/II
Protected lines			1	2
Types of networks			TT-TNS-TNC	TT-TNS-TNC
Type of current			AC - DC	AC - DC
Nominal AC voltage Un		[V]	57	57
Max. cont. operating AC voltage Uc		[V]	75	75
Maximum discharge current Imax (8/20)		[kA]	20	20
Nominal discharge current In (8/20)		[kA]	5	5
Voltage protection level Up at In		[kV]	0.3	0.3
Voltage protection level Up at 3 kA		[kV]	0.25	0.25
TOV (Temporary overvoltage) withstand Ut (L-N: 5s/N-PE: 200ms)		[V]	75/-	75/-
Response time		[ns]	≤ 25	≤ 25
Residual current IPE		[µA]	25	50
Short-circuit withstand capability Isccr		[kA]	50	50
Backup protection maximum rating	fuse (gG)	[A]	≤ 16	≤ 16
	circuit breaker (B or C curve)	[A]	≤ 16	≤ 16
Pluggable cartridge			Yes	Yes
Integrated thermal disconnector			Yes	Yes
State indicator			Yes	Yes
Safety reserve			No	No
Auxiliary contact (TS)			Yes (TS option)	Yes (TS option)
Installation				
Wire range (L, N, PE)	solid wire	[mm²]	2.5 … 25	2.5 … 25
	stranded wire	[mm²]	2.5 … 16	2.5 … 16
Stripping length (L, N, PE)		[mm]	12.5	12.5
Tightening torque (L, N, PE)		[Nm]	2.5	2.5
Auxiliary contact (TS)				
Contact complement			1 NO - 1 NC	1 NO - 1 NC
Min. load			12 V DC - 10 mA	12 V DC - 10 mA
Max. load			250 V AC - 1 A	250 V AC - 1 A
Connection cross-section		[mm²]	1.5	1.5
Miscellanous characteristics				
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000
Degree of protection			IP 20	IP 20
Fire resistance according to UL 94			V-0	V-0
Dimensions				
height x width x depth		[mm]	88 x 17.8 x 64.8	88 x 35.6 x 64.8
		[in]	3.46 x 0.7 x 2.55	3.46 x 1.4 x 2.55
Dimensions with auxilary contact (TS)				
height x width x depth		[mm]	96 x 17.8 x 64.8	96 x 35.6 x 64.8
		[in]	3.78 x 0.7 x 2.55	3.78 x 1.4 x 2.55
Replacement Cartridges				
Phase Product ID			OVR T2 20-75 C 2CTB803854R1400	OVR T2 20-75 C 2CTB803854R1400

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (Up). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Type 2 pluggable - Uc 75 V

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1	20	5	0.3	57	75	518446	OVR T2 20-75 P	2CTB803851R2800	0.12
1	20	5	0.3	57	75	518453	OVR T2 20-75 P TS	2CTB803851R2700	0.12
2	20	5	0.3	57	75	518484	OVR T2 2 20-75 P	2CTB803852R1700	0.23
2	20	5	0.3	57	75	518477	OVR T2 2 20-75 P TS	2CTB803852R1600	0.23

Protection and safety

OVR Type 2 surge protective devices non pluggable

Technical features

Types			OVR T2 20-275	OVR T2 40-275
with auxiliary contact (TS)			-	-
Technology			Varistor	Varistor
Electrical features				
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T2/II	T2/II
Protected lines			1	1
Types of networks			TT(L-N)-TNS-TNC	TT(L-N)-TNS-TNC
Type of current			AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20 %	± 20 %
Nominal AC voltage Un		[V]	230	230
Max. cont. operating AC voltage Uc		[V]	275	275
Maximum discharge current Imax (8/20)		[kA]	20	40
Nominal discharge current In (8/20)		[kA]	5	20
Voltage protection level Up at In		[kV]	1	1,4
Voltage protection level Up at 3 kA		[kV]	0,9	0,9
TOV (Temporary overvoltage) withstand Ut (L-N: 5s/N-PE: 200ms)		[V]	337/-	337/-
Response time		[ns]	≤ 25	≤ 25
Residual current IPE		[µA]	25	25
Short-circuit withstand capability Isccr		[kA]	50	50
Backup protection maximum rating	fuse (gG)	[A]	≤ 50	≤ 50
	circuit breaker (B or C curve)	[A]	≤ 50	≤ 50
Pluggable cartridge			No	No
Integrated thermal disconnector			Yes	Yes
State indicator			Yes	Yes
Safety reserve			No	No
Auxiliary contact (TS)			No	No
Installation				
Wire range (L, N, PE)	solid wire	[mm²]	2.5…25	2.5…25
	stranded wire	[mm²]	2.5…16	2.5…16
Stripping length (L, N, PE)		[mm]	12,2	12,2
Tightening torque (L, N, PE)		[Nm]	2,5	2,5
Auxiliary contact (TS)				
Contact complement			–	–
Min. load			–	–
Max. load			–	–
Connection cross-section		[mm²]	–	–
Miscellanous characteristics				
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80
Maximal Altitude		[m]	2000	2000
Degree of protection			IP 20	IP 20
Fire resistance according to UL 94			V-0	V-0
Dimensions				
height x width x depth		[mm]	85 x 17.8 x 64.8	85 x 17.8 x 64.8
		[in]	3.35 x 0.70 x 2.55	3.35 x 0.70 x 2.55

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (Up). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Type 2 non pluggable - Uc 275 V

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1	20	5	1	230/400	275	514882	OVR T2 20-275	2CTB804200R0100	0.12
1	40	20	1.4	230/400	275	514103	OVR T2 40-275	2CTB804201R0100	0.12
1	20	5	1	230/400	275	519382	OVR T2 20-275 (x20)	2CTB804200R1100	0.12
1	40	20	1.4	230/400	275	519412	OVR T2 40-275 (x20)	2CTB804201R1100	0.12

Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices Single pole 230 V networks

Technical features

Types			OVR T2 40-275 P QS	OVR T2 40-275s P QS
with auxiliary contact (TS)			OVR T2 40-275 P TS QS	OVR T2 40-275s P TS QS
Technology			Varistor	Varistor
Electrical features				
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T2/II	T2/II
Protected lines			1	1
System network			TT(L-N)-TNS-TNC	TT(L-N)-TNS-TNC
Type of current			AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20%	± 20%
Nominal system voltage Un		[V]	230	230
Max. cont. operating voltage Uc		[V]	275	275
Nominal dc voltage Un dc L-PE		[V dc]	320	-
Max. dc. cont. operating voltage Ucdc L-PE		[V dc]	355	-
Maximum discharge current Imax (8/20)		[kA]	40	40
Maximum impulse current Iimp (10/350)		[kA]	2	2
Nominal discharge current In (8/20)		[kA]	20	20
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	1.25/-/1.25	1.4/-/1.4
Voltage protection level Ures at 3kA (L-N)		[kV]	0.8	0.5
Voltage protection level Ures at 5kA (L-N)		[kV]	0.85	0.7
Voltage protection level Ures at 10kA (L-N)		[kV]	1	0.9
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	337/-	337/-
Response time		[ns]	≤ 25	≤ 25
Short-circuit withstand capability Isccr		[kA]	100	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 125	≤ 160
	circuit breaker (B or C curve)	[A]	≤ 125	≤ 125
Pluggable cartridge			Yes	Yes
Integrated QuickSafe® technology			Yes	Yes
State indicator			Yes	Yes
Safety reserve			No	Yes
Auxiliary contact			Yes (TS option)	Yes (TS option)
Installation				
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5	12.5
Tightening torque (L, N, PE)		[Nm]	2.8	2.8
Auxiliary contact (TS)				
Contacts information			1 NO - 1 NC	1 NO - 1 NC
Min. load			12 V DC - 10 mA	12 V DC - 10 mA
Max. load			250 V AC - 1 A	250 V AC - 1 A
Connection cross-section		[mm²]	1.5	1.5
Miscellanous characteristics				
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000
Degree of protection			IP 20	IP 20
Fire resistance according to UL 94			V0	V0
Dimensions				
height x width x depth		[mm]	88 x 17.8 x 65.3	88 x 17.8 x 76.7
		[inches]	3.46 x 0.7 x 2.57	3.46 x 0.7 x 3.02
With Auxiliary Contact (TS)				
height x width x depth		[mm]	95.8 x 17.8 x 65.3	95.8 x 17.8 x 76.7
		[inches]	3.77 x 0.7 x 2.57	3.77 x 0.7 x 3.02
Replacement Cartridges				
Phase Product ID			OVR T2 40-275 C QS 2CTB803876R1000	OVR T2 40-275s C QS 2CTB815704R2600
Neutral Product ID			-	-

OVR T2 40-350 P QS **OVR T2 40-350 P TS QS**	**OVR T2 80-275s P QS** **OVR T2 80-275s P TS QS**	**OVR T2-T3 N 80-275 P QS**	**OVR T2 N 80-350 P QS**	**OVR T2 N 80-275s P QS**
Varistor	Varistor	GDT	GDT	GDT
IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
T2/II	T2/II	T2-T3/II-III	T2/II	T2
1	1	1	1	1
TT(L-N)-TNS-TNC	TT(L-N)-TNS-TNC	TT (N-PE)-TNS(N-PE)	TT (N-PE)-TNS(N-PE)	TT(N-PE)-TNS(N-PE)
AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
± 50%	± 20%	± 20%	± 50%	± 20%
230	230	230	230	230
350	275	275	350	275
375	-	-	-	-
415	-	-	-	-
40	80	80	80	80
2	6.25	2	2	6.25
20	20	30	30	30
1.5/-/1.5	1.4/-/1.4	-/1.4/-	-/1.4/-	-/1.4/-
1	0.5	-	-	-
1.05	0.7	-	-	-
1.2	0.9	-	-	-
455/-	337/	-/1200	-/1200	-/1200
≤ 25	≤ 25	< 25	< 25	< 25
100	100	-	-	100
≤ 125	≤ 160	≤ 125	≤ 125	≤160
≤ 125	≤ 125	≤ 125	≤ 125	≤125
Yes	Yes	Yes	Yes	Yes
Yes	Yes	-	-	-
Yes	Yes	No	No	No
No	Yes	No	No	No
Yes (TS option)	Yes (TS option)	No	No	No
2.5 ... 35	2.5 ... 35	2.5 ... 35	2.5 ... 35	2.5 ... 35
2.5 ... 25	2.5 ... 25	2.5 ... 25	2.5 ... 25	2.5 ... 25
12.5	12.5	12.5	12.5	15
2.8	2.8	2.8	2.8	3.5
1 NO- 1 NC	1 NO- 1 NC	-	-	1 NO - 1 NC
12 V DC - 10 mA	12 V DC - 10 mA	-	-	12 V DC - 10 mA
250 V AC - 1 A	250 V AC - 1 A	-	-	250 V AC - 1 A
1.5	1.5	-	-	1.5
-40 to +80	-40 to +80	-40 to +80	-40 to +80	-40 to +80
5000	5000	5000	5000	5000
IP 20	IP 20 - Indoor	IP 20 - Indoor	IP 20 - Indoor	IP 20 - Indoor
V0	V-0	V-0	V-0	V0
88 x 17.8 x 65.3	88 x 17.8 x 76.7	85 x 17.8 x 64.8	85 x 17.8 x 64.8	
3.46 x 0.7 x 2.57	3.46 x 0.7 x 3.02	3.35 x 0.70 x 2.55	3.35 x 0.70 x 2.55	
95.8 x 17.8 x 65.3	95.8 x 17.8 x 76.7			96 x 17.8 x 69.4
3.77 x 0.7 x 2.57	3.77 x 0.7 x 3.02			3.78 x 0.7 x 2.73
OVR T2 40-350 C QS 2CTB803886R1000	OVR T2 80-275s C QS 2CTB815708R2600	-	-	
-	-	OVR T2-T3 N 80-275 C QS 2CTB803876R0000	OVR T2 N 80-350 C QS 2CTB803886R0000	OVR T2 N 80-275s C QS 2CTB815708R2800

Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices Single pole 230 V networks

OVR T2 40-275 P QS

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (Up). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Type 2 pluggable

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1	40	20	1.25	230	275	519580	OVR T2 40-275 P QS	2CTB803871R2300	0.12
1	40	20	1.25	230	275	519597	OVR T2 40-275 P TS QS	2CTB803871R1700	0.12
1	40	20	1.4	230	275	525291	OVR T2 40-275s P QS	2CTB815704R1200	0.15
1	40	20	1.4	230	275	525222	OVR T2 40-275s P TS QS	2CTB815704R0000	0.15
1	40	20	1.5	230	350	520609	OVR T2 40-350 P QS	2CTB803881R2300	0.12
1	40	20	1.5	230	350	520562	OVR T2 40-350 P TS QS	2CTB803881R1700	0.12
1	80	20	1.4	230	275	525475	OVR T2 80-275s P QS	2CTB815708R1200	0.15
1	80	20	1.4	230	275	525406	OVR T2 80-275s P TS QS	2CTB815708R0000	0.15
1	80	30	1.4	230	275	519658	OVR T2 N 80-350 P QS	2CTB803983R1900	0.12
1	80	30	1.4	230	275	519641	OVR T2-T3 N 80-275 P QS	2CTB803973R1900	0.12
1	80	30	1.4	230	275	525536	OVR T2 N 80-275s P QS	2CTB815708R2500	0.12

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Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices Single pole 400 V networks

Technical features

Types			OVR T2 40-440 P QS	OVR T2 40-440s P QS	OVR T2 80-440s P QS
with auxiliary contact (TS)			OVR T2 40-440 P TS QS	OVR T2 40-440s P TS QS	OVR T2 80-440s P TS QS
Technology			Varistor	Varistor	Varistor
Electrical features					
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T2/II	T2/II	T2/II
Protected lines			1	1	1
System network			TNC - TT(L-N) - TNS - IT (230 V)	TNC - TT(L-N) - TNS - IT (230 V)	TNC -TT(L-N) - TNS - IT (230 V)
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 10%	± 10%	± 10%
Nominal system voltage Un		[V]	400	400	400
Max. cont. operating voltage Uc		[V]	440	440	440
Nominal dc voltage Un dc L-PE		[V dc]	495	-	-
Max. dc. cont. operating voltage Ucdc L-PE		[V dc]	545	-	-
Maximum discharge current Imax (8/20)		[kA]	40	40	80
Maximum impulse current Iimp (10/350)		[kA]	2	2	6.25
Nominal discharge current In (8/20)		[kA]	20	20	20
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	1.8/-/1.8	1.8/-/1.8	1.8/-/1.8
Voltage protection level Ures at 3kA (L-N)		[kV]	1.25	0.8	0.8
Voltage protection level Ures at 5kA (L-N)		[kV]	1.35	1.2	1.2
Voltage protection level Ures at 10kA (L-N)		[kV]	1.55	1.55	-
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	581/-	581/-	581/-
Uoc		[kV]	-	-	-
Response time		[ns]	≤ 25	≤ 25	≤ 25
Short-circuit withstand capability Isccr		[kA]	100	100	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 125	≤ 160	≤ 160
	circuit breaker (B or C curve)	[A]	≤ 125	≤ 125	≤ 125
Pluggable cartridge			Yes	Yes	Yes
Integrated QuickSafe® technology			Yes	Yes	Yes
State indicator			Yes	Yes	Yes
Safety reserve			No	Yes	Yes
Auxiliary contact			Yes (TS option)	Yes (TS option)	Yes (TS option)
Installation					
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5	12.5	12.5
Tightening torque (L, N, PE)		[Nm]	2.8	2.8	2.8
Auxiliary contact (TS)					
Contacts information			1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC
Min. load			12 V DC - 10 mA	12 V DC - 10 mA	12 V DC - 10 mA
Max. load			250 V AC - 1 A	250 V AC - 1A	250 V AC - 1A

OVR T2 40-600 P QS	**OVR T2-T3 N 80-440 P QS**	**OVR T2 N 80-440s P QS**	
OVR T2 40-600 P TS QS			**OVR T2 120-440s P TS**
Varistor	GDT	GDT	Varistor
IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
T2/II	T2-T3/II-III	T2	T2
1	1	1	1
TNC - TT(L-N) - TNS - IT (230 V)	TT (N-PE)-TNS(N-PE)	TT(N-PE)-TNS(N-PE)	TNC - TT(L-N) - TNS - IT (230 V)
AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
± 50%	± 10%	± 10%	± 10%
400	400	400	400
600	440	440	440
650	-	-	
715	-	-	
40	80	80	120
2	2	6.25	-
20	30	30	60
2.3/-/-	-/1.4/-	-/2/-	2.5
1.6	-	-	1.1
1.7	-	-	-
1.9	-	-	-
792/-	-/1200	-/1200	440/-
-	-		
≤ 25	< 25	< 25	< 25
100	-	100	50
≤ 125	≤ 125	≤ 160 A	≤50
≤ 125	≤ 125	≤ 160 A	≤50
Yes	Yes	No	Yes
Yes	Yes	-	No
Yes	Yes	No	Yes
No	No	No	Yes
Yes	No	No	Yes
2.5 ... 35	2.5 ... 35	2.5 ... 35	2.5 ... 50
2.5 ... 25	2.5 ... 25	2.5 ... 25	2.5 ... 35
12.5	12.5	15	15
2.8	2.8	3.5	3.5
1 NO - 1 NC		1 NO - 1 NC	1 NO - 1 NC
12 V DC - 10 mA		12 V DC - 10 mA	12 V DC - 10 mA
250 V AC - 1A		250 VAC - 1 A	250 VAC - 1 A

Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices Single pole 400 V networks

Technical features

Types		OVR T2 40-440 P QS	OVR T2 40-440s P QS	OVR T2 80-440s P QS
with auxiliary contact (TS)		**OVR T2 40-440 P TS QS**	**OVR T2 40-440s P TS QS**	**OVR T2 80-440s P TS QS**
Connection cross-section	[mm²]	1.5	1.5	1.5
Miscellanous characteristics				
Stocking and operating temperature	[°C]	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude	[m]	5000	5000	5000
Degree of protection		IP 20	IP 20	IP 20
Fire resistance according to UL 94		V0	V-0	V-0
Dimensions of packing				
height x width x depth	[mm]	88 x 17.8 x 65.3	88 x 17.8 x 76.7	88 x 17.8 x 76.7
	[inches]	3.46 x 0.7 x 2.57	3.46 x 0.7 x 3.02	3.46 x 0.7 x 3.02
With Auxiliary Contact (TS)				
height x width x depth	[mm]	95.8 x 17.8 x 65.3	95.8 x 17.8 x 76.7	95.8 x 17.8 x 76.7
	[inches]	3.77 x 0.7 x 2.57	3.77 x 0.7 x 3.02	3.77 x 0.7 x 3.02
Replacement Cartridges				
Phase Product ID		OVR T2 40-440 C 2CTB803876R0400	OVR T2 40-440s C QS 2CTB815704R5500	OVR T2 80-440s C QS 2CTB815708R5500
Neutral Product ID		-	-	-

OVR T2 40-600 P QS	**OVR T2-T3 N 80-440 P QS**	**OVR T2 N 80-440s P QS**		
OVR T2 40-600 P TS QS			**OVR T2 120-440s P TS**	
1.5		1.5	1.5	
-40 to +80	-40 to +80	-40 to +80	-40 to +80	
5000	5000	5000	2000	
IP 20	IP 20	IP 20	IP 20	
V0	V-0	V0	V0	
85 x 17.8 x 64.8	88 x 17.8 x 65.3	88 x 17.8 x 76.7		
3.35 x 0.70 x 2.55	3.46 x 0.7 x 2.57	3.46 x 0.7 x 3.02		
95.8 x 17.8 x 65.3			96 x 35.6 x 64.8	
3.77 x 0.7 x 2.57			3.78 x 1.4 x 2.55	
OVR T2 40-600 C QS 2CTB803886R0400	-		OVR T2 70 440s C 2CTB803854R0100	
-	OVR T2-T3 N 80-440 C QS 2CTB803886R0100	OVR T2 N 80-440s C QS 2CTB815708R2800		

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (Up). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Type 2 pluggable

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1	40	20	1.8	400	440	519627	OVR T2 40-440 P QS	2CTB803871R1200	0.12
1	40	20	2	400	440	519634	OVR T2 40-440 P TS QS	2CTB803871R0500	0.12
1	40	20	1.8	400	440	525338	OVR T2 40-440s P QS	2CTB815704R4100	0.30
1	40	20	1.8	400	440	525369	OVR T2 40-440s P TS QS	2CTB815704R2900	0.30
1	80	20	1.8	400	440	525567	OVR T2 80-440s P QS	2CTB815708R4100	0.30
1	80	20	1.8	400	440	525567	OVR T2 80-440s P TS QS	2CTB815708R2900	0.30
1	40	20	2.3	400	600	520616	OVR T2 40-600 P QS	2CTB803881R1200	0.12
1	40	20	2.3	400	600	520579	OVR T2 40-600 P TS QS	2CTB803881R0500	0.12
1	80	30	1.4	400	440	519665	OVR T2-T3 N 80-440 P QS	2CTB803973R2000	0.12
1	80	30	2	400	440	525642	OVR T2 N 80-440s P QS	2CTB815708R5400	0.12
1	120	60	2.5	400	440	517067	OVR T2 120-440s P	2CTB803951R1300	0.25

Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices
TNC 230 V networks

Technical features

Types			OVR T2 3L 40-275 P QS	OVR T2 3L 40-275s P QS	OVR T2 3L 80-275s P QS	OVR T2 3L 40-350 P QS
with auxiliary contact (TS)			OVR T2 3L 40-275 P TS QS	OVR T2 3L 40-275s P TS QS	OVR T2 3L 80-275s P TS QS	OVR T2 3L 40-350 P TS QS
Technology			Varistor	Varistor	Varistor	Varistor
Electrical features						
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T2/II	T2/II	T2/II	T2/II
Protected lines			3	3	3	3
System network			TNC	TNC	TNC	TNC
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20%	± 20%	± 20%	± 50%
Nominal system voltage Un (L-PEN/L-L)		[V]	230/400	230/400	230/400	230/400
Max. cont. operating voltage Uc		[V]	275	275	275	350
Nominal dc voltage Un dc L-PE/Un dc L-L		[V dc]	320/640	-	-	375/750
Max. dc. cont. operating voltage Ucdc L-PE/Ucdc L-L		[V dc]	355/710	-	-	415/830
Maximum discharge current Imax (8/20)		[kA]	40	40	80	40
Maximum impulse current Iimp (10/350)		[kA]	2	2	6.25	2
Nominal discharge current In (8/20)		[kA]	20	20	20	20
Voltage protection level Up at In (L-PE)		[kV]	1.25	1.4	1.4	1.5
Voltage protection level Ures at 3kA		[kV]	0.8	0.5	0.5	1.0
Voltage protection level Ures at 5kA		[kV]	0.85	0.7	0.7	1.05
Voltage protection level Ures at 10kA		[kV]	1.0	0.9	0.9	1.2
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	337/-	337/-	337/-	455/-
Uoc		[kV]	-	-	-	-
Response time		[ns]	≤ 25	≤ 25	≤ 25	≤ 25
Short-circuit withstand capability Isccr		[kA]	100	100	100	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 125	≤ 160	≤ 160	≤ 125
	circuit breaker (B or C curve)	[A]	≤ 125	≤ 125	≤ 125	≤ 125
Pluggable cartridge			Yes	Yes	Yes	Yes
Integrated QuickSafe® technology			Yes	Yes	Yes	Yes
State indicator			Yes	Yes	Yes	Yes
Safety reserve			No	Yes	Yes	No
Auxiliary contact			Yes (TS option)	Yes (TS option)	Yes (TS option)	Yes (TS option)
Installation						
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35	2.5 ... 35	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5	12.5	12.5	12.5
Tightening torque (L, N, PE)		[Nm]	2.8	2.8	2.8	2.8
Auxiliary contact (TS)						
Contacts information			1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC
Min. load			12 DC - 10 mA	12 DC - 10 mA	12 DC - 10 mA	12 DC - 10 mA
Max. load			250 V AC - 1A	250 V AC - 1A	250 V AC - 1A	250 V AC - 1A
Connection cross-section		[mm²]	1.5	1.5	1.5	1.5
Miscellanous characteristics						
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000	5000	5000
Degree of protection			IP 20	IP 20	IP 20	IP 20
Fire resistance according to UL 94			V0	V-0	V-0	V0

Protection and safety

OVR Type 2 surge protective devices TNC 230 V networks, pluggable and non-pluggable versions

Technical features

Types		OVR T2 3L 80-275s P QS	OVR T2 3L 40-350 P QS
with auxiliary contact (TS)		**OVR T2 3L 80-275s P TS QS**	**OVR T2 3L 40-350 P TS QS**
Dimensions			
height x width x depth	[mm]	88 x 53.4 x 76.7	85 x 53.4 x 64.8
	[inches]	3.46 x 2.1 x 3.02	3.35 x 2.10 x 2.55
With Auxiliary Contact (TS)			
height x width x depth	[mm]	95.8 x 53.4 x 76.7	96 x 53.4 x 64.8
	[inches]	3.77 x 2.1 x 3.02	3.78 x 2.10 x 2.55
Replacement Cartridges			
Phase Product ID		OVR T2 80-275s C QS 2CTB8157084R2600	OVR T2 40-350 C QS 2CTB803886R1000
Neutral Product ID		-	-

OVR T2 3L 40-275 P QS

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (Up). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Type 2 pluggable

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
3	40	20	1.25	230/400	275	519825	OVR T2 3L 40-275 P QS	2CTB803873R2400	0.36
3	40	20	1.25	230/400	275	519832	OVR T2 3L 40-275 P TS QS	2CTB803873R2500	0.36
3	40	20	1.4	230/400	275	525253	OVR T2 3L 40-275s P TS QS	2CTB815704R0600	0.45
3	40	20	1.4	230/400	275	525314	OVR T2 3L 40-275s P QS	2CTB815704R1800	0.45
3	80	20	1.4	230/400	275	525437	OVR T2 3L 80-275s P TS QS	2CTB815708R0600	0.45
3	80	20	1.4	230/400	275	525499	OVR T2 3L 80-275s P QS	2CTB815708R1800	0.45
3	40	20	1.5	230/400	350	519849	OVR T2 3L 40-350 P QS	2CTB803883R2400	0.36
3	40	20	1.5	230/400	350	519856	OVR T2 3L 40-350 P TS QS	2CTB803883R2500	0.36

Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices
TNC 400 V networks

Technical features

Types			OVR T2 3L 40-440 P QS	OVR T2 3L 80-440s P QS	OVR T2 3L 40 400/690 P	
with auxiliary contact (TS)			OVR T2 3L 40-440 P TS QS	OVR T2 3L 80-440s P TS QS	OVR T2 3L 40 400/690 P TS	OVR T2 3L 40-600 P TS QS
Technology			Varistor	Varistor	Varistor	Varistor
Electrical features						
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T2/II	T2/II	T2/II	T2/II
Protected lines			3	3	3	3
System network			TNC - IT (230)	TNC - IT (230)	TNC - IT (400)	TNC - IT (230)
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 10%	± 10%	± 10%	± 50%
Nominal system voltage Un (L-PEN/L-L)		[V]	400/690	400/690	400/690	400/690
Max. cont. operating voltage Uc		[V]	440	440	440	600
Nominal dc voltage Un dc L-PE/Un dc L-L		[V dc]	495/990	-	-	650/990
Max. dc. cont. operating voltage Ucdc L-PE/Ucdc L-L		[V dc]	545/1090	-	-	715/1090
Maximum discharge current Imax (8/20)		[kA]	40	80	40	40
Maximum impulse current Iimp (10/350)		[kA]	2	6.25	2	2
Nominal discharge current In (8/20)		[kA]	20	20	15	20
Voltage protection level Up at In (L-PE)		[kV]	1.8	2.1	2.9	2.3
Voltage protection level Ures at 3kA		[kV]	1.25	1.25	2.1	1.6
Voltage protection level Ures at 5kA		[kV]	1.35	1.35	2.2	1.7
Voltage protection level Ures at 10kA		[kV]	1.55	1.55	2.3	1.9
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	581/	581/-	910/-	792/-
Response time		[ns]	< 25	< 25	< 25	< 25
Short-circuit withstand capability Isccr		[kA]	100	100	100	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 125	≤ 160	≤ 50	≤ 125
	circuit breaker (B or C curve)	[A]	≤ 125	≤ 126	≤ 50	≤ 125
Pluggable cartridge			Yes	Yes	Yes	Yes
Integrated QuickSafe® technology			Yes	Yes	No	Yes
State indicator			Yes	Yes	Yes	Yes
Safety reserve			No	Yes	No	No
Auxiliary contact			Yes (TS option)	Yes (TS option)	Yes (TS option)	Yes
Installation						
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35	2.5 ... 36	2.5 ... 36
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	2.8	2.8	2.8	2.8
Tightening torque (L, N, PE)		[Nm]				
Auxiliary contact (TS)			1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC
Contacts information			12 DC - 10 mA	12 DC - 10 mA	12 DC - 10 mA	12 DC - 10 mA
Min. load			250 V AC - 1A	250 V AC - 1A	250 V AC - 1A	250 V AC - 1A
Max. load			1.5	1.5	1.5	1.5
Connection cross-section		[mm²]				
Miscellanous characteristics						
Stocking and operating temperature		°C	-40 to +80	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000	5000	5000
Degree of protection			IP 20	IP 20	IP 20	IP 20

Technical features

Types		OVR T2 3L 40-440 P QS	OVR T2 3L 80-440s P QS	OVR T2 3L 40 400/690 P	
with auxiliary contact (TS)		**OVR T2 3L 40-440 P TS QS**	**OVR T2 3L 80-440s P TS QS**	**OVR T2 3L 40 400/690 P TS**	**OVR T2 3L 40-600 P TS QS**
Fire resistance according to UL 94		V-0	V-0	V-0	V-0
Dimensions					
height x width x depth	mm	88 x 53.4 x 65.3	88 x 53.4 x 76.7	88 x 53.4 x 64.8	
	inches	3.46 x 2.1 x 2.57	3.46 x 2.1 x 3.02	3.46 x 2.1 x 2.55	
With Auxiliary Contact (TS)					
height x width x depth	mm	95.8 x 53.4 x 65.3	95.8 x 53.4 x 76.7	96 x 53.4 x 64.8	95.8 x 53.4 x 65.3
	inches	3.77 x 2.1 x 2.57	3.77 x 2.1 x 3.02	3.78 x 2.1 x 2.55	3.77 x 2.1 x 2.57
Replacement Cartridges					
Phase Product ID		OVR T2 40-440 C QS 2CTB803876R0400	OVR T2 80-440s C QS 2CTB815708R5500	OVR T2 40 400/690 C 2CTB803854R1100	OVR T2 40-600 C QS 2CTB803886R0400
Neutral Product ID		-	-	-	-

OVR T2 3L 40-440 P QS

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (Up). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
3	40	20	1.8	400	440	519894	OVR T2 3L 40-440 P QS	2CTB803873R5100	0.45
3	40	20	1.8	400	440	519900	OVR T2 3L 40-440 P TS QS	2CTB803873R5300	0.45
3	80	20	2.1	400	440	525598	OVR T2 3L 80-440s P TS QS	2CTB815708R4000	0.45
3	80	20	2.1	400	440	525635	OVR T2 3L 80-440s P QS	2CTB815708R5200	0.45
3	40	20	2.3	400	600	520685	OVR T2 3L 40-600 P TS QS	2CTB803883R5300	0.45
3	40	15	2.9	400/690	440	515629	OVR T2 3L 40-400/690 P	2CTB803853R4500	0.48
3	40	15	2.9	400/690	440	515636	OVR T2 3L 40-400/690 P TS	2CTB803853R4600	0.48

Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices
TNS 230 V networks

Technical features

Types			OVR T2 4L 40-275 P QS	OVR T2 4L 40-275s P QS	OVR T2 4L 80-275s P QS
with auxiliary contact (TS)			**OVR T2 4L 40-275 P TS QS**	**OVR T2 4L 40-275s P TS QS**	**OVR T2 4L 80-275s P TS QS**
Technology			Varistor	Varistor	Varistor
Electrical features					
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T2/II	T2/II	T2/II
Protected lines			4	4	4
Types of networks			TNS	TNS	TNS
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20%	± 20%	± 20%
Nominal voltage Un (L-N/L-L)		[V]	230/400	230/400	230/400
Max. cont. operating AC voltage Uc		[V]	275	275	275
Nominal dc voltage Un dc L-PE/Un dc L-L		V dc	320/640	-	-
Max. dc. cont. operating voltage Ucdc L-PE/ Ucdc L-L		V dc	355/710	-	-
Maximum discharge current Imax (8/20)		[kA]	40	40	80
Nominal discharge current In (8/20)		[kA]	20	20	20
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kA]	2.5/1.25/1.25	2.8/1.4/1.4	2.8/1.4/1.4
Voltage protection level Up at 3 kA		[kA]	0.8	0.5	0.8
TOV (Temporary over-voltage) withstand Ut	(L-N: 5 s /N-PE: 200 ms)	[V]	334/-	337	334/-
Response time		[ns]	≤ 25	≤25	≤ 25
Residual current IPE		[µA]	100 (200 for s option)		200
Short-circuit withstand capability Isccr		[kA]	100	100	100
Backup protection	Fuse (gG)	[A]	≤ 125	≤160	≤ 160
	Circuit breaker (B or C curve)	[A]	≤ 125	≤125	≤ 125
Pluggable cartridge			Yes	Yes	Yes
Integrated thermal disconnector			Yes	Yes	Yes
State indicator			Yes	Yes	Yes
Safety reserve			No	Yes	Yes
Auxiliary contact			Yes (TS option)	Yes (TS option)	Yes (TS option)
Installation					
Wire range (L, N, PE)	Solid wire	[mm²]	2.5 ... 35	2.5 ... 35	2.5 ... 35
	Stranded wire	[mm²]	2.5 ... 25	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5	12.5	12.5
Tightening torque (L, N, PE)		[Nm]	2.5	2.5	2.5
Auxiliary contact (TS)					
Contact complement			1 NO - 1 NC	-	1 NO - 1 NC
Minimum load			12 V DC - 10 mA	-	12 V DC - 10 mA
Maximum load			250 V AC - 1 A	-	250 V AC - 1 A
Connection cross-section		[mm²]	1.5	-	1.5
Miscellaneous characteristics					
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000	5000
Degree of protection			IP20	IP 20	IP20
Fire resistance according to UL 94			V0	V0	V0
Dimensions	height x width x depth	[mm]	88 x 71.2 x 65.3	88 x 71.2 x 76.7	88 x 71.2 x 76.7
		[inches]	3.46 x 2.8 x 2.57	3.46 x 2.8 x 3.02	3.46 x 2.8 x 3.02
with auxiliary contact (TS)	height x width x depth	[mm]	95.8 x 71.2 x 65.3	95.8 x 71.2 x 76.7	95.8 x 71.2 x 76.7
		[inches]	3.77 x 2.8 x 2.57	3.77 x 2.8 x 3.02	3.77 x 2.8 x 3.02
Replacement Cartridges					
Phase Product ID			OVR T2 40-275 C QS 2CTB803876R1000	OVR T2 40-275s C QS 2CTB8157084R2600	OVR T2 80-275s C QS 2CTB815708R2600
Neutral Product ID			-	-	-

OVR T2 4L 40-275 P QS

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (Up). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Type 2 pluggable - Uc 275 V

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
4	40	20	1.25	230/400	275	20548	OVR T2 4L 40-275 P QS	2CTB803873R5600	0.45
4	40	20	1.25	230/400	275	20555	OVR T2 4L 40-275 P TS QS	2CTB803873R5200	0.45
4	40	20	1.4	230/400	275	25345	OVR T2 4L 40-275s P QS	2CTB815704R2300	0.45
4	40	20	1.4	230/400	275	25284	OVR T2 4L 40-275s P TS QS	2CTB815704R1100	0.45
4	80	20	1.4	230/400	275	25529	OVR T2 4L 80-275s P QS	2CTB815708R2300	0.45
4	80	20	1.4	230/400	275	25468	OVR T2 4L 80-275s P TS QS	2CTB815708R1100	0.45

Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices TNS 400 V networks

Technical features

Types		OVR T2 4L 40-440 P QS	OVR T2 4L 80-440s P QS	
with auxiliary contact (TS)		**OVR T2 4L 40-440 P TS QS**	**OVR T2 4L 80-440s P TS QS**	**OVR T2 4L 40-600 P TS QS**
Technology		Varistor	Varistor	Varistor
Electrical features				
Standard		IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class		T2/II	T2/II	T2/II
Protected lines		4	4	4
System network		TNS	TNS	TNS
Type of current		AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regultaion of the system network		± 10%	± 10%	± 50%
Nominal system voltage Un (L-N/L-L)	V	400/690	400/690	400/690
Max. cont. operating AC voltage Uc	V	440	440	600
Nominal dc voltage Un dc L-PE/Un dc L-L		495/990	-	650/990
Max. dc cont. Operating voltage Ucdc L-PE/ Ucdc L-L		545/1090	-	715/1090
Maximal discharge current Imax (8/20)	kA	40	80	40
Maximum impulse current Iimp (10/350)	kA	2	6.25	2
Nominal discharge current In (8/20)	kA	20	20	20
Follow current interrupting rating Ifi	kA	-	-	
Voltage protection level Up at In (L-N/N-PE/L-PE)	kV	3.6/1.8/1.8	3.6/1.8/1.8	4.6/2.3/2.3
Voltage protection level Ures at 3 kA	kV	1.25	-	1.6
Voltage protection level Ures at 5 kA		1.35	-	1.7
Voltage protection level Ures at 10 kA		1.55	-	1.9
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)	V	581/	581/	792/
Response time	ns	≤25	≤25	≤25
Short-circuit withstand capability Isccr	kA	100	100	100
Backup protection maximum rating				
fuse (gG)	A	≤125	≤160	≤125
circuit breaker (B or C curve)	A	≤125	≤125	≤125
Pluggable cartridge		Yes	Yes	Yes
Integrated thermal disconnector		Yes	Yes	Yes
State indicator		Yes	Yes	Yes
Safety reserve		No	Yes	No
Auxiliary contact		Yes (TS option)	Yes (TS option)	Yes
Installation				
Wire range (L, N, PE) solid wire	mm^2	2.5 ... 35	2.5 ... 35	2.5 ... 35
stranded wire	mm^2	2.5 ... 25	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)	mm	12.5	12.5	12.5
Tightening torque (L, N, PE)	Nm	2.5	2.5	2.5
Auxiliary contact (TS)		-	-	-
Contacts information		1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC
Min. load		12 V DC - 10 mA	12 V DC - 10 mA	12 V DC - 10 mA
Max. load		250 V AC - 1 A	250 V AC - 1 A	250 V AC - 1 A
Connection cross-section	mm^2	1.5	1.5	1.5
Miscellanous characteristics				
Stocking and operating temperature	°C	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude	[m]	5000	5000	5000
Degree of protection		IP 20	IP 20	IP 20

Technical features

Types		OVR T2 4L 40-440 P QS	OVR T2 4L 80-440s P QS	
with auxiliary contact (TS)		**OVR T2 4L 40-440 P TS QS**	**OVR T2 4L 80-440s P TS QS**	**OVR T2 4L 40-600 P TS QS**
Fire resistance according to UL 94		V0	V0	V0
Dimensions				
height x width x depth	mm	88 x 71.2 x 65.3	88 x 71.2 x 69.4	
	inches	3.46 x 2.8 x 2.57	3.46 x 2.8 x 2.57	
Dimensions with auxilary contact (TS)				
height x width x depth	mm	95.8 x 142.4 x 69	95 x 71.2 x 69.4	95.8 x 71.2 x 65.3
	inches	3.77 x 2.8 x 2.57	3.77 x 2.8 x 2.57	3.77 x 2.8 x 2.57
Replacement Cartdriges				
Phase Product ID		OVR T2 40-440 C QS	OVR T2 80-440s C QS	OVR T2 40-600 C QS
		2CTB803876R0400	2CTB815708R5500	2CTB803886R0400

OVR T2 4L 20-275

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (Up). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

OVR T2 Pluggable

Protected lines	Max discharge current Imax 8/20	Nominal current In 8/20	Voltage protection level	Nominal voltage	Max. cont. operating voltage	Bbn 3660308	Order details		Weight 1 piece
	kA		Up kV	Un V	Uc V	EAN	Type code	Order code	kg
4	40	20	1,8	440	440	519894	OVR T2 4L 40-440 P QS	2CTB803873R5100	0.45
4	40	20	1,8	440	440	519900	OVR T2 4L 40-440 P TS QS	2CTB803873R5300	0.45
4	80	20	1,8	440	440	525635	OVR T2 4L 80-440s P QS	2CTB815708R5200	0.6
4	80	20	1,8	440	440	525598	OVR T2 4L 80-440s P TS QS	2CTB815708R4000	0.6
4	40	20	2,3	440	600	520685	OVR T2 4L 40-600 P TS QS	2CTB803883R5300	0.45

Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices TNS/TT 230 and 400 V 1Ph+N networks

Technical features

Types			OVR T2 1N 40-275 P QS	OVR T2 1N 40-275s P QS	OVR T2 1N 80-275s P QS	OVR T2 1N 40-350 P QS	
with auxiliary contact (TS)			OVR T2 1N 40-275 P TS QS	OVR T2 1N 40-275s P TS QS	OVR T2 1N 80-275s P TS QS	OVR T2 1N 40-350 P TS QS	OVR T2 1N 40-440 P TS QS
Technology			Varistor + GDT	Varistor + GDT	Varistor + GDT	Varistor + GDT	Varistor + GDT
Electrical features							
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/ EN61643-11
Type/test class			T2/II	T2/II	T2/II	T2/II	T2/II
Protected lines			1+1	1+1	1+1	1+1	1+1
System network			TT - TNS	TT - TNS	TT - TNS	TT - TNS	TT-TNS
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20%	± 20%	± 20%	± 50%	±10 %
Nominal system voltage Un		[V]	230	230	230	230	400
Max. cont. operating voltage Uc		[V]	275	275	275	350	440
Maximum discharge current Imax (8/20)		[kA]	40	40	80	40	40
Maximum impulse current Iimp (10/350)		[kA]	2	2	6.25	2	2
Nominal discharge current In (8/20)		[kA]	20	20	20	20	20
Total Current		[kA]	80	80	80	80	80
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	1.25/1.4/1.5	1.4/1.4/1.5	1.4/1.4/1.5	1.5/1.4/1.6	1,8/1,4/1,9
Voltage protection level Ures at 3 kA		[kV]	0.8/1.4/0.85	0.8/1.4/0.85	0.8/1.4/0.85	1.0/1.4/1.05	1,25/1,4/1,45
Voltage protection level Ures at 5 kA		[kV]	0.85/1.4/0.95	0.85/1.4/0.95	0.85/1.4/0.95	1.05/1.4/1.1	1,35/1,4/1,55
Voltage protection level Ures at 10 kA		[kV]	1/1.4/1.15	1/1.4/1.15	1/1.4/1.15	1.2/1.4/1.3	1,55/1,4/1,65
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	337/1200	337/1200	337/1200	455/1200	581/1200
Uoc		[kV]	-	-	-	-	-
Response time		[ns]	< 25	< 25	< 25	< 25	<25
Short-circuit withstand capability Isccr		[kA]	100	100	100	100	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 125	≤ 160	≤ 160	≤ 125	≤ 125
	circuit breaker (B or C curve)	[A]	≤ 125	≤ 125	≤ 125	≤ 125	≤ 125
Pluggable cartridge			Yes	Yes	Yes	Yes	Yes
Integrated QuickSafe® technology			Yes	Yes	Yes	Yes	Yes
State indicator			Yes	Yes	Yes	Yes	Yes
Safety reserve			No	Yes	Yes	No	No
Auxiliary contact			Yes (TS option)	Yes (TS option)	Yes (TS option)	Yes (TS option)	Yes
Installation							
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35	2.5 ... 35	2.5 ... 35	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25	2.5 ... 25	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5	12.5	12.5	12.5	12.5
Tightening torque (L, N, PE)		[Nm]	2.8	2.8	2.8	2.8	2.8
Auxiliary contact (TS)							
Contacts information			1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC
Min. load			12 DC - 10 mA	12 DC - 10 mA	12 DC - 10 mA	12 DC - 10 mA	12 DC - 10 mA
Max. load			250 V AC - 1A	250 V AC - 1A	250 V AC - 1A	250 V AC - 1A	250 V AC - 1A
Connection cross-section		[mm²]	1.5	1.5	1.5	1.5	1.5
Miscellanous characteristics							
Stocking and operating temperature		°C	-40 to +80	-40 to +80	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000	5000	5000	5000
Degree of protection			IP 20	IP 20	IP 20	IP 20	IP 20
Fire resistance according to UL 94			V0	V-0	V-0	V0	V0

Technical features

Types		OVR T2 1N 40-275 P QS	OVR T2 1N 40-275s P QS	OVR T2 1N 80-275s P QS	OVR T2 1N 40-350 P QS	
with auxiliary contact (TS)		**OVR T2 1N 40-275 P TS QS**	**OVR T2 1N 40-275s P TS QS**	**OVR T2 1N 80-275s P TS QS**	**OVR T2 1N 40-350 P TS QS**	**OVR T2 1N 40-440 P TS QS**
Dimensions						
height x width x depth	mm	88 x 35.6 x 65.3	88 x 35.6 x 76.7	88 x 35.6 x 76.7	88 x 35.6 x 65.3	
	inches	3.46 x 1.4 x 2.57	3.46 x 1.4 x 3.02	3.46 x 1.4 x 3.02	3.46 x 1.4 x 2.57	
With Auxiliary Contact (TS)						
height x width x depth	mm	95.8 x 35.6 x 65.3	95.8 x 35.6 x 76.7	95.8 x 35.6 x 76.7	95.8 x 35.6 x 65.3	95.8 x 35.6 x 65.3
	inches	3.77 x 1.4 x 2.57	3.77 x 1.4 x 3.02	3.77 x 1.4 x 3.02	3.77 x 1.4 x 2.57	3.77 x 1.4 x 2.57
Replacement Cartridges						
Phase Product ID		OVR T2 40-275 C QS 2CTB803876R1000	OVR T2 40-275s C QS 2CTB815704R2600	OVR T2 80-275s C QS 2CTB815708R2600	OVR T2 40-350 C QS 2CTB803886R1000	OVR T2 40-440 C QS 2CTB803876R0400
Neutral Product ID		OVR T2-T3 N 80-275 C QS 2CTB803876R0000	OVR T2 N 80-275s C QS 2CTB815708R2800	OVR T2 N 80-275s C QS 2CTB815708R2800	OVR T2 N 80-350 C QS 2CTB803886R0000	OVR T2 N 80-440 C QS 2CTB803886R0100

OVR T2 1N 40-275 P QS

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (Up).
They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Type 2 pluggable

Poles	Impluse Curent Iimp 10/350	Max discharge current Imax 8/20	Nominal current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1+1	2	40	20	1.25	230	275	519696	OVR T2 1N 40-275 P QS	2CTB803972R1100	0.24
1+1	2	40	20	1.25	230	275	519702	OVR T2 1N 40-275 P TS QS	2CTB803972R0500	0.24
1+1	2	40	20	1.4	230	275	525239	OVR T2 1N 40-275s P TS QS	2CTB815704R0200	0.30
1+1	2	40	20	1.4	230	275	525307	OVR T2 1N 40-275s P QS	2CTB815704R1400	0.30
1+1	2	80	20	1.4	230	275	525413	OVR T2 1N 80-275s P TS QS	2CTB815708R0200	0.30
1+1	2	80	20	1.4	230	275	525482	OVR T2 1N 80-275s P QS	2CTB815708R1400	0.30
1+1	2	40	20	1.5	230	350	519719	OVR T2 1N 40-350 P QS	2CTB803982R1100	0.24
1+1	2	40	20	1.5	230	350	519726	OVR T2 1N 40-350 P TS QS	2CTB803982R0500	0.24
1+1	2	40	20	1.9	400	440	524577	OVR T2 1N 40-440 P TS QS	2CTB803972R1400	0.24

Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices TNS/TT 230 and 400 V 3Ph+N networks

OVR T2 3N 40-275 P QS

Technical features

Types			**OVR T2 3N 40-275 P QS**	**OVR T2 3N 40-275s P QS**
with auxiliary contact (TS)			**OVR T2 3N 40-275 P TS QS**	**OVR T2 3N 40-275s P TS QS**
Technology			Varistor + GDT	Varistor + GDT
Electrical features				
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T2/II	T2/II
Protected lines			3+1	3+1
System network			TT - TNS	TT - TNS
Type of current			AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20%	± 20%
Nominal system voltage Un (L-N/L-L)		[V]	230/400	230/400
Max. cont. operating voltage Uc (L-N/L-L)		[V]	275/440	275/440
Maximum discharge current Imax (8/20)		[kA]	40	40
Maximum impulse current Iimp (10/350)		[kA]	2	2
Nominal discharge current In (8/20)		[kA]	20	20
Total Current		[kA]	80	80
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	1.25/1.4/1.5	1.4/1.4/1.5
Voltage protection level Ures at 3kA (L-N/N-PE /L-PE)		[kV]	0.8/1.4/0.85	0.8/1.4/0.85
Voltage protection level Ures at 5kA (L-N/N-PE /L-PE)		[kV]	0.85/1.4/0.95	0.85/1.4/0.95
Voltage protection level Ures at 10kA (L-N/N-PE /L-PE)		[kV]	1/1.4/1.15	1/1.4/1.15
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	337/1200	337/1200
Response time		[ns]	< 25	< 25
Short-circuit withstand capability Isccr		[kA]	100	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 125	≤ 160
	circuit breaker (B or C curve)	[A]	≤ 125	≤ 125
Pluggable cartridge			Yes	Yes
Integrated QuickSafe® technology			Yes	Yes
State indicator			Yes	Yes
Safety reserve			No	Yes
Auxiliary contact			Yes (TS option)	Yes (TS option)
Installation				
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5	12.5
Tightening torque (L, N, PE)		[Nm]	2.8	2.8
Auxiliary contact (TS)				
Contacts information			1 NO - 1 NC	1 NO - 1 NC
Min. load			12 DC - 10 mA	12 DC - 10 mA
Max. load			250 V AC - 1A	250 V AC - 1A
Connection cross-section		[mm²]	1.5	1.5
Miscellanous characteristics				
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000
Degree of protection			IP 20	IP 20
Fire resistance according to UL 94			V0	V-0
Dimensions				
height x width x depth		[mm]	88 x 71.2 x 65.3	88 x 71.2 x 76.7
		[inches]	3.46 x 2.8 x 2.57	3.46 x 2.8 x 3.02
With Auxiliary Contact (TS)				
height x width x depth		[mm]	95.8 x 71.2 x 65.3	95.8 x 71.2 x 76.7
		[inches]	3.77 x 2.8 x 2.57	3.77 x 2.8 x 3.02
Replacement Cartridges				
Phase Product ID			OVR T2 40-275 C QS 2CTB803876R1000	OVR T2 40-275s C QS 2CTB815704R2600
Neutral Product ID			OVR T2-T3 N 80-275 C QS 2CTB803876R0000	OVR T2 N 80-275s C QS 2CTB815708R2800

OVR T2 3N 80-275s P QS	**OVR T2 3N 40-350 P QS**	**OVR T2 3N 40-440 P QS**		**OVR T2 3N 80-440s P QS**
OVR T2 3N 80-275s P TS QS	**OVR T2 3N 40-350 P TS QS**	**OVR T2 3N 40-440 P TS QS**	**OVR T2 3N 40-440s P TS QS**	**OVR T2 3N 80-440s P TS QS**
Varistor + GDT	Varistor + GDT	Varistor + GDT	Varistor + GDT	Varistor + GDT
IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
T2/II	T2/II	T2/II	T2/II	T2/II
3+1	3+1	3+1	3+1	3+1
TT - TNS	TT - TNS	TT - TNS	TT - TNS	TT - TNS
AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
± 20%	± 50%	± 10%	± 10%	± 10%
230/440	230/400	400/690	400/690	400/690
275/440	350/600	440/760	440/760	440/760
80	40	40	40	80
6.25	2	2	2	6.25
20	20	20	20	20
80	80	80	80	80
1.4/1.4/1.5	1.5/1.4/1.7	1.8/1.4/2.1	1.8/2/2.1	1.8/2/2.1
0.8/1.4/0.85	1.0/1.4/1.05	1.25/1.4/1.45	1.25/1.4/1.45	1.25/1.4/1.45
0.85/1.4/0.95	1.05/1.4/1.1	1.35/1.4/1.45	1.35/1.4/1.45	1.35/1.4/1.45
1/1.4/1.15	1.2/1.4/1.3	1.55/1.4/1.65	1.55/1.4/1.65	1.55/1.4/1.65
337/1200	455/1200	581/1200	581/1200	581/1200
< 25	< 25	< 25	< 26	< 25
100	100	100	100	100
≤ 160	≤ 125	≤ 125	≤ 160	≤ 160
≤ 125	≤ 125	≤ 125	≤ 125	≤ 125
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
Yes	No	No	Yes	Yes
Yes (TS option)	Yes (TS option)	Yes (TS option)	Yes	Yes (TS option)
2.5 ... 35	2.5 ... 35	2.5 ... 35	2.5 ... 35	2.5 ... 35
2.5 ... 25	2.5 ... 25	2.5 ... 25	2.5 ... 25	2.5 ... 25
12.5	12.5	12.5	12.5	12.5
2.8	2.8	2.8	2.8	2.8
1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC
12 DC - 10 mA	12 DC - 10 mA	12 DC - 10 mA	12 DC - 10 mA	12 DC - 10 mA
250 V AC - 1A	250 V AC - 1A	250 V AC - 1A	250 V AC - 1A	250 V AC - 1A
1.5	1.5	1.5	1.5	1.5
-40 to +80	-40 to +80	-40 to +80	-40 to +80	-40 to +80
5000	5000	5000	5000	5000
IP 20	IP 20	IP 20	IP 20	IP 20
V-0	V0	V0	V-0	V-0
88 x 71.2 x 76.7	88 x 71.2 x 65.3	88 x 71.2 x 65.3		88 x 71.2 x 76.7
3.46 x 2.8 x 3.02	3.46 x 2.8 x 2.57	3.46 x 2.8 x 2.57		3.46 x 2.8 x 3.02
95.8 x 71.2 x 76.7	95.8 x 71.2 x 65.3	95.8 x 71.2 x 65.3	95.8 x 71.2 x 76.7	95.8 x 71.2 x 76.7
3.77 x 2.8 x 3.02	3.77 x 2.8 x 2.57	3.77 x 2.8 x 2.57	3.77 x 2.8 x 3.02	3.77 x 2.8 x 3.02
OVR T2 80-275s C QS 2CTB815708R2600	OVR T2 40-350 C QS 2CTB803886R1000	OVR T2 40-440 C QS 2CTB803876R0400	OVR T2 40-440s C QS 2CTB815704R5500	OVR T2 80-440s C QS 2CTB815708R5500
OVR T2 N 80-275s C QS 2CTB815708R2800	OVR T2 N 80-350 C QS 2CTB803886R0000	OVR T2-T3 N 80-440 C QS 2CTB803886R0100	OVR T2 N 80-440s C QS 2CTB815708R5700	OVR T2 N 80-440s C QS 2CTB815708R5700

Protection and safety

OVR Type 2 pluggable QuickSafe® surge protective devices TNS/TT 230 and 400 V 3Ph+N networks

OVR T2 3N 40-275 P QS

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (Up). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Type 2 pluggable

Protected lines	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
3+1	40	20	1.5	230/400	275	519.931	OVR T2 3N 40-275 P QS	2CTB803973R1100	0.48
3+1	40	20	1.5	230/400	275	519.948	OVR T2 3N 40-275 P TS QS	2CTB803973R0500	0.48
3+1	40	20	1.4	230/400	275	52526 0	OVR T2 3N 40-275s P TS QS	2CTB815704R0800	0.60
3+1	40	20	1.4	230/400	275	52532 1	OVR T2 3N 40-275s P QS	2CTB815704R2000	0.60
3+1	80	20	1.4	230/400	275	52544 4	OVR T2 3N 80-275s P TS QS	2CTB815708R0800	0.60
3+1	80	20	1.4	230/400	275	52550 5	OVR T2 3N 80-275s P QS	2CTB815708R2000	0.60
3+1	40	20	1.5	230/400	350	519.962	OVR T2 3N 40-350 P QS	2CTB803983R1100	0.48
3+1	40	20	1.5	230/400	350	519.979	OVR T2 3N 40-350 P TS QS	2CTB803983R0500	0.48
3+1	40	20	1.8	400/690	440	519.993	OVR T2 3N 40-440 P QS	2CTB803973R1400	0.48
3+1	40	20	1.8	400/690	440	520.005	OVR T2 3N 40-440 P TS QS	2CTB803973R1500	0.48
3+1	40	20	1.8	400/690	440	52537 6	OVR T2 3N 40-440s P TS QS	2CTB815704R3700	1.05
3+1	80	20	1.8	400/690	440	52558 1	OVR T2 3N 80-440s P TS QS	2CTB815708R3700	1.05
3+1	80	20	1.8	400/690	440	52562 8	OVR T2 3N 80-440s P QS	2CTB815708R4900	1.05

New E 90 50/125 fuse disconnectors.

Perfect integration,
guaranteed innovation.

Overloads and short circuits protection in installations with rated currents up to 125A, compliance with the major international standards, compactness and reliability: these are the winning features of the new line of fuse disconnectors E 90 50/125. A wide range of solution offering the technology state-of-the-art in safety and comfort (such as LED for blown fuse indication), designed to assure the maximum efficiency in industrial applications, manufacturing systems and power generation - everywhere in the world. **www.abb.com/lowvoltage**

Protection and safety

OVR Type T2-T3 pluggable QuickSafe® surge protective devices
Single pole - 230 V and 440 V networks

Technical features

Types			OVR T2-T3 20-275 P QS	OVR T2-T3 20-440 P QS	OVR T2-T3 N 80-275 P QS	OVR T2-T3 N 80-440 P QS
with auxiliary contact (TS)			OVR T2-T3 20-275 P TS QS	OVR T2-T3 20-440 P TS QS	-	-
Technology			Varistor	Varistor	GDT	GDT
Electrical features						
Standard			IEC 61643-11/ EN 61643-11	IEC 61643-11/ EN 61643-11	IEC 61643-11/ EN 61643-11	IEC 61643-11/ EN 61643-11
Type/test class			T2-T3/II-III	T2-T3/II-III	T2-T3/II-III	T2-T3/II-III
Protected lines			1	1	1	1
System network			TNC - TT(L-N) - TNS	TNC - TT(L-N) - TNS	TT (N-PE)-TNS(N-PE)	TT (N-PE)-TNS(N-PE)
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20%	± 10%	± 20%	± 10%
Nominal system voltage Un		[V]	230	400	230	400
Max. cont. operating voltage Uc		[V]	275	440	275	440
Nominal dc voltage Un dc L-PE		[V dc]	320	320	-	-
Max. dc. cont. operating voltage Ucdc L-PE		[V dc]	355	355	-	-
Maximum discharge current Imax (8/20)		[kA]	20	20	80	80
Nominal discharge current In (8/20)		[kA]	5	5	2	2
Voltage protection level Up at In (L-N)		[kV]	0.9/-/-	1.4/-/-	30	30
Voltage protection level Ures at 3kA (L-N)		[kV]	0.8	1.25	-/-/1.4	-/-/1.4
Voltage protection level Ures at 5kA (L-N)		[kV]	0.85	1.35	-	-
Voltage protection level Ures at 10kA (L-N)		[kV]	1	1.55	-	-
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	337/-	581/-	-	-
Uoc		[kV]	6	6	-	-
Response time		[ns]	≤ 25	≤ 25	-/1200	-/1200
Short-circuit withstand capability Isccr		[kA]	100	100	<25	<25
Backup protection maximum rating	fuse (gG)	[A]	≤ 125	≤ 125	<125	<125
	circuit breaker (B or C curve)	[A]	≤ 125	≤ 125	<125	<125
Pluggable cartridge			Yes	Yes	Yes	Yes
Integrated QuickSafe® technology			Yes	Yes	-	-
State indicator			Yes	Yes	No	No
Safety reserve			No	No	No	No
Auxiliary contact			Yes (TS option)	Yes (TS option)	No	No
Installation						
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35	2.5 ... 35	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5	12.5	12.5	12.5
Tightening torque (L, N, PE)		[Nm]	2.8	2.8	2.8	2.8
Auxiliary contact (TS)						
Contacts information			1 NO - 1 NC	1 NO - 1 NC	-	-
Min. load			12 DC - 10 mA	12 DC - 10 mA	-	-
Max. load			250 V AC - 1A	250 V AC - 1A	-	-
Connection cross-section		[mm²]	1.5	1.5	-	-
Miscellanous characteristics						
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80	-40 to + 80	-40 to + 80
Maximal Altitude		[m]	5000	5000	5000	5000
Degree of protection			IP 20	IP 20	IP 20 - Indoor	IP 20 - Indoor
Fire resistance according to UL 94			V0	V0	V-0	V-0
Dimensions of packing						
height x width x depth		[mm]	88 x 17.8 x 65.3	88 x 17.8 x 65.3	85 x 17.8 x 64.8	85 x 17.8 x 64.8
		[inches]	3.46 x 0.7 x 2.57	3.46 x 0.7 x 2.57	3.35 x 0.70 x 2.55	3.35 x 0.70 x 2.55

Technical features

Types		OVR T2-T3 20-275 P QS	OVR T2-T3 20-440 P QS	OVR T2-T3 N 80-275 P QS	OVR T2-T3 N 80-440 P QS
with auxiliary contact (TS)		**OVR T2-T3 20-275 P TS QS**	**OVR T2-T3 20-440 P TS QS**	**-**	**-**
With Auxiliary Contact (TS)					
height x width x depth	[mm]	95.8 x 17.8 x 65.3	95.8 x 17.8 x 65.3	-	-
	[inches]	3.77 x 0.7 x 2.57	3.77 x 0.7 x 2.57	-	-
Replacement Cartridges					
Phase Product ID		OVR T2-T3 20-275 C QS 2CTB803876R1200	OVR T2-T3 20-440 C QS 2CTB803876R0600	OVR T2-T3 N 80-275 C QS 2CTB803876R0000	OVR T2-T3 N 80-275 C QS 2CTB803876R0000
Neutral Product ID		-	-	-	-

OVR T2 T3 20- 275 P QS

Type 2 and 3 surge protective devices shall be installed as close as possible to the sensitive equipment to protect. As Type 2 they have been characterize by their capacity to safely discharge current with a 8/20 µs wave form and they guarantee the coordination with Type 1 SPDs or other Type 2 respecting coordination distances. As Type 3 they are characterized by their capacity to safely discharge current with 1.2/50 µs wave form, with a very low level of Voltage Protection level.

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1	20	5	0.9	230	275	519.566	OVR T2-T3 20-275 P QS	2CTB803871R2400	0.12
1	20	5	0.9	230	275	519.573	OVR T2-T3 20-275 P TS QS	2CTB803871R2500	0.12
1	20	5	1.4	400	440	519.603	OVR T2-T3 20-440 P QS	2CTB803871R1100	0.12
1	20	5	1.4	400	440	519.610	OVR T2-T3 20-440 P TS QS	2CTB803871R1300	0.12
1	80	30	1.4	230	275	519641	OVR T2-T3 N 80-275 P QS	2CTB803973R1900	0.12
1	80	30	1.4	400	440	519641	OVR T2-T3 N 80-440 P QS	2CTB803973R2000	0.12

Protection and safety

OVR Type T2-T3 pluggable QuickSafe® surge protective devices TNC - 230 V 3Ph + PEN networks

Technical features

Types			**OVR T2-T3 3L 20-275 P QS**
with auxiliary contact (TS)			**OVR T2-T3 3L 20-275 P TS QS**
Technology			Varistor + GDT
Electrical features			
Standard			IEC 61643-11/EN 61643-11 / UL 1449 4th Ed
Type/test class			T2-T3/II-III
Protected lines			3
System network			TNC
Type of current			AC 47-63 Hz
Voltage regulation of the system network			± 20%
Nominal system voltage Un (L-PEN/L-L)		[V]	230/400
Max. cont. operating voltage Uc (L-PEN/L-L)		[V]	275/440
Nominal dc voltage Un dc L-PE		[V dc]	320
Max. dc. cont. operating voltage Ucdc L-PE		[V dc]	355
Maximum discharge current Imax (8/20)		[kA]	20
Nominal discharge current In (8/20)		[kA]	5
Total Current		[kA]	60
Voltage protection level Up at In (L-N/N-PE /L-PE)		[kV]	0,85/-/-
Voltage protection level Ures at 3kA		[kV]	0.8
Voltage protection level Ures at 5kA		[kV]	0.85
Voltage protection level Ures at 10kA		[kV]	1.0
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	337/-
Uoc		[kV]	6
Response time		[ns]	≤ 25
Short-circuit withstand capability Isccr		[kA]	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 125
	circuit breaker (B or C curve)	[A]	≤ 125
Pluggable cartridge			Yes
Integrated QuickSafe® technology			Yes
State indicator			Yes
Safety reserve			No
Auxiliary contact			Yes (TS option)
Installation			
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5
Tightening torque (L, N, PE)		[Nm]	2.8
Auxiliary contact (TS)			
Contacts information			1 NO - 1 NC
Min. load			12 DC - 10 mA
Max. load			250 V AC - 1A
Connection cross-section		[mm²]	1.5
Miscellanous characteristics			
Stocking and operating temperature		[°C]	-40 to +80
Maximal Altitude		[m]	5000
Degree of protection			IP 20
Fire resistance according to UL 94			V0
Dimensions			
height x width x depth		mm	88 x 53.4 x 65.3
		inches	3.46 x 2.1 x 2.57

Technical features

Types		**OVR T2-T3 3L 20-275 P QS**
with auxiliary contact (TS)		**OVR T2-T3 3L 20-275 P TS QS**
With Auxiliary Contact (TS)		
height x width x depth	mm	95.8 x 53.4 x 65.3
	inches	3.77 x 2.1 x 2.57
Replacement Cartridges		
Phase Product ID		OVR T2-T3 20-275 C QS 2CTB803876R1200
Neutral Product ID		-

OVR T2 T3 3L 20-275 P TS QS

Type 2 and 3 surge protective devices shall be installed as close as possible to the sensitive equipment to protect. As Type 2 they have been characterize by their capacity to safely discharge current with a 8/20 µs wave form and they guarantee the coordination with Type 1 SPDs or other Type 2 respecting coordination distances. As Type 3 they are characterized by their capacity to safely discharge current with 1.2/50 µs wave form, with a very low level of Voltage Protection level.

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
3	20	5	0.85	230/400	275	519.818	OVR T2-T3 3L 20-275 P QS	2CTB803873R3400	0.36
3	20	5	0.85	230/400	275	520.661	OVR T2-T3 3L 20-275 P TS QS	2CTB803873R3500	0.36

Protection and safety

OVR Type T2-T3 QuickSafe® surge protective devices TNS/TT - 230 V 1Ph+N networks

Technical features

Types			**OVR T2-T3 1N 20-275 P QS**
with auxiliary contact (TS)			**OVR T2-T3 1N 20-275 P TS QS**
Electrical features			
Standard			IEC 61643-11/EN 61643-11
Type/test class			T2-T3/II-III
Protected lines			1+1
System network			TT - TNS
Type of current			AC 47-63 Hz
Voltage regulation of the system network			± 20%
Nominal system voltage Un		[V]	230
Max. cont. operating voltage Uc		[V]	275
Maximum discharge current Imax (8/20)		[kA]	20
Nominal discharge current In (8/20)		[kA]	5
Total Current		[kA]	40
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	0.9/1.4/1.4
Voltage protection level Ures at 3kA (L-N/N-PE /L-PE)		[kV]	0.8/1.4/0.85
Voltage protection level Ures at 5kA(L-N/N-PE /L-PE)		[kV]	0.85/1.4/0.95
Voltage protection level Ures at 10kA (L-N/N-PE /L-PE)		[kV]	1/1.4/1.15
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	337/1200
Uoc		[kV]	6
Response time		[ns]	≤ 25
Residual current IPE		[µA]	≤ 10
Short-circuit withstand capability Isccr		[kA]	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 125
	circuit breaker (B or C curve)	[A]	≤ 125
Pluggable cartridge			Yes
Integrated QuickSafe® technology			Yes
State indicator			Yes
Safety reserve			No
Auxiliary contact			Yes (TS option)
Installation			
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5
Tightening torque (L, N, PE)		[Nm]	2.8
Auxiliary contact (TS)			
Contacts information			1 NO - 1 NC
Min. load			12 DC - 10 mA
Max. load			250 V AC - 1A
Connection cross-section		[mm²]	1.5
Miscellanous characteristics			
Stocking and operating temperature		[°C]	-40 to +80
Maximal Altitude		[m]	5000
Degree of protection			IP 20
Fire resistance according to UL 94			V0

Technical features

Types		**OVR T2-T3 1N 20-275 P QS**
with auxiliary contact (TS)		**OVR T2-T3 1N 20-275 P TS QS**
Dimensions		
height x width x depth	[mm]	88 x 35.6 x 65.3
	[inches]	3.46 x 1.4 x 2.57
With Auxiliary Contact (TS)		
height x width x depth	mm	95.8 x 35.6 x 65.3
	inches	3.77 x 1.4 x 2.57
Replacement Cartridges		
Phase Product ID		OVR T2-T3 20-275 C QS 2CTB803876R1200
Neutral Product ID		OVR T2-T3 N 80-275 C QS 2CTB803876R0000

OVR T2 T3 1N 20-275 P QS

Type 2 and 3 surge protective devices shall be installed as close as possible to the sensitive equipment to protect. As Type 2 they have been characterize by their capacity to safely discharge current with a 8/20 µs wave form and they guarantee the coordination with Type 1 SPDs or other Type 2 respecting coordination distances. As Type 3 they are characterized by their capacity to safely discharge current with 1.2/50 µs wave form, with a very low level of Voltage Protection level.

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1+1	20	5	1.4	230	275	519.689	OVR T2-T3 1N 20-275 P QS	2CTB803972R1200	0.24
1+1	20	5	1.4	230	275	520.654	OVR T2-T3 1N 20-275 P TS QS	2CTB803972R1300	0.24

Protection and safety

OVR Type T2-T3 QuickSafe® surge protective devices
TT - 230 V and 400 V 3Ph+N networks

Technical features

Types			OVR T2-T3 3N 20-275 P QS	OVR T2-T3 3N 20-440 P QS
with auxiliary contact (TS)			**OVR T2-T3 3N 20-275 P TS QS**	
Technology			Varistor + GDT	Varistor + GDT
Electrical features				
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11 /EN 61643-11
Type/test class			T2-T3/II-III	T2-T3 /II-III
Protected lines			3+1	3+1
System network			TT - TNS	TT - TNS
Type of current			AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20%	± 10%
Nominal system voltage Un (L-N/L-L)		[V]	230/400	400/690
Max. cont. operating voltage Uc (L-N/L-L)		[V]	275/440	440/750
Maximum discharge current Imax (8/20)		[kA]	20	20
Nominal discharge current In (8/20)		[kA]	5	5
Total Current		[kA]	80	80
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	0.9/1.4/1.4	1.4/1.4/1.4
Voltage protection level Ures at 3kA (L-N/N-PE /L-PE)		[kV]	0.8/1.4/0.85	1.25/1.4/1.4
Voltage protection level Ures at 5kA (L-N/N-PE /L-PE)		[kV]	0.85/1.4/0.95	1.35/1.4/1.45
Voltage protection level Ures at 10kA (L-N/N-PE /L-PE)		[kV]	1/1.4/1.15	1.35/1.4/1.65
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./ N-PE: 200ms)		[V]	337/1200	581/1200
Uoc		[kV]	6	6
Response time		[ns]	≤ 25	≤ 25
Residual current IPE		[µA]	≤ 10	≤ 10
Short-circuit withstand capability Isccr		[kA]	100	100
Backup protection maximum rating	fuse (gG)	[A]	≤ 125	≤ 125
	circuit breaker (B or C curve)	[A]	≤ 125	≤ 125
Pluggable cartridge			Yes	Yes
Integrated QuickSafe® technology			Yes	Yes
State indicator			Yes	Yes
Safety reserve			No	No
Auxiliary contact			Yes (TS option)	Yes (TS option)
Installation				
Wire range (L, N, PE)	solid wire	[mm²]	2.5 ... 35	2.5 ... 35
	stranded wire	[mm²]	2.5 ... 25	2.5 ... 25
Stripping length (L, N, PE)		[mm]	12.5	12,5
Tightening torque (L, N, PE)		[Nm]	2.8	2,8
Auxiliary contact (TS)				
Contacts information			1 NO- 1 NC	1 NO- 1 NC
Min. load			12 DC - 10 mA	12 DC - 10 mA
Max. load			250 V AC - 1A	250 V AC - 1A
Connection cross-section		[mm²]	1.5	1.5
Miscellanous characteristics				
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000
Degree of protection			IP 20	IP 20
Fire resistance according to UL 94			V0	V0

Technical features

Types		OVR T2-T3 3N 20-275 P QS	OVR T2-T3 3N 20-440 P QS
with auxiliary contact (TS)		**OVR T2-T3 3N 20-275 P TS QS**	
Dimensions			
height x width x depth	mm	88 x 71.2 x 65.3	88 x 71.2 x 65.3
	inches	3.46 x 2.8 x 2.57	3.46 x 2.8 x 2.57
With Auxiliary Contact (TS)			
height x width x depth	mm	95.8 x 71.2 x 65.3	96 x 71.2 x 64.8
	inches	3.77 x 2.8 x 2.57	3.35 x 2.81 x 2.55
Replacement Cartridges			
Phase Product ID		OVR T2-T3 20-275 C QS 2CTB803876R1200	OVR T2-T3 20-440 C QS 2CTB803876R0600
Neutral Product ID		OVR T2-T3 N 80-275 C QS 2CTB803876R0000	OVR T2-T3 N 80-440 C QS 2CTB803886R0100

OVR T2 T3 3N 20-275 P TS QS

Type 2 and 3 surge protective devices shall be installed as close as possible to the sensitive equipment to protect. As Type 2 they have been characterize by their capacity to safely discharge current with a 8/20 µs wave form and they guarantee the coordination with Type 1 SPDs or other Type 2 respecting coordination distances. As Type 3 they are characterized by their capacity to safely discharge current with 1.2/50 µs wave form, with a very low level of Voltage Protection level.

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
3+1	20	5	1.4	230/400	275	519.924	OVR T2-T3 3N 20-275 P QS	2CTB803973R1200	0.48
3+1	20	5	1.4	230/400	275	520.692	OVR T2-T3 3N 20-275 P TS QS	2CTB803973R1600	0.48
3+1	20	5	1.5	400/690	440	519986	OVR T2-T3 3N 20-440 P QS	2CTB803973R1300	0.48

Protection and safety

OVR Type T2-T3 StreetLight surge protective devices TT/TN - 230 V 1Ph+N networks

Technical features

Types			OVR T2-T3 N1 15-275S SL
Technology			Varistor + GDT
Electrical features			
Standard			IEC 61643-11/EN 61643-11
Type/test class			T2-T3/II-III
System network			TT, TNS
Protection mode			Common/Differential
Number of pole/Type of current			1+1
Nominal system voltage Un		[V]	230
Max. cont. operating voltage Uc (L-N)		[V]	275
Maximum discharge current Imax (8/20)		[kA]	15
Nominal discharge current In (8/20)		[kA]	5
Total Current		[kA]	30
Voltage protection level Up at In (L-N/L-PE)		[kV]	1.1/1.3
TOV (Temporary overvoltage) withstand Ut (L-N: 5s.)		[V]	337
Uoc		[kV]	1.1
Response time		[ns]	< 25
Short circuit withstand Icc		[kA]	15
Backup protection maximum rating	fuse (gG)	[A]	< 20 A
	circuit breaker (B or C curve)	[A]	< 20 A
Pluggable cartridge			No
Integrated QuickSafe® technology			No
State indicator			Yes
Safety reserve			Yes
Installation			
Wire range : phase and neutral wire			2 x 1.5 mm² - L 16 cm
Wire range : Protective Earth wire		[mm²]	< 6 mm²
Stripping length (L, N, PE)		[mm]	10
Auxiliary contact (TS)			
Contacts information			-
Min. load			-
Max. load			-
Connection cross-section		[mm²]	-
Miscellanous characteristics			
Stocking and operating temperature		[°C]	-40 to +80
Degree of protection			IP 32
Fire resistance according to UL 94			V0
Dimensions			
height x width x depth		[mm]	80 x 17.5 x 41
		[inches]	3.15 x 0.69 x 1.62
With Auxiliary Contact (TS)			
height x width x depth		[mm]	-
		[inches]	-

2CSC400032F0013

OVR T2 T3 StreetLight

OVR TYPE 2 – TYPE 3 STREET LIGHTING

This is a particular Type 2 and 3 surge protective devices meant to be installed in applications where overall dimensions are critical.
It has the Safety system integrated by default, performed by two varistors in parallel, allowing the customer to perform preventive maintenance. As soon as one of the Life status windows swap from green to red, we know the product needs to be replaced, but it still guarantees the protection.
It has IP 32 and bottom connections to guarantee the best performances in critical and humid environment.

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1+1	15	5	1.3	230	275	524.775	OVR T2-T3 N1 15-275S SL	2CTB804500R0200	0.04
1+1	15	5	1.3	230	275	524799	OVR T2-T3 N1 15-275S SL (x20)	2CTB804500Z1200	0.04

Protection and safety

OVR Plus - Autoprotected surge protective devices TNS/TT 230 V networks

Technical features

Types			OVR Plus N1 20	OVR Plus N1 40	OVR Plus N3 20	OVR Plus N3 40
with auxiliary contact (TS)			–	–	–	–
Technology			Varistor + GDT	Varistor + GDT	Varistor + GDT	Varistor + GDT
Electrical features						
Standard			IEC 61643-1/EN 61643-11			
Type/test class			T2/II	T2/II	T2/II	T2/II
Protected lines			1+1	1+1	3+1	3+1
Types of networks			TNS/TT	TNS/TT	TNS/TT	TNS/TT
Type of current			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			± 20%	± 20%	± 20%	± 20%
Nominal voltage Un (L-N/L-L)		[V]	230/400	230/400	230/400	230/400
Max. cont. operating voltage Uc		[V]	275	275	275	275
Maximum discharge current Imax (8/20)		[kA]	20	40	20	40
Nominal discharge current In (8/20)		[kA]	5	20	5	20
Voltage protection level Up at In (L-N/N-PE/L-PE)		[kV]	1.3/-/1.3	1.6/-/1.8	1.3/1.3/1.3	2.0/1.5/2.0
Voltage protection level Up at 3 kA (L-N/N-PE/L-PE)		[kV]	1.1/-/1.1	1.1/-/1.1	1.1/1.1/1.1	1.1/1.1/1.1
TOV (Temporary overvoltage) withstand Ut	(L-N: 5 s /N-PE: 200 ms)	[V]	334/1200	334/1200	334/1200	334/1200
Response time		[ns]	≤ 25	≤ 25	≤ 25	≤ 25
Residual current IPE		[µA]	10	10	10	10
Short-circuit withstand capability Isccr		[kA]	10	15	10	15
Backup protection	Fuse (gG)	[A]	-	-	-	-
	Circuit breaker (B or C curve)	[A]	integrated	integrated	integrated	integrated
Pluggable cartridge			No	No	No	No
Integrated thermal disconnector			Yes	Yes	Yes	Yes
State indicator			Yes	Yes	Yes	Yes
Safety reserve			No	No	No	No
Auxiliary contact			Yes (S2C-H6R/2CDS200912R0001)			
Installation						
Wire range (L, N, PE)	Solid wire	[mm²]	2.5...25	2.5...25	2.5...25	2.5...25
	Stranded wire	[mm²]	2.5...16	2.5...16	2.5...16	2.5...16
Stripping length (L, N, PE)		[mm]	11	11	11	11
Tightening torque (L, N, PE)		[Nm]	2.5	2.5	2.5	2.5
Auxiliary contact (TS)						
Contact complement			–	–	–	–
Minimum load			–	–	–	–
Maximum load			–	–	–	–
Connection cross-section		[mm²]	–	–	–	–
Miscellaneous characteristics						
Stocking and operating temperature		[°C]	-40 to +70 / -25 to +55	-40 to +70 / -25 to +55	-40 to +70 / -25 to +55	-40 to +70 / -25 to +55
Maximal Altitude		[m]	2000	2000	2000	2000
Degree of protection			IP20	IP20	IP20	IP20
Fire resistance according to UL 94			V0	V0	V0	V0
Dimensions	height x width x depth	[mm]	91 x 35.6 x 74.6	91 x 35.6 x 74.6	100.8 x 106.8 x 74.6	100.8 x 106.8 x 74.6
		[inches]	3.58 x 1.40 x 2.94	3.58 x 1.40 x 2.94	3.97 x 4.20 x 2.94	3.97 x 4.20 x 2.94

OVR PLUS N3 20
OVR PLUS N3 40

OVR PLUS N3 20 and OVR PLUS N3 40 for commercial and industrial applications:

- Auto-protected: Backup miniature circuit breaker integrated and fully coordinated with the surge protective device.
- Easy installation: Fully coordinated unit with easy wiring with the complete ABB pro M modular range.
- High discharge capacity: With Imax 20 and 40 kA the OVR Plus N3 insure the protection of your low
  voltage installations and electric equipment.
- High reliability: No welding inside the module and specific thermal disconnection with the „bilame“ sensor.

OVR PLUS N1 40 for residential applications:

- Auto-protected: Backup miniature circuit breaker integrated and fully coordinated with the surge protective device.
- Compact: Only two modules (36 mm width), means more space and easy wiring with the complete ABB DIN rail range.
- High discharge capacity: With Imax 20 and 40 kA the OVR PLUS N1 can protect your electric equipment against high surges.
- High reliability: No welding inside the module and specific thermal disconnection.

Type 2 autoprotected

Poles	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection level Up	Nominal voltage Un	Max. cont. operating voltage Uc	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kV	V	V	EAN	Type code	Order code	kg
1+1	20	5	1.3	230	275	521286	OVR PLUS N1 20	2CTB803701R0700	0.28
1+1	40	20	1.8	230	275	517005	OVR PLUS N1 40	2CTB803701R0100	0.28
3+1	20	5	1.3	230/400	275	517081	OVR PLUS N3 20	2CTB803701R0400	0.84
3+1	40	20	2.0	230/400	275	517074	OVR PLUS N3 40	2CTB803701R0300	0.84

Protection and safety

OVR PV surge protective devices Photovoltaic networks

Technical features

Types			OVR PV T2 40-600 P QS	OVR PV T2 40-1000 P QS		OVR PV T2 40-1500 P QS
with auxiliary contact (TS)			OVR PV T2 40-600 P TS QS	OVR PV T2 40-1000 P TS QS	OVR PV T2 40-1000 P TS TWIN QS	OVR PV T2 40-1500 P TS QS
Technology			Varistor	Varistor	Varistor	Varistor
Electrical features						
Standard			IEC 61643-11/ EN 61643-11/ UL 1449 4th Ed	IEC 61643-11/ EN 61643-11/ UL 1449 4th Ed	IEC 61643-11/ EN 61643-11/ UL 1449 4th Ed	IEC 61643-11/ EN 61643-11/ UL 1449 4th Ed
Type/test class			T2/II	T2/II	T2/II	T2/II
Protected lines			2	2	4	2
Types of networks			Photovoltaic	Photovoltaic	Photovoltaic	Photovoltaic
Type of current			DC	DC	DC	DC
Nominal voltage Un (L-N/L-L)		[V]	600	1000	1000	1500
Max. cont. operating voltage Ucpv		[V]	600	1100	1100	1500
Max.cont.operating voltage according Ⓤ (MCOV)		[V]	600	1100	1100	1500
Impulse current Iimp (10/350)			2	-	2	2
Maximum discharge current Imax (8/20)		[kA]	40	40	40	40
Nominal discharge current In (8/20)		[kA]	20	20	20	10
Voltage protection level Up at In (L-L/L-PE)		[kV]	2.8/1.4	3.8/3.8	3.8/3.8	4.5/4.5
Voltage protection rating according Ⓤ (VPR (L+/G, L-/G, L+/L-))		[kV]	1.2/1.2/1.8	2.5/2.5/2.5	2.5/2.5/2.5	4/4/4
Response time		[ns]	≤ 25	≤ 25	≤ 25	≤ 25
Residual current IPE		[µA]	10	75	75	<30
Short-circuit DC current Iscpv		[A]	300	10,000	10,000	10,000
Short circuit withstand according Ⓤ (S_{CCR})		[kA]	10	10	10	10
Disconnector	Fuse		no need up to 0.3 kA	no need up to 10 kA	no need up to 10 kA	no need up to 10 kA
	Circuit breaker		no need up to 0.3 kA	no need up to 10 kA	no need up to 10 kA	no need up to 10 kA
Pluggable cartridge			Yes	Yes	Yes	Yes
Integrated specific thermal disconnector			Yes	Yes	Yes	Yes
State indicator			Yes	Yes	Yes	Yes
Safety reserve			No	No	No	No
Auxiliary contact			Yes (TS option)	Yes (TS option)	Yes (TS option)	Yes (TS option)
Installation						
Wire range (L, N, PE)	Solid wire	[mm²]	2.5...35	2.5...35	2.5...35	2.5...35
	Stranded wire	[mm²]	2.5...25	2.5...25	2.5...25	2.5...25
Stripping length (L, N, PE)			12.2	12.2	12.2	12.2
Tightening torque (L, N, PE)			2.5	2.5	2.5	2.5
Auxiliary contact (TS)						
Contact complement			1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC	1 NO - 1 NC
Minimum load			12 V DC - 10 mA	12 V DC - 10 mA	12 V DC - 10 mA	12 DC - 10 mA
Maximum load			250 V AC - 1 A	250 V AC - 1 A	250 V AC - 1 A	250 V AC - 1A
Connection cross-section			1.5	1.5	1.5	1.5
Miscellaneous characteristics						
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000	5000	5000
Humidity Rate HR			95%	95%	95%	95%
Degree of protection			IP20	IP20	IP20	IP 20
Fire resistance according to UL 94			V0	V0	V0	V0
Dimensions	height x width x depth	[mm]	88 x 53.4 x 65	88 x 53.4 x 65	88 x 88,33 x 65	88 x 53.4 x 65
		[inches]	3.46 x 2.10 x 2.56	3.46 x 2.10 x 2.56	3.46 x 3,5 x 2.56	3.46 x 2.10 x 2.56
with auxiliary contact (TS)	height x width x depth	[mm]	95 x 53.4 x 65	95 x 53.4 x 65	95 x 88,33 x 65	95 x 53.4 x 65
		[inches]	3.46 x 2.10 x 2.56	3.77 x 2.1 x 2.55	3.46 x 3,5 x 2.56	3.46 x 2.10 x 2.56
Replacement Cartridges						
Phase Product ID			OVR PV T2 40-600 C QS 2CTB804153R3100	OVR PV T2 40-1000 C QS 2CTB804153R3200	OVR PV T2 40-1000 C QS 2CTB804153R3200	OVR PV T2 40-1500 C QS 2CTB804153R3300
			OVR PV MC C QS 2CTB804153R3500			

OVR PV T2 40-600 P QS

OVR PV T2 40-1000 P QS

Specifically designed for photovoltaic DC installations, the OVR PV family provide a safe and reliable surge and lightning protection of solar panels and converters.
The OVR PV QS surge protective devices comply with UTE C 61-740-51, prEN 50539-11 and UL 1449 4th Edition.

Type 2 PV

Protected lines	Impulse current Iimp 10/350	Max. discharge current Imax 8/20	Nominal current In	Voltage protection level Up	Max. cont. operating voltage Ucpv	Bbn 3660308	Order details		Weight 1 piece
	kA	kA	kA	kV	V	EAN	Type code	Order code	kg
1+1 DC	2	40	20	2.8/1.4	600	526502	OVR PV T2 40-600 P QS	2CTB804153R2800	0.38
1+1 DC	2	40	20	2.8/1.4	600	526519	OVR PV T2 40-600 P TS QS	2CTB804153R2900	0.39
1+1 DC	2	40	20	2.8/1.4	600	527318	OVR PV T2 40-600 P QS BULK (30)	2CTB804153Z2800	0.38
1+1 DC	2	40	20	2.8/1.4	600	527325	OVR PV T2 40-600 P TS QS BULK (30)	2CTB804153Z2900	0.39
1+1 DC	-	40	20	3.8	1100	526243	OVR PV T2 40-1000 P QS	2CTB804153R2400	0.38
1+1 DC	2	40	20	3.8	1100	526434	OVR PV T2 40-1000 P TS QS	2CTB804153R2500	0.39
1+1 DC	2	40	20	3.8	1100	526748	OVR PV T2 40-1000 P QS BULK (30)	2CTB804153Z2400	0.36
1+1 DC	2	40	20	3.8	1100	526755	OVR PV T2 40-1000 P TS QS BULK (30)	2CTB804153Z2500	0.39
2+2 DC	2	40	20	3.8	1100	526199	OVR PV T2 40-1000 P TS TWIN QS	2CTB804153R2300	0.65
2+2 DC	2	40	20	3.8	1100	527295	OVR PV T2 40-1000 P TS TWIN QS BULK (4)	2CTB804153Z2300	0.65
1+1 DC	2	40	10	4.5	1500	526465	OVR PV T2 40-1500 P QS	2CTB804153R2600	0.47
1+1 DC	2	40	10	4.5	1100	526472	OVR PV T2 40-1500 P TS QS	2CTB804153R2700	0.48
1+1 DC	2	40	10	4.5	1500	527332	OVR PV T2 40-1500 P QS BULK (30)	2CTB804153Z2600	0.47
1+1 DC	2	40	10	4.5	1500	527301	OVR PV T2 40-1500 P TS QS BULK (30)	2CTB804153Z2700	0.48

Protection and safety

OVR WT surge protective devices - Wind turbine networks

Technical features

Types				
with auxiliary contact (TS)			**OVR WT 3L 690 P TS**	**OVR WT 3L 690**
Technology			Varistor + GDT	Varistor + GDT
Electrical features				
Standard			IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type/test class			T1+2/I - II	T1+2/I - II
Protected lines			3	3
System network			TNC-IT	TNC-IT
Type of current			AC 47-63 Hz	AC 47-63 Hz
Nominal system voltage Un		[V]	400/690	400/690
Peak repetitive voltage withstand Urp (L-PE/L-L)		[V]	3000/3400	3000/3400
Max. cont. operating voltage Uc (L-PE/L-L)		[V]	1260/2520	1260/2520
Maximal discharge current Imax (8/20)		[kA]	40	40
Maximum impulse current Iimp (10/350)		[kA]	2	2
Nominal discharge current In (8/20)		[kA]	20	20
Follow current interrupting rating Ifi		[kA]	-	-
Voltage protection level Up at In		[kV]	6	6
Voltage protection level Up at 3 kA		[kV]	4.4	4.4
Voltage protection level Up at 5 kA			-	-
Voltage protection level Up at 10 kA			-	-
TOV (Temporary overvoltage) withstand Ut (L-N: 5s./N-PE: 200ms)		[V]	-	-
Uoc			-	-
Response time		[ns]	≤100	≤100
Short-circuit withstand capability Isccr		[kA]	50	50
Backup protection maximum	fuse (gG)	[A]	≤125	≤125
rating	circuit breaker (B or C curve)	[A]	≤125	≤125
Pluggable cartridge			Yes	Yes
Integrated thermal disconnector			Yes	Yes
State indicator			Yes	Yes
Safety reserve			No	No
Auxiliary contact (TS)			Yes	Yes
Installation				
Wire range (L, N, PE) solid wire		[mm²]	2.5 ... 25	2.5 ... 25
stranded wire		[mm²]	2.5 ... 16	2.5 ... 16
Stripping length (L, N, PE)		[mm]	11	11
Tightening torque (L, N, PE)		[Nm]	2.5	2.5
Contacts information			-	-
Min. load			-	-
Max. load			-	-
Connection cross-section		[mm²]		
Miscellanous characteristics				
Stocking and operating temperature		[°C]	-40 to +80	-40 to +80
Maximal Altitude		[m]	5000	5000
Degree of protection			IP 20	IP 20
Fire resistance according to UL 94			V0	V0
Dimensions				
height x width x depth		[mm]		
		[inches]		
Dimensions with auxilary contact (TS)				
height x width x depth		[mm]	100 x 178 x 65	220 x 275 x 40
		[inches]	3.94 x 7.01 x 2.56	8.66 x 10.82 x 1.57
Replacement Cartridges				
Phase Product ID			OVR T2 40-440 C/2CTB803854R0400	OVR T2 40-440 C/2CTB803854R0400

2CTC435040F1701

OVR WT 3L 690 P TS

OVR WT 3L 690 P

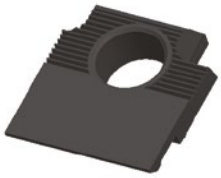
Due to their height, wind turbines have especially high exposure to lightning, they need high capacity and reliable lightning and surge protection.
The OVR WT family takes into consideration the specificity of wind installations with a high peak repetitive voltage withstand (Urp up to 3 kV) ensure a safe protection to Wind applications.
It can be DIN mounted with the OVR.

Type 1+2 WT

Protected lines	Impulse current Iimp 10/350	Max. discharge current Imax 8/20	Nominal current In	Voltage protection level Up	Max. cont. operating voltage Ucpv	Bbn	Order details		Weight 1 piece
	kA	kA	kA	kV	V	366030	Type code	Order code	kg
3	2	40	20	6	400/690	518507	OVR WT 3L 690 P TS	2CTB235402R0000	1.67
3	2	40	20	6	400/690		OVR WT 3L 690 P (enclosed)	2CTB235401R0000	2.5

Protection and safety

Accessories for OVR



Accessory for Cartridge Lock

Accessory for Cartridge Lock

This accessory can be fitted into the front of the socket of the SPD of the QS and PV range (for other families please consult us), QS and PV range, to guarantee an even higher withstand to vibrations and shocks, it reinforces mechanical lock between the cartridges and the socket (they are already locked by the pins in the back of the cartridge). It's recommended for stressful environments as the nazelle of the wind turbines. It's sold on packs of 50.

	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	EAN	Type code	Order code		kg
Accessory for Cartridge Lock (x50)			2CTB814355Z1200		0.01

Accessory for Auxiliary contact lock

Accessory for Auxiliary contact lock

This accessory can be fitted into the top of the auxiliary contact module and guarantees an even higher withstand to stressful environments. It reinforces the mechanical lock between the auxiliary contact module and the socket of the SPD. It's recommended in environments where the cables of the auxiliary contact can suffer pulls due to the limited length of the auxiliary cables that restrict any potential movements. It's sold on packs of 50. It can not be used on single pole devices. Please order it for multipole versions.

	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	EAN	Type code	Order code		kg
Accessory for Auxiliary contact lock (x50)			2CTB814355R2700		0.01

Label for Surge Protected Installations

This label allows the user to identify the panels where surge protection devices are fitted. It's meant to be used in the inside of the panel door and clearly states that the cartridges need to be removed to perform insulation tests. It's sold in packs of 100.

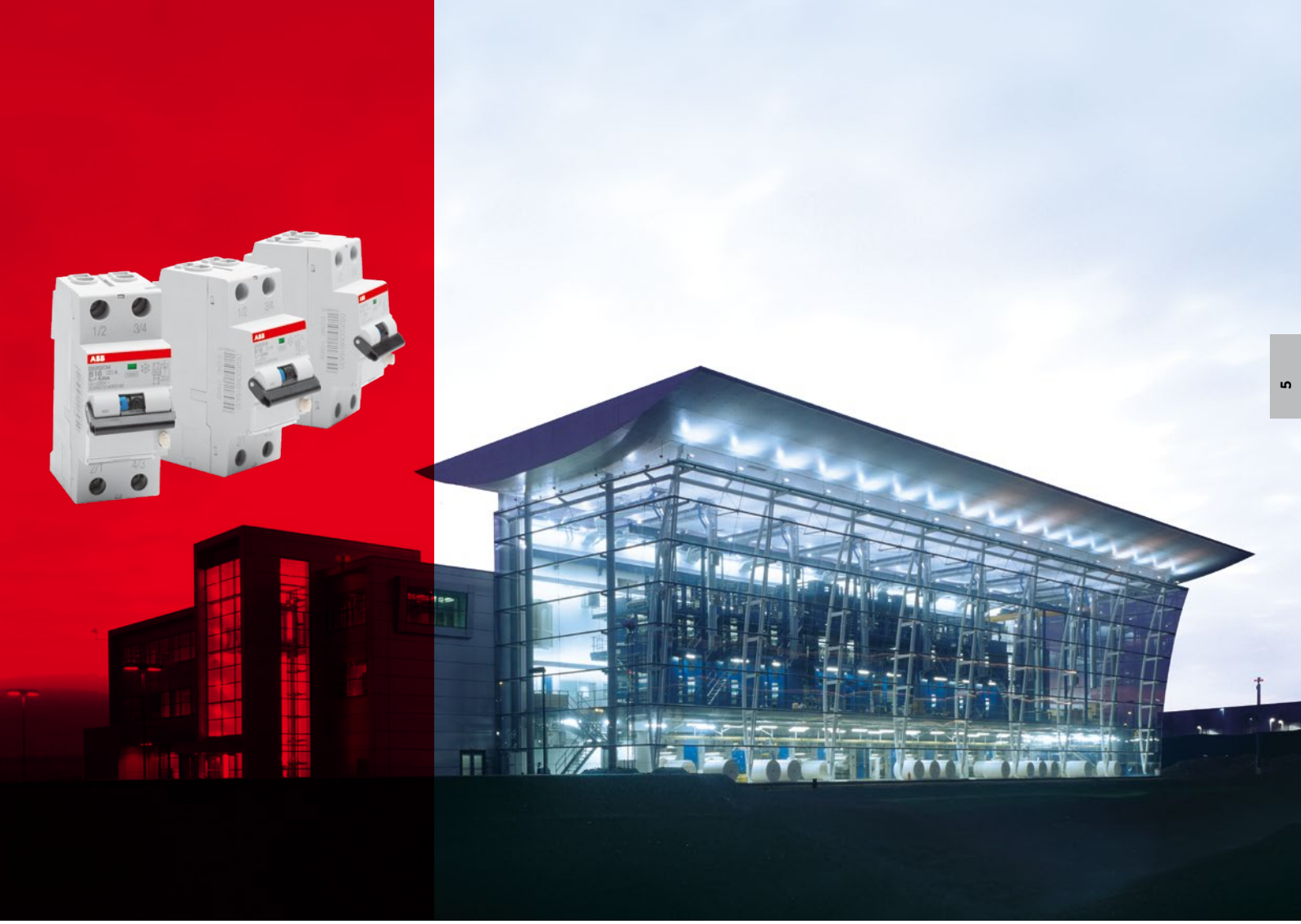
	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	EAN	Type code	Order code		kg
Label for Surge Protected Installations (x 100)			2CTB813860R1500		0.01

Busbar

Bus bar

For TNC, IT, TNS or TT systems using single pole Type 1 SPDs assembled together, we have 2 different bus bars than can be used, as listed here below.
These both products are sold in packs of 50.

	Bbn 3660308	Order details		Price 1 piece	Weight 1 piece
	EAN	Type code	Order code		kg
Busbar for Type 1, TT/TNS 3+1 configurations (x 50)	516091		2CTB815102R0400		0.03
Busbar for Type 1, TNC or IT 3-0 configurations (x 50)	524751		2CTB815141R0700		0.03



DS202C

Protection with unrivalled compactness.

With only 2 modules, the DS202C series of 2P residual current circuit-breakers with overcurrent protection (RCBOs) enables to save 50 % of switchboard space compared to the conventional 4-modules solution. Available in a technologically advanced and comprehensive range, the DS202C can be applied in the tertiary sector, in large-sized industrial plants and in naval applications. The series perfectly integrates with the System pro M compact® range, starting from the same profile, ensuring a nice and functional design in the installation. The maximum protection in only 2 modules.

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Protection and safety

Products Standards, UL 1449 Ed4

Terminology of SPD electrical characteristics

SPD terminology

8/20 wave:
Current waveform which passes through equipment when subjected to an overvoltage (low energy).

Type 2 surge protective device (SPD)
Permanently connected SPDs intended for installation on the load side of the service equipment overcurrent device, including SPDs located at a branch panel. It has successfully passed testing to the standard with the 8/20 wave (class II test).

Metal oxide varistor (MOV)
A varistor is an electronic component with a "diode like" nonlinear current-voltage characteristic, used to protect circuits against excessive transient voltages. Most commonly composed of metal oxides.

Maximum continuous operating voltage (MCOV, Uc)
The maximum designated root mean square (rms) value of power frequency voltage that may be applied continuously between the terminals of the SPD.

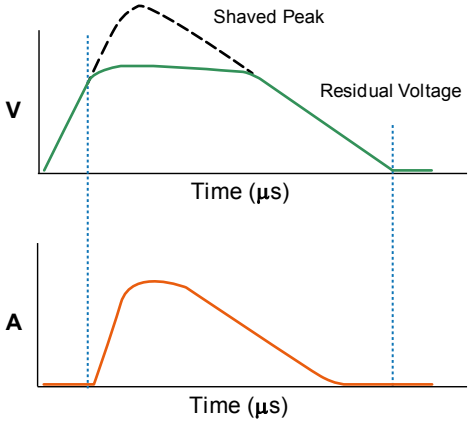
Nominal discharge current (In)
Peak current value of an 8/20 waveform which the SPD is rated for based on the test program.

Maximum discharge current (Imax)
Peak current value of an 8/20 waveform which can be safely discharged by the SPD, with an amplitude complying with the class II operating test sequence. Imax > In.

Short circuit current rating (SCCR)
Maximum symmetrical fault current, at rated voltage, that the SPD can withstand without sustaining damage that exceeds acceptable criteria or creates a hazardous operating condition.

Voltage protection rating (VPR)
The value of the VPR is determined as the nearest highest value, taken from Table 63.1 of ANSI/UL 1449 4th Edition, to the measured limiting voltage determined during the transient voltage surge suppression test using the combination wave generator at a setting of 6 kV, 3 kA.

Voltage protection level (Up or Ures)
The voltage let through by the SPD while diverting surge current to ground must not exceed the voltage withstand value of the equipment connected downstream.



Notes:
Test wave 8/20 µs according to IEEE # C62.62-200/UL 1449
The first number corresponds to the time from 10% to 90% of its peak value (8 µs).
The second number corresponds to the time taken for the wave to descend to 50% of its peak value (20 µs).

Protection and safety

UL 1449 Ed4

The Underwriters Laboratories (UL) standard for surge protective devices (SPDs) has been the primary safety standard for surge protection since the first edition was published in 1985, the fourth edition became mandatory for AC SPDs in March 2016.

The objective of UL 1449 has always been to increase safety in terms of surge protection.

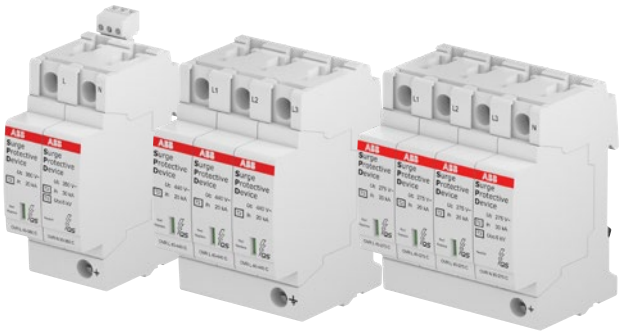
Change in the standard's name: From TVSS to SPDs
Prior to UL 1449 3rd Edition taking effect, the devices this standard covers were known as Transient Voltage Surge Suppressors (TVSS), operating on power circuits not exceeding 600 V. With the inception of the 3rd and 4th Edition, these devices are now known as Surge Protective Devices (SPDs), and may operate on power circuits not exceeding 1500 V DC.

This new designation moves the UL standard closer to the international designation and to IEC standards.

The different type designations of surge protective devices
The UL 1449 placed SPDs into five different Type categories based on installation location within an electrical system. While Type 1, Type 2 and Type 3 categories refer to different types of SPDs that can be installed at specific locations, Type 4 and Type 5 categories refer to components used in an SPDs configuration.

Type 1 – "Permanently connected SPDs intended for installation between the secondary of the service transformer and the line side of the service equipment overcurrent device."
Type 2 – "Permanently connected SPDs intended for installation on the load side of the service equipment overcurrent device."
Type 3 – "Point of utilization SPDs, installed at a minimum conductor length of 10 meters (30 feet) from the electrical service panel."
Type 4 - Component assemblies – "Component assembly consisting of one or more Type 5 components together with a disconnect (integral or external) or a means of complying with the limited current tests."
Type 1, 2, 3 - Component assemblies – "Consists of a Type 4 component assembly with internal or external short circuit protection."
Type 5 – "Discrete component surge suppressors, such as MOVs that may be mounted on a PWB, connected by its leads or provided within an enclosure with mounting means and wiring terminations."

The closer an SPD is installed to the equipment, the better the protection is. This is a push in the direction of providing stepped protection including external and internal surge protection.



The measured voltage protection level
The Measured Limiting Voltage (MLV) is the maximum magnitude of voltage measured at the application of a specific impulse wave shape.

When applying a certain surge current on the SPD the measured voltage at the device terminals is the so called "let-through voltage."

In UL 1449 2nd Edition, the let-through voltage was referred to as Suppressed Voltage Rating (SVR) and was calculated with a 0.5 kA surge wave form at 6 kV. The new designation is Voltage Protection Rating (VPR) and is calculated with a 3 kA surge wave form at 6 kV.

All products you will find in this chapter have been certified according to the UL 1449 4th Edition.

The MLV will allow comparison of different types of SPDs with regards to the let-through voltage. However, it is important to note that the surge current used to measure the let-through voltage is six times higher in the 3rd and 4th Edition than in the 2nd Edition. This means that, comparing the obsolete SVR designation with the new VPR ratings will not be valid, as VPR ratings will of course be higher than SVR ratings.

Protection and safety
UL 1449 Ed4

List of OVR T2 UL products according to their certification

Type acc. To UL 1449 Ed4

Range	Type	Order code	Type 4 CA	Type 1 CA
T2 U	OVR T2 15-150 P U	2CTB802341R0000		■
	OVR T2 15-320 P U	2CTB802341R0400		■
	OVR T2 40-150 P U	2CTB802341R2000		■
	OVR T2 40-150 P TS U	2CTB802341R2100		■
	OVR T2 40-320 P U	2CTB802341R2400		■
	OVR T2 40-320 P TS U	2CTB802341R2500		■
	OVR T2 40-440 P TS U	2CTB802341R2900		■
	OVR T2 40-550 P TS U	2CTB802341R3300		■
	OVR T2 40-660 P TS U	2CTB802341R3700	■	
	OVR T2 70 N P U	2CTB802341R8000	■	
	OVR T2 1N 15-150 P U	2CTB802342R0000	■	
	OVR T2 1N 15-320 P U	2CTB802342R0400	■	
	OVR T2 1N 40-150 P U	2CTB802342R2000	■	
	OVR T2 1N 40-150 P TS U	2CTB802342R2100	■	
	OVR T2 1N 40-320 P TS U	2CTB802342R2500	■	
	OVR T2 1N 40-440 P TS U	2CTB802342R2900	■	
	OVR T2 1N 40-550 P TS U	2CTB802342R3300	■	
	OVR T2 1N 40-660 P TS U	2CTB802342R3700	■	
	OVR T2 2L 15-150 P U	2CTB802343R0000		■
	OVR T2 2L 15-320 P U	2CTB802343R0400		■
	OVR T2 2L 40-150 P TS U	2CTB802343R2100		■
	OVR T2 2L 40-320 P TS U	2CTB802343R2500		■
	OVR T2 2N 15-150 P U	2CTB802344R0000		■
	OVR T2 2N 15-320 P U	2CTB802344R0400	■	
	OVR T2 2N 40-150 P TS U	2CTB802344R2100	■	
	OVR T2 2N 40-320 P TS U	2CTB802344R2500	■	
	OVR T2 2N 40-440 P TS U	2CTB802344R2900	■	
	OVR T2 2N 40-550 P TS U	2CTB802344R3300	■	
	OVR T2 2N 40-660 P TS U	2CTB802344R3700	■	
	OVR T2 3L 15-150 P U	2CTB802345R0000		■
	OVR T2 3L 15-320 P U	2CTB802345R0400		■
	OVR T2 3L 40-150 P TS U	2CTB802345R2100		■
	OVR T2 3L 40-320 P TS U	2CTB802345R2500		■
	OVR T2 3L 40-440 P TS U	2CTB802345R2900		■
	OVR T2 3L 40-550 P TS U	2CTB802345R3300		■
	OVR T2 3N 15-150 P U	2CTB802346R0000	■	
	OVR T2 3N 15-320 P U	2CTB802346R0400	■	
	OVR T2 3N 40-150 P TS U	2CTB802346R2100	■	
	OVR T2 3N 40-320 P TS U	2CTB802346R2500	■	
	OVR T2 3N 40-440 P TS U	2CTB802346R2900	■	
	OVR T2 3N 40-550 P TS U	2CTB802346R3300	■	
	OVR T2 3N 40-660 P TS U	2CTB802346R3700	■	
	OVR T2 15-150 C U	2CTB802348R2500		■
	OVR T2 15-320 C U	2CTB802348R2700		■
	OVR T2 40-150 C U	2CTB802348R3500		■
	OVR T2 40-320 C U	2CTB802348R3700		■
	OVR T2 40-440 C U	2CTB802348R3900		■
	OVR T2 40-550 C U	2CTB802348R4100		■
	OVR T2 40-660 C U	2CTB802348R4300	■	
	OVR T2 70 N C U	2CTB802348R6500	■	

Protection and safety

OVR surge protective devices – UL Version
Selection tables

Choosing the correct model

1) Determine the service voltage
Consult qualified personnel if the facility or operation service voltage is unknown.

2) Select the SPD maximum continuous operating voltage (MCOV, Uc)
The MCOV should correspond to the service voltage.
Example: If the service voltage is 480 V Delta, an SPD with 550 V or 660 V MCOV will be required.
Surge protection devices must also provide a level of protection compatible with the withstand voltage of the equipment. This withstand voltage depends on the type of equipment and its sensitivity. The incoming surge protector may not provide adequate protection by itself, as certain electrical phenomena may greatly increase its residual voltage if cable lengths exceed 10 m. A second SPD may be necessary.

3) Select the SPD surge capacity (Imax)
Surge capacity is the amount of energy the SPD can withstand from a single surge event. The higher the surge capacity, the longer the device will protect the system. A second surge protector may be required if the surge capacity of the first is not capable of diverting all surge current to ground. See coordination below.

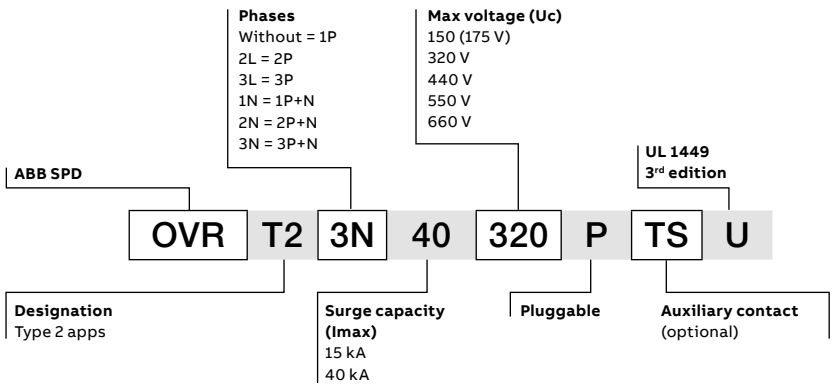
4) Remote monitoring (Optional)
Integrated auxiliary contact for remote monitoring available on models with "TS" designation.
Consult "Selection tables" on next page for help in the selection of SPDs.

Complete facility protection
Installing surge protection at the main distribution panel is only the beginning of protecting the entire operation. As most transient surges are created internally, it is necessary to install surge protection at sub-distribution panels (equipment protection) to be fully protected. Stepping down the Imax level from the service entrance panel toward equipment to be protected is recommended.
For example, if a 40 kA Imax SPD is installed in the main distribution panel, then 15 kA Imax SPDs should be installed in sub-distribution panels for equipment protection.

Coordination
It may be necessary to add a second surge protector, wired to the incoming unit, to achieve the required voltage protection and/or surge capacity. For Type 2 or 4 SPDs, installing this second unit a minimum of 1 m from the first unit will allow the two to work together, achieving the required protection.

Wiring rules
The impedance of the cables increases the voltage across the connected equipment. Therefore, the length of the cable between the surge protector and the equipment should be minimized.
The surge protective device should be installed as close to the equipment to be protected as possible. If this is not possible (the equipment is over 30 m from the panel), then a second surge protector must be installed.

OVR DIN rail SPD - Product type description

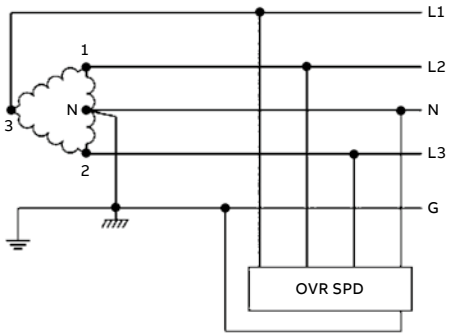


Protection and safety

OVR surge protective devices for Power Protection (AC) – UL Version
Selection tables

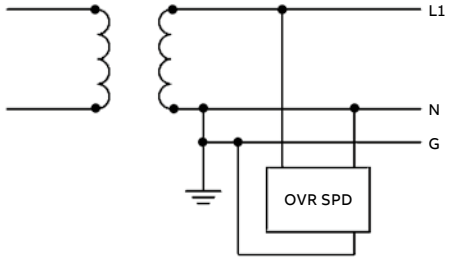
General wiring diagrams - DIN rail devices

Delta



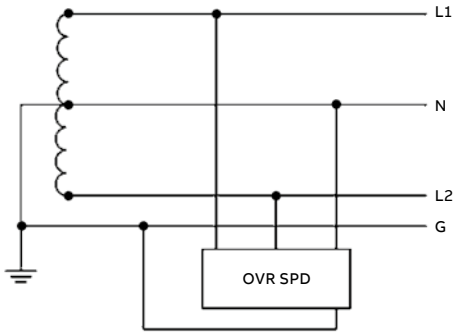
240 / 120 V HLD

Single phase



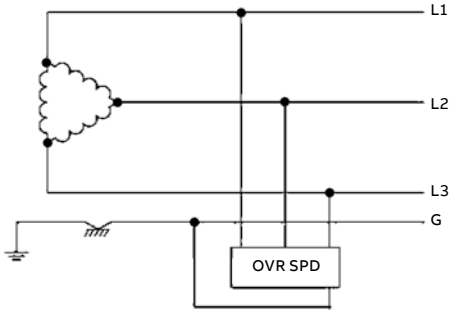
120 V, 240 V, 277 V

Split phase



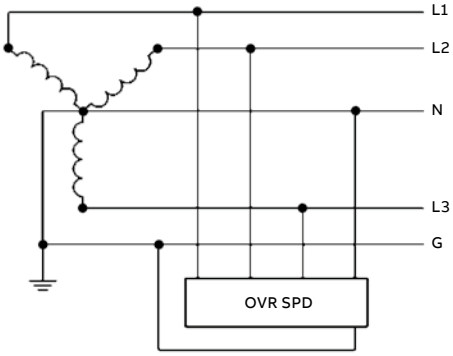
240 / 120 V, 480 / 240 V

Delta



240 V, 480 V, 600 V

Wye



208 / 120 V, 480 / 277 V, 600 / 347 V

NOTE: Multiple pole SPDs shown. Wiring diagrams for reference only.

Protected lines	Impulse current Iimp 10/350 kA	Max. discharge current Imax 8/20 kA	Nominal discharge current In kA	Follow current interrupting rating Ifi kA	Voltage protection Rating VPR kV	Nominal voltage Un V	Max. cont. operating voltage MCOV V	Type	Order code
Type 2 - Pluggable - Single Pole networks									
1	–	15	5	–	0.6	120	150	OVR T2 15-150 P U	2CTB802341R0000
1	–	15	5	–	1	277 ±15%	320	OVR T2 15-320 P U	2CTB802341R0400
1	–	40	20	–	0.6	120	150	OVR T2 40-150 P U	2CTB802341R2000
1	–	40	20	–	0.6	120	150	OVR T2 40-150 P TS U	2CTB802341R2100
1	–	40	20	–	1	277 ±15%	320	OVR T2 40-320 P U	2CTB802341R2400
1	–	40	20	–	1	277 ±15%	320	OVR T2 40-320 P TS U	2CTB802341R2500
1	–	40	10	–	1.3	347 ±15%	440	OVR T2 40-440 P TS U	2CTB802341R2900
1	–	40	10	–	1.7	480 ±15%	550	OVR T2 40-550 P TS U	2CTB802341R3300
1	–	40	10	–	1.9	600 ±15%	660	OVR T2 40-660 P TS U	2CTB802341R3700
Neutral									
1	–	70	20	0.1	1.2	230	275	OVR T2 70 N P U	2CTB802341R8000
Cartridges									
1	–	–	–	–	–	120 ±15%	175	OVR T2 15-150 C U	2CTB802348R2500
1	–	–	–	–	–	277 ±15%	320	OVR T2 15-320 C U	2CTB802348R2700
1	–	–	–	–	–	120 ±15%	175	OVR T2 40-150 C U	2CTB802348R3500
1	–	–	–	–	–	277 ±15%	320	OVR T2 40-320 C U	2CTB802348R3700
1	–	–	–	–	–	347 ±15%	440	OVR T2 40-440 C U	2CTB802348R3900
1	–	–	–	–	–	480 ±15%	550	OVR T2 40-550 C U	2CTB802348R4100
1	–	–	–	–	–	600 ±15%	660	OVR T2 40-660 C U	2CTB802348R4300
1	–	–	–	–	–	230	275	OVR T2 70 N C U	2CTB802348R6500

Protection and safety

OVR surge protective devices – UL Version

Selection tables

Protected lines	Impulse current Iimp 10/350 kA	Max. discharge current Imax 8/20 kA	Nominal discharge current In kA	Follow current interrupting rating Ifi kA	Voltage protection Rating VPR kV	Nominal voltage Un V	Max. cont. operating voltage MCOV V	Type	Order code
Type 2 - Pluggable - Delta networks									
3	–	15	5	–	1	277 +15%	320	OVR T2 3L 15-320 P U	2CTB802345R0400
3	–	40	20	–	1	277 ±15%	320	OVR T2 3L 40-320 P TS U	2CTB802345R2500
3	–	40	10	–	1.7	480 ±15%	550	OVR T2 3L 40-550 P TS U	2CTB802345R3300
Cartridges									
1	–	–	–	–	–	277 ±15%	320	OVR T2 15-320 C U	2CTB802348R2700
1	–	–	–	–	–	277 ±15%	320	OVR T2 40-320 C U	2CTB802348R3700
1	–	–	–	–	–	480 ±15%	550	OVR T2 40-550 C U	2CTB802348R4100
Type 2 - Pluggable - Single Phase networks									
2	–	15	5	–	1.2	120	150	OVR T2 1N 15-150 P U	2CTB802342R0000
2	–	15	5	–	1.2	277	320	OVR T2 1N 15-320 P U	2CTB802342R0400
2	–	40	20	–	1.2	120	150	OVR T2 1N 40-150 P U	2CTB802342R2000
2	–	40	20	–	1.2	120	150	OVR T2 1N 40-150 P U (x10)	2CTB802342R8000
2	–	40	20	–	1.2	120	150	OVR T2 1N 40-150 P TS U	2CTB802342R2100
2	–	40	20	–	1.2	277	320	OVR T2 1N 40-320 P TS U	2CTB802342R2500
2	–	40	10	–	1.2	347	440	OVR T2 1N 40-440 P TS U	2CTB802342R2900
2	–	40	10	–	1.2	480	550	OVR T2 1N 40-550 P TS U	2CTB802342R3300
2	–	40	10	–	1.2	600	660	OVR T2 1N 40-660 P TS U	2CTB802342R3700
Cartridges									
1	–	–	–	–	–	120 ±15%	175	OVR T2 15-150 C U	2CTB802348R2500
1	–	–	–	–	–	277 ±15%	320	OVR T2 15-320 C U	2CTB802348R2700
1	–	–	–	–	–	120 ±15%	175	OVR T2 40-150 C U	2CTB802348R3500
1	–	–	–	–	–	277 ±15%	320	OVR T2 40-320 C U	2CTB802348R3700
1	–	–	–	–	–	347 ±15%	440	OVR T2 40-440 C U	2CTB802348R3900
1	–	–	–	–	–	480 ±15%	550	OVR T2 40-550 C U	2CTB802348R4100
1	–	–	–	–	–	600 ±15%	660	OVR T2 40-660 C U	2CTB802348R4300
Type 2 - Pluggable - Split Phase networks									
2	–	15	5	–	0.6	120 ±15%	175	OVR T2 2L 15-150 P U	2CTB802343R0000
2	–	15	5	–	1	277 ±15%	320	OVR T2 2L 15-320 P U	2CTB802343R0400
3	–	15	5	–	0.7	120 ±15%	175	OVR T2 2N 15-150 P U	2CTB802344R0000
3	–	15	5	–	1.1	277 ±15%	320	OVR T2 2N 15-320 P U	2CTB802344R0400
2	–	40	20	–	0.6	120 ±15%	175	OVR T2 2L 40-150 P TS U	2CTB802343R2100
2	–	40	20	–	1	277 ±15%	320	OVR T2 2L 40-320 P TS U	2CTB802343R2500
3	–	40	20	–	0.7	120 ±15%	175	OVR T2 2N 40-150 P TS U	2CTB802344R2100
3	–	40	20	–	1.1	277 ±15%	320	OVR T2 2N 40-320 P TS U	2CTB802344R2500
3	–	40	10	–	1.4	347 ±15%	440	OVR T2 2N 40-440 P TS U	2CTB802344R2900
3	–	40	10	–	1.8	480 ±15%	550	OVR T2 2N 40-550 P TS U	2CTB802344R3300
3	–	40	10	–	2	600 ±15%	660	OVR T2 2N 40-660 P TS U	2CTB802344R3700
Cartridges									
1	–	–	–	–	–	120 ±15%	175	OVR T2 15-150 C U	2CTB802348R2500
1	–	–	–	–	–	277 ±15%	320	OVR T2 15-320 C U	2CTB802348R2700
1	–	–	–	–	–	120 ±15%	175	OVR T2 40-150 C U	2CTB802348R3500
1	–	–	–	–	–	277 ±15%	320	OVR T2 40-320 C U	2CTB802348R3700
1	–	–	–	–	–	347 ±15%	440	OVR T2 40-440 C U	2CTB802348R3900
1	–	–	–	–	–	480 ±15%	550	OVR T2 40-550 C U	2CTB802348R4100
Type 2 - Pluggable - Grounded Wye networks									
3	–	15	5	–	0.6	120 ±15%	175	OVR T2 3L 15-150 P U	2CTB802345R0000
4	–	15	5	–	0.6	120 ±15%	175	OVR T2 3N 15-150 P U	2CTB802346R0000
4	–	15	5	–	1.2	277 ±15%	320	OVR T2 3N 15-320 P U	2CTB802346R0400
3	–	40	20	–	0.6	120 ±15%	175	OVR T2 3L 40-150 P TS U	2CTB802345R2100
3	–	40	10	–	1.3	347 ±15%	440	OVR T2 3L 40-440 P TS U	2CTB802345R2900
4	–	40	20	–	1.2	120 ±15%	175	OVR T2 3N 40-150 P TS U	2CTB802346R2100
4	–	40	20	–	1.2	277 ±15%	320	OVR T2 3N 40-320 P TS U	2CTB802346R2500
4	–	40	10	–	1.2	347 ±15%	440	OVR T2 3N 40-440 P TS U	2CTB802346R2900
4	–	40	10	–	1.2	480 ±15%	550	OVR T2 3N 40-550 P TS U	2CTB802346R3300
4	–	40	10	–	1.2	600 ±15%	660	OVR T2 3N 40-660 P TS U	2CTB802346R3700
Cartridges									
1	–	–	–	–	–	120 ±15%	175	OVR T2 15-150 C U	2CTB802348R2500
1	–	–	–	–	–	120 ±15%	175	OVR T2 40-150 C U	2CTB802348R3500
1	–	–	–	–	–	347 ±15%	440	OVR T2 40-440 C U	2CTB802348R3900
1	–	–	–	–	–	277 ±15%	320	OVR T2 15-320 C U	2CTB802348R2700
1	–	–	–	–	–	277 ±15%	320	OVR T2 40-320 C U	2CTB802348R3700
1	–	–	–	–	–	480 ±15%	550	OVR T2 40-550 C U	2CTB802348R4100
1	–	–	–	–	–	600 ±15%	660	OVR T2 40-660 C U	2CTB802348R4300

Protection and safety

OVR Type 2 surge protective devices - Single pole

OVR T2 40-150 P U

OVR T2 40-440 P TS U

OVR T2 70 N P U

Descripiton

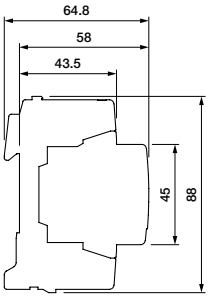
Single pole devices provide great flexibility for any kind of network configuration.
OVR T2 devices provide the best protection as they are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (VPR). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Ordering details

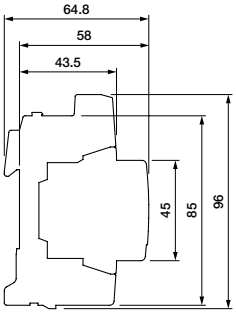
Pro-tected lines	Max dis-charge current Imax 8/20	Nomi-nal dis-charge current In	Voltage protec-tion rating VPR	Nominal voltage Un	Max. cont. operat-ing voltage MCOV	Bbn 3660308	Type	Order code	Weight Pkg (1 pce)
	kA	kA	kV	V	V	EAN			kg
Pluggable									
1	15	5	0.6	120	150	518514	OVR T2 15-150 P U	2CTB802341R0000	0.12
1	15	5	1	277 ±15%	320	518521	OVR T2 15-320 P U	2CTB802341R0400	0.12
1	40	20	0.6	120	150	518958	OVR T2 40-150 P U	2CTB802341R2000	0.12
1	40	20	0.6	120	150	518958	OVR T2 40-150 P TS U	2CTB802341R2100	0.12
1	40	20	1	277 ±15%	320	518965	OVR T2 40-320 P U	2CTB802341R2400	0.12
1	40	20	1	277 ±15%	320	518545	OVR T2 40-320 P TS U	2CTB802341R2500	0.12
1	40	10	1.3	347 ±15%	440	518552	OVR T2 40-440 P TS U	2CTB802341R2900	0.12
1	40	10	1.7	480 ±15%	550	518569	OVR T2 40-550 P TS U	2CTB802341R3300	0.12
1	40	10	1.9	600 ±15%	660	518576	OVR T2 40-660 P TS U	2CTB802341R3700	0.12
Neutral - Pluggable									
1	70	20	1.2	230	275	518583	OVR T2 70 N P U	2CTB802341R8000	0.12

Type	Width mm
OVR T2 15-150 P U	17.8
OVR T2 15-320 P U	17.8
OVR T2 40-150 P U	17.8
OVR T2 40-150 P TS U	17.8
OVR T2 40-320 P U	17.8
OVR T2 40-320 P TS U	17.8
OVR T2 40-440 P TS U	17.8
OVR T2 40-550 P TS U	17.8
OVR T2 40-660 P TS U	17.8
OVR T2 70 N P U	17.8

Main dimensions mm



OVR T2 15-150 P U
OVR T2 15-320 P U
OVR T2 40-150 P U
OVR T2 40-320 P U
OVR T2 70 N P U



OVR T2 40-150 P TS U
OVR T2 40-320 P TS U
OVR T2 40-440 P TS U
OVR T2 40-550 P TS U
OVR T2 40-660 P TS U

Protection and safety

OVR Type 2 surge protective devices - Single phase networks

OVR T2 1N 40-150 P U

OVR T2 1N 40-660 P TS U

Description

Single phase devices are composed by a MOV pole plus a spark gap one. The spark gap pole guarantees the lowest voltage protection rating and has to be connected to the Neutral.
OVR T2 devices provide the best protection as they are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (VPR). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

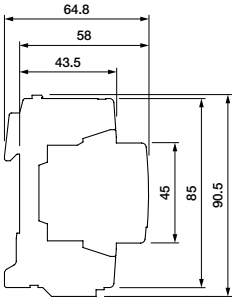
Ordering details

Protected lines	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection rating VPR	Nominal voltage Un	Max. cont. operating voltage MCOV, Uc	Bbn 3660308	Type	Order code	Weight Pkg (1 pce)
	kA	kA	kV	V	V	EAN			kg
Pluggable									
2	15	5	1.2	120	150	519238	OVR T2 1N 15-150 P U	2CTB802342R0000	0.24
2	15	5	1.2	277	320	519245	OVR T2 1N 15-320 P U	2CTB802342R0400	0.24
2	40	20	1.2	120	150	520869	OVR T2 1N 40-150 P U	2CTB802342R2000	0.24
2	40	20	1.2	120	150	520876	OVR T2 1N 40-150 P U (x10)	2CTB802342R8000	0.24
2	40	20	1.2	120	150	819252	OVR T2 1N 40-150 P TS U	2CTB802342R2100	0.24
2	40	20	1.2	277	320	519269	OVR T2 1N 40-320 P TS U	2CTB802342R2500	0.24
2	40	10	1.2	347	440	519276	OVR T2 1N 40-440 P TS U	2CTB802342R2900	0.24
2	40	10	1.2	480	550	519283	OVR T2 1N 40-550 P TS U	2CTB802342R3300	0.24
2	40	10	1.2	600	660	519290	OVR T2 1N 40-660 P TS U	2CTB802342R3700	0.24

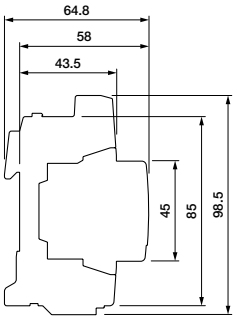
(x10) packaging of 10 pieces.

Type	Width mm
OVR T2 1N 15-150 P U	35.6
OVR T2 1N 15-320 P U	35.6
OVR T2 1N 40-150 P U	35.6
OVR T2 1N 40-150 P TS U	35.6
OVR T2 1N 40-320 P TS U	35.6
OVR T2 1N 40-440 P TS U	35.6
OVR T2 1N 40-550 P TS U	35.6
OVR T2 1N 40-660 P TS U	35.6

Main dimensions mm



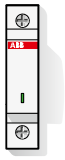
OVR T2 1N 15-150 P U
OVR T2 1N 15-320 P U
OVR T2 1N 40-150 P U



OVR T2 1N 40-150 P TS U
OVR T2 1N 40-320 P TS U
OVR T2 1N 40-440 P TS U
OVR T2 1N 40-550 P TS U
OVR T2 1N 40-660 P TS U

Protection and safety

OVR Type 2 surge protective devices - Single pole



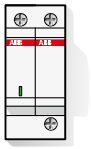
General technical data

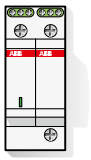
Type			OVR T2 15-150 P U	OVR T2 15-320 P U	OVR T2 40-150 P U
with auxiliary contact (TS)			–	–	OVR T2 40-150 P TS U
Technology			Varistor	Varistor	Varistor
Electrical features					
Standard			UL 1449	UL 1449	UL 1449
Type / test class (UL 1449)			1	1	1
Protected lines			1	1	1
System network			–	–	–
Type of current / frequency			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			±15%	±15%	±15%
Nominal system voltage Un			120 V	277 V	120 V
Maximum continuous operating voltage MCOV			150 V	320 V	150 V
Maximal discharge current (8/20) Imax			15 kA	15 kA	40 kA
Nominal discharge current (8/20) In			5 kA	5 kA	20 kA
Voltage protection rating (L-N / N-G / L-G) VPR			0.6 kV	1 kV	0.6 kV
Response time			< 25 ns	< 25 ns	< 25 ns
Short circuit withstand SCCR			200 kA	200 kA	200 kA
Back up protection maximum rating	fuse (gG - gL)		≤ 100 A	≤ 100 A	≤ 100 A
	circuit breaker (B or C Curve)		≤ 125 A	≤ 125 A	≤ 125 A
Pluggable cartridges			Yes	Yes	Yes
Integrated QuickSafe® technology			Yes	Yes	Yes
State indicator			Yes	Yes	Yes
Safety reserve			–	–	–
Auxiliary contact (TS)			No	No	Yes (TS option)
Installation					
Wire range (L,N,PE)	solid wire		2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²
	stranded wire		2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²
Stripping length (L,N,PE)			12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm
Tightening torque (L,N,PE)			2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm
Auxiliary contact (TS)					
Contact information			–	–	1 NO – 1 NC
Min. load			–	–	12 V DC – 10 mA
Max. load			–	–	250 V AC – 1 A
Connection cross section			–	–	1.5 / 16 mm²
Miscellaneous characteristics					
Stocking temperature			-40…+80 °C	-40…+80 °C	-40…+80 °C
Maximal Altitude			5 000 m	5 000 m	5 000 m
Operating temperature			-40…+176 °C	-40…+176 °C	-40…+176 °C
Degree of protection			NEMA 1	NEMA 1	NEMA 1
Fire resistance according to UL 94			V0	V0	V0
Dimensions	mm	h x w x d	88 x 17.8 x 64.8 mm	88 x 17.8 x 64.8 mm	88 x 17.8 x 64.8 mm
	inches	h x w x d	3.46 x 0.7 x 2.55 in	3.46 x 0.7 x 2.55 in	3.46 x 0.7 x 2.55 in
Dimensions with auxiliary contact (TS)	mm	h x w x d	–	–	96 x 17.8 x 64.8 mm
	inches	h x w x d	–	–	3.78 x 0.7 x 2.55 in
Replacement cartridges					
Phase product ID	Type		OVR T2 15-150 C U	OVR T2 15-320 C U	OVR T2 40-150 C U
	Order code		2CTB802348R2500	2CTB802348R2700	2CTB802348R3500
Neutral product ID	Type		–	–	–
	Order code		–	–	–

OVR T2 40-320 P U	**–**	**–**	**–**	**OVR T2 70 N P U**
OVR T2 40-320 P TS U	**OVR T2 40-440 P TS U**	**OVR T2 40-550 P TS U**	**OVR T2 40-660 P TS U**	**–**
Varistor	Varistor	Varistor	Varistor	Spark gap
UL 1449	UL 1449	UL 1449	UL 1449	UL 1449
1	1	1	1	4
1	1	1	1	1
–	–	–	–	–
AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
±15%	±15%	±15%	±15%	+15%
277 V	347 V	480 V	600 V	230 V
320 V	440 V	550 V	660 V	275 V
40 kA	40 kA	40 kA	40 kA	70 kA
20 kA	10 kA	10 kA	10 kA	20 kA
1 kV	1.3 kV	1.7 kV	1.9 kV	1.2 kV
< 25 ns	< 25 ns	< 25 ns	< 25 ns	< 25 ns
200 kA	200 kA	200 kA	200 kA	200 kA
≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A
≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	No
Yes	Yes	Yes	Yes	Yes
–	–	–	–	–
Yes (TS option)	Yes	Yes	Yes	No
2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²
2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²
12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm
2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm
1 NO – 1 NC	1 NO – 1 NC	1 NO – 1 NC	1 NO – 1 NC	–
12 V DC – 10 mA	12 V DC – 10 mA	12 V DC – 10 mA	12 V DC – 10 mA	–
250 V AC – 1 A	250 V AC – 1 A	250 V AC – 1 A	250 V AC – 1 A	–
1.5 / 16 mm²	1.5 / 16 mm²	1.5 / 16 mm²	1.5 / 16 mm²	–
-40...+80 °C	-40...+80 °C	-40...+80 °C	-40...+80 °C	-40...+80 °C
5 000 m	5 000 m	5 000 m	5 000 m	5 000 m
-40...+176 °C	-40...+176 °C	-40...+176 °C	-40...+176 °C	-40...+176 °C
NEMA 1	NEMA 1	NEMA 1	NEMA 1	NEMA 1
V0	V0	V0	V0	V0
88 x 17.8 x 64.8 mm	–	–	–	88 x 17.8 x 64.8 mm
3.46 x 0.7 x 2.55 in	–	–	–	3.46 x 0.7 x 2.55 in
96 x 17.8 x 64.8 mm	96 x 17.8 x 64.8 mm	96 x 17.8 x 64.8 mm	96 x 17.8 x 64.8 mm	–
3.78 x 0.7 x 2.55 in	3.78 x 0.7 x 2.55 in	3.78 x 0.7 x 2.55 in	3.78 x 0.7 x 2.55 in	–
OVR T2 40-320 C U	OVR T2 40-440 C U	OVR T2 40-550 C U	OVR T2 40-660 C U	–
2CTB802348R3700	2CTB802348R3900	2CTB802348R4100	2CTB802348R4300	–
–	–	–	–	OVR T2 70 N C U
–	–	–	–	2CTB802348R6500

Protection and safety

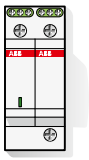
OVR Type 2 surge protective devices - Single phase networks





General technical data

Type			OVR T2 1N 15-150 P U	OVR T2 1N 15-320 P U	OVR T2 1N 40-150 P U
with auxiliary contact (TS)			–	–	OVR T2 1N 40-150 P TS U
Electrical features					
Standards			UL 1449	UL 1449	UL 1449
Type / test class (UL 1449)			4	4	4
Protected lines			2	2	2
Type of current / frequency			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			±15%	±15%	±15%
Nominal system voltage Un			120 V	277 V	120 V
Maximum continuous operating voltage MCOV			150 V	320 V	150 V
Maximal discharge current (8/20) Imax			15 kA	15 kA	40 kA
Nominal discharge current (8/20) In			5 kA	5 kA	20 kA
Voltage protection rating (L-N / N-G / L-G) VPR			1.2 kV	1.2 kV	1.2 kV
Response time			< 25 ns	< 25 ns	< 25 ns
Short circuit withstand	SCCR		200 kA	200 kA	200 kA
Back up protection maximum rating	fuse (gG - gL)		≤ 100 A	≤ 100 A	≤ 100 A
	circuit breaker (B or C curve)		≤ 125 A	≤ 125 A	≤ 125 A
Pluggable cartridges			Yes	Yes	Yes
Integrated QuickSafe® technology			Yes	Yes	Yes
State indicator			Yes	Yes	Yes
Safety reserve			–	–	–
Auxiliary contact (TS)			No	No	Yes (TS option)
Installation					
Wire range (L,N,PE)	solid wire		2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²
	stranded wire		2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²
Stripping length (L,N,PE)			12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm
Tightening torque (L,N,PE)			2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm
Auxiliary contact (TS)					
Contact information					2 NO – 2 NC
Min. load					12 V DC – 10 mA
Max. load					250 V AC – 1 A
Connection cross section					1.5 / 16 mm²
Miscellaneous characteristics					
Stocking temperature			-40...+80 °C	-40...+80 °C	-40...+80 °C
Maximal Altitude			5 000 m	5 000 m	5 000 m
Operating temperature			-40...+176 °C	-40...+176 °C	-40...+176 °C
Degree of protection			NEMA 1	NEMA 1	NEMA 1
Fire resistance according to UL 94			V0	V0	V0
Dimensions	mm	h x w x d	90.5 x 35.6 x 64.8 mm	90.5 x 35.6 x 64.8 mm	90.5 x 35.6 x 64.8 mm
	inches	h x w x d	3.56 x 1.4 x 2.55 in	3.56 x 1.4 x 2.55 in	3.56 x 1.4 x 2.55 in
Dimensions with auxiliary contact (TS)	mm	h x w x d	–	–	98.5 x 35.6 x 64.8 mm
	inches	h x w x d	–	–	3.88 x 1.4 x 2.55 in
Replacement cartridges					
Phase product ID	Type		OVR T2 15-150 C U	OVR T2 15-320 C U	OVR T2 40-150 C U
	Order code		2CTB802348R2500	2CTB802348R2700	2CTB802348R3500
Neutral product ID	Type		OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U
	Order code		2CTB802348R6500	2CTB802348R6500	2CTB802348R6500



–	–	–	–
OVR T2 1N 40-320 P TS U	**OVR T2 1N 40-440 P TS U**	**OVR T2 1N 40-550 P TS U**	**OVR T2 1N 40-660 P TS U**
UL 1449	UL 1449	UL 1449	UL 1449
4	4	4	4
2	2	2	2
AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
±15%	±15%	±15%	±15%
277 V	347 V	480 V	600 V
320 V	440 V	550 V	660 V
40 kA	40 kA	40 kA	40 kA
20 kA	10 kA	10 kA	10 kA
1.2 kV	1.2 kV	1.2 kV	1.2 kV
< 25 ns	< 25 ns	< 25 ns	< 25 ns
200 kA	200 kA	200 kA	200 kA
≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A
≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
–	–	–	–
Yes	Yes	Yes	Yes
2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²
2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²
12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm
2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm
2 NO – 2 NC	2 NO – 2 NC	2 NO – 2 NC	2 NO – 2 NC
12 V DC – 10 mA	12 V DC – 10 mA	12 V DC – 10 mA	12 V DC – 10 mA
250 V AC – 1 A	250 V AC – 1 A	250 V AC – 1 A	250 V AC – 1 A
1.5 / 16 mm²	1.5 / 16 mm²	1.5 / 16 mm²	1.5 / 16 mm²
-40…+80 °C	-40…+80 °C	-40…+80 °C	-40…+80 °C
5 000 m	5 000 m	5 000 m	5 000 m
-40…+176 °C	-40…+176 °C	-40…+176 °C	-40…+176 °C
NEMA 1	NEMA 1	NEMA 1	NEMA 1
V0	V0	V0	V0
–	–	–	–
–	–	–	–
98.5 x 35.6 x 64.8 mm	98.5 x 35.6 x 64.8 mm	98.5 x 35.6 x 64.8 mm	98.5 x 35.6 x 64.8 mm
3.88 x 1.4 x 2.55 in	3.88 x 1.4 x 2.55 in	3.88 x 1.4 x 2.55 in	3.88 x 1.4 x 2.55 in
OVR T2 40-320 C U	OVR T2 40-440 C U	OVR T2 40-550 C U	OVR T2 40-660 C U
2CTB802348R3700	2CTB802348R3900	2CTB802348R4100	2CTB802348R4300
OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U
2CTB802348R6500	2CTB802348R6500	2CTB802348R6500	2CTB802348R6500

Protection and safety

OVR Type 2 surge protective devices - Delta networks

OVR T2 3L 15-320 P U

OVR T2 3L 40-320 P TS U

Description

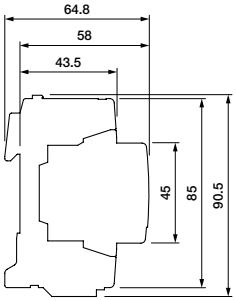
Delta devices provide the protection required by the three phases of a Delta network system.
OVR T2 devices provide the best protection as they are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (VPR). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Ordering details

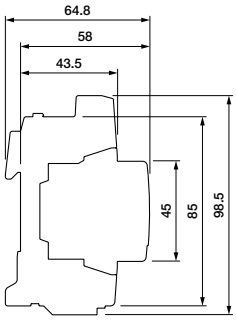
Protected lines	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection rating VPR	Nominal voltage Un	Max. cont. operating voltage MCOV, Uc	Bbn 3660308	Type	Order code	Weight Pkg (1 pce)
	kA	kA	kV	V	V	EAN			kg
Pluggable									
3	15	5	1	277 ±15%	320	518644	OVR T2 3L 15-320 P U	2CTB802345R0400	0.36
3	40	20	1	277 ±15%	320	518668	OVR T2 3L 40-320 P TS U	2CTB802345R2500	0.36
3	40	10	1.7	480 ±15%	550	518682	OVR T2 3L 40-550 P TS U	2CTB802345R3300	0.36

Type	Width mm
OVR T2 3L 15-320 P U	53.4
OVR T2 3L 40-320 P TS U	53.4
OVR T2 3L 40-550 P TS U	53.4

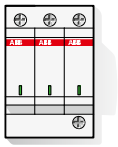
Main dimensions mm

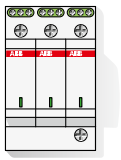


OVR T2 3L 15-320 P U



OVR T2 3L 40-320 P TS U
OVR T2 3L 40-550 P TS U





General technical data

Type			**OVR T2 3L 15-320 P U**	**–**	**–**
with auxiliary contact (TS)			**–**	**OVR T2 3L 40-320 P TS U**	**OVR T2 3L 40-550 P TS U**
Electrical features					
Standards			UL 1449	UL 1449	UL 1449
Type / test class (UL 1449)			1	1	1
Protected lines			3	3	3
Type of current / frequency			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			±15%	±15%	±15%
Nominal system voltage Un			277 V	277 V	480 V
Maximum continuous operating voltage MCOV			320 V	320 V	550 V
Maximal discharge current (8/20) Imax			15 kA	40 kA	40 kA
Nominal discharge current (8/20) In			5 kA	20 kA	10 kA
Voltage protection rating (L-N / N-G / L-G) VPR			1 kV	1 kV	1.7 kV
Response time			< 25 ns	< 25 ns	< 25 ns
Short circuit withstand	SCCR		200 kA	200 kA	200 kA
Back up protection maximum rating	fuse (gG - gL)		≤ 100 A	≤ 100 A	≤ 100 A
	circuit breaker (B or C curve)		≤ 125 A	≤ 125 A	≤ 125 A
Pluggable cartridges			Yes	Yes	Yes
Integrated QuickSafe® technology			Yes	Yes	Yes
State indicator			Yes	Yes	Yes
Safety reserve			–	–	–
Auxiliary contact (TS)			No	Yes	Yes
Installation					
Wire range (L,N,PE)	solid wire		2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²
	stranded wire		2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²
Stripping length (L,N,PE)			12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm
Tightening torque (L,N,PE)			2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm
Auxiliary contact (TS)					
Contact information			–	3 NO – 3 NC	3 NO – 3 NC
Min. load			–	12 V DC – 10 mA	12 V DC – 10 mA
Max. load			–	250 V AC – 1 A	250 V AC – 1 A
Connection cross section			–	1.5 / 16 mm²	1.5 / 16 mm²
Miscellaneous characteristics					
Stocking temperature			-40...+80 °C	-40...+80 °C	-40...+80 °C
Maximal Altitude			5 000 m	5 000 m	5 000 m
Operating temperature			-40...+176 °C	-40...+176 °C	-40...+176 °C
Degree of protection			NEMA 1	NEMA 1	NEMA 1
Fire resistance according to UL 94			V0	V0	V0
Dimensions	mm	h x w x d	90.5 x 53.4 x 64.8 mm	–	–
	inches	h x w x d	3.56 x 2.1 x 2.55 in	–	–
Dimensions with auxiliary contact (TS)	mm	h x w x d	–	98.5 x 53.4 x 64.8 mm	98.5 x 53.4 x 64.8 mm
	inches	h x w x d	–	3.88 x 2.1 x 2.55 in	3.88 x 2.1 x 2.55 in
Replacement cartridges					
Phase product ID	Type		OVR T2 15-320 C U	OVR T2 40-320 C U	OVR T2 40-550 C U
	Order code		2CTB802348R2700	2CTB802348R3700	2CTB802348R4100
Neutral product ID	Type		–	–	–
	Order code		–	–	–

Protection and safety

OVR Type 2 surge protective devices - Split phase networks

OVR T2 2L 15-320 P U

Description

Split phase devices are composed by two MOV poles or two MOV poles plus a spark gap one, depending on the number of lines the customer wants to pretect.The spark gap pole guarantees the lowest voltage protection rating and has to be connected to the neutral.
OVR T2 devices provide the best protection as they are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (VPR). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

OVR T2 2L 40-320 P TS U

OVR T2 2N 15-320 P U

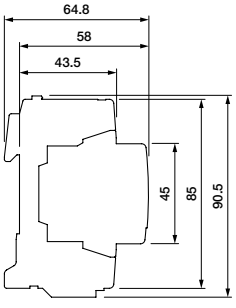
OVR T2 2N 40-440 P TS U

Ordering details

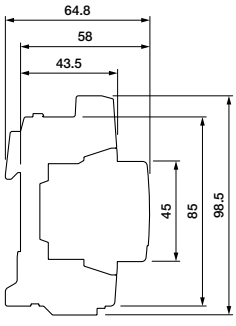
Protected lines	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection rating VPR	Nominal voltage Un	Max. cont. operating voltage MCOV, Uc	Bbn 3660308	Type	Order code	Weight Pkg (1 pce)
	kA	kA	kV	V	V	EAN			kg
Pluggable									
2	15	5	0.6	120 ±15%	175	518590	OVR T2 2L 15-150 P U	2CTB802343R0000	0.24
2	15	5	1	277 ±15%	320	518606	OVR T2 2L 15-320 P U	2CTB802343R0400	0.24
2	40	20	0.6	120 ±15%	175	518613	OVR T2 2L 40-150 P TS U	2CTB802343R2100	0.24
2	40	20	1	277 ±15%	320	518620	OVR T2 2L 40-320 P TS U	2CTB802343R2500	0.24
3	15	5	0.7	120 ±15%	175	519306	OVR T2 2N 15-150 P U	2CTB802344R0000	0.36
3	15	5	1.1	277 ±15%	320	519313	OVR T2 2N 15-320 P U	2CTB802344R0400	0.36
3	40	20	0.7	120 ±15%	175	519320	OVR T2 2N 40-150 P TS U	2CTB802344R2100	0.36
3	40	20	1.1	277 ±15%	320	519337	OVR T2 2N 40-320 P TS U	2CTB802344R2500	0.36
3	40	10	1.4	347 ±15%	440	519344	OVR T2 2N 40-440 P TS U	2CTB802344R2900	0.36
3	40	10	1.8	480 ±15%	550	519351	OVR T2 2N 40-550 P TS U	2CTB802344R3300	0.36
3	40	10	2	600 ±15%	660	519368	OVR T2 2N 40-660 P TS U	2CTB802344R3700	0.36

Type	Width mm
OVR T2 2L 15-150 P U	35.6
OVR T2 2L 15-320 P U	35.6
OVR T2 2L 40-150 P TS U	35.6
OVR T2 2L 40-320 P TS U	35.6
OVR T2 2N 15-150 P U	53.4
OVR T2 2N 15-320 P U	53.4
OVR T2 2N 40-150 P TS U	53.4
OVR T2 2N 40-320 P TS U	53.4
OVR T2 2N 40-440 P TS U	53.4
OVR T2 2N 40-550 P TS U	53.4
OVR T2 2N 40-660 P TS U	53.4

Main dimensions mm



OVR T2 2L 15-150 P U
OVR T2 2L 15-320 P U
OVR T2 2N 15-150 P U
OVR T2 2N 15-320 P U



OVR T2 2L 40-150 P TS U
OVR T2 2L 40-320 P TS U
OVR T2 2N 40-150 P TS U
OVR T2 2N 40-320 P TS U
OVR T2 2N 40-440 P TS U
OVR T2 2N 40-550 P TS U
OVR T2 2N 40-660 P TS U

Protection and safety

OVR Type 2 surge protective devices - Grounded Wye networks

OVR T2 3L 40-440 P TS U

Description

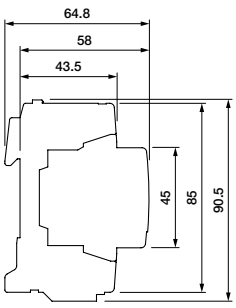
Wye devices are composed by three MOV poles or three MOV poles plus a spark gap one, depending on the number of lines the customer wants to protect. The spark gap pole guarantees the lowest voltage protection rating and has to be connected to the Neutral.
OVR T2 devices provide the best protection as they are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (VPR). They are characterized by their capacity to safely discharge current with 8/20 µs wave form.

Ordering details

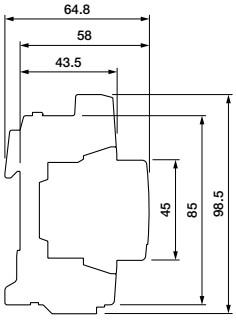
Protected lines	Max discharge current Imax 8/20	Nominal discharge current In	Voltage protection rating VPR	Nominal voltage Un	Max. cont. operating voltage MCOV, Uc	Bbn 3660308	Type	Order code	Weight Pkg (1 pce)
	kA	kA	kV	V	V	EAN			kg
Pluggable									
3	15	5	0.6	120 ±15%	175	518637	OVR T2 3L 15-150 P U	2CTB802345R0000	0.36
3	40	20	0.6	120 ±15%	175	518651	OVR T2 3L 40-150 P TS U	2CTB802345R2100	0.36
3	40	10	1.3	347 ±15%	440	518675	OVR T2 3L 40-440 P TS U	2CTB802345R2900	0.36
4	15	5	1.2	120 ±15%	175	518699	OVR T2 3N 15-150 P U	2CTB802346R0000	0.48
4	15	5	1.2	277 ±15%	320	518705	OVR T2 3N 15-320 P U	2CTB802346R0400	0.48
4	40	20	1.2	120 ±15%	175	518712	OVR T2 3N 40-150 P TS U	2CTB802346R2100	0.48
4	40	20	1.2	277 ±15%	320	518729	OVR T2 3N 40-320 P TS U	2CTB802346R2500	0.48
4	40	10	1.2	347 ±15%	440	518736	OVR T2 3N 40-440 P TS U	2CTB802346R2900	0.48
4	40	10	1.2	480 ±15%	550	518743	OVR T2 3N 40-550 P TS U	2CTB802346R3300	0.48
4	40	10	1.2	600 ±15%	660	518750	OVR T2 3N 40-660 P TS U	2CTB802346R3700	0.48

Type	Width mm
OVR T2 3L 15-150 P U	53.4
OVR T2 3L 40-150 P TS U	53.4
OVR T2 3L 40-440 P TS U	53.4
OVR T2 3N 15-150 P U	71.2
OVR T2 3N 15-320 P U	71.2
OVR T2 3N 40-150 P TS U	71.2
OVR T2 3N 40-320 P TS U	71.2
OVR T2 3N 40-440 P TS U	71.2
OVR T2 3N 40-550 P TS U	71.2
OVR T2 3N 40-660 P TS U	71.2

Main dimensions mm



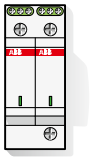
OVR T2 3L 15-150 P U
OVR T2 3N 15-150 P U
OVR T2 3N 15-320 P U

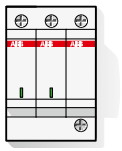


OVR T2 3L 40-150 P TS U
OVR T2 3L 40-440 P TS U
OVR T2 3N 40-150 P TS U
OVR T2 3N 40-320 P TS U
OVR T2 3N 40-440 P TS U
OVR T2 3N 40-550 P TS U
OVR T2 3N 40-660 P TS U

Protection and safety

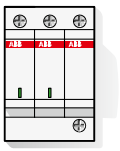
OVR Type 2 surge protective devices - Split phase networks

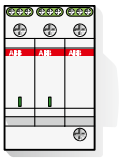




General technical data

Type			OVR T2 2L 15-150 P U	OVR T2 2L 15-320 P U	–	–	OVR T2 2N 15-150 P U
with auxiliary contact (TS)			–	–	OVR T2 2L 40-150 P TS U	OVR T2 2L 40-320 P TS U	–
Electrical features							
Standards			UL 1449	UL 1449	UL 1449	UL 1449	UL 1449
Type / test class (UL 1449)			1	1	1	1	4
Protected lines			2	2	2	2	3
Type of current / frequency			AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
Voltage regulation of the system network			±15%	±15%	±15%	±15%	±15%
Nominal system voltage Un			120 V	277 V	120 V	277 V	120 V
Maximum continuous operating voltage MCOV			175 V	320 V	175 V	320 V	175 V
Maximal discharge current (8/20) Imax			15 kA	15 kA	40 kA	40 kA	15 kA
Nominal discharge current (8/20) In			5 kA	5 kA	20 kA	20 kA	5 kA
Voltage protection rating (L-N / N-G / L-G) VPR			0.6 kV	1 kV	0.6 kV	1 kV	0.7 kV
Response time			< 25 ns	< 25 ns	< 25 ns	< 25 ns	< 25 ns
Short circuit withstand SCCR			200 kA	200 kA	200 kA	200 kA	200 kA
Back up protection maximum rating	fuse (gG - gL)		≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A
	circuit breaker (B or C curve)		≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A
Pluggable cartridges			Yes	Yes	Yes	Yes	Yes
Integrated QuickSafe® technology			Yes	Yes	Yes	Yes	Yes
State indicator			Yes	Yes	Yes	Yes	Yes
Safety reserve			–	–	–	–	–
Auxiliary contact (TS)			No	No	Yes	Yes	No
Installation							
Wire range (L,N,PE)	solid wire		2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²
	stranded wire		2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²
Stripping length (L,N,PE)			12.5 / 0.5	12.5 / 0.5	12.5 / 0.5	12.5 / 0.5	12.5 / 0.5
Tightening torque (L,N,PE)			2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm
Auxiliary contact (TS)							
Contact information			–	–	2 NO – 2 NC	2 NO – 2 NC	–
Min. load			–	–	12 V DC – 10 mA	12 V DC – 10 mA	–
Max. load			–	–	250 V AC – 1 A	250 V AC – 1 A	–
Connection cross section			–	–	1.5 / 16 mm²	1.5 / 16 mm²	–
Miscellaneous characteristics							
Stocking temperature			-40...+80 °C	-40...+80 °C	-40...+80 °C	-40...+80 °C	-40...+80 °C
Maximal Altitude			5 000 m	5 000 m	5 000 m	5 000 m	5 000 m
Operating temperature			-40...+176 °C	-40...+176 °C	-40...+176 °C	-40...+176 °C	-40...+176 °C
Degree of protection			NEMA 1	NEMA 1	NEMA 1	NEMA 1	NEMA 1
Fire resistance according to UL 94			V0	V0	V0	V0	V0
Dimensions	mm	h x w x d	90.5 x 35.6 x 64.8 mm	90.5 x 35.6 x 64.8 mm	–	–	90.5 x 53.4 x 64.8 mm
	inches	h x w x d	3.56 x 1.4 x 2.55 in	3.56 x 1.4 x 2.55 in	–	–	3.56 x 2.1 x 2.55 in
Dimensions with auxiliary contact (TS)	mm	h x w x d	–	–	98.5 x 35.6 x 64.8 mm	98.5 x 35.6 x 64.8 mm	–
	inches	h x w x d	–	–	3.88 x 1.4 x 2.55 in	3.88 x 1.4 x 2.55 in	–
Replacement cartridges			–	–	–	–	–
Phase product ID	Type		OVR T2 15-150 C U	OVR T2 15-320 C U	OVR T2 40-150 C U	OVR T2 40-320 C U	OVR T2 15-150 C U
	Order code		2CTB802348R2500	2CTB802348R2700	2CTB802348R3500	2CTB802348R3700	2CTB802348R2500
Neutral product ID	Type		–	–	–	–	OVR T2 70 N C U
	Order code		–	–	–	–	2CTB802348R6500

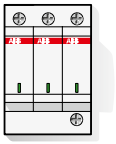


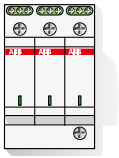


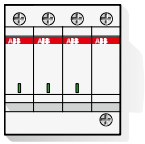
OVR T2 2N 15-320 P U	–	–	–	–	–
–	**OVR T2 2N 40-150 P TS U**	**OVR T2 2N 40-320 P TS U**	**OVR T2 2N 40-440 P TS U**	**OVR T2 2N 40-550 P TS U**	**OVR T2 2N 40-660 P TS U**
UL 1449	UL 1449	UL 1449	UL 1449	UL 1449	UL 1449
4	4	4	4	4	4
3	3	3	3	3	3
AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
±15%	±15%	±15%	±15%	±15%	±15%
277 V	120 V	277 V	347 V	480 V	600 V
320 V	175 V	320 V	440 V	550 V	660 V
15 kA	40 kA	40 kA	40 kA	40 kA	40 kA
5 kA	20 kA	20 kA	10 kA	10 kA	10 kA
1.1 kV	0.7 kV	1.1 kV	1.4 kV	1.8 kV	2 kV
< 25 ns	< 25 ns	< 25 ns	< 25 ns	< 25 ns	< 25 ns
200 kA	200 kA	200 kA	200 kA	200 kA	200 kA
≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A
≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes
–	–	–	–	–	–
No	Yes	Yes	Yes	Yes	Yes
2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²
2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²
12.5 / 0.5	12.5 / 0.5	12.5 / 0.5	12.5 / 0.5	12.5 / 0.5	12.5 / 0.5
2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm
–	3 NO – 3 NC	3 NO – 3 NC	3 NO – 3 NC	3 NO – 3 NC	3 NO – 3 NC
–	12 V DC – 10 mA	12 V DC – 10 mA	12 V DC – 10 mA	12 V DC – 10 mA	12 V DC – 10 mA
–	250 V AC – 1 A	250 V AC – 1 A	250 V AC – 1 A	250 V AC – 1 A	250 V AC – 1 A
–	1.5 / 16 mm²	1.5 / 16 mm²	1.5 / 16 mm²	1.5 / 16 mm²	1.5 / 16 mm²
-40…+80 °C	-40…+80 °C	-40…+80 °C	-40…+80 °C	-40…+80 °C	-40…+80 °C
5 000 m	5 000 m	5 000 m	5 000 m	5 000 m	5 000 m
-40…+176 °C	-40…+176 °C	-40…+176 °C	-40…+176 °C	-40…+176 °C	-40…+176 °C
NEMA 1	NEMA 1	NEMA 1	NEMA 1	NEMA 1	NEMA 1
V0	V0	V0	V0	V0	V0
90.5 x 53.4 x 64.8 mm	–	–	–	–	–
3.56 x 2.1 x 2.55 in	–	–	–	–	–
–	98.5 x 53.4 x 64.8 mm	98.5 x 53.4 x 64.8 mm	98.5 x 53.4 x 64.8 mm	98.5 x 53.4 x 64.8 mm	98.5 x 53.4 x 64.8 mm
–	3.88 x 2.1 x 2.55 in	3.88 x 2.1 x 2.55 in	3.88 x 2.1 x 2.55 in	3.88 x 2.1 x 2.55 in	3.88 x 2.1 x 2.55 in
–	**1 NO – 1 NC**	**1 NO – 1 NC**	**1 NO – 1 NC**	**1 NO – 1 NC**	**1 NO – 1 NC**
OVR T2 15-320 C U	OVR T2 40-150 C U	OVR T2 40-320 C U	OVR T2 40-440 C U	OVR T2 40-550 C U	OVR T2 40-660 C U
2CTB802348R2700	2CTB802348R3500	2CTB802348R3700	2CTB802348R3900	2CTB802348R4100	2CTB802348R4300
OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U
2CTB802348R6500	2CTB802348R6500	2CTB802348R6500	2CTB802348R6500	2CTB802348R6500	2CTB802348R6500

Protection and safety

OVR Type 2 surge protective devices - Grounded Wye networks

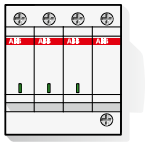


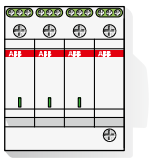




General technical data

	Type		**OVR T2 3L 15-150 P U**	**–**	**–**	**OVR T2 3N 15-150 P U**
	with auxiliary contact (TS)		**–**	**OVR T2 3L 40-150 P TS U**	**OVR T2 3L 40-440 P TS U**	**–**
Electrical features						
	Standards		UL 1449	UL 1449	UL 1449	UL 1449
	Type / test class (UL 1449)		1	1	1	4
	Protected lines		3	3	3	4
	Type of current / frequency		AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
	Voltage regulation of the system network		±15%	±15%	±15%	±15%
	Nominal system voltage Un		120 V	120 V	347 V	120 V
	Maximum continuous operating voltage MCOV		175 V	175 V	440 V	175 V
	Maximal discharge current (8/20) Imax		15 kA	40 kA	40 kA	15 kA
	Nominal discharge current (8/20) In		5 kA	10 kA	10 kA	5 kA
	Voltage protection rating (L-N / N-G / L-G VPR)		0.6 kV	0.6 kV	1.3 kV	0.6 kV
	Response time		< 25 ns	< 25 ns	< 25 ns	< 25 ns
	Short circuit withstand	SCCR	200 kA	200 kA	200 kA	200 kA
	Back up protection maximum rating	fuse (gG - gL)	≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A
		circuit breaker (B or C curve)	≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A
	Pluggable cartridges		Yes	Yes	Yes	Yes
	Integrated QuickSafe® technology		Yes	Yes	Yes	Yes
	State indicator		Yes	Yes	Yes	Yes
	Safety reserve		–	–	–	–
	Auxiliary contact (TS)		No	Yes	Yes	No
Installation						
	Wire range (L,N,PE)	solid wire	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²
		stranded wire	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²
	Stripping length (L,N,PE)		12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm
	Tightening torque (L,N,PE)		2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm
Auxiliary contact (TS)						
	Contact information		–	4 NO – 4 NC	4 NO – 4 NC	–
	Min. load		–	12 V DC – 10 mA	12 V DC – 10 mA	–
	Max. load		–	250 V AC – 1 A	250 V AC – 1 A	–
	Connection cross section		–	1.5 / 16 mm²	1.5 / 16 mm²	–
Miscellaneous characteristics						
	Stocking temperature		-40...+80 °C	-40...+80 °C	-40...+80 °C	-40...+80 °C
	Maximal Altitude		5 000 m	5 000 m	5 000 m	5 000 m
	Operating temperature		-40...+176 °C	-40...+176 °C	-40...+176 °C	-40...+176 °C
	Degree of protection		NEMA 1	NEMA 1	NEMA 1	NEMA 1
	Fire resistance according to UL 94		V0	V0	V0	V0
	Dimensions	mm h x w x d	90.5 x 53.4 x 64.8 mm	–	–	90.5 x 71.2 x 64.8 mm
		inches h x w x d	3.56 x 2.1 x 2.55 in	–	–	3.56 x 2.8 x 2.55 in
	Dimensions with auxiliary contact (TS)	mm h x w x d	–	98.5 x 53.4 x 64.8 mm	98.5 x 53.4 x 64.8 mm	–
		inches h x w x d	–	3.88 x 2.1 x 2.55 in	3.88 x 2.1 x 2.55 in	–
Replacement cartridges						
	Phase product ID	Type	OVR T2 15-150 C U	OVR T2 40-150 C U	OVR T2 40-440 C U	OVR T2 15-150 C U
		Order code	2CTB802348R2500	2CTB802348R3500	2CTB802348R3900	2CTB802348R2500
	Neutral product ID	Type	–	–	–	OVR T2 70 N C U
		Order code	–	–	–	2CTB802348R6500





OVR T2 3N 15-320 P U	**–**	**–**	**–**	**–**	**–**
–	**OVR T2 3N 40-150 P TS U**	**OVR T2 3N 40-320 P TS U**	**OVR T2 3N 40-440 P TS U**	**OVR T2 3N 40-550 P TS U**	**OVR T2 3N 40-660 P TS U**
UL 1449	UL 1449	UL 1449	UL 1449	UL 1449	UL 1449
4	4	4	4	4	4
4	4	4	4	4	4
AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz	AC 47-63 Hz
±15%	±15%	±15%	±15%	±15%	±15%
277 V	120 V	277 V	347 V	480 V	600 V
320 V	175 V	320 V	440 V	550 V	660 V
15 kA	40 kA	40 kA	40 kA	40 kA	40 kA
5 kA	20 kA	20 kA	10 kA	10 kA	10 kA
1 kV	1.2 kV	1.2 kV	1.2 kV	1.2 kV	1.2 kV
< 25 ns	< 25 ns	< 25 ns	< 25 ns	< 25 ns	< 25 ns
200 kA	200 kA	200 kA	200 kA	200 kA	200 kA
≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A	≤ 100 A
≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A	≤ 125 A
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes
–	–	–	–	–	–
No	Yes	Yes	Yes	Yes	Yes
2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²	2.5…25 / 4…14 mm²
2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²	2.5…16 / 6…14 mm²
12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm	12.5 / 0.5 mm
2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm	2.8 / 24.5 Nm
–	4 NO – 4 NC	4 NO – 4 NC	4 NO – 4 NC	4 NO – 4 NC	4 NO – 4 NC
–	12 V DC – 10 mA	12 V DC – 10 mA	12 V DC – 10 mA	12 V DC – 10 mA	12 V DC – 10 mA
–	250 V AC – 1 A	250 V AC – 1 A	250 V AC – 1 A	250 V AC – 1 A	250 V AC – 1 A
–	1.5 / 16 mm²	1.5 / 16 mm²	1.5 / 16 mm²	1.5 / 16 mm²	1.5 / 16 mm²
-40…+80 °C	-40…+80 °C	-40…+80 °C	-40…+80 °C	-40…+80 °C	-40…+80 °C
5 000 m	5 000 m	5 000 m	5 000 m	5 000 m	5 000 m
-40…+176 °C	-40…+176 °C	-40…+176 °C	-40…+176 °C	-40…+176 °C	-40…+176 °C
NEMA 1	NEMA 1	NEMA 1	NEMA 1	NEMA 1	NEMA 1
V0	V0	V0	V0	V0	V0
90.5 x 71.2 x 64.8 mm	–	–	–	–	–
3.56 x 2.8 x 2.55 in	–	–	–	–	–
–	98.5 x 71.2 x 64.8 mm	98.5 x 71.2 x 64.8 mm	98.5 x 71.2 x 64.8 mm	98.5 x 71.2 x 64.8 mm	98.5 x 71.2 x 64.8 mm
–	3.88 x 2.8 x 2.55 in	3.88 x 2.8 x 2.55 in	3.88 x 2.8 x 2.55 in	3.88 x 2.8 x 2.55 in	3.88 x 2.8 x 2.55 in
OVR T2 15-320 C U	OVR T2 40-150 C U	OVR T2 40-320 C U	OVR T2 40-440 C U	OVR T2 40-550 C U	OVR T2 40-660 C U
2CTB802348R2700	2CTB802348R3500	2CTB802348R3700	2CTB802348R3900	2CTB802348R4100	2CTB802348R4300
OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U	OVR T2 70 N C U
2CTB802348R6500	2CTB802348R6500	2CTB802348R6500	2CTB802348R6500	2CTB802348R6500	2CTB802348R6500

Protection and safety

OVRH series product range

Name	OVRHSP (200, 240, 300, 400)	OVRHSP (120, 160)	OVRHSP (60, 80, 100)	OVRHSR (120, 160)
Connection Ampacity	1,000A and higher	1,000A and below	400A and below	1,000A and below
SPD Type	Type 1	Type 1	Type 1	Type 1
Certifications	UL 1449 and CE	UL 1449 and CE	UL 1449 and CE	UL 1449 and CE
Surge Ratings	200, 240, 300, 400kA per phase	120, 160kA per phase	60, 80, 100kA per phase	120, 160kA per phase
LEDs	Yes	Yes	Yes	Yes
Dry Relay Contacts	Standard	Standard	Optional	Standard
EMI Filter	Optional	Optional	Optional	Optional
Surge Counter	Optional	Optional	Not available	Not available
Warranty	5 years	5 years	5 years	5 years

OVRHTE	OVRHT3B	OVRHT3C	OVRHS3U	OVRHLD
100–80kA 1,000A and below 50kA 400A and below 25kA 100A and below	400A and below	400A and below	400A and below	100A and below
Type 2	Type 1	Type 1	Type 1 and Type 2	Type 1
UL 1449	UL 1449	UL 1449	UL 1449	UL 1449
25, 50, 80 and 100 per mode	50kA per phase	50kA per phase	40kA per phase	20, 25, 30kA per phase
Yes	Yes	Yes	Yes	Yes
Optional	Not available	Not available	Optional	Not available
Optional	Not available	Not available	Not available	Not available
Not available	Not available	Not available	Not available	Not available
3 years	3 year	3 year	1 year	1 year

Protection and safety

OVRHSP/OVRHSR Facility Wide Protection – 4,000A and below

- Listed to UL 1449 4th Edition for Type 1 and Type 2 SPD applications.
- Fail-safe design with individually fused Metal Oxide Varistors (MOVs) eliminating single point failure, protecting against both overcurrent and overvoltage events.
- 200kAIC short circuit rating permits direct bus connection to most electrical services.
- Low let through voltage ensured by the lowest possible impedance path to ground and equal current sharing during surge events.
- All weather sealed, powder-coated NEMA 4/IP65 housing is designed for any orientation and indoor/outdoor applications.
- 5-year standard warranty.

Technical features

Electrical	
Nominal discharge current rating (I-n)	10kA (60–100) 20kA (120–400)
Operating frequency	47–63Hz
Connection method	Parallel to electrical distribution system
Modes of protection	All modes (L-N, L-G, N-G, L-L)
Fault rating (SCCR)	200kAIC–no upstream over-current protection device (breaker or fuse) required
Response time	Less than 1 nanosecond
Standard monitoring (120–400 kA)	Status indicator lights (one per phase), Standard dry (Form “C”) relay contacts, Audible alarm with silence button
Mechanical	
Weight	60, 80, 100 kA: 4.5 kg (10 lbs.) 120, 160 kA: 9 kg (20 lbs.) 200, 240, 300, 400 kA: 18 kg (40 lbs.)
Enclosure type	Powder coated, impact-resistance steel, weather-proof NEMA 4
Installation location	Indoor/outdoor
Mounting method	Dual mounting flanges
Operating environment	-40° to +70°C (-40° to +185°F)
Altitude	Up to 4000 m (13,000 ft.)
Product design	Parallel design with individually fused MOVs
Regulatory	
UL 1449 4th Edition Type	Type 1
UL 1283	Yes
IEEE C62.41.1, .2, C62.45	Yes
Listed by	ETL: 60–100kA models UL: 120–400kA models CE: 120–400kA models

OVRHSP and OVRHSR

Configuration	Voltage	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1-phase, 2-wire + ground	120V		OVRHSP(SR)xxx1201P				
1-phase, 2-wire + ground	240V		OVRHSP(SR)xxx2401P				
2-phase, 3-wire + ground	120/240V		OVRHSP(SR)xxx1202S				
3-phase Wye, 4-wire + ground	120/208V		OVRHSP(SR)xxx1203Y				
3-phase Wye, 4-wire + ground	220/380V		OVRHSP(SR)xxx2203Y				
3-phase Wye, 4-wire + ground	240/415V		OVRHSP(SR)xxx2403Y				
3-phase Wye, 4-wire + ground	277/480V		OVRHSP(SR)xxx2773Y				
3-phase Wye, 4-wire + ground	347/600		OVRHSP(SR)xxx3473Y*				
3-phase High-Leg, 4-wire + ground	120/240V		OVRHSP(SR)xxx2403H				
3-phase Delta, 3-wire + ground	240V		OVRHSP(SR)xxx2403D				
3-phase Delta, 3-wire + ground	380V		OVRHSP(SR)xxx3803D*				
3-phase Delta, 3-wire + ground	480V		OVRHSP(SR)xxx4803D*				
3-phase Delta, 3-wire + ground	600V		OVRHSP(SR)xxx6003D*				

OVRHSP: Where “xxx” can be 60, 80, 100, 120, 160, 200, 240, 300 or 400
OVRHSR: Where “xxx” can be 120 or 160
*Voltages not available with 60, 80 or 100kA units

Available options Add applicable suffix to end of numbers	**Model number***
Advanced monitoring (available in 60–100kA units only) (Includes dry relay contacts, audible alarm, alarm silence button, fault light)	1
Transient filter* and advanced monitoring	A
Stainless steel enclosure and advanced monitoring	M
Stainless steel enclosure, transient filter* and advanced monitoring	N
Transient filter* (meets UL 1283) (All models)	3
Stainless steel enclosure (All models)	4
Transient filter* and surge counter (SP 120–400kA only)	B
Transient filter* and stainless steel enclosure (All models)	C
Surge counter and stainless steel enclosure (SP 120–400kA only)	D
Transient filter*, surge counter and stainless steel enclosure (SP 120–400kA only)	T

*Not recommended when using telecommunication rectifiers.

OVRHSR stand alone option

(To be ordered as a separate item)

	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
Flush-mount plate kit		OVRHSR-FMP-120/160				

Protection and safety

OVRHTE Sub and Mid-Level Distribution – 1,000A and below

- Listed to UL 1449 4th edition for Type 2 SPD applications.
- Protects facilities and equipment against the harmful effects of lightning strikes and internally generated electrical transients.
- Includes pre-wired pigtail conductors to streamline installation.
- Features internal copper bus conduction path to minimize system impedances, lowering clamping voltage and increasing protection.

Technical features

Electrical	
Nominal discharge current rating (I-n)	20kA
Operating frequency	47–63Hz
Connection methods	Parallel to load (shunt) 609.6mm (24”) 5mm2 (#10 AWG) wires through 20A (max) breaker
Modes of protection	L-L, L-N, L-G, N-G
Fault rating (SCCR)	65kAIC–upstream over-current protection device (breaker or fuse required)
Response time	Less than 1 nanosecond (one per phase)
Standard monitoring	LED status indicator lights
Mechanical	
Weight	5.8kg (12.7 lbs.)
Enclosure type	NEMA 4X fiberglass-reinforced polyester (FRP) surface-mount, non-removable cover
Installation location	Indoor/outdoor
Mounting methods	Dual mounting flanges
Operating environment	40° to +60°C (-40° to +140°F)
Altitude	Up to 5000m (16,400 ft.)
Product design	No internal fusing
Regulatory	
UL 1449 4th edition type	Type 2
UL 1283	Yes
IEEE C62.41.1, .2, C62.45	Yes
Listed by	UL

Configuration	Voltage	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1-phase, 2-wire + ground	120V		OVRHTExx1201P				
1-phase, 2-wire + ground	240V		OVRHTExx2401P				
2-phase, 3-wire + ground	120/240V		OVRHTExx1202S				
3-phase Wye, 4-wire + ground	120/208V		OVRHTExx1203Y				
3-phase Wye, 4-wire + ground	220/380V		OVRHTExx2203Y				
3-phase Wye, 4-wire + ground	240/415V		OVRHTExx2403Y				
3-phase Wye, 4-wire + ground	277/480V		OVRHTExx2773Y				
3-phase Wye, 4-wire + ground	347/600V		OVRHTExx3473Y				
3-phase Hi-Leg, 4-wire + ground	120/240V		OVRHTExx2403H				
3-phase Delta, 3-wire + ground	240V		OVRHTExx2403D				
3-phase Delta, 3-wire + ground	380V		OVRHTExx3803D				
3-phase Delta, 3-wire + ground	480V		OVRHTExx4803D				

Model number: Where “xx” can be 25, 50, 80, or 100

Available option	Model number*
Dry Form “C” relay contacts	5

*Add applicable suffix to the end of Model number.
Example: OVRHTE251201P5

Protection and safety

OVRHT3B Sub Distribution and Panelboard – 400A and below

- Listed to UL 1449 4th Edition for Type 1 SPD applications.
- 50kA per phase protection.
- Individual thermally fused and protected MOVs.
- Includes pre-wired pigtail conductors.
- Multiple MOVs per phase eliminates single point failure.

Technical features

Electrical	
Nominal discharge current rating (I-n)	20 kA (Earthling systems 10 kA)
Operating frequency	47–63 Hz
Connection methods	Parallel to load (shunt) 914.4 mm (36") of 3.31 mm² (#12 AWG) wires
Modes of protection	Model dependent
Fault rating (SCCR)	100 kA IC
Response time	Less than 1 nanosecond (one per phase)
Standard monitoring	LED status indicator lights
Mechanical	
Weight	23 kg (5 lbs)
Enclosure type	NEMA 4X, non metallic
Installation location	Indoor/Outdoor
Mounting method	12.7mm (1/2")–14 NPT thread
Operating environment	-35° to +80°C (-31° to +176°F)
Altitude	Up to 5000 m (16,400 ft.)
Product design	Individual thermally fused and protected MOVs
Regulatory	
UL 1449 4th edition type	Type 1
UL 96A	Yes
IEEE C62.41.1, .2, C62.45	Yes
Listed by	UL

Configuration	kA per phase	Voltage	Order details		Price 1 piece	Weight 1 piece	Pack unit
			Type code	Order code		kg	pc.
1-phase, 2-wire + ground	50kA	120V	OVRHT3B501201P	2CJC405120P0000		0.23	1
1-phase, 2-wire + ground	50kA	240V	OVRHT3B502401P	2CJC405240P0000		0.23	1
1-phase, 2-wire + ground	50kA	277V	OVRHT3B502771P	2CJC405277P0000		0.23	1
1-phase, 2-wire + ground	50kA	480V	OVRHT3B504801P	2CJC405480P0000		0.23	1
2-phase, 3-wire + ground	50kA	120/240V	OVRHT3B501202S	2CJC405120S0000		0.23	1
2-phase, 3-wire + ground	50kA	240/480V	OVRHT3B502402S	2CJC405240S0000		0.23	1
3-phase High-Leg, 4-wire + ground	50kA	120/240V	OVRHT3B502403H	2CJC405240H0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	120/208V	OVRHT3B501203Y	2CJC405120Y0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	220/380V	OVRHT3B502203Y	2CJC405220Y0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	230/400V	OVRHT3B502303Y	2CJC405230Y0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	240/415V	OVRHT3B502403Y	2CJC405240Y0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	277/480V	OVRHT3B502773Y	2CJC405277Y0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	347/600V	OVRHT3B503473Y	2CJC405347Y0000		0.23	1
3-phase Delta, 3-wire + ground	50kA	240V	OVRHT3B502403D	2CJC405240D0000		0.23	1
3-phase Delta, 3-wire + ground	50kA	380V	OVRHT3B503803D	2CJC405380D0000		0.23	1
3-phase Delta, 3-wire + ground	50kA	400V	OVRHT3B504003D	2CJC405400D0000		0.23	1
3-phase Delta, 3-wire + ground	50kA	480V	OVRHT3B504803D	2CJC405480D0000		0.23	1
3-phase Delta, 3-wire + ground	50kA	600V	OVRHT3B506003D	2CJC405600D0000		0.23	1
Earthing Systems							
1-phase, 2-wire + ground (for TNC earthing systems)	50kA	230V	OVRHT3B502301PI	2CJC405230I0000		0.23	1
1-phase, 2-wire + ground (for TNS earthing systems)	50kA	230V	OVRHT3B502301PJ	2CJC405230J0000		0.23	1
1-phase, 2-wire + ground (for IT earthing systems)	50kA	230V	OVRHT3B502301PK	2CJC405230K0000		0.23	1
1-phase, 2-wire + ground (for TT earthing systems)	50kA	230V	OVRHT3B502301PL	2CJC405230L0000		0.23	1
Warranty							
3-year							

Protection and safety

OVRHS3U Sub Distribution and Panelboard – 400A and below

- Listed to UL 1449 4th Edition for Type 1 and Type 2 SPD applications.
- Individual fusing for each Metal Oxide Varistors (MOVs).
- LED indicates proper functioning of L-N and N-G MOVs.

Technical features

Electrical	
Nominal discharge current rating (I-n)	20kA
Operating frequency	47–63Hz
Connection methods	Parallel to load (shunt) 2mm2 (#14 AWG) wires
Modes of protection	Model dependent
Fault rating (SCCR)	100kAIC
Response time	Less than 1 nanosecond (one per phase)
Standard monitoring	LED status indicator lights
Mechanical	
Weight	.9kg (2 lbs.)
Enclosure type	NEMA 1, non-metallic
Installation location	Indoor
Mounting method	12.7mm (1/2”)–14 NPT thread (Aluminum bracket optional)
Operating environment	-40° to +80°C (-40° to +176°F)
Altitude	Up to 5000m (16,400 ft.)
Product design	Individually fused MOVs
Regulatory	
UL 1449 4th edition type	Type 1 and Type 2
UL 1283	Only for model number OVRHS3U802402SR
IEEE C62.41.1, .2, C62.45	Yes
Listed by	UL

Type 1

Configuration	kA per phase	Voltage	Bbn 8012542 EAN	Order details Type code	 Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1-phase, 2-wire + ground	40kA	120V		OVRHS3U401201P				
2-phase, 3-wire + ground	40kA	120/240V		OVRHS3U401202S				
3-phase Delta, 4-wire + ground	40kA	240V		OVRHS3U402403D				
3-phase, 4-wire + ground	40kA	120/208V		OVRHS3U402083Y				

Type 2

Configuration	kA per phase	Voltage	Bbn 8012542 EAN	Order details Type code	 Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1-phase, 2-wire + ground	40kA	240V		OVRHS3U402401P				
2-phase, 3-wire + ground (Contains UL 1283 listed filter, Dry relay contacts not available.)	80kA	120/240V		OVRHS3U802402SR				
3-phase Delta, 3-wire + ground	40kA	480V		OVRHS3U404803D				
3-phase High-Leg, 4-wire + ground	40kA	120/240V		OVRHS3U401202H				
3-phase, 4-wire + ground	40kA	277/480V		OVRHS3U402773Y				
3-phase, 4-wire + ground	40kA	230/400V		OVRHS3U402303Y				

Available options (Not available on OVRHS3U802402SR unit)	Model number*
1 set of dry relay contacts (all models)	5
1 set of dry relay contacts + mounting bracket (only on OVRHS3U402401P and OVRHS3U402303Y models)	P

Protection and safety

OVRHT3C Sub Distribution and Panelboard – 400A and below

- Listed to UL 1449 4th Edition for Type 1 SPD applications.
- 50kA per phase protection.
- Individual thermally fused and protected MOVs.
- Includes pre-wired pigtail conductors.
- Multiple MOVs per phase eliminates single point failure.

Technical features

Electrical	
Nominal discharge current rating (I-n)	10kA
Operating Frequency	47–63Hz
Connection Methods	Parallel to load 914.4mm (36“) of 3.31mm2 (#12 AWG) wires
Modes of protection	Model dependent
Fault rating (SCCR)	100kAIC
Response time	Less than 1 nanosecond (one per phase)
Standard monitoring	LED status indicator lights
Mechanical	
Weight	.23 kg (.5 lbs)
Enclosure type	NEMA 4X, non metallic
Installation location	Indoor/Outdoor
Mounting method	12.7mm (1/2”)–14 NPT thread
Operating environment	-35° to +80°C (-31° to +176°F)
Altitude	Up to 5000 m (16,400 ft.)
Product design	Individual thermally fused and protected MOVs
Regulatory	
UL 1449 4th edition type	Type 1
UL 96A	Yes
IEEE C62.41.1, .2, C62.45	Yes
Listed by	UL

Configuration	kA per phase	Voltage	Order details		Price 1 piece	Weight 1 piece	Pack unit
			Type code	Order code		kg	pc.
1-phase, 2-wire + ground	50kA	120V	OVRHT3C501201P	2CJC605120P0000		0.23	1
1-phase, 2-wire + ground	50kA	240V	OVRHT3C502401P	2CJC605240P0000		0.23	1
1-phase, 2-wire + ground	50kA	277V	OVRHT3C502771P	2CJC605277P0000		0.23	1
1-phase, 2-wire + ground	50kA	480V	OVRHT3C504801P	2CJC605480P0000		0.23	1
2-phase, 3-wire + ground	50kA	120/240V	OVRHT3C501202S	2CJC605120S0000		0.23	1
2-phase, 3-wire + ground	50kA	240/480V	OVRHT3C502402S	2CJC605240S0000		0.23	1
3-phase High-Leg, 4-wire + ground	50kA	120/240V	OVRHT3C502403H	2CJC605240H0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	120/208V	OVRHT3C501203Y	2CJC605120Y0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	220/380V	OVRHT3C502203Y	2CJC605220Y0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	230/400V	OVRHT3C502303Y	2CJC605230Y0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	240/415V	OVRHT3C502403Y	2CJC605240Y0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	277/480V	OVRHT3C502773Y	2CJC605277Y0000		0.23	1
3-phase Wye, 4-wire + ground	50kA	347/600V	OVRHT3C503473Y	2CJC605347Y0000		0.23	1
3-phase Delta, 3-wire + ground	50kA	240V	OVRHT3C502403D	2CJC605240D0000		0.23	1
3-phase Delta, 3-wire + ground	50kA	380V	OVRHT3C503803D	2CJC605380D0000		0.23	1
3-phase Delta, 3-wire + ground	50kA	400V	OVRHT3C504003D	2CJC605400D0000		0.23	1
3-phase Delta, 3-wire + ground	50kA	480V	OVRHT3C504803D	2CJC605480D0000		0.23	1
3-phase Delta, 3-wire + ground	50kA	600V	OVRHT3C506003D	2CJC605600D0000		0.23	1
Earthing Systems							
1-phase, 2-wire + ground (for TNC earthing systems)	50kA	230V	OVRHT3C502301PI	2CJC605230I0000		0.23	1
1-phase, 2-wire + ground (for TNS earthing systems)	50kA	230V	OVRHT3C502301PJ	2CJC605230J0000		0.23	1
1-phase, 2-wire + ground (for IT earthing systems)	50kA	230V	OVRHT3C502301PK	2CJC605230K0000		0.23	1
1-phase, 2-wire + ground (for TT earthing systems)	50kA	230V	OVRHT3C502301PL	2CJC605230L0000		0.23	1
Warranty							
3-year							

Protection and safety

OVRHLD Equipment Level Protection – 100A and below

- Listed by ETL to UL 1449 4th edition for Type 1 SPD applications.
- Multiple Metal Oxide Varistors (MOVs), with individual current fusing and thermal disconnects for each MOV.
- LED indicates proper functioning of L-N MOVs.

Technical features

Electrical	
Nominal discharge current rating (I-n)	10kA
Operating frequency	47–63Hz
Connection methods	Parallel to load (shunt) 457.2 mm (18") 2mm2 (#14 AWG) wires Direct connect or breaker
Modes of protection	L-N, L-G, N-G
Fault rating (SCCR)	65kAIC
Response time	Less than 1 nanosecond
Standard monitoring	LED status indicator lights (one per phase)
Mechanical	
Weight	.5 kg (1 lb.)
Enclosure type	NEMA 1, non-metallic
Installation location	Indoor
Mounting method	NPS thread and aluminum bracket
Operating environment	-40° to +80°C (-40° to +176°F)
Altitude	Up to 5000 m (16,400 ft.)
Product design	Individually fused MOVs Overcurrent fusing Thermal fusing
Regulatory	
UL 1449 4th edition type	Type 1
UL 1283	No
IEEE C62.41.1, .2, C62.45	Yes
Listed by	ETL

Configuration	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
xxkA, yyyV, L-N, L-G (1 LED)		OVRHLDxx-yyy-1				
xxkA, yyyV, L1-N, L2-N (2 LEDs)		OVRHLDxx-yyy-2				
xxkA, yyyV, L1-G, L2-G (2 LEDs)		OVRHLDxx-yyy-3				
xxkA, yyyV, L1-G, N-G (1 LED)		OVRHLDxx-yyy-4				
xxkA, yyyV, L-N, L-G (2 LEDs)		OVRHLDxx-yyy-5				
xxkA, yyyV, L-N (1 LED)		OVRHLDxx-yyy-6				
xxkA, yyyV, L-G (1 LED)		OVRHLDxx-yyy-7				
xxkA, yyyV, N-G (0 LED)		OVRHLDxx-yyy-8				
xxkA, yyyV, L1-L2 (1 LED		OVRHLDxx-yyy-9				

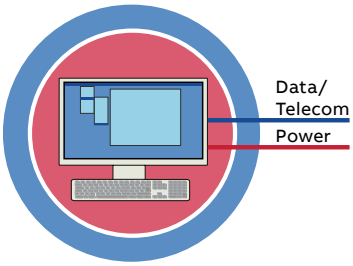
Model number: Where "xx" can be 20, 25 or 30 and "yyy" can be 120, 127, 230, or 277
Description: Where "xx" can be 20, 25 or 30 and "yyy" can be 120, 127, 230, or 277

Available option	Model number*
Mounting bracket	6

The new ABB OVR data and telecom SPD range overview

Protecting critical electronic systems

The new ABB OVR data/telecom range of SPDs are designed to protect equipment connected to data and telephone lines to complement the OVR power SPD products and offer a complete system protection solution (power & data) against surges. The comprehensive range includes protection for twisted pair data lines (including hazardous environments), computer networks, telecom systems including PBX and ISDN, CCTV, TV and RF systems.

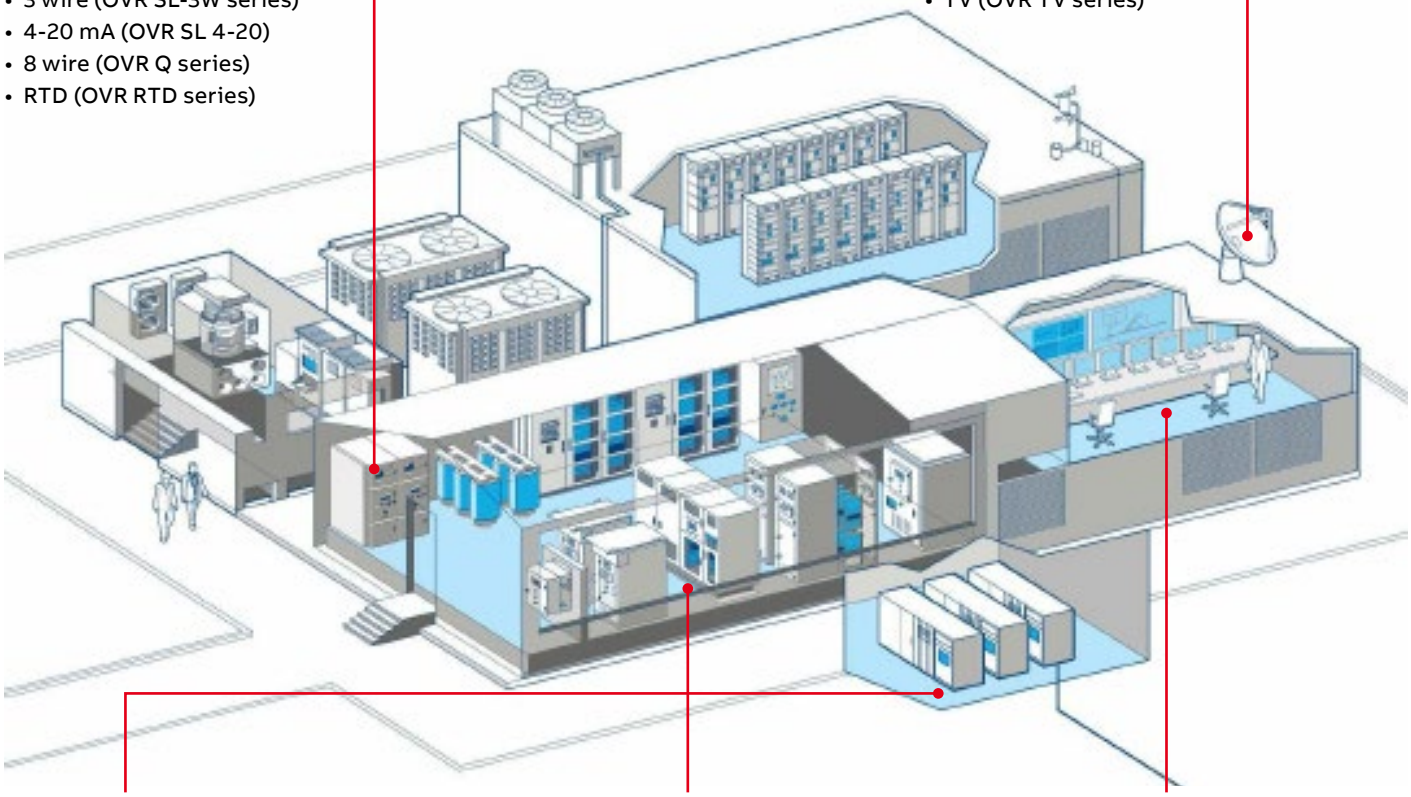


WARNING Equipment is **ONLY** protected if all incoming lines have protection fitted

To protect the electronic equipment inside a building, all cables that enter or leave the building must be protected.
Cables leaving the building can also provide a route back into the building for transients.

Data & measurement systems
- 2 wire (OVR SL series)
- 2 wire ATEX (OVR SLX series)
- 2 wire (OVR D/E/H series)
- 3 wire (OVR SL-3W series)
- 4-20 mA (OVR SL 4-20)
- 8 wire (OVR Q series)
- RTD (OVR RTD series)

Transceiver/CCTV systems
- RF (OVR RF series)
- CCTV (OVR CCTV series with OVR 240-16A)
- TV (OVR TV series)



Mains power supply
- See OVR power SPD series

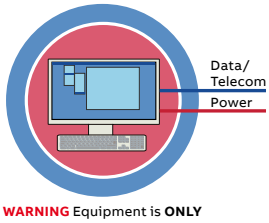
Telecom systems
- PBX (OVR KT series)
- RJ11 (OVR TN series)
- RJ45 (OVR ISDN series)
- 2 wire (OVR TN, OVR SLTN) 8 wire (OVR TNQ)

Information technology systems
- Cat 6 + PoE (OVR Cat-6 series)
- Cat 5e + PoE (OVR Cat-5e series)
- RS485/HART/Profibus (OVR RS485 series)

Protection and safety

Short Selection Guide – Surge Protection Devices OVR

PROFIBUS Systems HART Systems	 OVR RS485 Flat/DIN Mount 7TCA085400R0310	 **OVR SL RS485** Slim DIN Mount 7TCA085400R0310	 **OVR RS485Q** Multiple Lines (DIN Mount) 7TCA085400R0312				
Ethernet	 withPoE:	Cat-5 (100 Mbps) **OVR Cat-5e** 7TCA085400R0289 7TCA085400R0290	Cat-6 (1000 Mbps) **OVR Cat-6e** 7TCA085400R0291 7TCA085400R0292				
Video Surveillance CCTV	 **5V CCTV** with BNC connector, power, and telemetry line	 **OVR CCTV/B** Video signal 7TCA085400R0296	 **OVR RS485** Telemetry signal 7TCA085400R0310	 **OVR 240-16A** Power line 7TCA085460R0361	 **OVR CME4** Earth Bar 7TCA085400R0414	 **OVR WBX4/GS** Enclosure 7TCA085410R0049	CCTV Protection is also available for different voltages and twisted pair connections.
4 - 20 mA current loops	Screw terminals 30 V	 **OVR SL30L/4-20** 7TCA085400R0371					
Coaxial antennas: GSM, UMTS, Radar, Radio, TV, GPS	 Female coaxial connector:	**OVR RF 441421** BNC 7TCA085450R0066	**OVR RF AA1421** 7/16 DIN 7TCA085450R0063	**OVR RF 111421** N 7TCA085450R0065			
Telephone ISDN DSL	 **2 wire Telecom**	Screw terminals:	 **OVR TN** Flat Mount 7TCA085400R0345	 **OVR SL TN** Slim Mount 7TCA085400R0323	 **OVR SL TNL** Slim Mount with LED 7TCA085400R0418	 **OVR TNQ** Multiple Lines 7TCA085400R0344	
		RJ11, RJ45	RJ11 telephone units	**OVR TN/RJ11-6/6** 6P6C Connector 7TCA085400R0359	RJ45 network units	**OVR ISDN/RJ45-4/8** 8P4C Connector 7TCA085400R0359	
		PBX Telecom	LSA-PLUS connection	**OVR KT1** Single module 7TCA085400R0305	**OVR K10T1** 10 modules 7TCA085400R0307	**OVR KE10** Earth Bar 7TCA085400R0304	
TV: Satellite, Cable			**OVR CATV/F** Cable 7TCA085400R0293	**OVR SMATV/F** Satellite 7TCA085400R0336	**OVR TV/EURO** Antenna 7TCA085400R0334		
2 wire systems (30V)		 **OVR 30E** Flat Mount 7TCA085400R0353	 **OVR SL30** Slim Mount 7TCA085400R0363	 **OVR 30Q** Multiple Lines 7TCA085400R0341	Protection for different voltages are available		
3 wire systems (30V)		 **OVR SL30/3W** Slim Mount 7TCA085400R0331	Protection for different voltages are available				
Hazardous Areas ATEX/IEC approved		 **OVR SL15X** 15 Volt 7TCA085400R0386	**OVR SL30X** 30 Volt 7TCA085400R0387				
Resistance Temperature Detectors (RTD)		 **OVR RTD** Flat/DIN Mount 7TCA085400R0313	 **OVR SL RTD** Slim (DIN Mount) 7TCA085400R0315	 **OVR RTDQ** Multiple Lines (DIN Mount) 7TCA085400R0314			

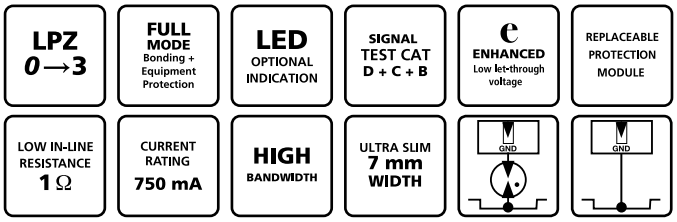


WARNING Equipment is **ONLY** protected if all incoming lines have protection fitted

Protection and safety

Data & signal protection

OVR SL Series



Combined Category D, C, B tested protector (to BS EN 61643) suitable for twisted pair signalling applications which require either a lower in-line resistance, an increased current and/or higher bandwidth. Also suitable for DC power applications less than 0.75 Amps. Available for working voltages of up to 6, 15, 30, 50 and 110 Volts. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Ultra slim 7 mm width ideal for compact protection of large numbers of lines (e.g. process control installations)
- Optional LED status indication versions available for low current DC power applications - add L suffix to part number - e.g. OVR SL30L
- Two stage removable protection module with simple quick release mechanism allowing partial removal for easy line commissioning and maintenance as well as full removal for protection replacement
- Strong, flame retardant, polycarbonate housing
- High (750 mA) maximum running current
- High bandwidth enables higher frequency (high traffic or bit rate) data communications
- Screen terminal enables easy connection of cable screen to earth
- Suitable for earthed or isolated screen systems - add/I suffix to part number for versions that require isolated screens - e.g. OVR SL30/I
- Built-in innovative DIN rail foot with locking feature for simple positioning and clip-on mounting to top hat DIN rails
- 4 mm^2 terminals allow for larger cross section wiring, stranded wires terminated with ferrules or fitting two wires into a single terminal
- Convenient earthing through DIN foot and/or earth terminal
- Very low (1 Ω) in-line resistance allows resistance critical applications (e.g. alarm loops) to be protected

Application

Use these protectors where installation space is at a premium and large numbers of lines require protection (e.g. process control, high speed digital communication equipment or systems with long signal lines).

Installation

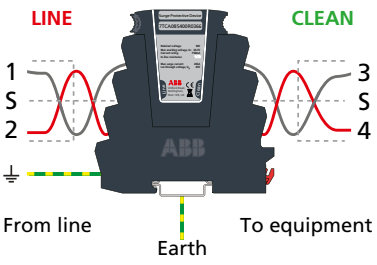
Connect in series with the data communication or signal line either near where it enters or leaves the building or close to the equipment being protected (e.g. within its control panel).
Either way, it must be very close to the system's earth star point. Install protectors either within an existing cabinet/cubicle or in a separate enclosure.

Accessories

Replacement modules:
OVR SLXX/M
Standard module replacement where XX is voltage rating (06, 15, 30, 50 or 110)
OVR SLXXL/M
LED module replacement where XX is voltage rating, as above
OVR SL/B
Base replacement (common for standard and LED modules)

OVR SL/I/B
Base replacement with isolated screen from earth

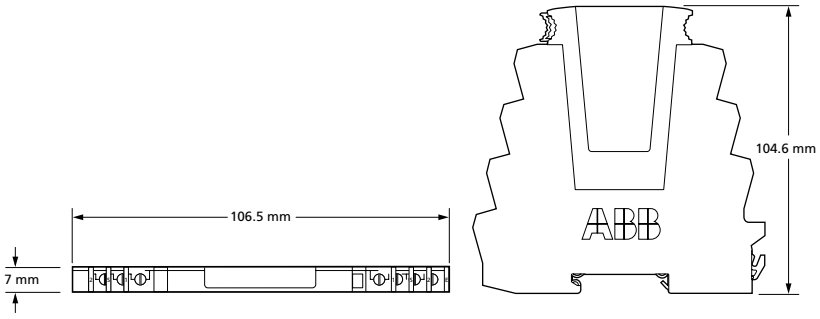
Weatherproof enclosure:
OVR WBX SLQ



NOTE: The OVR SL 'Slim Line' Series is also available for protection of 3-wire, RS 485 and RTD applications (OVR SL/3W, OVR SL RS485 & OVR SL RTD).
The OVR SL X Series has approvals for use in hazardous areas. For telecommunication applications use OVR SLTN Series.

OVR SL Series - Technical specification

Electrical specification		**OVR SL06**	**OVR SL15**	**OVR SL30**	**OVR SL50**	**OVR SL110**
ABB order code		7TCA085400R0360	7TCA085400R0361	7TCA085400R0363	7TCA085400R0364	7TCA085400R0362
Nominal voltage [1]		6 V	15 V	30 V	50 V	110 V
Maximum working voltage Uc (RMS/DC) [2]		5 V/7.79 V	11 V/16.7 V	25 V/36.7 V	40 V/56.7 V	93 V/132 V
Current rating (signal)		750 mA				
In-line resistance (per line ±10%)		1.0 Ω				
Bandwidth (-3 dB 50 Ω system)		45 MHz	45 MHz	45 MHz	45 MHz	45 MHz
Transient specification		**OVR SL06**	**OVR SL15**	**OVR SL30**	**OVR SL50**	**OVR SL110**
Let-through voltage (all conductors) [3] Up						
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		36.0 V	38.4 V	63.0 V	90.3 V	185 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		26.2 V	29.4 V	51.3 V	77.2 V	175 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		16.0 V	26.8 V	45.4 V	68.3 V	165 V
5 kV, 10/700 µs [4]		17.0 V	27.5 V	46.3 V	69.1 V	170 V
Maximum surge current						
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	1.25 kA				
	– Per pair	2.5 kA				
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA				
	– Per pair	20 kA				
Mechanical specification		**OVR SL06**	**OVR SL15**	**OVR SL30**	**OVR SL50**	**OVR SL110**
Temperature range		-40 to +80 °C				
Connection type		Screw terminal - maximum torque 0.8 Nm				
Conductor size (stranded)		4 mm^2				
Earth connection		Via DIN rail or 4 mm^2 earth terminal - maximum torque 0.8 Nm				
Case material		FR Polymer UL-94 V-0				
Weight	– Unit	0.08 kg				
	– Packaged (per 10)	0.85 kg				
Dimensions		See diagram below				



[1] Nominal voltage (RMS/DC or AC peak) measured at < 10 µA (OVR SL15, OVR SL30, OVR SL50, OVR SL110 and LED variants) and < 200 µA (OVR SL06 and OVR SL06L)
[2] Maximum working voltage (RMS/DC or AC peak) measured at < 1 mA leakage
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45, Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

5

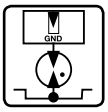
Protection and safety

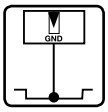
Data & signal protection

OVR SL X Series

LPZ 0→3 | FULL MODE Bonding + Equipment Protection | LED OPTIONAL INDICATION | SIGNAL/ TELECOM TEST CAT D + C + B | ENHANCED Low let-through voltage | REPLACEABLE PROTECTION MODULE | LOW IN-LINE RESISTANCE 1 Ω

CURRENT RATING 30 mA | ATEX/IEC APPROVED | HIGH BANDWIDTH | ULTRA SLIM 7 mm WIDTH





Combined Category D, C, B tested protector (to BS EN 61643) suitable for twisted pair signalling applications within hazardous environments (ATEX/ IECEx approved). Available for working voltages of up to 15 and 30 Volts. For use at boundaries up to LPZ 0 to protect against flashover through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Approved for use in hazardous environments for the protection of Intrinsically Safe circuits (Classification: II 2(1)G, Ex ia (ia Ga) IIC T4 Gb)
- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Ultra slim 7 mm width ideal for compact protection of large numbers of lines (e.g. process control installations)
- Optional LED status indication versions available for low current DC power applications
- Negligible self-capacitance and self-inductance offering minimal interference when protecting Intrinsically Safe circuits
- Very low (1 Ω) in-line resistance allows resistance critical applications (e.g. alarm loops) to be protected
- High (750 mA) maximum running current
- High bandwidth enables higher frequency (high traffic or bit rate) data communications
- Screen terminal enables easy connection of cable screen to earth
- Suitable for earthed or isolated screen systems - add/I suffix to part number for versions that require isolated screens
- Built-in innovative DIN rail foot with locking feature for simple positioning and clip-on mounting to top hat DIN rails
- 4 mm² terminals allow for larger cross section wiring, stranded wires terminated with ferrules or fitting two wires into a single terminal
- Approval references for OVR SL X Series: IECEx SIR 10.0030X, Sira 10ATEX2063X

Application

Use these protectors in hazardous environments where installation space is at a premium and large numbers of lines require protection (e.g. process control, 4-20 mA loops, fire and gas detectors and shut-down systems). Suitable for high speed digital communication equipment or systems with long signal lines. See Application Note OVR AN013.

Installation

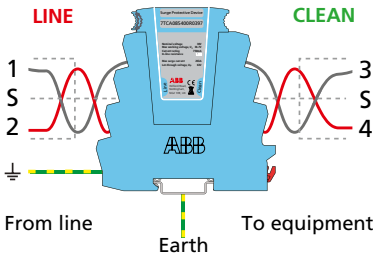
Connect in series with the data communication or signal line either near where it enters or leaves the building or close to the equipment being protected (e.g. within its control panel). Either way, it must be very close to the system's earth star point. Install protectors either within an existing cabinet/cubicle or in a separate enclosure.

Accessories

Replacement modules:
OVR SL15X/M, OVR SL30X/M
Standard module replacement for 15 and 30 V protectors respectively
OVR SL15XL/M, OVR SL30XL/M
LED module replacement for 15 and 30 V protectors respectively
OVR SLX/B Base replacement (common for standard and LED modules)

OVR SLX/I/B
Base replacement with isolated screen from earth

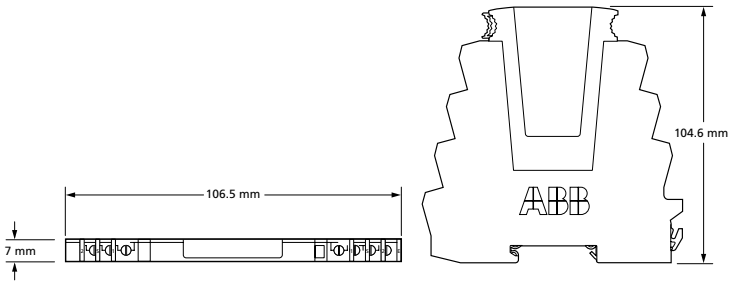
Weatherproof enclosure:
OVR WBX SLQ



NOTE: Use the standard OVR SL 'Slim Line' Series for non-hazardous areas. The OVR SL Series is also available for protection of 3-wire, RS 485, RTD & telecommunication applications (OVR SL/3W, OVR SL RS485, OVR SL RTD & OVR SL TN).

OVR SL X Series - Technical specification

Electrical specification		**OVR SL15X**	**OVR SL30X**
ABB order code		7TCA085400R0386	7TCA085400R0387
Nominal voltage [1]		15 V	30 V
Maximum working voltage Uc (RMS/DC) [2]		11 V/16.7 V	25 V/36.7 V
Current rating (signal)		750 mA	
In-line resistance (per line ±10%)		1.0 Ω	
Bandwidth (-3 dB 50 Ω system)		45 MHz	
Intrinsically safe specification		**OVR SL15X**	**OVR SL30X**
Maximum voltage Ui		30 V	
Maximum power Pi	– Per -40 °C < Ta < 40 °C	1.3 W	
	– Per -40 °C < Ta < 60 °C	1.2 W	
	– Per -40 °C < Ta < 80 °C	1.0 W	
Capacitance Ci		0 µF	
Inductance Li		0 µH	
Certificate number		IECEx SIR 10.0030X, Sira 10ATEX2063X	
Classification		Ex II 2 (1) G, Ex ia (ia Ga) IIC T4 Gb	
Transient specification		**OVR SL15X**	**OVR SL30X**
Let-through voltage (all conductors) [3] Up			
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		38.4 V	63.0 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		29.4 V	51.3 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		26.8 V	45.4 V
5 kV, 10/700 µs [4]		27.5 V	46.3 V
Maximum surge current			
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	1.25 kA	
	– Per pair	2.5 kA	
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA	
	– Per pair	20 kA	
Mechanical specification		OVR SL15X	OVR SL30X
Temperature range		-40 to +80 °C	
Connection type		Screw terminal - maximum torque 0.8 Nm	
Conductor size (stranded)		4 mm²	
Earth connection		Via DIN rail or 4 mm² earth terminal - maximum torque 0.8 Nm	
Case material		FR Polymer UL-94 V-0	
Weight	– Unit	0.08 kg	
	– Packaged (per 10)	0.85 kg	
Dimensions		See diagram below	



[1] Nominal voltage (RMS/DC or AC peak) measured at < 10 µA
[2] Maximum working voltage (RMS/DC or AC peak) measured at < 1 mA leakage
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45, Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

Protection and safety

Data & signal protection

OVR D Series

LPZ 0→3	FULL MODE Bonding + Equipment Protection	SIGNAL TEST CAT D + C + B	ENHANCED Low let-through voltage	LOW IN-LINE RESISTANCE 9.4 Ω	CURRENT RATING 300 mA

Combined Category D, C, B tested protector (to BS EN 61643) suitable for most twisted pair signalling applications. Available for working voltages of up to 6, 15, 30, 50 and 110 Volts. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Low in-line resistance minimizes unnecessary reductions in signal strength
- Strong, flame retardant, ABS housing
- Supplied ready for flat mounting on base or side
- Built-in DIN rail foot for simple clip-on mounting to top hat DIN rails
- Colour coded terminals give a quick and easy installation check - grey for the dirty (line) end and green for the clean end
- Screen terminal enables easy connection of cable screen to earth
- Substantial earth stud to enable effective earthing
- Integral earthing plate for enhanced connection to earth via a OVR CME kit

Application

Use on twisted pair lines, e.g. those found in process control equipment, modems and computer communications interfaces.

Installation

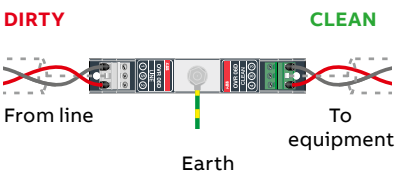
Connect in series with the data communication or signal line either near where it enters or leaves the building or close to the equipment being protected (e.g. within its control panel). Either way, it must be very close to the system's earth star point. Install protectors either within an existing cabinet/cubicle or in a separate enclosure.

Accessories

Combined Mounting/Earthing kits:
OVR CME 4 Mount & earth up to 4 protectors
OVR CME 8 Mount & earth up to 8 protectors
OVR CME 16 Mount & earth up to 16 protectors
OVR CME 32 Mount & earth up to 32 protectors

Weatherproof enclosures:
OVR WBX 4, OVR WBX 4/GS
For use with a OVR CME 4 and up to 4 protectors
OVR WBX 8, OVR WBX 8/GS
For use with a OVR CME 8 and up to 8 protectors
OVR WBX 16/2/G
For use with one or two OVR CME 16 and up to 32 protectors

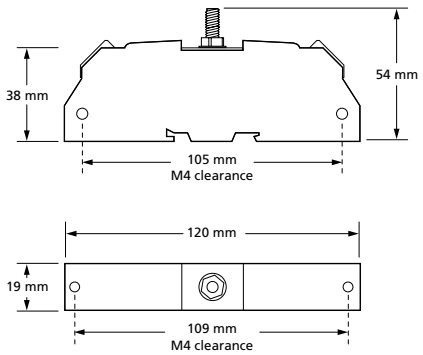
Install in series (in-line)



Slim Line (OVR SL) and ATEX (OVR SLX) versions are also available. If your system requires a protector with a very low resistance or higher current, see the OVR E & H Series. Also use the OVR E Series for systems needing a higher bandwidth. Protectors for 3-wire (OVR SL/3W) and RTD (OVR RTD, OVR SL RTD) are available, as are the space saving protectors (OVR Q, OVR SL Series). The OVR KT and TN Series are additional protectors specifically for telephone lines.

OVR D Series - Technical specification

Electrical specification		OVR 06D	OVR 15D	OVR 30D	OVR 50D	OVR 110D
ABB order code		7TCA085400R0288	7TCA085400R0349	7TCA085400R0351	7TCA085400R0352	7TCA085400R0347
Nominal voltage [1]		6 V	15 V	30 V	50 V	110 V
Maximum working voltage Uc (RMS/DC) [2]		5 V/7.79 V	13 V/19 V	26 V/37.1 V	41 V/58 V	93 V/132 V
Current rating (signal)		300 mA				
In-line resistance (per line ±10%)		9.4 Ω	9.4 Ω	9.4 Ω	9.4 Ω	9.4 Ω
Bandwidth (-3 dB 50 Ω system)		800 kHz	2.5 MHz	4 MHz	6 MHz	9 MHz
Transient specification		OVR 06D	OVR 15D	OVR 30D	OVR 50D	OVR 110D
Let-through voltage (all conductors)(3) Up						
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		12.0 V	25.0 V	44.0 V	78.0 V	155 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		11.5 V	24.5 V	43.5 V	76.0 V	150 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		10.0 V	23.0 V	42.5 V	73.0 V	145 V
5 kV, 10/700 µs [4]		10.5 V	23.8 V	43.4 V	74.9 V	150 V
Maximum surge current						
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	2.5 kA				
	– Per pair	5 kA				
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA				
	– Per pair	20 kA				
Mechanical specification		OVR 06D	OVR 15D	OVR 30D	OVR 50D	OVR 110D
Temperature range		-40 to +80 °C				
Connection type		Screw terminal - maximum torque 0.5 Nm				
Conductor size (stranded)		2.5 mm^2				
Earth connection		M6 stud				
Case material		FR Polymer UL-94 V-0				
Weight	– Unit	0.08 kg				
	– Packaged (per 10)	0.85 kg				
Dimensions		See diagram below				



[1] Nominal voltage (RMS/DC or AC peak) measured at < 5 µA (OVR 15D, OVR 30D, OVR 50D, OVR 110D) and < 200 µA (OVR 06D)
[2] Maximum working voltage (RMS/DC or AC peak) measured at < 1 mA leakage (OVR 15D, OVR 30D, OVR 50D, OVR 110D), < 10 mA (OVR 06D)
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45, Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

Protection and safety

Data & signal protection

OVR E Series

LPZ 0→3	FULL MODE Bonding + Equipment Protection	HIGH BANDWIDTH	SIGNAL/ TELECOM TEST CAT D + C + B	ENHANCED Low let-through voltage	LOW IN-LINE RESISTANCE 1 Ω	CURRENT RATING 1.25 A

Combined Category D, C, B tested protector (to BS EN 61643) suitable for twisted pair signalling applications which require either a lower in-line resistance, an increased current or a higher bandwidth than the OVR D Series. Also suitable for DC power applications less than 1.25 Amps. Available for working voltages of up to 6, 15, 30, 50 and 110 Volts. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Very low (1 Ω) in-line resistance allows resistance critical applications (e.g. alarm loops) to be protected
- High (1.25 A) maximum running current
- High bandwidth enables higher frequency (high traffic or bit rate) data communications
- Screen terminal enables easy connection of cable screen to earth
- Strong, flame retardant, ABS housing
- Built-in DIN rail foot for simple clip-on mounting to top hat DIN rails
- Colour coded terminals give a quick and easy installation check - grey for the dirty (line) end and green for clean
- Substantial earth stud to enable effective earthing
- Supplied ready for flat mounting on base or side
- Integral earthing plate for enhanced connection to earth via OVR CME kit

Application

Use these units to protect resistance sensitive, higher frequency or running current systems, e.g. high speed digital communications equipment or systems with long signal lines.

Installation

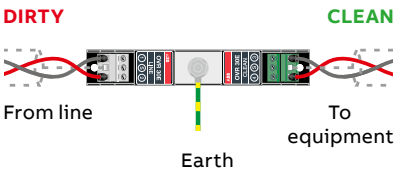
Connect in series with the data communication or signal line either near where it enters or leaves the building or close to the equipment being protected (e.g. within its control panel). Either way, it must be very close to the system's earth star point. Install protectors either within an existing cabinet/cubicle or in a separate enclosure.

Accessories

Combined Mounting/Earthing kits:
OVR CME 4 Mount & earth up to 4 protectors
OVR CME 8 Mount & earth up to 8 protectors
OVR CME 16 Mount & earth up to 16 protectors
OVR CME 32 Mount & earth up to 32 protectors

Weatherproof enclosures:
OVR WBX 4, OVR WBX 4/GS
For use with a OVR CME 4 and up to 4 protectors
OVR WBX 8, OVR WBX 8/GS
For use with a OVR CME 8 and up to 8 protectors
OVR WBX 16/2/G
For use with one or two OVR CME 16 and up to 32 protectors

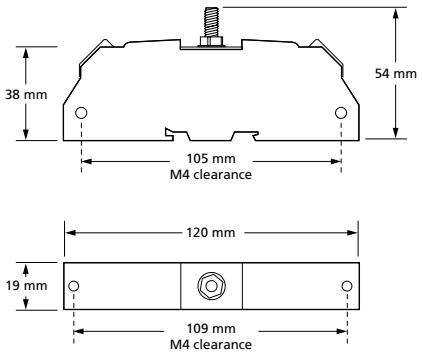
Install in series (in-line)



NOTE: Slim Line (OVR SL) and ATEX (OVR SLX) are available. For many twisted pair data and signal applications, the lower cost OVR D Series may be suitable. For applications requiring higher current (1.25 A to 4 A) or ultra-low in-line resistance, the OVR H Series protectors may be more suitable.

OVR E Series - Technical specification

Electrical specification		**OVR 06E**	**OVR 15E**	**OVR 30E**	**OVR 50E**	**OVR 110E**
ABB order code		7TCA085400R0346	7TCA085400R0350	7TCA085400R0353	7TCA085400R0354	7TCA085400R0348
Nominal voltage [1]		6 V	15 V	30 V	50 V	110 V
Maximum working voltage Uc (RMS/DC) [2]		5 V/7.79 V	11 V/16.7 V	25 V/36.7 V	40 V/56.7 V	93 V/132 V
Current rating (signal)		1.25 A				
In-line resistance (per line ±10%)		1.0 Ω				
Bandwidth (-3 dB 50 Ω system)		45 MHz				
Transient specification		**OVR 06E**	**OVR 15E**	**OVR 30E**	**OVR 50E**	**OVR 110E**
Let-through voltage (all conductors) [3] Up						
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		36.0 V	39.0 V	60.0 V	86.0 V	180 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		26.2 V	28.0 V	49.0 V	73.5 V	170 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		16.0 V	25.5 V	43.5 V	65.0 V	160 V
5 kV, 10/700 µs [4]		17.0 V	26.2 V	44.3 V	65.8 V	165 V
Maximum surge current						
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	2.5 kA				
	– Per pair	5 kA				
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA				
	– Per pair	20 kA				
Mechanical specification		**OVR 06E**	**OVR 15E**	**OVR 30E**	**OVR 50E**	**OVR 110E**
Temperature range		-40 to +80 °C				
Connection type		Screw terminal - maximum torque 0.5 Nm				
Conductor size (stranded)		2.5 mm²				
Earth connection		M6 stud				
Case material		FR Polymer UL-94 V-0				
Weight	– Unit	0.08 kg				
	– Packaged (per 10)	0.85 kg				
Dimensions		See diagram below				



[1] Nominal voltage (RMS/DC or AC peak) measured at < 10 µA (OVR 15E, OVR 30E, OVR 50E, OVR 110E) and < 200 µA (OVR 06E)
[2] Maximum working voltage (RMS/DC or AC peak) measured at < 5 mA leakage (OVR 15E, OVR 30E, OVR 50E, OVR 110E) and < 10 mA (OVR 06E)
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45,Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

Protection and safety

Data & signal protection

OVR H Series

LPZ 0→3 | FULL MODE Bonding + Equipment Protection | SIGNAL/ TELECOM TEST CAT D + C + B | ENHANCED Low let-through voltage | LOW IN-LINE RESISTANCE 0.05 Ω | CURRENT RATING 4 A

Combined Category D, C, B tested protector (to BS EN 61643) suitable for twisted pair signalling applications which require either a lower in-line resistance or an increased current than the OVR D or E Series. Also suitable for DC power applications less than 4 Amps. Available for working voltages of up to 6, 15, 30, 50 and 110 Volts. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Ultra-low (< 0.05 Ω) in-line resistance allows resistance critical applications (e.g. alarm loops) to be protected
- Very high (4 A) maximum running current
- Strong, flame retardant ABS housing
- Supplied ready for flat mounting on base or side
- Built-in DIN rail foot for simple clip-on mounting to top hat DIN rails
- Colour coded terminals give a quick and easy installation check - grey for the dirty (line) end and green for clean
- Screen terminal enables easy connection of cable screen to earth
- Substantial earth stud to enable effective earthing
- Integral earth plate enables enhanced connection to earth via OVR CME kit

Application

Use these applications to protect resistance sensitive or higher running current systems, e.g. systems with long signal lines, or DC power applications.

Installation

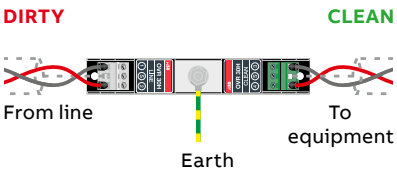
Connect in series with the data communication or signal line either near where it enters or leaves the building or close to the equipment being protected (e.g. within its control panel). Either way, it must be very close to the system's earth star point. Install protectors either within an existing cabinet/cubicle or in a separate enclosure.

Accessories

Combined Mounting/Earthing kits:
OVR CME 4 Mount & earth up to 4 protectors
OVR CME 8 Mount & earth up to 8 protectors
OVR CME 16 Mount & earth up to 16 protectors
OVR CME 32 Mount & earth up to 32 protectors

Weatherproof enclosures:
OVR WBX 4, OVR WBX 4/GS
For use with a OVR CME 4 and up to 4 protectors
OVR WBX 8, OVR WBX 8/GS
For use with a OVR CME 8 and up to 8 protectors
OVR WBX 16/2/G
For use with one or two OVR CME 16 and up to 32 protectors

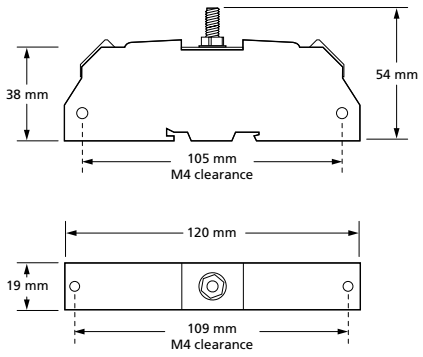
Install in series (in-line)



NOTE: For some data and signal applications with lower current, higher in-line resistance or higher bandwidth requirements, the OVR D or E Series protectors or the Slim Line OVR SL Series may be more suitable.

OVR H Series - Technical specification

Electrical specification		**OVR 06H**	**OVR 15H**	**OVR 30H**	**OVR 50H**	**OVR 110H**
ABB order code		7TCA085400R0355	7TCA085400R0357	7TCA085400R0358	7TCA085400R0359	7TCA085400R0356
Nominal voltage [1]		6 V	15 V	30 V	50 V	110 V
Maximum working voltage Uc (RMS/DC) [2]		5 V/7.79 V	11 V/16.7 V	25 V/36.7 V	40 V/56.7 V	93 V/132 V
Current rating (signal)		4 A				
In-line resistance (per line ±10%)		0.05 Ω				
Bandwidth (-3 dB 50 Ω system)		160 KHz	140 KHz	130 KHz	120 KHz	120 KHz
Transient specification		**OVR 06H**	**OVR 15H**	**OVR 30H**	**OVR 50H**	**OVR 110H**
Let-through voltage (all conductors) [3] Up						
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		12.0 V	27.5 V	46.0 V	67.0 V	150 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		11.0 V	26.5 V	45.0 V	66.5 V	145 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		10.5 V	25.5 V	43.5 V	65.0 V	140 V
5 kV, 10/700 µs [4]		10.8 V	26.2 V	44.3 V	65.8 V	145 V
Maximum surge current						
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	2.5 kA				
	– Per pair	5 kA				
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA				
	– Per pair	20 kA				
Mechanical specification		**OVR 06E**	**OVR 15E**	**OVR 30E**	**OVR 50E**	**OVR 110E**
Temperature range		-40 to +80 °C				
Connection type		Screw terminal - maximum torque 0.5 Nm				
Conductor size (stranded)		2.5 mm^2				
Earth connection		M6 stud - maximum torque 0.5 Nm				
Case material		FR Polymer UL-94 V-0				
Weight	– Unit	0.08 kg				
	– Packaged (per 10)	0.85 kg				
Dimensions		See diagram below				



[1] Nominal voltage (RMS/DC or AC peak) measured at < 10 µA (OVR 15H, OVR 30H, OVR 50H, OVR 110H) and < 200 µA (OVR 06H)
[2] Maximum working voltage (RMS/DC or AC peak) measured at < 5 mA leakage (OVR 15H, OVR 30H, OVR 50H, OVR 110H) and < 10 mA (OVR 06H)
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45,Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

5

Protection and safety

Data & signal protection

OVR SL 3-Wire Series

LPZ 0→3 | FULL MODE Bonding + Equipment Protection | REPLACEABLE PROTECTION MODULE | SIGNAL/ TELECOM TEST CAT D + C + B | ENHANCED Low let-through voltage | LOW IN-LINE RESISTANCE 1 Ω | CURRENT RATING 500 mA | HIGH BANDWIDTH | ULTRA SLIM 7 mm WIDTH

Combined Category D, C, B tested protector (to BS EN 61643) suitable for 3-wire signalling applications which require either a lower in-line resistance, an increased current and/or higher bandwidth. Also suitable for DC power applications less than 0.5 Amps. Available for working voltages of up to 6, 15, 30, 50 and 110 Volts. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

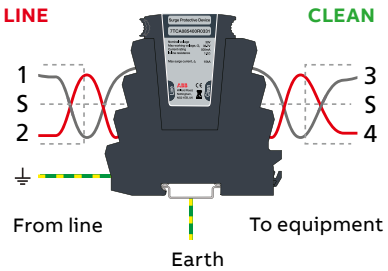
- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Ultra slim 7 mm width ideal for compact protection of large numbers of lines (e.g. process control installations)
- Two stage removable protection module with simple quick release mechanism allowing partial removal for easy line commissioning and maintenance as well as full removal for protection replacement
- Very low (1 Ω) in-line resistance allows resistance critical applications (e.g. alarm loops) to be protected
- High (500 mA) maximum running current
- High bandwidth enables higher frequency (high traffic or bit rate) data communications
- Strong, flame retardant, polycarbonate housing
- Built-in innovative DIN rail foot with locking feature for simple positioning and clip-on mounting to top hat DIN rails
- 4 mm² terminals allow for larger cross section wiring, stranded wires terminated with ferrules or fitting two wires into a single terminal
- Convenient earthing through DIN foot and/or earth terminal

Application

Use these protectors for 3-wire systems where installation space is at a premium and large numbers of lines require protection (e.g. process control, high speed digital communication equipment or systems with long signal lines).

Installation

Connect in series with the data communication or signal line either near where it enters or leaves the building or close to the equipment being protected (e.g. within its control panel). Either way, it must be very close to the system's earth star point. Install protectors either within an existing cabinet/cubicle or in a separate enclosure.



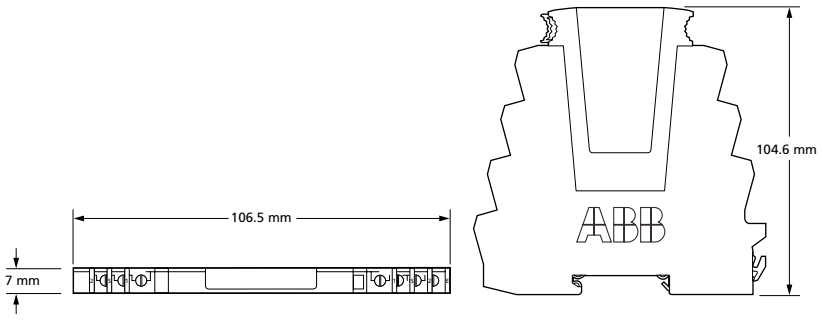
Accessories

Replacement modules:
OVR SLXX/3W/M
Standard module replacement where XX is voltage rating (06, 15, 30, 50 or 110)
OVR SL/3W/B
Base replacement
Weatherproof enclosure:
OVR WBX SLQ

NOTE: The OVR SL 'Slim Line' Series is also available for protection of 2-wire systems up to 110 V, RS 485, RTD and telecommunication applications (OVR SL Series, OVR SL RS485, OVR SL RTD and OVR SL TN). The OVR SL X Series has approvals for use in hazardous areas.

OVR SL 3-Wire Series - Technical specification

Electrical specification		OVR SL06/3W	OVR SL15/3W	OVR SL30/3W	OVR SL50/3W	OVR SL110/3W
ABB order code		7TCA085400R0328	7TCA085400R0330	7TCA085400R0331	7TCA085400R0332	7TCA085400R0329
Nominal voltage [1]		6 V	15 V	30 V	50 V	110 V
Maximum working voltage Uc (RMS/DC) [2]		5 V/7.79 V	11 V/16.7 V	25 V/36.7 V	40 V/56.7 V	93 V/132 V
Current rating (signal)		500 mA				
In-line resistance (per line ±10%)		1.0 Ω				
Bandwidth (-3 dB 50 Ω system)		45 MHz				
Transient specification		**OVR SL06/3W**	**OVR SL15/3W**	**OVR SL30/3W**	**OVR SL50/3W**	**OVR SL110/3W**
Let-through voltage (all conductors) [3] Up						
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		36.0 V	38.4 V	63.0 V	90.3 V	185 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		26.2 V	29.4 V	51.3 V	77.2 V	175 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		16.0 V	26.8 V	45.4 V	68.3 V	165 V
5 kV, 10/700 µs [4]		17.0 V	27.5 V	46.3 V	69.1 V	170 V
Maximum surge current						
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	1.25 kA				
	– Per pair	2.5 kA				
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA				
	– Per pair	20 kA				
Mechanical specification		**OVR SL06/3W**	**OVR SL15/3W**	**OVR SL30/3W**	**OVR SL50/3W**	**OVR SL110/3W**
Temperature range		-40 to +80 °C				
Connection type		Screw terminal - maximum torque 0.8 Nm				
Conductor size (stranded)		4 mm^2				
Earth connection		Via DIN rail or 4 mm^2 earth terminal - maximum torque 0.8 Nm				
Case material		FR Polymer UL-94 V-0				
Weight	– Unit	0.08 kg				
	– Packaged (per 10)	0.85 kg				
Dimensions		See diagram below				



[1] Nominal voltage (RMS/DC or AC peak) measured at < 10 µA (OVR SL15/3W, OVR SL30/3W, OVR SL50/3W, OVR SL110/3W) and < 200 µA (OVR SL06/3W)
[2] Maximum working voltage (RMS/DC or AC peak) measured at < 1 mA leakage
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45, Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

5

Protection and safety

Data & signal protection

OVR SL LED 4-20 mA Series

LPZ 0→3 | FULL MODE Bonding + Equipment Protection | REPLACEABLE PROTECTION MODULE | SIGNAL/ TELECOM TEST CAT D + C + B | ENHANCED Low let-through voltage | LOW IN-LINE RESISTANCE 1 Ω | CURRENT RATING 75 mA | ULTRA SLIM 7 mm WIDTH | LED INDICATION

Combined Category D, C, B tested protector (to BS EN 61643) suitable for twisted pair 4-20 mA loop systems with innovative LED protector status indication. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment (e.g. transmitters, monitors, controllers).

Features & benefits

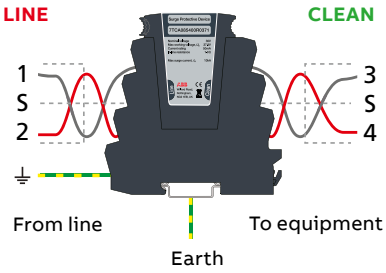
- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Innovative LED indication of protection status provides easy visual checking and quick maintenance
- Ultra slim 7 mm width ideal for compact protection of large numbers of lines (e.g. process control installations)
- Two stage removable protection module with simple quick release mechanism allowing partial removal for easy line commissioning and maintenance as well as full removal for protection replacement
- Very low (1 Ω) in-line resistance for minimal system interference
- High (75 mA) maximum running current - can also be used on 10-50 mA systems (e.g. process control)
- Screen terminal enables easy connection of cable screen to earth
- Strong, flame retardant, polycarbonate housing
- Built-in innovative DIN rail foot with locking feature for simple positioning and clip-on mounting to top hat DIN rails
- 4 mm² terminals allow for larger cross section wiring, stranded wires terminated with ferrules or fitting two wires into a single terminal
- Convenient earthing through DIN foot and/or earth terminal

Application

Use these protectors on 4-20 mA loop systems - ideal where installation space is at a premium and large numbers of lines require protection, or for systems with long signal lines.

Installation

Connect in series with the 4-20 mA current loop either near where it enters or leaves the building or close to the equipment being protected (e.g. within its control panel). Either way, it must be very close to the system's earth star point. Install protectors either within an existing cabinet/ cubicle or in a separate enclosure.



Accessories

OVR SL30L/4-20/M
Module replacement
OVR SL/B
Base replacement

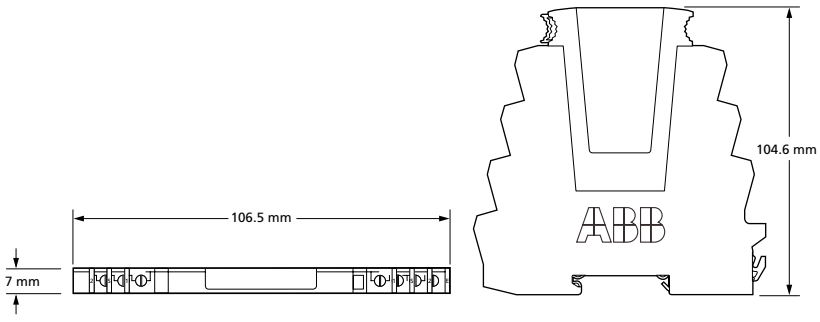
Weatherproof enclosure:
OVR WBX SLQ

TECHNICAL NOTE: 4-20 mA current loops can serve multiple devices over a long distance. The devices and wiring produce a voltage drop (also known as "loop drops") but these do not reduce the 4-20 mA current as long as the power supply voltage is greater than the sum of the voltage drops around the loop at the maximum signalling current of 20 mA.For design considerations, each OVR SL30L/4-20 device installed within the loop introduces a 1.7 V loop drop.

NOTE: The OVR SL 'Slim Line' Series is also available for protection of systems up to 110 V as well as 3-wire, RS 485, RTD & telecommunication applications (OVR SL/3W, OVR SL RS485, OVR SL RTD & OVR SL TN). The OVR SL X Series has approvals for use in hazardous areas.

OVR SL LED 4-20 mA Series - Technical specification

Electrical specification		**OVR SL30L/4-20**
ABB order code		7TCA085400R0371
Nominal voltage [1]		30 V
Maximum working voltage Uc (RMS/DC) [2]		25 V/36.7 V
Current rating (signal) [3]		75 mA
In-line resistance (per line ±10%)		1.0 Ω
Series voltage drop [4]		1.7 V
Bandwidth (-3 dB 50 Ω systems)		45 MHz
Transient specification		**OVR SL30L/4-20**
Let-through voltage (all conductors) [5] Up		
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		63.0 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		51.3 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		45.4 V
5 kV, 10/700 µs [6]		46.3 V
Maximum surge current		
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	1.25 kA
	– Per pair	2.5 kA
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA
	– Per pair	20 kA
Mechanical specification		**OVR SL30L/4-20**
Temperature range		-40 to +80 °C
Connection type		Screw terminal - maximum torque 0.8 Nm
Conductor size (stranded)		4 mm²
Earth connection		Via DIN rail or 4 mm² earth terminal - maximum torque 0.8 Nm
Case material		FR Polymer UL-94 V-0
Weight	– Unit	0.08 kg
	– Packaged (per 10)	0.85 kg
Dimensions		See diagram below



(1) Nominal voltage (RMS/DC or AC peak) measured at < 10 µA
(2) Maximum working voltage (RMS/DC or AC peak) measured at < 1 mA leakage
(3) The minimum current for LED indicator operation is 2 mA
(4) At 20 mA
(5) The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
(6) Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45, Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

Protection and safety

Data & signal protection

OVR Q Series

Combined Category D, C, B tested protector (to BS EN 61643) suitable for 4 twisted pair lines. Available for working voltages of up to 6, 15, 30, 50 and 110 Volts. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Almost twice as space efficient as smallest competitor
- Standard DIN module (18 mm) depth
- Removable (plug-in) terminals allow pre-wiring of cable looms, for easier installation
- Suitable for earthed or isolated screen systems
- Built-in DIN rail foot for clip-on mounting to top hat or G DIN rails
- Optional flat mounting on side
- 2.5 mm² terminals allow for larger cross section wiring, stranded wires terminated with ferrules or fitting two wires into a single terminal
- Very low resistance to minimizes unwanted signal strength reductions
- Strong, flame retardant, ABS housing
- Colour coded terminals (grey for line, green for clean) give a quick and easy installation check
- Screen terminal enables easy connection of cable screen, maintaining continuity through the SPD between the input and output connectors.
- Simple, yet substantial, connection to earth via DIN rail

Application

Use these protectors where installation space is at a premium and large numbers of lines require protection.

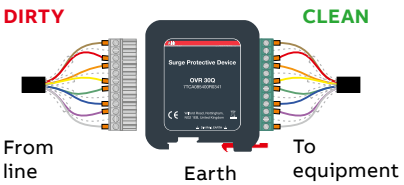
Installation

Connect in series with the signal or data line either near where it enters or leaves the building or close to the equipment being protected. Install in a cabinet/cubicle close to the system's earth star point.

Accessories

Weatherproof enclosure: **OVR WBX SLQ**

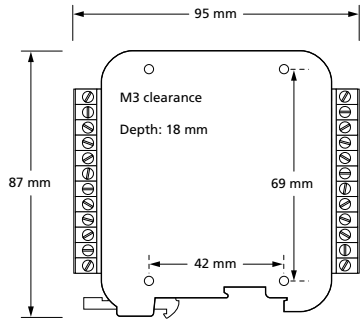
OVR 06Q, OVR 15Q, OVR 30Q, OVR 50Q and OVR 110Q installed in series (in-line)



NOTE: The OVR Q Series is also available for protection of RS 485 and RTD applications (OVR RS485Q, OVR RTDQ). Protectors for individual data and signal lines are available (OVR D Series and Slim Line OVR SL Series). Alternatively, for individual protectors with higher current or bandwidth use the OVR E and OVR H Series. For telecommunication applications use OVR TNQ Series.

OVR Q Series - Technical specification

Electrical specification		**OVR 06Q**	**OVR 15Q**	**OVR 30Q**	**OVR 50Q**	**OVR 110Q**
ABB order code		7TCA085400R0333	7TCA085400R0340	7TCA085400R0341	7TCA085400R0342	7TCA085400R0343
Nominal voltage [1]		6 V	15 V	30 V	50 V	110 V
Maximum working voltage Uc (RMS/DC) [2]		5 V/7.79 V	13 V/18.8 V	26 V/37.8 V	41 V/57.8 V	93 V/132 V
Current rating (signal)		750 mA	750 mA	750 mA	750 mA	750 mA
In-line resistance (per line ±10%)		1.0 Ω	1.0 Ω	1.0 Ω	1.0 Ω	1.0 Ω
Bandwidth (-3 dB 50 Ω system)		45 MHz	45 MHz	45 MHz	45 MHz	45 MHz
Transient specification		**OVR 06Q**	**OVR 15Q**	**OVR 30Q**	**OVR 50Q**	**OVR 110Q**
Let-through voltage (all conductors) [3] Up						
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		15.0 V	28.0 V	53.0 V	84.0 V	188 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		12.5 V	26.5 V	48.0 V	76.0 V	175 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		10.0 V	23.0 V	43.5 V	64.5 V	145 V
5 kV, 10/700 µs [4]		10.8 V	26.2 V	44.3 V	65.8 V	150 V
Maximum surge current						
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	2.5 kA				
	– Per pair	5 kA				
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA				
	– Per pair	20 kA				
Mechanical specification		**OVR 06Q**	**OVR 15Q**	**OVR 30Q**	**OVR 50Q**	**OVR 110Q**
Temperature range		-40 to +80 °C				
Connection type		Pluggable 12 way screw terminal - maximum torque 0.6 Nm				
Conductor size (stranded)		2.5 mm²				
Earth connection		Via DIN rail or M5 threaded hole in base of unit				
Case material		FR Polymer UL-94 V-0				
Weight	– Unit	0.1 kg				
	– Packaged (each)	0.12 kg				
	– Packaged (per 10)	1.3 kg				
Dimensions		See diagram below				



[1] Nominal voltage (RMS/DC or AC peak) measured at < 5 µA (OVR 15Q, OVR 30Q, OVR 50Q, OVR 110Q) and < 200 µA (OVR 06Q)
[2] Maximum working voltage (RMS/DC or AC peak) measured at < 5 mA leakage (OVR 15Q, OVR 30Q, OVR 50Q, OVR 110Q)
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45, Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

Protection and safety

Data & signal protection

OVR RTD Series

LPZ 0→3 | FULL MODE Bonding + Equipment Protection | OVR SL RTD ULTRA SLIM 7 mm WIDTH | SIGNAL/ TELECOM TEST CAT D + C + B | ENHANCED Low let-through voltage | OVR RTDQ ULTRA COMPACT 18 mm WIDTH | LOW IN-LINE RESISTANCE | OVR SL RTD HIGH BANDWIDTH

Combined Category D, C, B tested protector (to BS EN 61643) suitable for 3-wire RTD systems to protect monitoring equipment. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3. Available as standard OVR RTD format, or compact OVR RTDQ and Slim Line OVR SL RTD versions for installations where a high number of lines require protection.

Features & benefits

- Protects all three wires on a 3-wire RTD system with a single protector
- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Low in-line resistance minimizes reductions in signal strength
- Built-in DIN rail foot for simple mounting to top hat DIN rails
- Convenient earthing through DIN foot and/or earth terminal
- OVR RTD can be flat mounted on base or side
- OVR RTD and OVR RTDQ have colour coded terminals for quick and easy installation check
- OVR SL RTD has ultra slim 7mm width ideal for compact protection of large numbers of lines (e.g. process control installations)
- OVR SL RTD includes two stage removable protection module with simple quick release mechanism allowing partial removal for easy line commissioning and maintenance as well as full removal for protection replacement

For further information on RTD applications, see separate Application Note OVR AN001 (contact us for a copy).

Installation

Connect in series with the signal line either near where it enters or leaves the building or close to the equipment being protected ensuring it is very close to the system's earth star point. Install protectors either within an existing cabinet/cubicle or in a separate enclosure.

Accessories

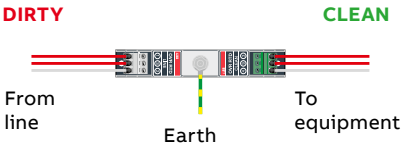
Replacement module for OVR SL RTD:
OVR SLRTD/M
Standard module replacement
OVR SLRTD/B
Base replacement

Combined Mounting/Earthing kits for OVR RTD:
OVR CME 4 For up to 4 x OVR RTD
OVR CME 8 For up to 8 x OVR RTD
OVR CME 16 For up to 16 x OVR RTD
OVR CME 32 For up to 32 x OVR RTD

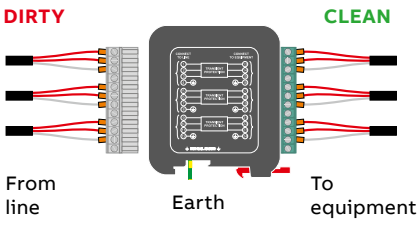
If protectors cannot be incorporated within an existing panel or enclosure, OVR WBX enclosures are available for up to 4, 8, 16 or 32 protectors and their associated OVR CME kit.

Weatherproof enclosure:
OVR WBX SLQ (OVR SLRTD and OVR RTD Q)

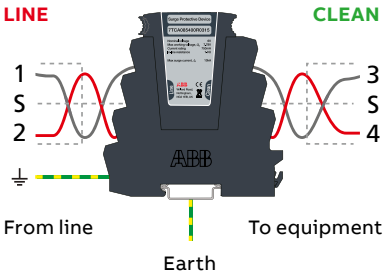
OVR RTD installed in series



OVR RTDQ installed in series (in-line)



OVR SL RTD installed in series

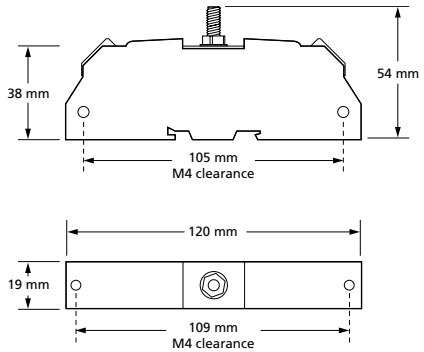


NOTE: For 2-wire or 4-wire RTD applications, use one or two OVR 06D or OVR SL06 protectors respectively.

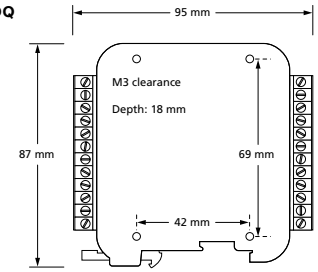
OVR RTD, RTDQ & SL RTD Series - Technical specification

Electrical specification		OVR RTD	OVR SL RTD	OVR RTDQ
ABB order code		7TCA085400R0313	7TCA085400R0315	7TCA085400R0314
Nominal voltage [1]		6 V		
Maximum working voltage Uc (RMS/DC) [2]		5 V/7.79 V		
Current rating (signal)		200 mA	500 mA	700 mA
In-line resistance (per line ±10%)		10 Ω	1.0 Ω	1.0 Ω
Bandwidth (-3 dB 50 Ω system)		800 kHz	1.5 MHz	800 kHz
Transient specification		**OVR RTD**	**OVR SL RTD**	**OVR RTDQ**
Let-through voltage (all conductors) [3] Up				
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		12.0 V	17.9 V	15.0 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		11.5 V	12.1 V	12.5 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		10.0 V	11.0 V	10.0 V
5 kV, 10/700 µs [4]		10.5 V	11.3 V	10.5 V
Maximum surge current				
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	2.5 kA	1.25 kA	2.5 kA
	– Per pair	5 kA	2.5 kA	5 kA
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA		
	– Per pair	20 kA		
Mechanical specification		OVR RTD	OVR SL RTD	OVR RTDQ
Temperature range		-40 to +80 °C		
Connection type		Screw terminal - max. torque 0.5 Nm	Screw terminal - max. torque 0.8 Nm	Pluggable 12 way screw terminal
Conductor size (stranded)		2.5 mm^2	4 mm^2	2.5 mm^2
Earth connection		M6 stud - max. torque 0.5 Nm	Via DIN rail or 4 mm^2 earth terminal - max. torque 0.8 Nm	Via DIN rail or M5 threaded hole in base of unit - max. torque 0.6 Nm
Case Material		FR Polymer UL-94 V-0		
Weight	– Unit	0.08 kg	0.08 kg	0.1 kg
	– Packaged (per 10)	0.85 kg	0.85 kg	1.3 kg
Dimensions		See diagram below		

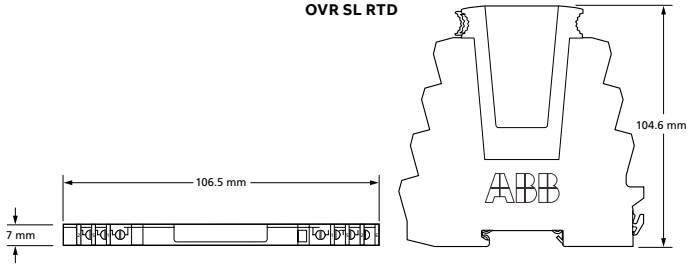
OVR RTD



OVR RTDQ



OVR SL RTD

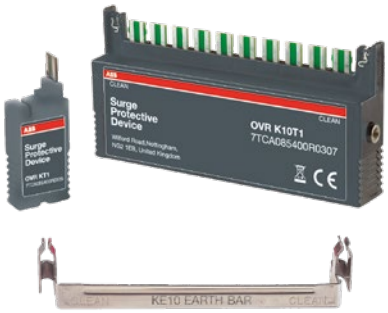


[1] Nominal voltage (RMS/DC or AC peak) measured at < 200 µA
[2] Maximum working voltage (RMS/DC or AC peak) measured at < 10 mA
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45,Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

5

Protection and safety

Telecoms & computer line protection
OVR KT & KE Series



LPZ 0→3 | FULL MODE Bonding + Equipment Protection | SIGNAL/ TELECOM TEST CAT D + C + B | ENHANCED Low let-through voltage | HIGH BANDWIDTH | LOW IN-LINE RESISTANCE 4.4 Ω

Combined Category D, C, B tested protector (to BS EN 61643) suitable for use on ten line LSA-PLUS disconnection modules to PBX telephone exchanges, ISDN and other telecoms equipment with LSA-PLUS disconnection modules. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Low cost protection for large numbers of data and signal lines
- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Colour of housing distinguishes electrically different protectors - avoids confusion when installed together on the same distribution frame
- Quick and easy plug-in installation, with 'bump' location feedback
- Under power line cross conditions/PTC versions offer safe disconnection during fault duration. Unit auto-resets once fault corrected
- At larger installations OVR K10T1 and OVR K10T1/PTC provide all in one protection for all ten lines on LSA-PLUS disconnection modules
- Use the OVR KE10 to provide trouble free earthing for up to ten OVR KT1 and OVR KT1/PTC (per disconnection module)
- OVR K10T1 and OVR K10T1/PTC have an integral earth connection, and an external M4 earth bush for use with non-metallic LSA-Plus frames
- OVR KT1/PTC and OVR K10T1/PTC have resettable overcurrent protection and are rated for power cross faults
- OVR KT1, OVR KT1/PTC, OVR K10T1 and OVR K10T1/PTC are suitable for telecoms applications in accordance with Telcordia and ANSI Standards

Application

- For PSTN (e.g POTS, dial-up, lease line, T1/E1, *DSL and Broadband) and U interface ISDN lines, use OVR KT1 (or OVR KT1/PTC) and OVR K10T1 (or OVR K10T1/PTC)
- Protect single lines with OVR KT1 or OVR KT1/PTC
- Protect all ten lines on a disconnection module with OVR K10T1 or OVR K10T1/PTC

Installation

Install protectors on all lines that enter or leave each building (including extensions to other buildings). Identify the lines requiring protection and plug-in the protector (ensuring the correct orientation) for a series connection. Plug OVR K10T1 or OVR K10T1/PTC directly into each disconnection module requiring protection.

OVR KT1 and OVR KT1/PTC must be installed via the OVR KE10 earth bar. Clip an OVR KE10 on to the disconnection module and plug an OVR KT1 or OVR KT1/PTC in to each line on the module that needs protecting. In the unlikely situation that the protector is damaged, it will sacrifice itself and fail short circuit, taking the line out of commission, indicating it needs replacing and preventing subsequent transients from damaging equipment.

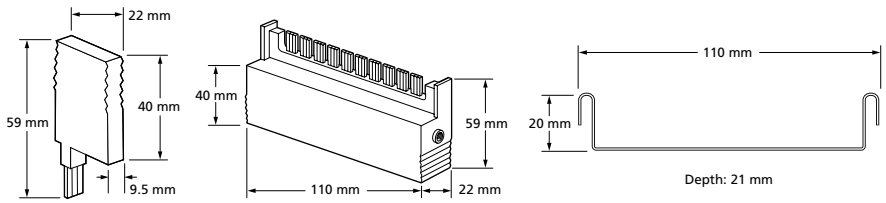
For further information on global telephony applications, see separate Application Note OVR AN005 (contact us for a copy).

NOTE: For individual telephone lines and lines at unmanned sites the high performance OVR TN or plug-in OVR TN/JP or OVR TN/RJ11 Series should be used.
For plug-in S/T interface ISDN protection, use the ISDN Series protectors.

OVR KT & KE Series - Technical specification

Electrical specification		**OVR KT1**	**OVR KT1/PTC**	**OVR K10T1**	**OVR K10T1/PTC**
ABB order code		7TCA085400R0305	7TCA085400R0306	7TCA085400R0307	7TCA085400R0410
Maximum working voltage Uc [1]	– line to line	296 V	296 V	296 V	296 V
	– line to earth	296 V	296 V	296 V	296 V
Current rating (signal)		300 mA	145 mA	300 mA	145 mA
In-line resistance (per line ±10%)		4.4 Ω			
Bandwidth (-3 dB 50 Ω system)		20 MHz	20 MHz	20 MHz	20 MHz
Transient specification		**OVR KT1**	**OVR KT1/PTC**	**OVR K10T1**	**OVR K10T1/PTC**
Let-through voltage (all conductors) [2] Up					
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21	– line to line	395 V	395 V	395 V	395 V
	– line to earth	395 V	395 V	395 V	395 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21	– line to line	390 V	390 V	390 V	390 V
	– line to earth	390 V	390 V	390 V	390 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21	– line to line	298 V	298 V	298 V	298 V
	– line to earth	298 V	298 V	298 V	298 V
5 kV, 10/700 µs [3]	– line to line	300 V	300 V	300 V	27 V
	– line to earth	300 V	300 V	300 V	80 V
Maximum surge current [4]					
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– line to line	1 kA			
	– line to earth	2 kA			
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– line to line	5 kA			
	– line to earth	10 kA			
Power Faults specification		**OVR KT1**	**OVR KT1/PTC**	**OVR K10T1**	**OVR K10T1/PTC**
Power/Line Cross and Power Induction - tests to: ITU-T (formerly CCITT) K.20, K.21 and K.45, Telcordia GR-1089-CORE, Issue 2:2002, UL 60950/IEC 950					
Power/line cross		–	110/230 Vac (15 min)	–	110/230 Vac (15 min)
Power induction		–	600 V, 1 A (0.2 sec)	–	600 V, 1 A

Mechanical specification		**OVR KT1, OVR KT1/PTC**	**OVR K10T1, OVR K10T1/PTC**	**OVR KE10**
Temperature range		-40 to +80 °C		–
Connection type		To LSA-PLUS disconnection modules (BT part number 237A)		–
Earth connection		Via OVR KE10 earth bar	Via integral earth clip/external M4 bush	–
Material		FR Polymer UL-94 V-0		Stainless Steel
Weight	– Unit	0.01 kg	0.10 kg	0.01 kg
	– Packaged	0.12 kg (per 10)	0.12 kg	0.10 kg (per 10)
Dimensions		See diagram below		



[1] Maximum working voltage (DC or AC peak) at 10 µA for OVR KT1, OVR KT1/PTC, OVR K10T1, OVR K10T1/PTC

[2] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns

[3] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45,Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

[4] The installation and connections external to the protector may limit the capability of the protector

Protection and safety

Telecoms & computer line protection
OVR TN/RJ11 & ISDN/RJ45 Series

LPZ 0→3	FULL MODE Bonding + Equipment Protection	SIGNAL/ TELECOM TEST CAT D + C + B	ENHANCED Low let-through voltage	LOW IN-LINE RESISTANCE 4.4 Ω	CURRENT RATING 300 mA

Combined Category D, C, B tested protector (to BS EN 61643) suitable to protect telephony equipment plugged into a Modem (RJ11) or ISDN (RJ45) socket. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Substantial earth connection to enable effective earthing
- Supplied in a sturdy ABS housing ready for flat mounting, or vertically via TS35 'Top Hat' DIN rail
- OVR TN/RJ11-2/6, OVR TN/RJ11-4/6 and OVR TN/RJ11-6/6 are suitable for telecommunication applications in accordance with Telcordia and ANSI Standards (see Application Note OVR AN005)

Application

- For PSTN (e.g. POTS, dial-up, lease line, T1/E1, *DSL and Broadband) use TN/RJ11
- OVR TN/RJ11... are suitable for use on telephone lines with a maximum (or ringing) voltage of up to 296 Volts
- For telephone lines with RJ11 connections protect the middle 2 (of 6) conductors with OVR TN/RJ11-2/6, the middle 4 (of 6) with OVR TN/RJ11-4/6 or all 6 with OVR TN/RJ11-6/6
- For S/T interface ISDN lines, use OVR ISDN/RJ45-4/8 and OVR ISDN/RJ45-8/8
- For S/T interface ISDN lines with RJ45 connections protect the middle 4 (of 8) conductors (paired 3&6, 4&5) with OVR ISDN/RJ45-4/8, or all 8 (outside pairs 1&2, 7&8) with OVR ISDN/RJ45-8/8

For further information on RJ45 ISDN applications, see separate Application Note OVR AN002 and for global telephony applications, see separate Application Note OVR AN005 (contact us for a copy).

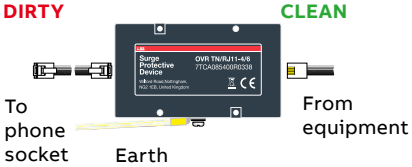
Installation

Connect in series with the telephone or ISDN line. These units are usually installed close to the equipment being protected and within a short distance of a good electrical earth.

Accessories

OVR CAT5e/UTP-1
1 metre cable with RJ45 connections

Plug-in series connection for OVR TN/RJ11-2/6, 4/6 & 6/6



Plug-in series connection for OVR ISDN/RJ45-4/8 & 8/8

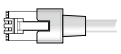
NOTE: For non-ISDN wire-in applications the high performance OVR TN, OVR SLTN or OVR TNQ can be used.
Protect PBX telephone exchanges and other equipment with LSA-PLUS connections using OVR KT series.

OVR TN/RJ11 & ISDN/RJ45 Series - Technical specification

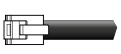
Electrical specification		**OVR TN/ RJ11-2/6**	**OVR TN/ RJ11-4/6**	**OVR TN/ RJ11-6/6**	**OVR ISDN/ RJ45-4/8**	**OVR ISDN/ RJ45-8/8**
ABB order code		7TCA085400R0337	7TCA085400R0338	7TCA085400R0339	7TCA085460R0359	7TCA085460R0360
Nominal voltage		296 V	296 V	296 V	5 V	5 V/58 V [2]
Maximum working voltage Uc [1]		296 V	296 V	296 V	58 V	58 V
Current rating (signal)		300 mA				
In-line resistance (per line ±10%)		4.4 Ω				
Bandwidth (-3 dB 50 Ω system)		20 MHz	20 MHz	20 MHz	19 MHz	19 MHz
Transient specification		**OVR TN/ RJ11-2/6**	**OVR TN/ RJ11-4/6**	**OVR TN/ RJ11-6/6**	**OVR ISDN/ RJ45-4/8**	**OVR ISDN/ RJ45-8/8**
Let-through voltage (all conductors) [3] Up						
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21	– line to line	395 V	395 V	395 V	28 V	28 V/88 V [5]
	– line to earth	395 V	395 V	395 V	88 V	88 V
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21	– line to line	390 V	390 V	390 V	23 V	23 V/63 V [5]
	– line to earth	390 V	390 V	390 V	63 V	63 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21	– line to line	298 V	298 V	298 V	26 V	26 V/65 V [5]
	– line to earth	298 V	298 V	298 V	65 V	65 V
5 kV, 10/700 µs [4]	– line to line	300 V	300 V	300 V	27 V	27 V/80 V [5]
	– line to earth	300 V	300 V	300 V	80 V	80 V
Maximum surge current [6]						
D1 test 10/350 µs to BS EN/EN/IEC 61643-21		1 kA				
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002:		10 kA				
Mechanical specification		**OVR TN/ RJ11-2/6**	**OVR TN/ RJ11-4/6**	**OVR TN/ RJ11-6/6**	**OVR ISDN/ RJ45-4/8**	**OVR ISDN/ RJ45-8/8**
Temperature range		-40 to +80 °C				
Connection type		RJ11 plug and socket	RJ11 plug and socket	RJ11 plug and socket	RJ45 plug and socket	RJ45 plug and socket
Earth connection		M4/DIN rail				
Case Material		FR Polymer UL-94 V-0				
Weight	– Unit	0.15 kg				
	– Packaged	0.2 kg				
Dimensions		See diagram below				

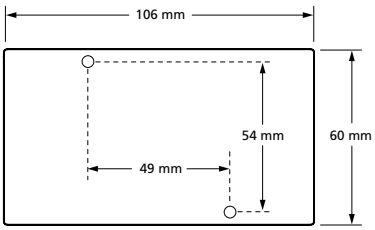
[1] Maximum working voltage (DC or AC peak) measured at < 10 µA leakage for OVR TN/RJ11 products and < 5 µA for OVR ISDN/RJ45 products
[2] Maximum working voltage is 5 V for pairs 3/6 & 4/5, and 58 V for pairs 1/2 & 7/8
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45,Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)
[5] The first let-through voltage value is for pairs 3/4 & 5/6, and the second value is for pairs 1/2 & 7/8
[6] The installation and connectors external to the protector may limit the capability of the protector

OVR ISDN/RJ45-4/8, 8/8
cable length: 0.5 m



OVR TN/RJ11-2/6, 4/6, 6/6
cable length: 1 m





Depth: 24 mm
Fixing centres 49 x 54 mm, M3 clearance

Protection and safety

Data & signal protection

OVR TN, TNQ & SL TN Series

FULL MODE Bonding + Equipment Protection

OVR SLTN ULTRA SLIM 7 mm WIDTH

LPZ 0→3

ENHANCED Low let-through voltage

OVR TNQ ULTRA COMPACT 18 mm WIDTH

SIGNAL/ TELECOM TEST CAT D + C + B

LOW IN-LINE RESISTANCE

HIGH BANDWIDTH

Combined Category D, C, B tested protector (to BS EN 61643) specifically designed for telecommunications applications in accordance with Telcordia and ANSI standards (see Application Note OVR AN005). For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3. Available as standard OVR TN format, or compact OVR TNQ and Slim Line OVR SL TN versions for installations where a high number of lines require protection.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- 20 MHz bandwidth greatly exceeds VDSL2+ (50Mbps ~ 7MHz) maximum speeds
- Low in-line resistance minimizes reductions in signal strength
- Built-in DIN rail foot for simple mounting to top hat DIN rails
- Convenient earthing through DIN foot and/or earth terminal
- OVR TN can be flat mounted on base or side
- OVR TN and OVR TNQ have colour coded terminals for quick and easy installation check
- OVR SL TN has ultra slim 7 mm width ideal for compact protection of large numbers of lines (e.g. process control installations)
- OVR SL TN includes two stage removable protection module with simple quick release mechanism allowing partial removal for easy line commissioning and maintenance as well as full removal for protection replacement
- OVR SL TN includes optional LED status indication (add L suffix to part number - i.e. OVR SL TNL)

Application

Connect in series with the signal line either near where it enters or leaves the building or close to the equipment being protected ensuring it is very close to the system's earth star point. Install protectors either within an existing cabinet/cubicle or in a separate enclosure.

Accessories

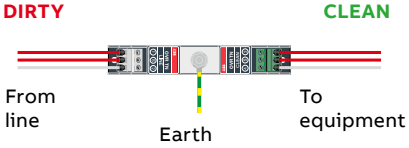
Replacement module for OVR SL TN:
OVR SLTN/M
Standard module replacement

Combined Mounting/Earthing kits for OVR RS485:
OVR CME 4 For up to 4 x OVR TN
OVR CME 8 For up to 8 x OVR TN
OVR CME 16 For up to 16 x OVR TN
OVR CME 32 For up to 32 x OVR TN

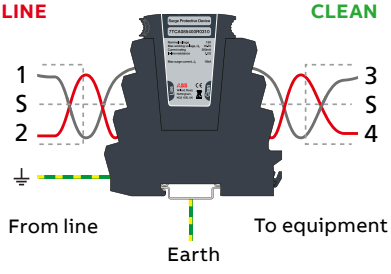
If protectors cannot be incorporated within an existing panel or enclosure, OVR WBX enclosures are available for up to 4, 8, 16 or 32 protectors and their associated OVR CME kit.

Weatherproof enclosure:
OVR WBX SLQ (OVR SLTN and OVR TNQ)

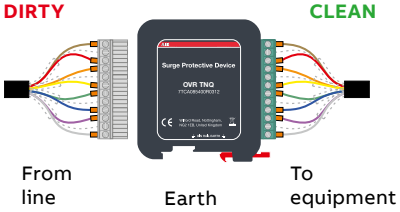
OVR TN installed in series



OVR SL TN installed in series



OVR TNQ installed in series (in-line)

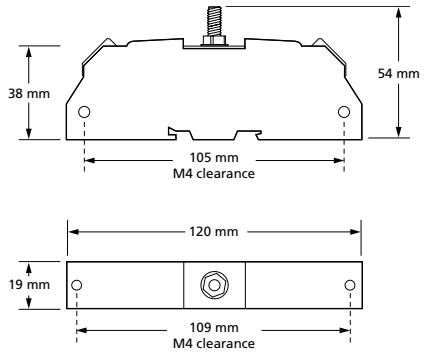


NOTE: The OVR KT Series is also available for telecommunications application using LSA-PLUS disconnection modules. Plug-in solutions are also available for RJ11 connections (see OVR TN RJ11 Series).

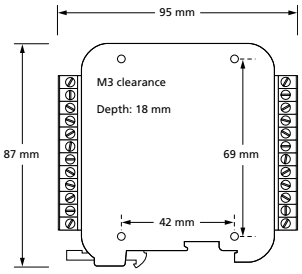
OVR TN, TNQ & SL TN Series - Technical specification

Electrical specification		**OVR TN**	**OVR SL TN, OVR SL TNL**	**OVR TNQ**
ABB order code		7TCA085400R0345	7TCA085400R0323, 7TCA085400R0418	7TCA085400R0344
Nominal voltage [1]		–		
Maximum working voltage Uc (RMS/DC) [2]		–/296 V		
Current rating (signal)		300 mA		
In-line resistance (per line ±10%)		4.4 Ω		
Bandwidth (-3 dB 50 Ω system)		20 MHz		
Transient specification		**OVR TN**	**OVR SL TN , OVR SL TNL**	**OVR TNQ**
Let-through voltage (all conductors) [3] Up				
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		395 V		
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		390 V		
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		298 V		
5 kV, 10/700 µs [4]		300 V		
Maximum surge current				
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	2.5 kA	1.25 kA	2.5 kA
	– Per pair	5 kA	2.5 kA	5 kA
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA		
	– Per pair	20 kA		
Mechanical specification		**OVR TN**	**OVR SL TN , OVR SL TNL**	**OVR TNQ**
Temperature range		-40 to +80 °C		
Connection type		Screw terminal - max. torque 0.5 Nm	Screw terminal - max. torque 0.8 N	Pluggable 12 way screw terminal
Conductor size (stranded)		2.5 mm^2	4 mm^2	2.5 mm^2
Earth connection		M6 stud	Via DIN rail or 4 mm^2 earth terminal - max. torque 0.8 Nm	Via DIN rail or M5 threaded hole in base of unit
Case Material		FR Polymer UL-94 V-0		
Weight	– Unit	0.08 kg		0.1 kg
	– Packaged (per 10)	0.85 kg		1.3 kg
Dimensions		See diagram below		

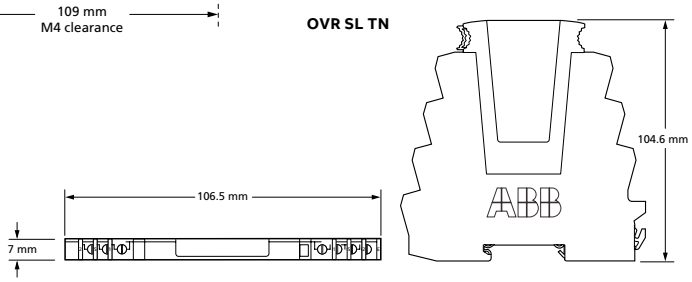
OVR TN



OVR TNQ



OVR SL TN



[1] Nominal voltage (RMS/DC or AC peak) measured at < 10 µA
[2] Maximum working voltage (RMS/DC or AC peak) measured at < 5 mA
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45,Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

5

Protection and safety

Telecom & computer line protection
OVR Cat-5 & Cat-6 Series

LPZ 0→3 | FULL MODE Bonding + Equipment Protection | SIGNAL/ TELECOM TEST CAT D + C + B | ENHANCED Low let-through voltage | LOW IN-LINE RESISTANCE 1.5 Ω | HIGH CURRENT RATING | PoE+ Compliant IEEE 802.3at | PoE Modes A & B

Combined Category D, C, B tested protector (to BS EN 61643) suitable to protect twisted pair Ethernet networks, including Power over Ethernet (PoE), with RJ45 connections. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Suitable for systems signalling on up to eight wires of either shielded or unshielded twisted pair cable
- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Unlike some competing devices, the ethernet SPDs provide effective protection without impairing the system's normal operation
- Low capacitance circuitry prevents the start-up signal
- degradation associated with other types of network protector
- Low in-line resistance minimizes unnecessary reductions in signal strength to maximize signalling distance
- Sturdy ABS housing with convenient holes for flat mounting, or vertically via TS35 'Top Hat' DIN rail
- Substantial earth connection to enable effective earthing
- Will protect all PoE powering modes A and B.

Application

Use these protectors on network cables that travel between buildings to prevent damage to equipment, e.g. computers, servers, repeaters and hubs. Suitable for computer networks up to Cat-6A cabling.

- To protect up to 100baseT networks with Cat-5/Cat-5e cabling use OVR Cat-5e
- To protect up to 1000baseT/10GbaseT networks with Cat-6/Cat-6A cabling use OVR Cat-6
- To protect up to 100baseT Power over Ethernet (PoE) networks with Cat-5/Cat-5e use OVR Cat-5e/PoE
- To protect up to 1000baseT/10GbaseT Power over Ethernet (PoE) networks with Cat-6/Cat-6A cabling use OVR Cat-6/PoE

For further application information, see separate Application Note OVR AN004 (contact us for a copy).

Installation

Connect in series with the network cable, either:

- Near to where it enters or leaves the building, or
- As it enters the network hub, or
- Close to the equipment being protected

This should be close to the system's earth star point (to enable a good connection to earth).

Accessories

OVR CAT5e/UTP-1
1 metre cable with unshielded RJ45 connections

OVR CAT6/STP-2
2 metre screened cable with shielded RJ45 connections

Plug-in series connection

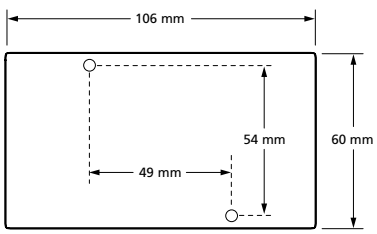
TECHNICAL NOTE: The interfaces used in Ethernet networks incorporate an isolation transformer which gives these systems an in-built immunity to transients between line and earth of 1,500 Volts or more.

NOTE: To protect datacomms systems based on twisted pairs, use the OVR D, E or H Series. Local protection for networked equipment is also available.

OVR Cat-5 & Cat-6 Series - Technical specification

Electrical Specification		**OVR Cat-5e**	**OVR Cat-5e/PoE**	**OVR Cat-6**	**OVR Cat-6/PoE**
ABB order code		7TCA085400R0289	7TCA085400R0290	7TCA085400R0291	7TCA085400R0292
Maximum working voltage Uc [1]	– data [2]	5 V			
	– power [3]	–	58 V	–	58 V
Current rating		300 mA	600 mA [4]	300 mA	600 mA [4]
In-line resistance (per line ±25%)	– data [2]	1.5 Ω			
	– power	–	1.5 Ω	–	–
Maximum data rate		100 Mbps	100 Mbps	1000 Mbps	1000 Mbps
Networking standards		10/100baseT	10/100baseT	10/100/1000/ 10GbaseT	10/100/1000/ 10GbaseT
		TIA Cat-5e	TIA Cat-5/PoE	TIA Cat-6	TIA Cat-6
		IEEE 802.3i	IEEE 802.3i	IEEE 802.3i	IEEE 802.3i
		IEEE 802.3u	IEEE 802.3u	IEEE 802.3u	IEEE 802.3u
		–	IEEE 802.3af	IEEE 802.3ab	IEEE 802.3ab
		–	IEEE 802.3at	IEEE 802.3an	IEEE 802.3an
		–	–	–	IEEE 802.3af
		–	–	–	IEEE 802.3at
Transient specification		**OVR Cat-5e**	**OVR Cat-5e/PoE**	**OVR Cat-6**	**OVR Cat-6/PoE**
Let-through voltage (all conductors) [5] Up					
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21	– line to line	120 V	120 V/116 V [8]	120 V	120 V/116 V [8]
	– line to earth [6]	700 V			
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21	– line to line	74 V	74 V/95 V [8]	74 V	74 V/95 V [8]
	– line to earth [6]	600 V			
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21	– line to line	21 V	21 V/87 V [8]	21 V	21 V/87 V [8]
	– line to earth(6)	550 V			
5 kV, 10/700 µs [7]	– line to line	25 V	25 V/90 V [8]	25 V	25 V/90 V [8]
	– line to earth [6]	600 V			
Maximum surge current [9]					
D1 test 10/350 µs to BS EN/EN/IEC 61643-21		1 kA			
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002		10 kA			
Mechanical specification		**OVR Cat-5e, OVR Cat-5e/PoE**		**OVR Cat-6, OVR Cat-6/PoE**	
Temperature range		-40 to +80 °C			
Connection type		RJ45 sockets			
Cable (supplied)		0.5 m Cat-5e UTP patch lead		0.5 m Cat-6 STP patch lead	
Earth connection		M4/DIN rail			
Case Material		FR Polymer UL-94 V-0			
Weight	– Unit	0.15 kg			
	– Packaged	0.2 kg			
Dimensions		See diagram below			

[1] Maximum working voltage (DC or AC peak) measured at 1 mA leakage
[2] Data pairs 1/2 and 3/6 are protected as standard. Pairs 4/5 and 7/8 are also protected on Cat-6 barriers
[3] PoE protectors transmit power Mode A and Mode B power
[4] Based on 30W of transmitted PSE power, to IEEE 802.3at.
[5] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth. Response time <10 ns (on all protected pairs)
[6] The interfaces used in network systems incorporate an isolation transformer that inherently provides an inbuilt immunity to transients between line and earth of 1,500 Volts or more
[7] Test to IEC 61000-4-5:2014, ITU-T (formerly CCITT) K.20, K.21 and K.45,Telcordia GR-1089-CORE, Issue 6:2011, ANSI TIA/EIA/ IS-968-A:2005 (formerly FCC Part 68).
[8] The first number is for the data pair, with the second number for the power pair
[9] The installation and connectors may limit the capability of the protector

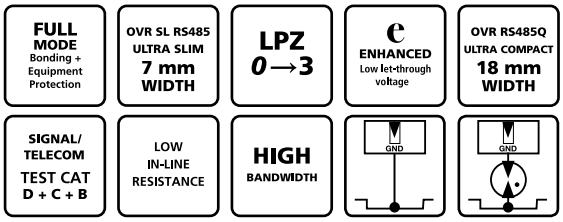


Depth: 24 mm Fixing centres 49 x 54 mm, M3 clearance

Protection and safety

Data & signal protection

OVR RS485, RS485Q & SL RS485 Series



Combined Category D, C, B tested protector (to BS EN 61643) specifically designed for RS 485 and Fieldbus applications, such as Profibus DP.
For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3. Available as standard OVR RS485 format, or compact OVR RS485Q and Slim Line OVR SL RS485 versions for installations where a high number of lines require protection.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- 45 MHz bandwidth greatly exceeds 12 Mbps maximum speeds
- Low in-line resistance minimizes reductions in signal strength
- Suitable for earthed or isolated screen systems
- Built-in DIN rail foot for simple mounting to top hat DIN rails
- Convenient earthing through DIN foot and/or earth terminal
- OVR RS485 can be flat mounted on base or side
- OVR RS485 and OVR RS485Q have colour coded terminals for quick and easy installation check
- OVR SL RS485 has ultra slim 7mm width ideal for compact protection of large numbers of lines (e.g. process control installations)
- OVR SL RS485 includes two stage removable protection module with simple quick release mechanism allowing partial removal for easy line commissioning and maintenance as well as full removal for protection replacement
- OVR SL RS485 includes optional LED status indication
- Add L suffix to part number - i.e. OVR SL RS485L

Application

Connect in series with the signal line either near where it enters or leaves the building or close to the equipment being protected ensuring it is very close to the system's earth star point. Install protectors either within an existing cabinet/cubicle or in a separate enclosure.

Accessories

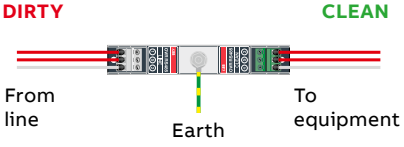
Replacement module for OVR SL RS485:
OVR SLRS485/M
Standard module replacement
OVR SLRS485/B
Base replacement

Combined Mounting/Earthing kits for OVR RS485:
OVR CME 4 For up to 4 x OVR RS485
OVR CME 8 For up to 8 x OVR RS485
OVR CME 16 For up to 16 x OVR RS485
OVR CME 32 For up to 32 x OVR RS485

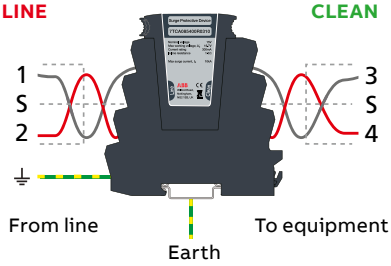
If protectors cannot be incorporated within an existing panel or enclosure, OVR WBX enclosures are available for up to 4, 8, 16 or 32 protectors and their associated OVR CME kit.

Weatherproof enclosure:
OVR WBX SLQ (OVR SL RS485 and OVR RS485Q)

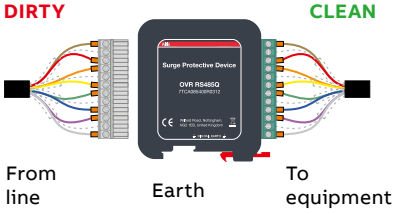
OVR RS485 installed in series



OVR SL RS485 installed in series



OVR RS485Q installed in series (in-line)

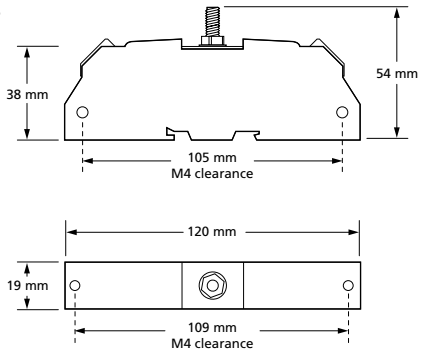


NOTE: The OVR SL 'Slim Line' Series is also available for protection of 3-wire and RTD applications (OVR SL/3W & OVR SL RTD).
The OVR SL X Series has approvals for use in hazardous areas.

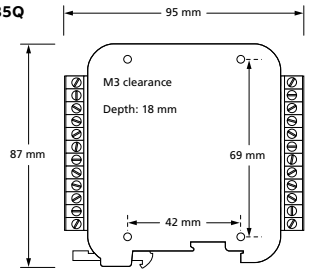
OVR RS485, RS485Q & SL RS485 Series - Technical specification

Electrical specification		**OVR RS485**	**OVR SL RS485**	**OVR RS485Q**
ABB order code		7TCA085400R0311	7TCA085400R0310	7TCA085400R0312
Nominal voltage [1]		15 V		
Maximum working voltage Uc (RMS/DC) [2]		11 V/16.7 V		
Current rating (signal)		300 mA		
In-line resistance (per line ±10%)		1 Ω		
Bandwidth (-3 dB 50 Ω system)		45 MHz		
Transient specification		**OVR RS485**	**OVR SL RS485**	**OVR RS485Q**
Let-through voltage (all conductors) [3] Up				
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		55.0 V		
C1 test 1 kV, 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		42.0 V		
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		27.2 V		
5 kV, 10/700 µs [4]		28.2 V		
Maximum surge current				
D1 test 10/350 µs to BS EN/EN/IEC 61643-21	– Per signal wire	2.5 kA	1.25 kA	2.5 kA
	– Per pair	5 kA	2.5 kA	5 kA
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002	– Per signal wire	10 kA		
	– Per pair	20 kA		
Mechanical specification		**OVR RS485**	**OVR SL RS485**	**OVR RS485Q**
Temperature range		-40 to +80 °C		
Connection type		Screw terminal - max. torque 0.5 Nm	Screw terminal - max. torque 0.8 N	Pluggable 12 way screw terminal
Conductor size (stranded)		2.5 mm^2	4 mm^2	2.5 mm^2
Earth connection		M6 stud	Via DIN rail or 4 mm^2 earth terminal - max. torque 0.8 Nm	Via DIN rail or M5 threaded hole in base of unit
Case Material		FR Polymer UL-94 V-0		
Weight	– Unit	0.08 kg		0.1 kg
	– Packaged (per 10)	0.85 kg		1.3 kg
Dimensions		See diagram below		

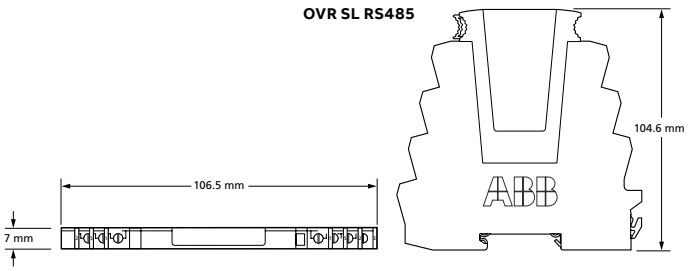
OVR RS485



OVR RS485Q



OVR SL RS485



[1] Nominal voltage (RMS/DC or AC peak) measured at < 10 µA
[2] Maximum working voltage (RMS/DC or AC peak) measured at < 5 mA
[3] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth, both polarities. Response time < 10 ns
[4] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45,Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

Protection and safety
Specific systems protection
OVR RF Series

FULL MODE Bonding + Equipment Protection | LPZ 0→3 | ENHANCED Low let-through voltage | SIGNAL/ TELECOM TEST CAT D + C + B | HIGH BANDWIDTH

Combined Category D, C, B tested protector (to BS EN 61643) suitable for RF systems using coaxial cables at frequencies between DC and 2.7 GHz and where DC power is present. Suitable for RF systems with power up to 1.9 kW. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- Wide bandwidth means a single product is suitable for a range of applications
- Very low attenuation and near unity VSWR over a wide range of frequencies ensure the protectors do not impair system performance
- Available with N, 7/16 DIN and BNC connectors
- Easily mounted and earthed via fixtures on the base of the unit that accept M3 and M5 screws or via mounting brackets
- Additional mounting plates give increased flexibility
- Robust aluminium housing

Application

Use on coaxial cables to protect RF transmitter and receiver systems, including electronics located at the antenna or dish. Typical examples include cell sites, military communications, satellite earth stations, pager systems and emergency services communications systems.

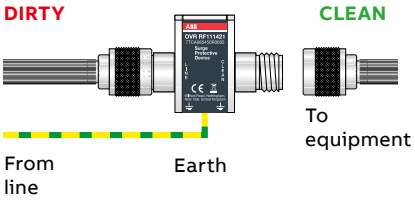
Installation

In a building, connect in series with the coaxial cable near where it enters or leaves the structure, or close to the equipment being protected. This should be as close as possible to the system's earth star point (to enable a good connection to earth). On a mast, connect in series with the coaxial cable near the antenna/dish being protected. Install in a radio communications room, an existing cabinet or a suitable enclosure.

Accessories

OVR RF BK1 Straight mounting plates
OVR RF BK2 90° angled mounting plates
OVR RF BK3 Bulkhead through mounting plate (single)
OVR RF BK4 Bulkhead through mounting plate (for 4 products)
OVR RF GDT-4 Replacement gas discharge tube

OVR RF 111421 with N female connectors installed in series



NOTE: These protectors are based on a continuous transmission line with a GDT connected between this line and screen/earth, and are suited for applications where DC is required to pass to the equipment. OVR CCTV/B and OVR CCTV/T are suitable for use on coaxial (or twisted pair) CCTV lines.
For coaxial CATV lines, use the OVR CATV/F.

OVR RF Series - Technical specification

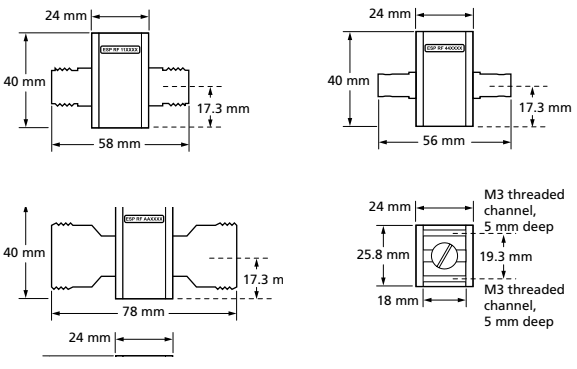
Electrical specification		**OVR RF 111421**	**OVR RF AA1421**	**OVR RF 441421**
Gas Discharge Tube voltage		350 V		
Maximum working voltage Uc (RMS)		200 V		
Characteristic impedance		50 Ω		
Bandwidth		DC-2.7 GHz		
Voltage standing wave ratio		≤ 1.1		
Insertion loss over bandwidth		≤ 0.1 dB		
Maximum power [1]		650 W		
Transient specification		**OVR RF 111421**	**OVR RF AA1421**	**OVR RF 441421**
Let-through voltage (all conductors) [2] Up				
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		< 800 V		
C1 test 1 kV 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		< 650 V		
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		< 550 V		
5 kV, 10/700 µs [3]		< 580 V		
Maximum surge current [4]				
D1 test 10/350 µs to BS EN/EN/IEC 61643-21		2.5 kA		
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002		20 kA		
Mechanical specification		**OVR RF 111421**	**OVR RF AA1421**	**OVR RF 441421**
ABB order code		7TCA085450R0065	7TCA085450R0063	7TCA085450R0066
Temperature range		-40 to +80 °C		
Connection type		N female	7/16 DIN female	BNC female
Conductor size (stranded)		Via mounting fixtures		
Case Material		Aluminium body, nickel plated. Brass connectors, white bronze plated		
Weight	– Unit	120 g	190 g	90 g
	– Packaged	140 g	210 g	110 g
Dimensions		See diagram below		

OVR RF BK1 (ABB order code: 7TCA085400R0416)
Straight mounting bracket, 53 x 26.3 x 3 mm
2 x M4 clearance mounting holes, 16.3 mm apart

OVR RF BK2 (ABB order code: 7TCA085400R0064)
90° mounting bracket, 33 x 26.3 x 3 mm, 20 x 26.3 x 3 mm
2 x M4 clearance mounting holes, 16.3 mm apart, 14 mm from fold line

OVR RF BK3 (ABB order code: 7TCA085400R0412)
90° mounting bracket, 50 x 24 x 1.5 mm, 60 x 24 x 1.5 mm
2 x M5 clearance mounting holes, 40 mm apart

OVR RF BK4 (ABB order code: 7TCA085400R0413)
90° quad mounting bracket, 50 x 24 x 1.5 mm, 210 x 24 x 1.5 mm
5 x M5 clearance mounting holes, various spacings
Mounting brackets supplied with screws for fixing to protector

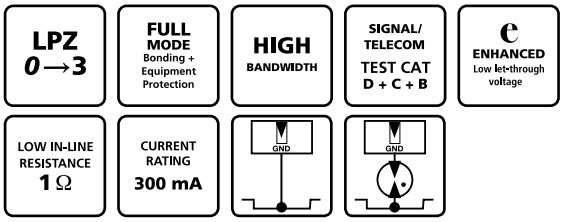


[1] Power levels have been de-rated to allow for real life 'worst case' conditions, calculated with VSWR as 2:1
[2] The maximum transient voltage let-through of the protector throughout the test (±10%) (±10%). Response time < 10 ns. This let-through voltage represents a deviation from the applied signal voltage, present at the time of the test
[3] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45, Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)
[4] The installation and connections external to the protector may limit the capability of the protector

Protection and safety

Specific systems protection

OVR CCTV Series



Combined Category D, C, B tested protector (to BS EN 61643) suitable for coaxial CCTV cables with BNC connectors (OVR CCTV/B) or twisted pair CCTV lines (OVR CCTV/T) on systems with either an earthed or an isolated screen. Not suitable for use on broadcast, satellite or cable TV systems. For use at boundaries up to LPZ 0 to protect against flashover (typically the service entrance location) through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Full Mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Repeated protection in lightning intense environments
- 100 MHz bandwidth prevents the degradation of high frequency signals
- Low in-line resistance to minimize unnecessary reductions in signal strength and maximizes signalling distance
- Very low reflection coefficient/VSWR ensure that the protector doesn't disrupt system operations
- Suitable for either earthed or isolated screen systems
- Sturdy, conductive ABS housing for 2 way shielding - preventing emissions & providing signals with immunity from external interference
- Convenient holes for flat mounting on base or side
- Built-in DIN rail foot for easy installation on a top hat DIN rail
- OVR CCTV/T has colour coded terminals for a quick and easy installation check - grey for the dirty (line) end and green for the clean end
- Substantial earth stud to enable effective earthing
- Integral earthing plate for enhanced connection to earth via OVR CME kit

Application

Use these protectors on the video cable to outdoor CCTV cameras and central control and monitoring equipment.

Installation

Connect in series with the CCTV cable in a convenient place close to the equipment being protected. For outdoor CCTV cameras, protectors should be mounted in the junction box, or in a separate enclosure, close to the camera. Protect central control and monitoring equipment inside the building by installing protectors on all incoming or outgoing lines, either:

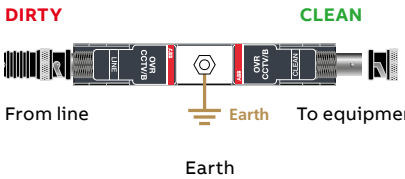
a) near where they enter or leave the building, or

b) close to the equipment being protected (or actually within its control panel).

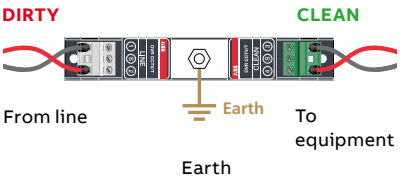
Accessories

When CCTV protectors are installed in groups, or alongside protectors for signal and mains power lines, these can be mounted and earthed simultaneously on a OVR CME kit. An OVR CME 4 will accommodate the video, telemetry and power protectors to a camera. If protectors cannot be incorporated within an existing panel or enclosure, OVR WBX enclosures are available for up to 4, 8, 16 or 32 protectors and their associated OVR CME kit. The OVR WBX 4/GS is a secure IP66 enclosure suitable for a OVR CME 4 and associated protectors.

Series connection for OVR CCTV/B



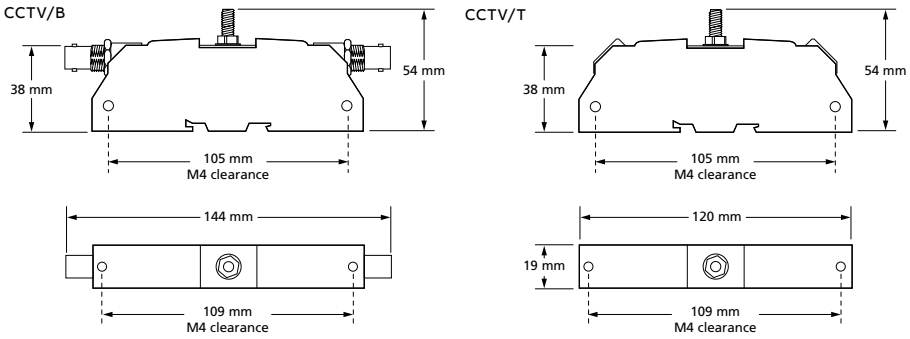
Series connection for OVR CCTV/T



NOTE: Camera telemetry or control lines should be protected with a suitable Lightning Barrier from the OVR D or E Series. Protectors for the power supply to individual cameras (e.g. OVR 240-16A) and the mains supply to the control room are available. For coaxial RF (OVR RF Series) cable protectors and CATV systems (OVR CATV/F) are also available.

OVR CCTV Series - Technical specification

Electrical specification		**OVR CCTV/B**	**OVR CCTV/ B-15V**	**OVR CCTV/ B-30V**	**OVR CCTV/ B-50V**	**OVR CCTV/T**	**OVR CCTV/T-15V**	**OVR CCTV/ T-30V**	**OVR CCTV/ T-50V**
ABB order code		7TCA085400R0296	7TCA085400R0297	7TCA085400R0299	7TCA085400R0300	7TCA085400R0301	7TCA085400R0302	7TCA085400R0298	7TCA085400R0303
Nominal voltage [1] (peak-peak)		1 V				2 V			
Maximum working voltage Uc [2] (peak)		7.79 V	16.7 V	36.7 V	56.7 V	7.79 V	16.7 V	36.7 V	56.7 V
Current rating (signal)		300 mA							
In-line resistance (±10%)		1 Ω inserted in coax inner			1 Ω per line				
Bandwidth (-3 dB 75 Ω system) [3]		> 100 MHz							
Voltage standing wave ratio		< 1.2:1							
Transient specification		**OVR CCTV/B**	**OVR CCTV/ B-15V**	**OVR CCTV/ B-30V**	**OVR CCTV/ B-50V**	**OVR CCTV/T**	**OVR CCTV/T-15V**	**OVR CCTV/ T-30V**	**OVR CCTV/ T-50V**
Let-through voltage (all conductors)(4) Up									
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		39.5 V	55.0 V	78.0 V	105.0 V	39.5 V	55.0 V	78.0 V	105.0 V
C1 test 1 kV 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		26.0 V	42.0 V	66.5 V	93.5 V	26.0 V	42.0 V	66.5 V	93.5 V
B2 test 4 kV 10/700 µs to BS EN/ EN/IEC 61643-21		16.0 V	27.2 V	47.5 V	73.6 V	16.0 V	27.2 V	47.5 V	73.6 V
5 kV, 10/700 µs [5]		17.0 V	28.2 V	49.5 V	76.2 V	17.0 V	28.2 V	49.5 V	76.2 V
Maximum surge current [6]									
D1 test 10/350 µs to BS EN/EN/ IEC 61643-21	– Per signal wire	2.5 kA				2.5 kA			
	– Per pair	–				5 kA			
8/20 µs to ITU (formerly CCITT)	– Per signal wire	10 kA				10 kA			
	– Per pair	–				20 kA			
Mechanical specification		**OVR CCTV/B variants**				**OVR CCTV/T variants**			
Temperature range		-40 to +80 °C							
Connection type		Coaxial BNC female				Screw terminal			
Conductor size (stranded)		Not applicable				2.5 mm^2			
Earth connection		M6 stud							
Case Material		ABS UL94 V-0				ABS UL94 V-0			
Weight	– Unit	0.08 kg							
	– Packaged	0.9 kg							
Dimensions		See diagram below							



[1] Nominal voltage (DC or AC peak) measured at < 10 µA leakage
[2] Maximum working voltage (DC or AC peak) measured at 5 mA leakage
[3] Capacitance < 30 pF
[4] The maximum transient voltage let-through of the protector throughout the test (±10%), line to line & line to earth. Screen to earth let-through voltage will be up to 600 V (with 5 kV 10/700 test), when protector is configured for use with non-earthed or isolated screen systems. Response time < 10 ns
[5] Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45,Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/ IS-968-A:2002 (formerly FCC Part 68)
[6] The installation and connectors external to the protector may limit the capability of the protector

Protection and safety

Mains power protection

OVR 240-16A

FULL MODE Bonding + Equipment Protection

MAINS TEST TYPE 2 + 3

ENHANCED Low let-through voltage

LPZ 1→3

Combined Type 2 and 3 tested protector (to BS EN 61643) for use on low current (up to 16 A) single phase systems to protect connected electronic equipment from transient overvoltages on the mains supply, e.g. CCTV systems, fire/intruder alarm panels.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all sets of conductors (phase to neutral, phase to earth, neutral to earth - Full Mode protection) allowing continuous operation of equipment
- Repeated protection in lightning intense environments
- Compact size for easy incorporation in the protected system
- Removable DIN rail foot for simple clip-on mounting to top hat DIN rails
- Colour coded terminals give a quick and easy installation check - grey for the dirty (line) end and green for the clean end
- Robust housing and substantial earth stud fixing holes ready for flat mounting
- Maintenance free

Application

Use these protectors on low current mains power supplies, e.g. CCTV cameras, alarm panels and telemetry equipment.

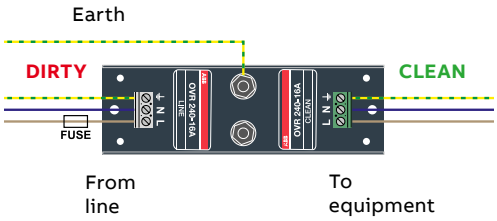
Installation

Connect in-line with the power supply usually either within the equipment panel (or for CCTV cameras, in an enclosure close by), or on the fused connection that supplies equipment. To protect equipment inside a building from transients entering on an outgoing feed (e.g. to CCTV cameras or to site lighting) the protector should be installed as close to where the cable leaves the building as possible. Protectors should be installed either within an existing cabinet/cubicle or in a separate enclosure.

Accessories

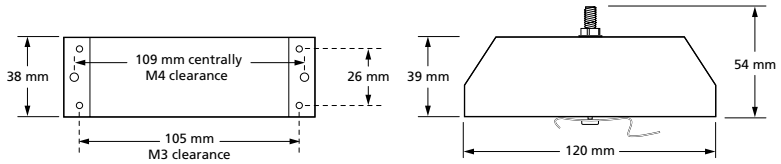
If several OVR 240-16A protectors are to be installed together, or if one is in use alongside OVR SPDs for video or signal lines, these can be simultaneously mounted and earthed on a OVR CME kit and housed in a suitable OVR WBX enclosure.

Connect in-line on supplies fused up to 16 A. Note how the protector can also be earthed from its earth stud.



OVR 240-16A - Technical specification

Electrical specification		**OVR 240-16A**
ABB order code		7TCA085460R0361
Nominal voltage - Phase-Neutral Uo (RMS)		240 V
Maximum voltage - Phase-Neutral Uc (RMS)		280 V
Working voltage (RMS)		200-280 V
Frequency range		47-63 Hz
Current rating (supply)		16 A or less
Max. back-up fuse (see installation instructions)		≤ 16 A
Leakage current (to earth)		< 0.5 mA
Transient specification		**OVR 240-16A**
Type 2 (BS EN/EN), Class II (IEC)		
Nominal discharge current 8/20 µs (per mode) In		5 kA
Let-through voltage Up at In [1]		750 V
Maximum discharge current Imax (per mode) [2]		10 kA
Type 3 (BS EN/EN), Class III (IEC)		
Let-through voltage at Uoc of 6 kV 1.2/50 µs and Isc of 3 kA 8/20 µs (per mode) [1, 3]		600 V
Electrical specification		OVR 240-16A
Temperature range		-40 to +80 °C
Connection type		Screw terminal - maximum torque 0.5 Nm
Conductor size (stranded)		4 mm^2
Earth connection		Via M6 stud or earth terminal -maximum torque 0.5 Nm
Degree of protection (IEC 60529)		IP20
Case material		Steel
Weight	– Unit	0.23 kg
	– Packaged	0.25 kg
Dimensions		See diagrams below



[1] The maximum transient voltage let-through of the protector throughout the test (±10%), phase to neutral, phase to earth and neutral to earth

[2] The electrical system, external to the unit, may constrain the actual current rating achieved in a particular installation

[3] Combination wave test within IEC/BS EN 61643, IEEE C62.41-2002 Location Cats C1 & B3, SS 555:2010, AS/NZS 1768-2007, UL 1449 mains wire-in

Protection and safety

Specific systems protection

OVR TV Series

LPZ 0→3 | FULL MODE Bonding + Equipment Protection | SIGNAL/ TELECOM TEST CAT D + C + B | ENHANCED Low let-through voltage | HIGH BANDWIDTH

Combined Category D, C, B tested protector (to BS EN 61643) suitable to protect Cable, Terrestrial and Satellite TV systems. For use on lines running within buildings at boundaries up to LPZ 0 to through to LPZ 3 to protect sensitive electronic equipment.

Features & benefits

- Very low let-through voltage (enhanced protection to IEC/BS EN 62305) between all lines - Full Mode protection
- Low attenuation and high return loss over a wide range of frequencies ensures the protectors do not impair system performance
- Substantial earth termination
- Supplied ready for flat mounting
- Strong metal housing

Application

Use to protect analogue and digital Cable, Terrestrial and Satellite TV installations. OVR CATV/F, OVR MATV/F, OVR SMATV/F and OVR TV/F are suitable for systems using F connectors. OVR TV/EURO is suitable for systems using EURO-TV connectors.

- For protecting terrestrial antenna feeds use OVR TV/F or OVR TV/EURO
- For protecting satellite feeds use OVR SMATV/F
- For protecting distributed combined TV feeds use OVR MATV/F
- For protecting cable TV feeds use OVR CATV/F

For further information on TV applications, see separate Application Note OVR AN006 (contact us for a copy).

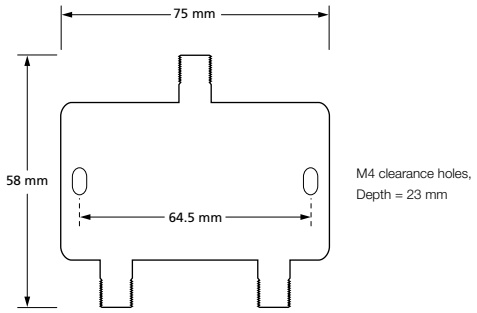
Installation

Connect in series with the coaxial cable either near where it enters or leaves each building or close to equipment being protected.

NOTE: Protectors for coaxial (or twisted pair) CCTV Lines are available. For coaxial RF lines, use the OVR RF Series. Transients can also be conduced into TV systems via the mains power supplies - use suitable OVR mains protection.

OVR TV Series - Technical specification

Electrical specification		**OVR CATV/F**	**OVR MATV/F**	**OVR SMATV/F**	**OVR TV/F**	**OVR TV/EURO**
ABB order code		7TCA085400R0293	7TCA085400R0308	7TCA085400R0336	7TCA085400R0335	7TCA085400R0334
Maximum working voltage(1)		140 V	18.9 V	18.9 V	6.4 V	6.4
Maximum operating current		4 A	800 mA	800 mA	300 mA	300 mA
Characteristic impedance		75 Ω				
Bandwidth		5-860 MHz	5-3224 MHz	860-3224 MHz	5-860 MHz	5-860 MHz
Insertion loss	– 5-860 MHz	< 0.5 dB	< 0.3 dB	–	< 0.3 dB	< 0.3 dB
	– 860-2150 MHz	–	< 1.5 dB	< 1.5 dB	–	–
	– 2150-3224 MHz	–	< 2.2 dB	< 2.2 dB	–	–
Return loss (VSWR)	– 5-860 MHz	> 20 dB (< 1.2:1)	> 32 dB (< 1.05:1)	–	> 32 dB (< 1.05:1)	> 32 dB (< 1.05:1)
	– 860-2150 MHz	–	> 20 dB (< 1.2:1)	> 20 dB (< 1.2:1)	–	–
	– 2150-3224 MHz	–	< 2.2 dB	< 2.2 dB	–	–
Transient specification		**OVR CATV/F**	**OVR MATV/F**	**OVR SMATV/F**	**OVR TV/F**	**OVR TV/EURO**
Let-through voltage (all conductors)(2) Up						
C2 test 4 kV 1.2/50 µs, 2 kA 8/20 µs to BS EN/EN/IEC 61643-21		270 V	70 V	70 V	65 V	65 V
C1 test 1 kV 1.2/50 µs, 0.5 kA 8/20 µs to BS EN/EN/IEC 61643-21		265 V	60 V	60 V	50 V	50 V
B2 test 4 kV 10/700 µs to BS EN/EN/IEC 61643-21		245 V	45 V	45 V	30 V	30 V
5 kV, 10/700 µs(3)		250 V	50 V	50 V	35 V	35 V
Maximum surge current						
8/20 µs to ITU-T K.45:2003, IEEE C62.41.2:2002		3 kA				
D1 test 10/350 µs to BS EN/EN/IEC 61643-21		500 A	750 A	750 A	750 A	750 A
Mechanical specification		**OVR CATV/F**	**OVR MATV/F**	**OVR SMATV/F**	**OVR TV/F**	**OVR TV/EURO**
Temperature range		-40 to +80 ºC				-40 to +80 ºC
Connection type		F female				Euro-TV
Earth connection		~ 9.5 mm (3/8") diameter earth stud				~ 9.5 mm (3/8") diameter earth stud
Case Material		Diecast				Diecast
Weight	– Unit	0.14 kg				0.14 kg
	– Packaged	0.15 kg				0.15 kg
Dimensions		See diagram below				



(1) Maximum working voltage (DC or AC peak) measured at < 5 µA (OVR CATV/F) and < 50 mA (OVR MATV/F, OVR SMATV/F, OVR TV/EURO, OVR TV/F)

(2) The maximum transient voltage let-through of the protector throughout the test (±10%) line to earth. Response time < 10 ns

(3) Test to IEC 61000-4-5:2006, ITU-T (formerly CCITT) K.20, K.21 and K.45,Telcordia GR-1089-CORE, Issue 2:2002, ANSI TIA/EIA/IS-968-A:2002 (formerly FCC Part 68)

Protection and safety

Protector accessories

OVR WBX Series

OVR WBX Series

OVR WBX Series

A range of moisture and dirt resistant enclosures for the convenient installation of any OVR protector. For signalling applications they can be used with their associated OVR CME with grey base and either a see-through or grey (part number/G or/GS) lid.

Features & benefits

- Tough polycarbonate enclosures
- Weatherproof with IP resistance to dirt and water of IP56 or more
- Clear lid enables easy visual inspection of the protector's visual status indication (OVR WBX 4, OVR WBX 8)
- Grey lid for applications not needing regular protector inspection (OVR WBX 4/GS, OVR WBX 8/GS and OVR WBX 16/2/G)
- For external CCTV and other installations requiring added security the OVR WBX 4/GS and OVR WBX 8/GS are supplied with an opaque lid and special secure head screws (plus tool)
- Supplied complete with metal base (mounting) plate with pre-prepared mounting positions and fixing hardware for easy installation

Application

Use OVR WBX enclosures when your OVR protector(s) can't be installed within the existing equipment panel or enclosure and for added protection in damp and dirty environments.

Installation

The protector(s), or OVR CME kit, are mounted on the metal base plate, which in turn mounts in the enclosure.

OVR WBX Series - Technical specification

Enclosure part no.	**For use with following protectors**
OVR WBX 4 or the secure OVR WBX 4/GS	1 OVR CME 4 and associated protectors
OVR WBX 8 or the secure OVR WBX 8/GS	1 OVR CME 8 and associated protectors
OVR WBX 16/2/G	1 or 2 OVR CME 16 and associated protectors
OVR WBX SLQ or OVR WBX SLQ/G	Up to 6 x OVR**Q, or up to 15 x OVR SL**

		OVR WBX 4 OVR WBX 4/GS	**OVR WBX 8 OVR WBX 8/GS**	**OVR WBX 16/2/G**	**OVR WBX SLQ OVR WBX SLQ/G**
ABB Order Code		7TCA085410R0048 7TCA085410R0049	7TCA085410R0050 7TCA085410R0051	7TCA085410R0047	7TCA085400R0326 7TCA085400R0327
Weight	– Unit	0.9 kg	1.3 kg	6.4 kg	0.7 kg
	– Packaged	0.95 kg	1.35 kg	7.6 kg	1.0 kg
Dimensions					
Length	– Internal	246 mm	225 mm	460 mm	230 mm
	– External	255 mm	235 mm	474 mm	250 mm
Width	– Internal	171 mm	225 mm	380 mm	105 mm
	– External	180 mm	235 mm	396 mm	125 mm
Depth	– Internal	119 mm	100 mm	120 mm	110 mm
	– External	125 mm	117 mm	128 mm	125 mm
Fixing centres (mm)		240 x 165	215 x 215	380 x 310	235 x 110
IP rating		IP66	IP66	IP56	IP67
Temperature range		-15 to +75 °C	-15 to +75 °C	-25 to +60 °C	-40 to +80 °C
Flammability		UL 94 V2	UL 94 V2	UL 94 V0	UL 746C 5V

Protection and safety

Protector accessories

OVR CME Series

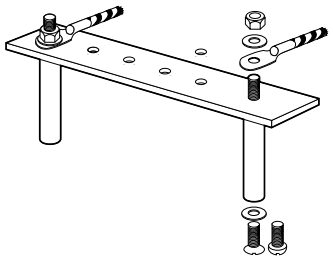
OVR CME Series

OVR CME Series

Enables groups of protectors to be simultaneously mounted and earthed via their earth stud. Suitable for installing protectors with one or two earth studs on their top face. Available with 4, 8, 16 and 32 mounting holes.

Features & benefits

- Enables quick and easy installation of protectors for added convenience
- Speedy installation of groups of protectors saves time and money
- Individual protectors can be changed without needing to remove others
- Sturdy construction
- Supplied with a choice of flat and round ended fixing screws to suit your application



Assembly of OVR CME kit
Earth connection (not supplied)

Application

Use OVR CME kits to simultaneously mount and earth groups of single and double earth stud protectors. Each single earth stud protector requires one OVR CME mounting position and each double earth stud protector requires two OVR CME mounting positions, this includes:

- High conductivity copper with electro-tin plating and nylon insulating pillars, for low impedance to earth

Single earth stud protectors which are:

– OVR 06D	– OVR 06E	– OVR 06H	– OVR TN
– OVR 15D	– OVR 15E	– OVR 15H	– OVR RTD
– OVR 30D	– OVR 30E	– OVR 30H	– OVR CCTV/B
– OVR 50D	– OVR 50E	– OVR 50H	– OVR CCTV/T
– OVR 110D	– OVR 110E	– OVR 110H	– OVR RS485

Double earth stud protectors which are:

– OVR 240-16A

Once you know how many OVR CME mounting positions you require choose a OVR CME kit to suit:

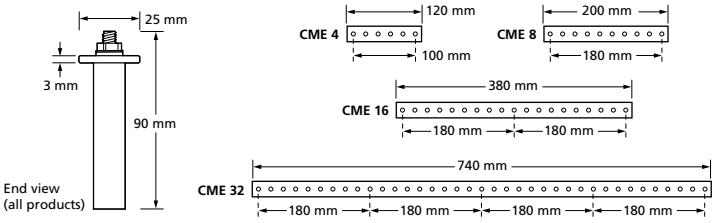
– OVR CME 4 has 4 mounting positions
– OVR CME 8 has 8 mounting positions
– OVR CME 16 has 16 mounting positions
– OVR CME 32 has 32 mounting positions

Accessories

Enclosures suitable for a OVR CME 4 and its associated protectors: **(OVR WBX 4/GS)**, **OVR CME 8** and protectors **(OVR WBX 8/GS)** or one or two **OVR CME 16** and protectors **(OVR WBX 16/2/G)**

Installation

The earth bar is supported by a series of mounting pillars (which are fixed to the cubicle or box base). Protectors are attached to the OVR CME's earth bar via their earth stud(s) and earthed with shared connections to earth. We suggest one earth connection per mounting pillar.



OVR CME Series - Technical specification

	OVR CME 4	OVR CME 8	OVR CME 16	OVR CME 32
ABB order code	7TCA085400R0414	7TCA085400R0415	7TCA085410R0045	7TCA085410R0046
Hole size	6.5 mm with 20 mm spacings			
Weight	0.1 kg	0.15 kg	0.3 kg	0.6 kg
Dimensions	See diagram opposite			

Protection and safety

Protector accessories

Accessories

Slim Line replacement base/module

Slim Line replacement base/module

Replacement: Base & module for the Slim Line Series of protectors

Part no.	Description
Slim Line protector replacement base	
OVR SL/B	For use with standard and 4-20 mA Slim Line Series
OVR SL/I/B	Isolated screen version for use with standard and 4-20 mA Slim Line Series
OVR SLX/B	For use with Slim Line Intrinsically Safe (ATEX) Series
OVR SLX/I/B	Isolated screen version for use with Slim Line Intrinsically Safe (ATEX) Series
OVR SL/3W/B	For use with Slim Line 3-wire Series
OVR SLRTD/B	For use with Slim Line RTD Series
OVR SL RS485/B	For use with Slim Line RS485 Series
Slim Line protector replacement module	
OVR SLXX/M	For use with Slim Line Series - replace 'XX' with relevant voltage, i.e. 06, 15, 30, 50, 110
OVR SLTN/M	For use with Slim Line TN Series
OVR SL15X/M	For use with Slim Line Instrinsically Safe (ATEX) Series, 15 V
OVR SL30X/M	For use with Slim Line Instrinsically Safe (ATEX) Series, 30 V
OVR SLRTD/M	For use with Slim Line RTD Series
OVR SLRS485/M	For use with Slim Line RS485 Series
Slim Line LED protector replacement module	
OVR SLXXL/M	For use with Slim Line LED Series - replace 'XX' with relevant voltage, i.e. 06, 15, 30, 50, 110
OVR SL30L/4-20/M	For use with Slim Line LED Series, 4-20 mA
OVR SL15XL/M	For use with Slim Line Instrinsically Safe (ATEX) LED Series, 15 V
OVR SL30XL/M	For use with Slim Line Instrinsically Safe (ATEX) LED Series, 30 V
OVR SLXX/3W/M	For use with Slim Line 3-wire LED Series – replace 'XX' with relevant voltage, i.e. 06, 15, 30, 50, 110
OVR SLTNL/M	For use with Slim Line TN LED Series

OVR RF mounting plates

OVR RF mounting plates

Use with: Any ESP RF protector to assist installation

Part no.	Description
OVR RF BK1	Straight Mounting plate
OVR RF BK2	90º Mounting plate
OVR RF BK3	Bulkhead through mounting plate (single)
OVR RF BK4	Bulkhead through mounting plate (4 protectors)

OVR RF GDT-4

OVR RF GDT-4

Replacement: Gas Discharge Tubes for use with standard RF protectors

Part no.	Description	Voltage
OVR RF GDT-4	Gas Discharge Tube	350 V

Cable assembly

Use with: OVR ISDN/RJ45-*/8 or OVR Cat-5e or OVR Cat-6 protector range

Part no.	Description	Length
OVR CAT5e/UTP-1	Cable assembly for OVR Cat-5e with unshielded RJ45 connections	1 m
OVR CAT6/STP-2	Cable assembly for OVR Cat-6 with shielded RJ45 connections	2 m

Cable assembly with RJ45 connections for the OVR ISDN/RJ45-4/8 or OVR ISDN/RJ45-8/8 plug-in ISDN protectors for use if the standard 0.5 m cable is insufficient

E 90. Uncompromising performance

A safe and smart range designed for quick, flexible and error-proof installation

Compactness
The compact dimensions enable to close the switchboard door even when the fuse holder is open, thus ensuring total safety during maintenance.

Reliability
Venting grooves and cooling chambers improve heat dissipation even in multiple-pole configurations.

Completeness
The fuse tripping can be easily displayed, thanks to the special blown fuse indicator light.

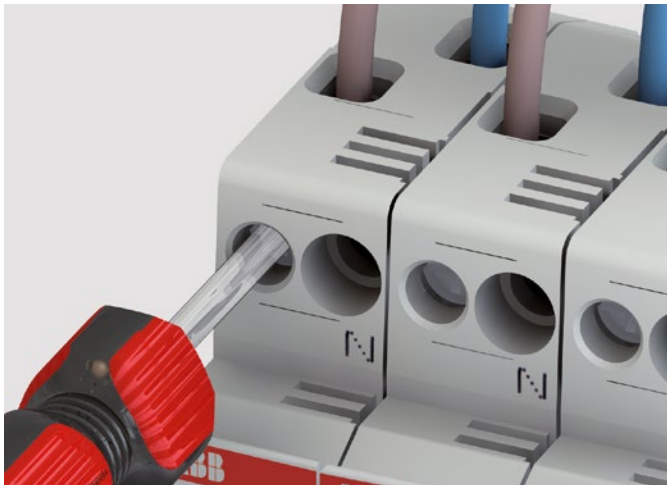
Universal use
Screw holes have increased diameter to accomodate insulated screwdrivers and electric screwdrivers.

E 90. Uncompromising performance

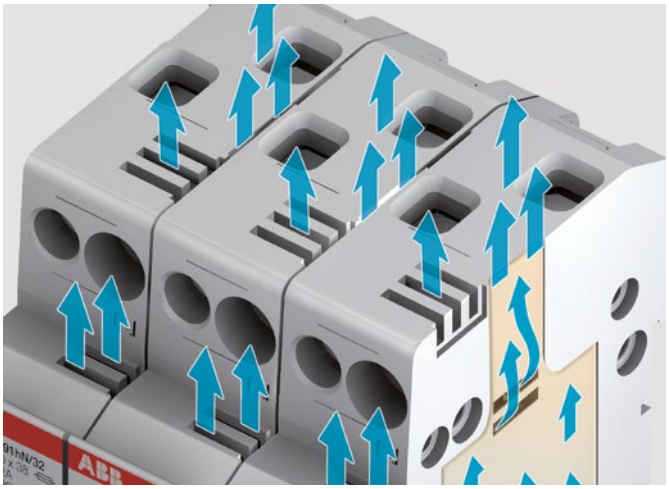
A safe and smart range designed for quick, flexible and error-proof installation

Fuseholder profile has been designed for maximum ease of use: the 90° flip hinge with ergonomic knob, makes the replacement of fuses easier even in small spaces or when wearing protective gloves.

The compact dimensions enable to close the switchboard door even when the fuseholder is open, thus ensuring total safety during maintenance.



With the Prozidriv PZ2 screws tightening can be performed by exerting less torque than conventional screws, and the same electric screwdriver can be used for all terminals. Moreover, the PS connection busbars facilitate the connecting operations, making the wiring both simple and safe and providing complete integration with S 200 and SN 201 System pro M compact® circuit-breakers.



Venting grooves and cooling chambers improve heat dissipation even in multiple-pole configurations.
The reduced operating temperature inside fuseholders ensures durability and reliability of the devices over time.

Protection and safety

E 90 fuse switch disconnectors

E 90

Technical features

Type			E 90/20		E 90/32	
Rated current		A	20		32	
Type of current			AC			
Fuse		[mm]	8 x 31		10 x 38	
Max power dissipation accepted		[W]	2.5		3	
Rated frequency		[Hz]	50-60			
Tightening torque		[Nm]	PZ2 2-2.5*			
Protection degree			IP20			
Terminals cross-section		[mm²]	25			
Cross-section rigid copper conductors	1 wire		1.5-25 mm² (16-10 AWG)			
	2 wires		-		5 mm² (10 AWG)	
Cross-section stranded copper conductors	1 wire		1.5-16 mm² (16-3 AWG)			
	2 wires		-		2-5 mm² (14-10 AWG)	
Operating temperature		[°C]	-5/+40 (1)			
Storage temperature		[°C]	-25/+70 (2)			
Altitude		[m]	2000			
Voltage range for LED indicator light			24-1000 AC/DC (only s version)			
Padlockable (when open)			■		■	
Sealable (when closed)			■		■	
IEC 60947-3						
Utilization category			AC-22B	AC-20B	AC-22B	AC-20B
Markings		[V]	400	690	400	690

(1) for lower temperature verify fuse technical characteristics, for higher temperature refer to derating table in Chapter 5 of Electrical installation solutions for buildings - Technical details
(2) for more than 24h max temperature is +55 °C
** PZ2 2.8 Nm in case of rigid copper conductors, 2 wires

Shock and vibration

Vibration withstand on the 3 main axis:

- Sinusoidal vibration testing according to IEC 60068-2-6: 2 to 13 Hz x = 1 mm peak; 13 to 100 Hz y = 0.7 g peak
- Random vibration testing according to IEC 61373: Category 1 Class B

Shock withstand

- Shock testing according to IEC 60068-2-27 : 15 g/11 ms/18 shocks
- Shock testing according to IEC 61373: Category 1 Class B

Materials

Plastic parts	**Case:**	**Material PA 6 +30% glass fibre**
		Self extinguishing class: V2 (UL94)
		Temperature resistance: 130 °C
	Opening handle	**Material PA 66 +25% glass fibre**
		Self-extinguishing class V0 (UL94)
		Temperature resistance: 140 °C
Metal parts	**Clips**	**Silver plated copper**
	Clip spring	**Stainless steel**
	Terminals	**Galvanized steel**

The E 90 series is environmental friendly and protects the health of people: all used materials are conform to the RoHS and REACH directives and they completely exclude hazardous substances and halogen.

Protection and safety

E 90 fuse switch disconnectors

E 92

E 94

E 90 fuse switch disconnectors

E 90 series fuse switch disconnectors are designed for switching circuits under load, providing protection against short circuits and overloads. The case is made of self-extinguishing thermoplastic material resistant to high temperatures (all materials are UL listed) while the contact clips are in silver plated copper.

E 90 fuse switch disconnectors can be sealed or padlocked to ensure operator safety during maintenance. Versions with blown fuse indicator allow to check whether the fuse is still working correctly or not. For easy and quick installation E 90 range is totally compatible with connecting bars, terminals and caps of S 200 MCBs.

Thanks to cURus approval, they can be installed in UL certified machines.

E 90 fuse switch disconnectors for 10.3 x 38 mm fuses (AC-22B)

Poles	Rated current	Modules	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In		EAN	Type code	Order code		kg	pc.
1	32	1	009238	E 91/32	2CSM200923R1801		0.061	6
1	32	1	024835	E 91/32s	2CSM202483R1801		0.062	6
1+N	32	2	008934	E 91N/32	2CSM200893R1801		0.130	3
1+N	32	2	515036	E 91N/32s	2CSM251503R1801		0.132	3
2	32	2	008835	E 92/32	2CSM200883R1801		0.122	3
2	32	2	514930	E 92/32s	2CSM251493R1801		0.132	3
3	32	3	047537	E 93/32	2CSM204753R1801		0.183	2
3	32	3	020639	E 93/32s	2CSM202063R1801		0.184	2
3+N	32	4	047339	E 93N/32	2CSM204733R1801		0.252	1
3+N	32	4	514831	E 93N/32s	2CSM251483R1801		0.255	1
4	32	4	047230	E 94/32	2CSM204723R1801		0.244	1
4	32	4	020530	E 94/32s	2CSM202053R1801		0.248	1

s: version with blown fuse indicator light

E 90 fuse switch disconnectors for 8.5 x 31.5 mm fuses (AC-22B)

Poles	Rated current	Modules	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In		EAN	Type code	Order code		kg	pc.
1	20	1	009832	E 91/20	2CSM200983R1801		0.061	6
1	20	1	024231	E 91/20s	2CSM202423R1801		0.062	6
2	20	2	009535	E 92/20	2CSM200953R1801		0.122	3
2	20	2	896234	E 92/20s	2CSM289623R1801		0.062	3
3	20	3	009436	E 93/20	2CSM200943R1801		0.183	2
3	20	3	896135	E 93/20s	2CSM289613R1801		0.184	2

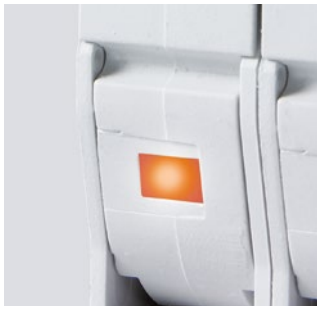
s: version with blown fuse indicator light

Protection and safety

E 90h fuseholders

E 91hN

E 93hN



Fuse indicator LED

Technical features

Type		E 90hN/20	E 90hN/32
Rated currrent	[A]	20	32
Type of current		AC	
Fuse	[mm]	8 x 31	10 x 38
Max power dissipation accepted	[W]	2.6	3.2
Rated frequency	[Hz]	50-60	
Tightening torque	[Nm]	PZ2 0.8-1.2	
Protection degree		IP20	
Terminals cross-section	[mm²]	16	
Cross-section rigid copper conductors	[mm²]	1.5-16	
Cross-section stranded copper conductors	[mm²]	1.5-10	
Operating temperature	[°C]	-5/+40 (1)	
Storage temperature	[°C]	-25/+70 (2)	
Altitude	[m]	2000	
Voltage range for LED indicator light		24-1000 AC/DC (only s version)	
Padlockable (when open)		■	
Sealable (when closed)		■	
IEC 60269-3			
Rated voltage	[V]	400	

(1) for lower temperature verify fuse technical characteristics, for higher temperature refer to derating table in Chapter 5 of Electrical installation solutions for buildings - Technical details
(2) for more than 24h max temperature is +55 °C

E 90h fuseholders

E 90h fuseholders are suitable for protection against overloads and short circuits. Available in a single module 1P+N version and in a three-module 3P+N version, they are designed for use with gG and aM cylindrical fuse links. The body is made from self-extinguishing material resistant to high temperatures, while the contact clips are in silver-plated copper. E 90h fuseholders can be sealed or padlocked to assure operator safety during maintenance. Versions with blown fuse indicator allow to check whether the fuse is still working correctly or not.

E 90h fuseholders for 10.3 x 38 mm fuses

Poles	Rated current	Modules	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In		EAN	Type code	Order code		kg	pc.
1+N	32	1	009139	E 91hN/32	2CSM200913R1801		0.070	6
1+N	32	1	065739	E 91hN/32s	2CSM206573R1801		0.071	6
3+N	32	3	047438	E 93hN/32	2CSM204743R1801		0.192	2
3+N	32	3	743439	E 93hN/32s	2CSM274343R1801		0.200	2

s: version with blown fuse indicator light

E 90h fuseholders for 8.5 x 31.5 mm fuses

Poles	Rated current	Modules	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In		EAN	Type code	Order code		kg	pc.
1+N	20	1	009634	E 91hN/20	2CSM200963R1801		0.070	6
1+N	20	1	007036	E 91hN/20s	2CSM200703R1801		0.071	6
3+N	20	3	009337	E 93hN/20	2CSM200933R1801		0.192	2
3+N	20	3	896036	E 93hN/20s	2CSM289603R1801		0.200	2

s: version with blown fuse indicator light

Protection and safety

E 90 PV fuse disconnectors

E 90 PV

Technical features

Type		E 90/32 PV	E 90/32 PV according to UL
Rated current	[A]	30	
Type of current		DC	
Fuse	[mm]	10 x 38	
Max power dissipation accepted	[W]	3	
Rated frequency	[Hz]	-	
Tightening torque		PZ2 2-2.5 Nm	PZ2 18-22 lb-in
Protection degree		IP20	
Terminals cross-section	[mm²]	25	
Cross-section rigid copper conductors		1.5 - 25 mm²	n..a.
Cross-section stranded copper conductors		1.5 - 16 mm²	8÷3 AWG
Operating temperature	[°C]	-5/+40 (1)	
Storage temperature	[°C]	-25/+70 (2)	
Altitude	[m]	2000	
Voltage range for LED indicator light		24-1000 AC/DC (only s version)	
Can be padlocked (open)		■	
Can be sealed (closed)		■	
IEC 60947-3			
Utilization category		DC-20B	
Rated voltage	[V]	1000	

(1) for lower temperature verify fuse technical characteristics, for higher temperature refer to derating table in Chapter 5 of Electrical installation solutions for buildings - Technical details
(2) for more than 24h max temperature is +55 °C

E 90 PV fuse disconnectors

E 90 PV series fuse disconnectors, designed for operating voltages of 1000 V DC with utilization category DC-20B, are particularly suited for protection against overcurrents of photovoltaic systems.The single-pole or two-pole E 90 PV disconnectors for 10.3 x 38 mm cylindrical fuse links offer a reliable, compact and affordable solution for photovoltaic installations. Versions with blown fuse indicator allow to check whether the fuse is still working correctly or not.

E 90 PV fuse disconnectors for 10.3 x 38 mm fuses (DC-20B)

Poles	Rated current	Modules	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In		EAN	Type code	Order code		kg	pc.
1	32	1	047131	E 91/32 PV	2CSM204713R1801		0.061	6
1	32	1	046936	E 91/32s PV	2CSM204693R1801		0.062	6
2	32	2	047032	E 92/32 PV	2CSM204703R1801		0.122	3
2	32	2	569138	E 92/32s PV	2CSM256913R1801		0.233	3

s: version with blown fuse indicator light

Protection and safety

E 90 PV 1500 fuse holder

E 90 PV 1500

Technical features

Type		E90/32 PV1500
Rated current	[A]	32 (acc. IEC), 30 (acc. UL)
Rated voltage	[V]	1500V DC
Fuse	[mm]	10x85 and 10/14x85
Max power dissipation accepted	[W]	6
Rated frequency	[Hz]	50/60
Tightening torque	[Nm]	2…2,5 Nm
Protection degree		IP20
Cross-section rigid copper conductors	[mm²]	0,75 – 25
Cross-section stranded copper conductors	[mm²]	0,75 – 10 (2 wires of same cross-section)
Temperature stability	[°C]	125 °C
Altitude	[m]	2000

E 90 PV fuse holder

The E 90 PV 1500 series of fuse holders has been designed for applications up 1500 V DC. Thanks to their rated voltage up to 1500 V DC they are the ideal solution for protecting cells and inverters. In case of maintenance, they ensure isolation of circuits and strings up to 1500 V in direct current, in total safety. The main features of E 90 PV 1500 fuse holders include venting grooves and cooling chambers which improved heat dissipation, finger safe feature which ensure personnel protection during maintenance (no possibility of getting in touch with live parts during fuse replacement). Both IEC and UL approvals guarantee a global marketing availability.

E 90 PV fuse holder for 10 x 85 mm and 10/14 x 85 mm fuses

Poles	Rated current	Width	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In		EAN	Type code	Order code		kg	pc.
1	30	22.5	052456	E91/32 PV1500	2CSM205245R1801	0.092	0.092	5

Protection and safety

E 90 50/125 fuse disconnectors

E 90 50/125

Technical features

Type		E 90/50	E 90/125
Rated current	[A]	50	100*
Type of current		AC	
Fuse	[mm]	14 x 51	22 x 58
Max power dissipation accepted	[W]	5	9.5
Rated frequency	[Hz]	50-60	
Tightening torque	[Nm]	PZ2 3-3.5	PZ2 3.5-4
Protection degree		IP20**	
Terminals cross-section	[mm²]	35	50
Cross-section rigid copper conductors	[mm²]	2.5 - 35	4 - 50
Cross-section stranded copper conductors	[mm²]	2.5 - 25	4 - 35
Can be sealed closed		■	
Can be padlocked open		■	
IEC 60947-3			
Utilization category		AC-20B	
Rated voltage	[V]	690	

* 125A with fuses of type aM and in combination with a device which guarantees protection against overload
** The protection degree IP20 is obtained also as standalone unit with respect to wire size of 10mm²

90 50/125 fuse disconnectors

The E 90 50/125 fuse disconnector range is specifically intended for industrial circuit protection when currents are from 50 A to 125 A. They can, respectively, carry any type of cylindrical fuses 14x51 and 22x58 mm. The E 90 50/125 fuseholders can be sealed or padlocked in open position to ensure operator safety during maintenance operations. Versions with blown fuse indicator (LED) allow checking whether the fuse is still working correctly or not.

E 90/50 fuse disconnectors for 14 x 51 mm fuses (AC-20B)

Poles	Rated current In	Modules	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1	50	1.5	790228	E 91/50	2CSM279022R1801		0.095	4
1	50	1.5	372028	E 91/50s	2CSM237202R1801		0.095	4
1+N	50	3	779827	E 91N/50	2CSM277982R1801		0.19	2
1+N	50	3	023920	E 91N/50s	2CSM202392R1801		0.19	2
2	50	3	779728	E 92/50	2CSM277972R1801		0.19	2
2	50	3	070320	E 92/50s	2CSM207032R1801		0.19	2
3	50	4.5	779629	E 93/50	2CSM277962R1801		0.285	1
3	50	4.5	574828	E 93/50s	2CSM257482R1801		0.285	1
3+N	50	6	779520	E 93N/50	2CSM277952R1801		0.38	1
3+N	50	6	563020	E 93N/50s	2CSM256302R1801		0.38	1

E 90/125 fuse disconnectors for 22 x 58 mm fuses (AC-20B)

Poles	Rated current In	Modules	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1	100	2	775720	E 91/125	2CSM277572R1801		0.135	4
1	100	2	896326	E 91/125s	2CSM289632R1801		0.135	4
1+N	100	4	773528	E 91N/125	2CSM277352R1801		0.27	2
1+N	100	4	049425	E 91N/125s	2CSM204942R1801		0.27	2
2	100	4	771326	E 92/125	2CSM277132R1801		0.27	2
2	100	4	049326	E 92/125s	2CSM204932R1801		0.27	2
3	100	6	775027	E 93/125	2CSM277502R1801		0.405	1
3	100	6	049227	E 93/125s	2CSM204922R1801		0.405	1
3+N	100	8	965329	E 93N/125	2CSM296532R1801		0.54	1
3+N	100	8	049128	E 93N/125s	2CSM204912R1801		0.54	1

s: version with blown fuse indicator light

Protection and safety

E 90 CC fuseholders

E 91

E 93

Technical features

Type			E 90/30 CC
Rated voltage		[V]	600
Rated current		[A]	30
Type of current			AC/DC
Rated frequency		[Hz]	60
Fuse			class CC
Tightening torque		[Nm]	PZ2 2-2.5*
		[lb-in]	PZ2 18-22**
Terminals cross-section		[mm²]	25
Cross-section rigid copper conductors	1 wire		1.5-25 mm² (16-10 AWG)
	2 wires		5 mm² (10 AWG)
Cross-section stranded copper conductors	1 wire		1.5-16 mm² (16-3 AWG)
	2 wires		2-5 mm² (14-10 AWG)
Voltage range for LED indicator light (only s version)		[V]	24 - 1000 AC/DC
Can be sealed closed			■
Can be padlocked open			■

* PZ2 2.8 Nm in case of rigid copper conductors, 2 wires
** PZ2 24,5 lb-in in case of rigid copper conductors, 2 wires

The E 90 fuse carriers for Class CC cylindrical fuse links are specifically designed for the North American market in compliance with the UL standards. In accordance with the reference standards UL 4248-1 and UL 4248-4, they come in voltage and current ratings up to 600V and 30A. They are available in 1P, 1P+N, 2P, 3P, 3P+N and 4P versions. They can be padlocked open and sealed closed.
The E 90 fuse carriers are the ideal solution for process control and industrial systems, automation systems, industrial installations and control circuits. The versions with blown fuse indicator light provide a visual signal of the fuse break condition

E 90 for class CC cartridge fuses

Poles	Rated current	Modules	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In		EAN	Type code	Order code		kg	pc.
1	30	1	998723	E 91/30 CC	2CSM299872R1801		0.061	6
1	30	1	998822	E 91/30s CC	2CSM299882R1801		0.062	6
1+N	30	2	998921	E 91N/30 CC	2CSM299892R1801		0.13	3
1+N	30	2	999027	E 91N/30s CC	2CSM299902R1801		0.13	3
2	30	2	999126	E 92/30 CC	2CSM299912R1801		0.122	3
2	30	2	999225	E 92/30s CC	2CSM299922R1801		0.122	3
3	30	3	999324	E 93/30 CC	2CSM299932R1801		0.183	2
3	30	3	999423	E 93/30s CC	2CSM299942R1801		0.183	2
3+N	30	4	999522	E 93N/30 CC	2CSM299952R1801		0.252	1
3+N	30	4	999621	E 93N/30s CC	2CSM299962R1801		0.252	1
4	30	4	999720	E 94/30 CC	2CSM299972R1801		0.244	1
4	30	4	999829	E 94/30s CC	2CSM299982R1801		0.244	1

s: version with blown fuse indicator light

Protection and safety

E 90 J fuse fuseholders

E 90 Class J

Technical features

Type		E 90/30 J	E 90/60 J
Rated current	[A]	30	60
Rated voltage	[V]	600	
Type of current		AC/DC	
Fuse		Class J 1-30A	Class J 31-60A
Rated frequency	[Hz]	60	
Tightening torque	[Nm]	PZ2 3.5-4	
Terminals cross-section	[mm²]	50	
Cross-section rigid copper conductors	[AWG]	14-10	
Cross-section stranded copper conductors	[AWG]	14-8	
Can be sealed closed		n	
Can be padlocked open		n	

E 90 Class J

The E 90 Class J fuse carriers are the ideal solution for industrial systems, industrial installations and control circuits. They are specifically designed for the North American market in compliance with the UL standards. In accordance with the reference standard UL 4248-8, they come in voltage and current ratings up to 600V and 30/60A. They are available in 1P, 2P and 3P versions. The versions with blown fuse indicator light provide a visual signal of the fuse break condition. They can be padlocked open and sealed closed to ensure operator safety during maintenance operations.

E 90/30 fuse disconnectors for Class J fuses

Poles	Rated current	Modules	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In		EAN	Type code	Order code		kg	pc.
1	30	2	048220	E 91/30 J	2CSM204822R1801		0.135	4
2	30	4	048121	E 92/30 J	2CSM204812R1801		0.27	2
3	30	6	048022	E 93/30 J	2CSM204802R1801		0.405	1
1	30	2	047926	E 91/30s J	2CSM204792R1801		0.135	4
2	30	4	047827	E 92/30s J	2CSM204782R1801		0.27	2
3	30	6	047728	E 93/30s J	2CSM204772R1801		0.405	1

E 90/60 fuse disconnectors for Class J fuses

Poles	Rated current	Modules	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In		EAN	Type code	Order code		kg	pc.
1	60	2.5	047629	E 91/60 J	2CSM204762R1801		0.175	3
2	60	5	049821	E 92/60 J	2CSM204982R1801		0.35	1
3	60	7.5	049722	E 93/60 J	2CSM204972R1801		0.525	1
1	60	2.5	049623	E 91/60s J	2CSM204962R1801		0.175	3
2	60	5	049524	E 92/60s J	2CSM204952R1801		0.35	1
3	60	7.5	738824	E 93/60s J	2CSM273882R1801		0.525	1

s: version with blown fuse indicator light

Protection and safety

Cylindrical fuses E 9F gG

E 9F8

Technical features

Rated voltage	[V]	400, 500, 690 AC
Rated current	[A]	0.5…125
Breaking capacity	[kA]	20, 80, 120
Overall dimensions	[mm]	8.5x31.5 , 10.3x38 , 14x51 , 22x58
Weight	[g]	4, 7, 18, 48
Reference standards		IEC 60269-2; ROHS 2002/98/CE
Marks		LLOYD, BV

E 9F 8 gG cylindrical fuses 8.5 x 31.5 mm

Type	Rated current [A]	Rated voltage [V AC]	Breaking capacity [kA]
E 9F8 GG1	1	400	20
E 9F8 GG2	2	400	20
E 9F8 GG4	4	400	20
E 9F8 GG6	6	400	20
E 9F8 GG8	8	400	20
E 9F8 GG10	10	400	20
E 9F8 GG12	12	400	20
E 9F8 GG16	16	400	20
E 9F8 GG20	20	400	20

E 9F10

E 9F 10 gG cylindrical fuses 10.3 x 38 mm

Type	Rated current [A]	Rated voltage [V AC]	Breaking capacity [kA]
E 9F10 GG05	0.5	500	120
E 9F10 GG1	1	500	120
E 9F10 GG2	2	500	120
E 9F10 GG4	4	500	120
E 9F10 GG6	6	500	120
E 9F10 GG8	8	500	120
E 9F10 GG10	10	500	120
E 9F10 GG12	12	500	120
E 9F10 GG16	16	500	120
E 9F10 GG20	20	500	120
E 9F10 GG25	25	500	120
E 9F10 GG32	32	400	120

Protection and safety

Cylindrical fuses E 9F gG

E 9F14

E 9F22

E 9F 14 gG cylindrical fuses 14 x 51 mm

Type	Rated current [A]	Rated voltage [V AC]	Breaking capacity [kA]
E 9F14 GG2	2	690	120
E 9F14 GG4	4	690	120
E 9F14 GG6	6	690	120
E 9F14 GG8	8	690	120
E 9F14 GG10	10	690	120
E 9F14 GG12	12	690	120
E 9F14 GG16	16	690	120
E 9F14 GG20	20	690	120
E 9F14 GG25	25	690	120
E 9F14 GG32	32	500	120
E 9F14 GG40	40	500	120
E 9F14 GG50	50	400	120

E 9F 22 gG cylindrical fuses 22 x 58 mm

Type	Rated current [A]	Rated voltage [V AC]	Breaking capacity [kA]
E 9F22 GG4	4	690	120
E 9F22 GG6	6	690	120
E 9F22 GG8	8	690	120
E 9F22 GG10	10	690	120
E 9F22 GG12	12	690	120
E 9F22 GG16	16	690	120
E 9F22 GG20	20	690	120
E 9F22 GG25	25	690	120
E 9F22 GG32	32	690	120
E 9F22 GG40	40	690	120
E 9F22 GG50	50	690	120
E 9F22 GG63	63	690	120
E 9F22 GG80	80	690	120
E 9F22 GG100	100	500	120
E 9F22 GG125	125	500	120

E 9F gG cylindrical fuses

The E 9F gG cylindrical fuses, coupled with E 90 and E 90 50/125 fuse disconnectors, are the ideal solution for protection against overload and short-circuit. They feature a fast tripping curve that is ideal for protecting electronic devices, transformers and electric cables. The E 9F gG series is available for all the main sizes (8.5 x 31.5 mm, 10.3 x 38 mm, 14 x 51 mm e 22 x 58 mm) and with a wide range of rated current values (from 1 A to 125 A and up to 690 V AC). All the E 9F series fuses conform to the RoHS directive and are type-approved in accordance with the most important international naval marks.

E 9F 8 gG cylindrical fuses 8.5 x 31.5 mm

Rated current	Size	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
In	mm	EAN	Type code	Order code		kg	pc.
1	8.5x31.5	575733	E 9F8 GG1	2CSM257573R1801		0.004	10
2	8.5x31.5	563938	E 9F8 GG2	2CSM256393R1801		0.004	10
4	8.5x31.5	586630	E 9F8 GG4	2CSM258663R1801		0.004	10
6	8.5x31.5	574835	E 9F8 GG6	2CSM257483R1801		0.004	10
8	8.5x31.5	563037	E 9F8 GG8	2CSM256303R1801		0.004	10
10	8.5x31.5	775737	E 9F8 GG10	2CSM277573R1801		0.004	10
12	8.5x31.5	773535	E 9F8 GG12	2CSM277353R1801		0.004	10
16	8.5x31.5	771333	E 9F8 GG16	2CSM277133R1801		0.004	10
20	8.5x31.5	775034	E 9F8 GG20	2CSM277503R1801		0.004	10

E 9F 10 gG cylindrical fuses 10.3 x 38 mm

Rated current	Size	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
In	mm	EAN	Type code	Order code		kg	pc.
0.5	10.3x38	773337	E 9F10 GG05	2CSM277333R1801		0.007	10
1	10.3x38	771135	E 9F10 GG1	2CSM277113R1801		0.007	10
2	10.3x38	587231	E 9F10 GG2	2CSM258723R1801		0.007	10
4	10.3x38	575436	E 9F10 GG4	2CSM257543R1801		0.007	10
6	10.3x38	563631	E 9F10 GG6	2CSM256363R1801		0.007	10
8	10.3x38	586333	E 9F10 GG8	2CSM258633R1801		0.007	10
10	10.3x38	574538	E 9F10 GG10	2CSM257453R1801		0.007	10
12	10.3x38	562733	E 9F10 GG12	2CSM256273R1801		0.007	10
16	10.3x38	775430	E 9F10 GG16	2CSM277543R1801		0.007	10
20	10.3x38	773238	E 9F10 GG20	2CSM277323R1801		0.007	10
25	10.3x38	771036	E 9F10 GG25	2CSM277103R1801		0.007	10
32	10.3x38	587132	E 9F10 GG32	2CSM258713R1801		0.007	10

Protection and safety

Cylindrical fuses E 9F gG

E 9F 14 gG cylindrical fuses 14 x 51 mm

Rated current	Size	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
In	mm	EAN	Type code	Order code		kg	pc.
2	14x51	775232	E 9F14 GG2	2CSM277523R1801		0.018	10
4	14x51	773030	E 9F14 GG4	2CSM277303R1801		0.018	10
6	14x51	770831	E 9F14 GG6	2CSM277083R1801		0.018	10
8	14x51	910039	E 9F14 GG8	2CSM291003R1801		0.018	10
10	14x51	909835	E 9F14 GG10	2CSM290983R1801		0.018	10
12	14x51	909637	E 9F14 GG12	2CSM290963R1801		0.018	10
16	14x51	587835	E 9F14 GG16	2CSM258783R1801		0.018	10
20	14x51	576037	E 9F14 GG20	2CSM257603R1801		0.018	10
25	14x51	564232	E 9F14 GG25	2CSM256423R1801		0.018	10
32	14x51	586937	E 9F14 GG32	2CSM258693R1801		0.018	10
40	14x51	575139	E 9F14 GG40	2CSM257513R1801		0.018	10
50	14x51	563334	E 9F14 GG50	2CSM256333R1801		0.018	10

E 9F 22 gG cylindrical fuses 22 x 58 mm

Rated current	Size	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
In	mm	EAN	Type code	Order code		kg	pc.
4	22x58	571834	E 9F22 GG4	2CSM257183R1801		0.048	10
6	22x58	592839	E 9F22 GG6	2CSM259283R1801		0.048	10
8	22x58	581031	E 9F22 GG8	2CSM258103R1801		0.048	10
10	22x58	569237	E 9F22 GG10	2CSM256923R1801		0.048	10
12	22x58	594031	E 9F22 GG12	2CSM259403R1801		0.048	10
16	22x58	582236	E 9F22 GG16	2CSM258223R1801		0.048	10
20	22x58	570431	E 9F22 GG20	2CSM257043R1801		0.048	10
25	22x58	595335	E 9F22 GG25	2CSM259533R1801		0.048	10
32	22x58	583530	E 9F22 GG32	2CSM258353R1801		0.048	10
40	22x58	571735	E 9F22 GG40	2CSM257173R1801		0.048	10
50	22x58	593935	E 9F22 GG50	2CSM259393R1801		0.048	10
63	22x58	582137	E 9F22 GG63	2CSM258213R1801		0.048	10
80	22x58	570332	E 9F22 GG80	2CSM257033R1801		0.048	10
100	22x58	595236	E 9F22 GG100	2CSM259523R1801		0.048	10
125	22x58	583431	E 9F22 GG125	2CSM258343R1801		0.048	10

Protection and safety
Cylindrical fuses E 9F aM

E 9F8 aM

Technical features

Rated voltage	[V]	400, 500, 690 AC
Rated current	[A]	0.5...125
Breaking capacity	[kA]	20, 80, 120
Overall dimensions	[mm]	8.5x31.5, 10.3x38, 14x51, 22x58
Weight	[g]	4, 7, 18, 48
Reference standards		IEC 60269-2; ROHS 2002/98/CE
Marks		LLOYD, BV

E 9F8 aM cylindrical fuses 8.5 x 31.5 mm

Type	Rated current [A]	Rated voltage [V AC]	Breaking capacity [kA]
E 9F1 AM1	1	400	20
E 9F8 AM2	2	400	20
E 9F8 AM4	4	400	20
E 9F8 AM6	6	400	20
E 9F8 AM8	8	400	20
E 9F8 AM10	10	400	20

E 9F10 aM

E 9F10 aM cylindrical fuses 10.3 x 38 mm

Type	Rated current [A]	Rated voltage [V AC]	Breaking capacity [kA]
E 9F10 AM05	0.5	500	120
E 9F10 AM1	1	500	120
E 9F10 AM2	2	500	120
E 9F10 AM4	4	500	120
E 9F10 AM6	6	500	120
E 9F10 AM8	8	500	120
E 9F10 AM10	10	500	120
E 9F10 AM12	12	500	120
E 9F10 AM16	16	500	120
E 9F10 AM20	20	500	120
E 9F10 AM25	25	400	120
E 9F10 AM32	32	400	120

Protection and safety

Cylindrical fuses E 9F aM

E 9F14 aM

E 9F22 aM

E 9F14 aM cylindrical fuses 14 x 51 mm

Type	Rated current [A]	Rated voltage [V AC]	Breaking capacity [kA]
E 9F14 AM1	1	690	120
E 9F14 AM2	2	690	120
E 9F14 AM4	4	690	120
E 9F14 AM6	6	690	120
E 9F14 AM8	8	690	120
E 9F14 AM10	10	690	120
E 9F14 AM12	12	690	120
E 9F14 AM16	16	690	120
E 9F14 AM20	20	690	120
E 9F14 AM25	25	690	120
E 9F14 AM32	32	500	120
E 9F14 AM40	40	500	120
E 9F14 AM45	45	500	120
E 9F14 AM50	50	400	120

E 9F22 aM cylindrical fuses 22 x 58 mm

Type	Rated current [A]	Rated voltage [V AC]	Breaking capacity [kA]
E 9F22 AM6	6	690	120
E 9F22 AM8	8	690	120
E 9F22 AM10	10	690	120
E 9F22 AM12	12	690	120
E 9F22 AM16	16	690	120
E 9F22 AM20	20	690	120
E 9F22 AM25	25	690	120
E 9F22 AM32	32	690	120
E 9F22 AM40	40	690	120
E 9F22 AM50	50	690	120
E 9F22 AM63	63	690	120
E 9F22 AM80	80	690	120
E 9F22 AM100	100	500	120
E 9F22 AM125	125	500	120

E 9F aM cylindrical fuses

The E 9F aM cylindrical fuses, coupled with E 90 and E 90 50/125 fuse disconnectors, are the ideal solution for protection against overload and short-circuit. They feature a delayed tripping curve and are therefore ideal for protecting industrial motors that require high inrush current during the starting phase. The E 9F aM series is available for all the main sizes (8.5 x 31.5 mm, 10.3 x 38 mm, 14 x 51 mm e 22 x 58 mm) and with a wide range of rated current values (from 1 A to 125 A and up to 690 V AC). All the E 9F series fuses conform to the RoHS directive and are type-approved in accordance with the most important international naval marks.

E 9F 8 aM cylindrical fuses 8.5 x 31.5 mm

Rated current	Size	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
In	mm	EAN	Type code	Order code		kg	pc.
1	8.5x31.5	772835	E 9F8 AM1	2CSM277283R1801		0.004	10
2	8.5x31.5	770633	E 9F8 AM2	2CSM277063R1801		0.004	10
4	8.5x31.5	587439	E 9F8 AM4	2CSM258743R1801		0.004	10
6	8.5x31.5	575634	E 9F8 AM6	2CSM257563R1801		0.004	10
8	8.5x31.5	563839	E 9F8 AM8	2CSM256383R1801		0.004	10
10	8.5x31.5	586531	E 9F8 AM10	2CSM258653R1801		0.004	10

E 9F 10 aM cylindrical fuses 10.3 x 38 mm

Rated current	Size	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
In	mm	EAN	Type code	Order code		kg	pc.
0.5	10.3x38	574736	E 9F10 AM05	2CSM257473R1801		0.007	10
1	10.3x38	562931	E 9F10 AM1	2CSM256293R1801		0.007	10
2	10.3x38	775638	E 9F10 AM2	2CSM277563R1801		0.007	10
4	10.3x38	773436	E 9F10 AM4	2CSM277343R1801		0.007	10
6	10.3x38	771234	E 9F10 AM6	2CSM277123R1801		0.007	10
8	10.3x38	587330	E 9F10 AM8	2CSM258733R1801		0.007	10
10	10.3x38	575535	E 9F10 AM10	2CSM257553R1801		0.007	10
12	10.3x38	563730	E 9F10 AM12	2CSM256373R1801		0.007	10
16	10.3x38	586432	E 9F10 AM16	2CSM258643R1801		0.007	10
20	10.3x38	574637	E 9F10 AM20	2CSM257463R1801		0.007	10
25	10.3x38	562832	E 9F10 AM25	2CSM256283R1801		0.007	10
32	10.3x38	775539	E 9F10 AM32	2CSM277553R1801		0.007	10

Protection and safety

Cylindrical fuses E 9F aM

E 9F 14 aM cylindrical fuses 14 x 51 mm

Rated current	Size	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
In	mm	EAN	Type code	Order code		kg	pc.
1	14x51	575337	E 9F14 AM1	2CSM257533R1801		0.018	10
2	14x51	563532	E 9F14 AM2	2CSM256353R1801		0.018	10
4	14x51	586234	E 9F14 AM4	2CSM258623R1801		0.018	10
6	14x51	574439	E 9F14 AM6	2CSM257443R1801		0.018	10
8	14x51	562634	E 9F14 AM8	2CSM256263R1801		0.018	10
10	14x51	775331	E 9F14 AM10	2CSM277533R1801		0.018	10
12	14x51	773139	E 9F14 AM12	2CSM277313R1801		0.018	10
16	14x51	770930	E 9F14 AM16	2CSM277093R1801		0.018	10
20	14x51	587033	E 9F14 AM20	2CSM258703R1801		0.018	10
25	14x51	575238	E 9F14 AM25	2CSM257523R1801		0.018	10
32	14x51	563433	E 9F14 AM32	2CSM256343R1801		0.018	10
40	14x51	586135	E 9F14 AM40	2CSM258613R1801		0.018	10
45	14x51	574330	E 9F14 AM45	2CSM257433R1801		0.018	10
50	14x51	562535	E 9F14 AM50	2CSM256253R1801		0.018	10

E 9F 22 aM cylindrical fuses 22 x 58 mm

Rated current	Size	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
In	mm	EAN	Type code	Order code		kg	pc.
6	22x58	586036	E 9F22 AM6	2CSM258603R1801		0.048	10
8	22x58	574231	E 9F22 AM8	2CSM257423R1801		0.048	10
10	22x58	562436	E 9F22 AM10	2CSM256243R1801		0.048	10
12	22x58	775133	E 9F22 AM12	2CSM277513R1801		0.048	10
16	22x58	772934	E 9F22 AM16	2CSM277293R1801		0.048	10
20	22x58	770732	E 9F22 AM20	2CSM277073R1801		0.048	10
25	22x58	774938	E 9F22 AM25	2CSM277493R1801		0.048	10
32	22x58	772736	E 9F22 AM32	2CSM277273R1801		0.048	10
40	22x58	770534	E 9F22 AM40	2CSM277053R1801		0.048	10
50	22x58	594130	E 9F22 AM50	2CSM259413R1801		0.048	10
63	22x58	582335	E 9F22 AM63	2CSM258233R1801		0.048	10
80	22x58	570530	E 9F22 AM80	2CSM257053R1801		0.048	10
100	22x58	595434	E 9F22 AM100	2CSM259543R1801		0.048	10
125	22x58	583639	E 9F22 AM125	2CSM258363R1801		0.048	10

Protection and safety
Cylindrical fuses E 9F gPV

E 9F PV

Type		E9F PV	E9F PV 1500
Reference standards	-	IEC 60269-6; ROHS 2002/98/CE, UL	IEC 60269-6; ROHS 2002/98/CE, UL
Rated current	[A]	1...30	4...32
Rated operational voltage	[V]	1000 DC	1500 DC
Breaking capacity	[kA]	10	50
Overall dimensions	[mm]	10.3 x 38	10 x 85

E 9F PV cylindrical fuses for photovoltaic applications

The E9F PV series of cylindrical fuses has been specifically designed for protecting direct current circuits up to 1500 V DC. Those fuses are the best way to protect the strings, inverters and surge arresters in photovoltaic installations.

The range of E9F PV fuses is available in the 10.3 x 38 mm size for up to 30 A rated current values at a nominal voltage of 1000 V DC or in the 10x85 mm size up to 32 A rated current at a nominal voltage of 1500 V DC.

E 9F PV cylindrical fuses 10.3 x 38 mm

Rated current	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
In	EAN	Type code	Order code		kg	pc.
1 A	134568	E 9F1 PV	2CSM213456R1801		0.007	10
2 A	134667	E 9F2 PV	2CSM213466R1801		0.007	10
3 A	134766	E 9F3 PV	2CSM213476R1801		0.007	10
4 A	134865	E 9F4 PV	2CSM213486R1801		0.007	10
5 A	134964	E 9F5 PV	2CSM213496R1801		0.007	10
6 A	135060	E 9F6 PV	2CSM213506R1801		0.007	10
7 A	135169	E 9F7 PV	2CSM213516R1801		0.007	10
8 A	135268	E 9F8 PV	2CSM213526R1801		0.007	10
10 A	135367	E 9F10 PV	2CSM213536R1801		0.007	10
12 A	135466	E 9F12 PV	2CSM213546R1801		0.007	10
15 A	135565	E 9F15 PV	2CSM213556R1801		0.007	10
20 A	135664	E 9F20 PV	2CSM213566R1801		0.007	10
25 A	135763	E 9F25 PV	2CSM213576R1801		0.007	10
30 A	135862	E 9F30 PV	2CSM213586R1801		0.007	10

E9F PV cylindrical fuses 10 x 85 mm

Rated current		Order details		Price 1 piece	Weight 1 piece	Pack unit
In	EAN	Type code	Order code		kg	pc.
4 A	8012542339410	E9F4 PV1500	2CSM233941R1801		0.010	5
5 A	8012542052852	E9F5 PV1500	2CSM205285R1801		0.010	5
6 A	8012542052951	E9F6 PV1500	2CSM205295R1801		0.010	5
7 A	8012542053057	E9F7 PV1500	2CSM205305R1801		0.010	5
8 A	8012542053156	E9F8 PV1500	2CSM205315R1801		0.010	5
10 A	8012542053255	E9F10 PV1500	2CSM205325R1801		0.010	5
12 A	8012542053354	E9F12 PV1500	2CSM205335R1801		0.010	5
15 A	8012542053453	E9F15 PV1500	2CSM205345R1801		0.010	5
20 A	8012542068754	E9F20 PV1500	2CSM206875R1801		0.010	5
25 A	8012542068952	E9F25 PV1500	2CSM206895R1801		0.010	5
30 A	8012542069058	E9F30 PV1500	2CSM206925R1801		0.010	5
32 A	8012542069256	E9F32 PV1500	2CSM206925R1801		0.010	5

Protection and safety

ILTS-E D0 Fuse-switch-disconnectors

ILTS-E1

ILTS-E1

ILTS-E3

ILTS-E/H11

ILTS-E/RE

Technical data

Reference standards	DIN VDE 0638, EN 60947-3, EN 660269-3-1
Approval	VDE
No. of poles	1, 2, 3 pole and 3 pole+N
Rated voltage	400 V AC, per pole 65 V DC (2 pole 130 V DC)
Operating current In	acc. to fuse link D0 2-63 A
Rated frequency	50/60 Hz
Rated short circuit capacity	50 kA for AC (8 kA for DC)
Power loss	5.5 W/pole
Utilization category	AC 22 B: 400 V AC 63 A according to IEC/EN 60947-3 (all versions)
	DC 22 B: 65 V DC 63 A according to IEC/EN 60947-3 (1 pole)
	DC 22 B: 130 V DC 63 A according to IEC/EN 60947-3 (2 pole)
Leakage current resistance	CTI 200
Ambient temperature	– 5 °C up to + 40 °C
Casing material	thermoplast; halogen-, phosphor-, silicone- and CFC-free
Fire classification	UL 94 (self-extinguishing)
Shock protection	according to DIN EN 50 274 (DIN VDE 0660 Part 514) BGV A3
Connection capacity	1.5 – 35 mm2 finely stranded, directly clamped or with connector sleeve Twin-function terminal for simultaneous connection of two conductors (35 mm2 and 16 mm²) or conductor and busbar
Pick-up torque	2.5 – 3 Nm
Auxiliary switch indicating contact position	
Contacts	1 NO contact + 1 NC contact
Contact rating	AC 13: 2 A/400 V, 6 A/230 V DC 13: 1 A/220 V, 6 A/24 V

Switch-disconnector ILTS-E for D0 2-63 A fuse links “Drawer technology”

User-friendly fuse-switch-disconnector in “drawer technology”:

- Snap action
- Fuse can be replaced only if the system is de-energized.
- Captive fuse carrier
- For D02 fuse links, D01 fuse link with reducing piece
- Twin box terminal on both sides
- User-friendly installation of cross-wiring in lower terminal
- Auxiliary switch to indicate switching position

Fuse-switch-disconnector

Poles	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
1	65347 3	ILTS-E1	2CDE101001R1901		0.210	3
2	65348 0	ILTS-E2	2CDE102001R1901		0.420	2
3	65349 7	ILTS-E3	2CDE103001R1901		0.630	1
3+N*	65350 3	ILTS-E3+N	2CDE103101R1901		0.790	1
Reducing piece	65407 4	ILTS-E/RE	2CDE000011R1901		0.001	20
Auxiliary switch 1NO/1NC	65671 9	LTS-E/H11	2CDE000012R1901		0.050	1

* N conductor leading make contact, late closing

Protection and safety

ISS D0 Fuse carriers

ISS 16/1

ISS 63/1

ISS 16/3

ISS 63/3

Technical features

Size	D01	D02
Current type	AC (50 Hz)/DC	AC (50 Hz)/DC
Rated voltage	400 V AC/250 V DC	400 V AC/250 V DC
Rated current	16 A	63 A
Rated short-circuit current	50 kA (AC) 8 kA (DC)	50 kA (AC) 8 kA (DC)
For fuse links with losses per phase up to	2.5 W	5.5 W

D0 fuse carrier ISS with integrated red cover

D0 fuse base for NEOZED fuse links D01/D02. Touch-protection according to BGV A3.
Twin box terminal on both sides for connection of two different conductor cross-sections or conductors and busbars.
Conductor cross-sections incoming and outing 1.5 – 35 mm², stranded. With integrated terminal cover. A separate cover for distribution board installation is not required.

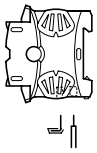
- IEC 60269-3/VDE 0636-3
- 1/3-pole
- Fuse links, connector sleeves VDE 0636-3
- Snap clip device for rail mounting to EN 60715
- Twin function terminal
- Connection cross-section 1.5 – 35 mm²
- Tightening torque 2.5 – 3 Nm

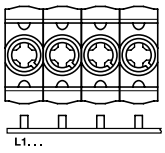
D0 fuse carrier

Poles	Screw cover/fuse	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
		EAN	Type code	Order code		kg	pc.
1	E14 D01	65579 8	ISS 16/1	2CDE111001R1902		0.08	9
1	E18 D02	65581 1	ISS 63/1	2CDE161001R1902		0.08	9
3	E14 D01	65580 4	ISS 16/3	2CDE113001R1902		0.24	9
3	E18 D02	65582 8	ISS 63/3	2CDE163001R1902		0.24	9

Protection and safety

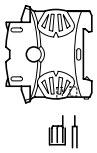
Busbars and accessories for ILTS-E and ISS

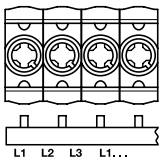

ISS, 1pole



2CDC 062 151 F0008

PS 1/39/16 ILTS-E
PS 1/39/30 ILTS-E


ISS, 3pole



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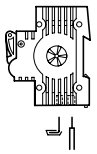
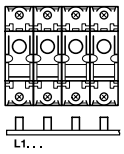
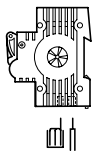
PS 3/39/16 ILTS-E
PS 3/39/30 ILTS-E

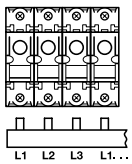

ILTS-E, 1pole



2CDC 062 149 F0008

PS 1/39/16 ILTS-E
PS 1/39/30 ILTS-E


ILTS-E, 3pole



2CDC 062 150 F0008

PS 3/39/16 ILTS-E
PS 3/39/30 ILTS-E

Fuse links
D 01
2-16 A

S0223B91

D 02
20-63 A

SK 0070 Z 01

SK 0069 Z 01

D0 screw caps

Busbars for fuse-switch-disconnector ILTS-E and fuse carrier ISS: 1pole or 3pole
End caps:
PS 1/39/16 ILTS-E: END 1.1
PS 1/39/30 ILTS-E: PS-END 3.2
PS 3/39/16 ILTS-E: PS-END
PS 3/39/30 ILTS-E: PS-END 3

Busbars

Cross-section	Length	No. of poles	Cu factor	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²	mm			EAN	Type code	Order code		kg	pc.
16	1040	39 x 1	0.43	66956 6 (1)	PS 1/39/16 ILTS-E	2CDL010101R1639	15	0.23	10
30	1040	39 x 1	0.74	66957 3 (1)	PS 1/39/30 ILTS-E*	2CDL010101R3039	15	0.487	5
16	1040	39 x 3	1.3	66958 0 (1)	PS 3/39/16 ILTS-E	2CDL030101R1639	15	0.59	10
30	1040	39 x 3	1.95	66959 7 (1)	PS 3/39/30 ILTS-E*	2CDL030101R3039	15	1.222	5

(1) bbn-Nr. 40 16779 * Not compatible with ISS

End caps

Cross-section	Length	No. of poles	Cu factor	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm²	mm			EAN	Type code	Order code		kg	pc.
		1		63891 3	END 1.1	2CDL200011R0011	15	0.001	50
		2/3		51472 9	PS-END	2CDL200001R0001	15	0.001	50
		2/3		65430 2	PS-END 3	2CDL200001R3001	15	0.001	50
		1		66960 3	PS-END 3.2	2CDL200001R3003	15	0.001	50

D0 fuses and accessories

D0 fuse links to DIN VDE 0636-3, IEC/EN 60269-3 suitable for D01/E14

Rated current	Colour code	Power loss	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
A		W	EAN	Type code	Order code		kg	pc.
2	pink	1.5	60480 7	D01 x 2 gG	GMN977120P0011	13	0.006	10
4	brown	1.5	60490 6	D01 x 4 gG	GMN977120P0012	13	0.006	
6	green	1.5	60500 2	D01 x 6 gG	GMN977120P0013	13	0.006	
10	red	1.8	60510 1	D01 x 10 gG	GMN977120P0014	13	0.006	
16	grey	2.1	60520 0	D01 x 16 gG	GMN977120P0015	13	0.006	

Suitable for D02/E18

Rated current	Colour code	Power loss	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
A		W	EAN	Type code	Order code		kg	pc.
20	blue	2.3	60530 9	D02 x 20 gG	GMN977120P0017	13	0.011	10
25	yellow	2.6	60540 8	D02 x 25 gG	GMN977120P0018	13	0.012	
35	black	2.9	60550 7	D02 x 35 gG	GMN977120P0019	13	0.013	
50	white	3.5	60560 6	D02 x 50 gG	GMN977120P0020	13	0.014	
63	copper	4.2	60570 5	D02 x 63 gG	GMN977120P0021	13	0.015	

Connector sleeves
D 01 **D 02**
2-10 A **2-50 A**

FD 1713

D0 screw caps acc. to DIN VDE 0636-3, IEC/EN 60269-3, 400 V AC
Plastic version, RAL 7037

Rated current	Colour code	Power loss	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
A		W	EAN	Type code	Order code		kg	pc.
16	for D01	–	60790 7	D01 DIN 49 525 K	GMN977130P0011	13	0.015	20
63	for D02	–	60800 3	D02 DIN 49 525 K	GMN977130P0012	13	0.015	20

D0 connector sleeves to DIN VDE 0636-3, IEC/EN 60269-3
Suitable for D01/E14

Rated current	Colour code	Power loss	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
A		W	EAN	Type code	Order code		kg	pc.
2	pink	–	60600 9	D01 x 2	GMN977125P0001	13	0.001	50
4	brown		60610 8	D01 x 4	GMN977125P0002	13	0.001	
6	green		60620 7	D01 x 6	GMN977125P0003	13	0.001	
10	red		60630 6	D01 x 10	GMN977125P0004	13	0.001	

Suitable for D02/E18

Rated current	Colour code	Power loss	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
A		W	EAN	Type code	Order code		kg	pc.
2	pink	–	60640 5	D02 x 2	GMN977125P0011	13	0.001	50
4	brown		60650 4	D02 x 4	GMN977125P0012	13	0.001	
6	green		60660 3	D02 x 6	GMN977125P0013	13	0.001	
10	red		60670 2	D02 x 10	GMN977125P0014	13	0.001	
16	grey		60680 1	D02 x 16	GMN977125P0015	13	0.001	
20	blue		60690 0	D02 x 20	GMN977125P0016	13	0.001	
25	yellow		60700 6	D02 x 25	GMN977125P0017	13	0.001	
35	black		60710 5	D02 x 35	GMN977125P0018	13	0.001	
50	white		60720 4	D02 x 50	GMN977125P0019	13	0.001	

Spring clip for use of D01 fuses in D02 screw caps

Rated current	Colour code	Power loss	Bbn 4012233	Order details		Price 1 piece	Weight 1 piece	Pack unit
A		W	EAN	Type code	Order code		kg	pc.
			15120 7	FD 1713	GMN977130P0004	13	0.001	50

Protection and safety

Electronic Protection Devices for use behind 24 V DC Switch Mode Power Supplies

EPD

Operating data

Operating voltage UB	24 V DC (18...32 V)		
Current rating IN	fixed current ratings: 0.5, 1, 2, 3, 4, 6, 8, 10, 12 A		
Closed current I0	ON condition: typically 20...30 mA depending on signal output		
Staus indication by means of	multico-lour LED	Green	- unit is ON (S1 = ON)
			- load circuit/Power-is switched on MOSFET
		Orange	- in the event of overload or short circuit until electronic disconnection
		Red	- unit electronically disconnected
			- load circuit/Power-MOSFET OFF
			- undervoltage (UB < 8 V)
			- after switch-on till the end of the delay period
		OFF	- manually switched off (S1 = OFF) or device is dead
	potential-free auxiliary contact F		
	ON/OFF/condition of switch S1		

Load circuit

Load output	Power-MOSFET switching output (high slide switch)
Overload disconnection	typically 1.1 x IN (1.05...1.35 x IN)
Short-circuit current IK	active current limitation (see table 1)
Trip time	see time/current characteristics
For electronic disconnection	typically 3 s at ILoad > 1.1 x IN typically 100 ms...3 s at ILoad > 1.8 x IN (or 1.5 x IN/1.3 x IN,)
Temperature disconnection	internal temperature monitoring with electronic disconnection
Low voltage monitoring load output	with hysteresis, no reset required: load »OFF« at UB< 8 V
Starting delay tStart	typically 0.5 sec after every switch-on and after applying US
Disconnection of load circuit	electronic disconnection
Free-wheeling circuit	suitable external free-wheeling circuit to be used with inductive load
Several load outputs must not be connected in parallel	

Signal output F

Electrical data	potential-free auxiliary contact max. 30 V DC/0.5 A, min. 10 V DC/10 mA
ON condition LED green	voltage UB applied, switch S1 is in ON position no overload, no short circuit
OFF condition LED off	device switched off (switch S1 is in OFF position)
	no voltage UB applied
Fault condition LED orange	overload condition > 1.1 x IN up to electronic disconnection
Aux. contact	single signal, make contact
	contact open, terminal 13-14
Fault	signal output fault conditions
	- no operating voltage UB
	- ON/OFF switch S1 is in OFF position
	- red LED lighted (electronic discon nection)

General data

Fail-Safe element	backup fuse for EPD24 not required
	because of the integral redundant fail-safe element
Housing material	moulded
Mounting	symmetrical rail to EN 50022-35x7.5
Ambient temperature	0...+50 °C (without condensation, see EN 60204-1)
Storage temperature	-20...+70 °C
Humidity	96 hrs/95 % RH/40 °C to IEC 60068-2-78, test Cab. climate class 3K3 to EN 60721
Vibration	3 g, test to IEC 60068-2-6 test Fc
Protection degree	housing: IP20 DIN 40050
	terminals: IP20 DIN 40050
EMC (EMC directive, CE logo)	emission: EN 61000-6-3
	susceptibility: EN 61000-6-2
Isolations coordination (IEC 60934)	0.5 kV/pollution degree 2 reinforced insulation in operating area
Dielectric strength	max. 32 V DC (load circuit)
Isolation resistance (OFF condition)	n/a, only electronic disconnection
Approvals/Declarations of conformity	UL 2367 Solid State Overcurrent Protectors
	UL 1604, (class I, division 2, groups A, B, C, D)
	UL 508
	CSA C22.2 No. 213 (class I, division 2)
	CSA C22.2 No. 142
	CSA C22.2 No. 14
	CE logo
Dimensions (B x H x T)	12.5 x 80 x 83 mm
Weight	approx. 65 g

Terminals Line+/LOAD+/0V

Screw terminals	M4
Max. cable cross section flexible with wire end ferrule w/wo plastic sleeve	0.5 – 10 mm^2
Multi-lead connection (2 identical cables) rigid/flexible	0.5 – 4 mm^2
Flexible with wire end ferrule without plastic sleeve	0.5 – 2.5 mm^2
Flexible with TWIN wire end ferrule with plastic sleeve	0.5 – 6 mm^2
Wire stripping length	10 mm
Tightening torque (EN 60934)	1.5 – 1.8 Nm

Terminals aux. contacts

Screw terminals	M3
Max. cable cross section flexible with wire end ferrule w/wo plastic sleeve	0.25 - 2.5 mm^2
Wire stripping length	8 mm
Tightening torque (EN 60934)	0.5 Nm

Protection and safety

Electronic Protection Devices for use behind 24 V DC Switch Mode Power Supplies

EPD24

The protection devices EPD24 extend the ABB product range of modular DIN rail components by electronic overcurrent protection modules for selective protection of 24V DC load circuits.
This protection is achieved by a combination of active electronic current limitation in the case of a short circuit and an overload deactivation from 1.1 x In upwards.
If a fault occurs in a load circuit, the protection device EPD24 will detect this rapidly and reliably, disable the power output transistor and hence interrupt the current flow in the defective circuit. The maximum possible overcurrent is always limited to 1.5…1.8 times the selected rated current. An activation of capacitive loads up to 20.000 µF is possible, deactivation only occurring in the case of overloads or short circuits. Selective deactivation of the defective current circuit means undefined error states and a complete system stop are prevented.

Features

- Selective load protection, one electronic trip characteristics.
- Active current limitation for safe connection of capacitive loads up to 20.000 µF and on overload/short circuit.
- Current ratings 0.5 A...12 A.
- Reliable overload disconnection with 1.1 x IN
- Manual ON/OFF button
- Clear status and failure indication through LED and auxiliary contact.
- Integral fail-safe element adjusted to current rating.
- Width per unit only 12.5 mm.
- Rail mounting
- Ease of wiring through busbar LINE+ and 0 V as well as signal bars.
- UL- and CSA-approvals allow international use of the devices.

Rated current In	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
A	EAN	Type code	Order code		kg	pc.
0.5	829960	EPD24-TB-101-0.5A	2CDE601101R2905		0.065	4
1	829984	EPD24-TB-101-1A	2CDE601101R2001		0.065	4
2	830003	EPD24-TB-101-2A	2CDE601101R2002		0.065	4
3	830027	EPD24-TB-101-3A	2CDE601101R2003		0.065	4
4	830041	EPD24-TB-101-4A	2CDE601101R2004		0.065	4
6	830065	EPD24-TB-101-6A	2CDE601101R2006		0.065	4
8	830089	EPD24-TB-101-8A	2CDE601101R2008		0.065	4
10	830102	EPD24-TB-101-10A	2CDE601101R2010		0.065	4
12	830126	EPD24-TB-101-12A	2CDE601101R2012		0.065	4

Accessories

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Busbars for LINE+ and 0 V, grey insulation, length 500 mm [1)]	830140	EPD-BB500	2CDE605100R0500		0.20	10
Signal Bars for aux. contacts, grey insulation, length 21 mm	830164	EPD-SB21	2CDE605200R0021		0.04	10

1) Max. load with one line entry Imax = 50 A (recommended: center-feeding)
Max. load with two line entries Imax = 63 A

Protection and safety

SQZ3 phase and sequence relay

SQZ3

Technical features

Supply voltage	[Vn]	400 V AC
Frequency	[Hz]	50/60
Contact type	[A]	1 CO, 250 V, 10 A (cosφ=1) safety switching
Minimum voltage adjustment trimmer	[%]	100 to 70 % of Vn
Intervention delay adjustment trimmer	[s]	2 to 20 (only for min. voltage)
Protection degree	[IP]	20
Operating temperature	[°C]	-10...+55
Power consumption	[W]	1.5
Modules	[n°]	3

SQZ3 phase and sequence relay

SQZ3 relay performs the following continue monitoring functions on three-phase networks at 400 V AC:

- phase sequence
- phase failure
- minimum voltage (adjustable up to 70 % of Vn).

If one of the three failures is detected, the output relay (safety switching contact) intervenes with a delay adjustable from 2 to 20 seconds for minimum voltage only and controls the following:

- acoustic alarms
- motor controlling contactors
- circuit-breakers with coils.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	372004	SQZ3	2CSM111310R1331		0.300	1

Protection and safety

RH/RL maximum and minimum current/voltage relays

RH/RL

Technical characteristics

Rated voltage Un	[V]	230 AC
Contact type		1 CO, 250 V, 16 A
Rated frequency	[Hz]	50/60
Current relay alarm thresholds	[A]	2, 5, 10
Voltage relay alarm thresholds	[V]	100, 300, 500
Adj. calibration of In and Vn %	[%]	30...100
Adjustable hysteresis value	[%]	1...45
Time delay	[s]	1...30
Power consumption	[W]	2
Modules	[n°]	3
Control relay alarm indication		red LED on = alarm
Power supply lighting indication		green LED on = ON
Alarm indication		blinking green LED = alarm

Maximum and minimum current/voltage relays

These relays are used for monitoring current and voltage on single-phase electrical networks, to ensure perfect protection of the devices installed on the system.
The range includes:

- maximum current (RHI) and maximum voltage (RHV) relays. The control relay remains on as long as the measured quantity stays below the preset threshold value.
- minimum current (RLI) and minimum voltage (RLV) relays. The control relay remains on as long as the measured quantity stays above a preset threshold value.

Both types of relays have trimmers for adjusting the switch-off delay and the hysteresis (from 1 to 45 %).
The 100 V and 5 A relay inputs allow indirect connection of external CTs and VTs for monitoring voltage and current values exceeding the maximum device scale

Type	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
maximum current relay	334309	RHI	2CSM121310R1321		0.300	1
maximum voltage relay	334101	RHV	2CSM111310R1321		0.300	1
minimum current relay	334200	RLI	2CSM122310R1321		0.300	1
minimum voltage relay	334002	RLV	2CSM112310R1321		0.300	1

Protection and safety

E 236 undervoltage monitoring relays

E 236-US 1

E 236-US 2

Technical features

		US 1 US 2
Rated voltage		250 V AC
Rated frequency		48-63 Hz
Measuring range:	supply voltage	3N 400/230 V AC (terminals N-L1-L2-L3)
	overload capacity	3N 459/265 V AC
Switching capacity		device in series (distance < 5 mm): 750 VA (3 A/250 V AC);
		device not in series (distance > 5 mm): 1250 VA (5 A/250 V AC)
Rated insulation voltage		250 V AC (corresponds with IEC 664-1)
Rated surge voltage		4 kV
Tripping delay		ca. 100 ms
Clearence and creepage distance		> 6 mm (between contact and electronics)
Mechanical service life		20 x 106 operations
Electrical service life at 10000 VA		2 x 105 operations
Max. switching rate		max. 6/min (1000 VA Ohmic load);
		max. 60/min (100 VA Ohmic load)
Ambient temperature		-25 °C/-13 °F to +55 °C/131 °F
Overvoltage category		III
Accuracy in non-changing environment:	setting tolerance (US 2)	≤ 5 %
	repeat accuracy	±1 %
	temperature effect	≤ 0.1 %/°C
Max terminals cross-section		4 mm^2
Specifications		VDE 0110 and VDE 0435
EMC tests		EM 50081-1 and EN 50082-2
Displays		LED green= supply voltage applied; LED yellow= relay status
Power loss		1.7 W

E 236 undervoltage monitoring relays

Function

The green LED is lit when the supply voltage is applied. If each phase voltage exceeds 195 V (US1) or exceeds the preset threshold value (US2) with respect to the neutral including the hysteresis when switching the device on, the relay switches immediately into the working position. The yellow LED is lit. If at least one phase voltage falls below the threshold value, the relay goes back into its normal position and the yellow LED goes out.
If also phase 2 fails, the green LED goes out, too.
It is indispensable to connect the neutral conductor!

Application - devices with 2CO contacts

For the control of three-phase undervoltage (each phase to neutral) of switchgear, also for installations according to DIN VDE 0100-718 (power installations in hospitals and rooms used for medical purposes outside of hospitals) and DIN VDE 0108-100 (power installations and safety supply in buildings where many people gather).
US 1: 3 phases to neutral with fixed threshold at 195 V; hysteresis fixed 5 %
US 2: 3 phases to neutral with fixed threshold at 160 – 240 V; hysteresis fixed 5 %

Contact	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
2CO	511087	E 236-US 1	2CDE165000R2001		0.095	5
2CO	511094	E 236-US 2	2CDE165010R2001		0.095	5

Protection and safety

E 236 undervoltage monitoring relays

E 236

Technical features

		US 1.1 US 2.1 US 1.1D
Supply circuit		
Supply voltage (= measured voltage)		3N~ 400/230 V AC (terminals N-C1-C2-C3)
Overvoltage permanent		3N~ 459/265 V AC
Rated frequency		48 – 63 Hz (AC sinus)
Rated surge voltage:		4 kV
Overvoltage category		III
Output circuit (isolated two-way-switch)		
Rated voltage		250 V AC
Switiching capacity		1250 VA (5 A/250 V AC)
Continuous current		1250 VA (5 A/250 V AC)
Fuse protection		5 A flink
Serviceable life, mechanical		15x106 switchover cycles
Serviceable life, electric		2x105 switchover cycles at 1.000 VA resistive load
Max. switching rate		max. 6/min at 1.000 VA resistive load
		max. 60/min at 100 VA resistive load
Trip delay		ca. 200 ms
Pick-up delay (US 1.1D)		0.1 – 10 min
Accuracy under constant conditions – setting accuracy (US 2.1/1.1D) – repeat accuracy – temperature effect		≤ 5 % of full scale value ≤ 2 % ≤ 1 %
Ambient temperature		– 25° to + 55 °C
Terminals		1 x 0.5 to 2.5 mm² with/without connector sleeve
		1 x 4 mm² without connector sleeve
		2 x 0.5 to 1.5 mm² with/without connector sleeve
		2 x 2.5 mm² without connector sleeve
Pick-up torque		max. 1 Nm
Mounting position		optional
Vibration resistance		10 to 55 Hz 0.35 mm (IEC 68-2-6)
Shock resistance		15 g 11 ms (IEC 68-2-27)
Reference standards		VDE 0110 und VDE 0435
EMC tests		EN 61000-6-2 and EN 61000-6-4
Back-up fuse		≤ 16 A
Displays	green LED U/t ON	all 3 voltages ok
	green LED U/t flashes	time-out indication
	yellow LED ON/OFF	position of output relay

All measured inputs have to be connected to one phase each. If no three-phase measurement should be carried out, measured inputs have to be connected to one phase to apply the required voltage to all measured inputs. If a load causes inverse voltage exceeding the threshold value Us, phase failures cannot be identified.
A neutral conductor must be connected in any case!

E236-US1.1

E236-US2.1

E236-US1.1D

Devices for panel installation onto mounting rails (35 mm) according to DIN EN 60715
mounting depth: 68 mm
mounting width: 17.5 mm = 1 module
color: gray, RAL 7035

Application - devices with 1CO contact

For three-phase undervoltage monitoring (each phase connected to a neutral conductor) of switchgear. Devices with fixed threshold value (US 1.x and US 1.1 D) also for installations according to
DIN VDE 0100-718 (for medical purposes) and DIN VDE 0108-100 (power installations and safety supply in installations for gathering of people).

US 1.1: 3 phases to neutral conductor with fixed threshold value at 195 V; hysteresis fixed at 5 %

US 2.1: 3 phases to neutral conductor with threshold value range of 160 – 240 V; hysteresis fixed at 5 %

US 1.1D: 3 phases to neutral conductor with fixed threshold value at 195 V; hysteresis fixed at 5 %, but with switch-on delay of 0.1 (6 sec.) to 10 min

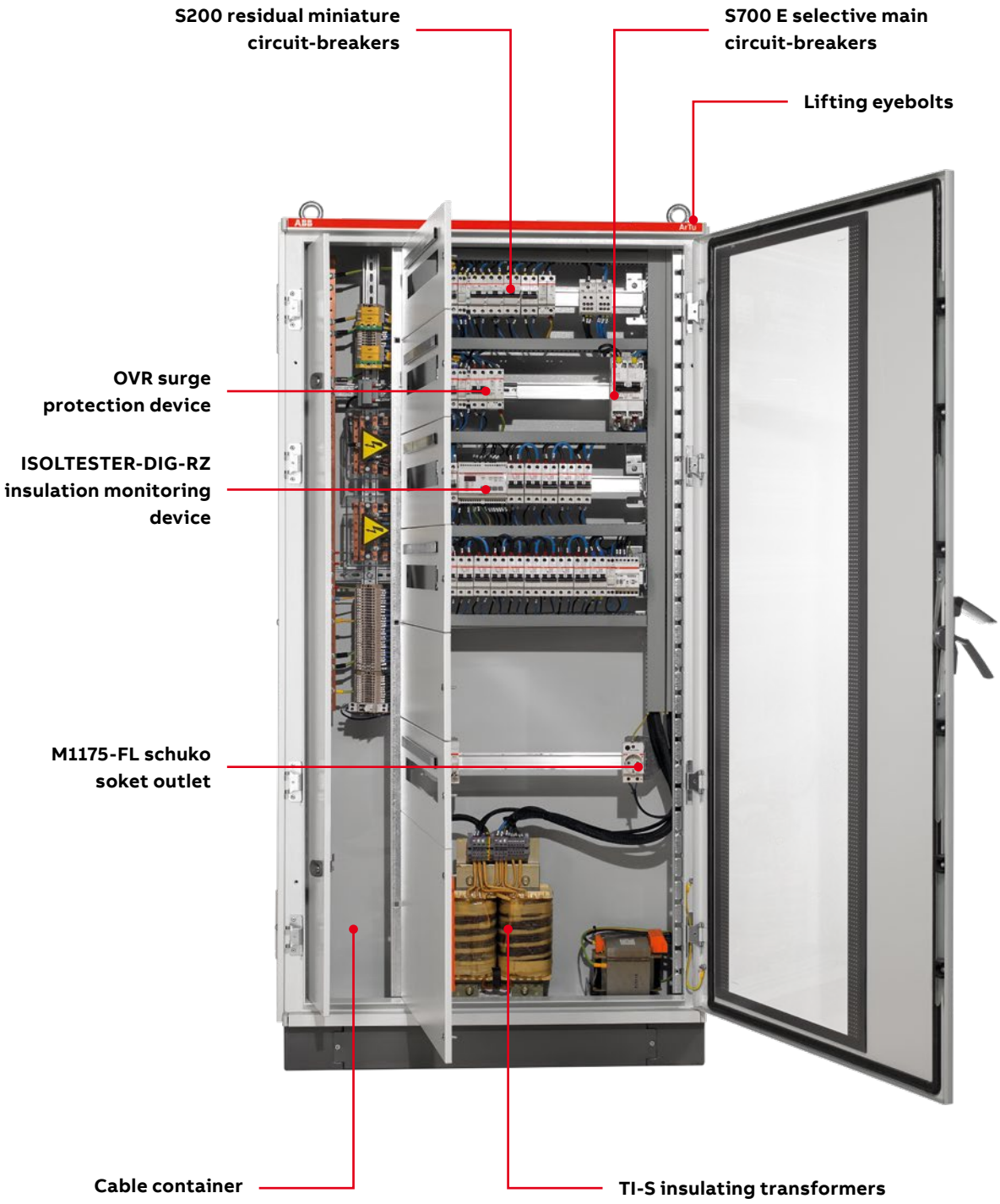
Undervoltage monitoring device with pick-up delay E236-US 1.1D

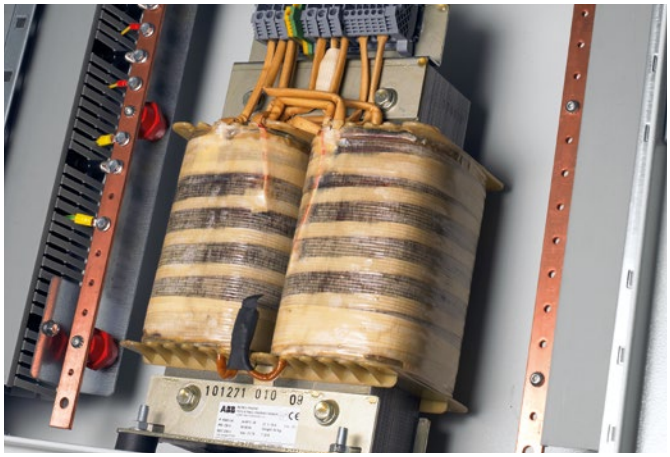
If the measurement of the voltage of all phases connected exceeds the switching threshold U_s, including the hysteresis, the time delay (t) starts to run and the (green LED U/t) flashes. Upon expiry of the time delay (t), the output relay R picks up (yellow LED on, green LED U/t flashes). If the measured voltage of one of the connected phases falls below the switching threshold U_s, the output relay de-energizes (yellow LED is off, green LED U/t is off).

Contact	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
1 two-way switch	651776	E 236-US 1.1	2CDE165001R2001		0.05	10
1 two-way switch	651783	E 236-US 2.1	2CDE165011R2001		0.05	10
1 two-way switch	651790	E 236-US 1.1D	2CDE165001R2011		0.05	10

H+ Line. Operational continuity

A wide range which ensure safety and reliability in hospital segment





Specifically designed and assembled for medical use according to the IEC EN 61558-2-15, it ensures protection against indirect contacts without the need to interrupt the circuit automatically upon the first grounding fault.
Thanks to its two PT100 temperature probes, on primary and secondary winding, it is possible to monitor the transformer over temperature produced by any eventual overload, and therefore anticipating any breakdown.
The transformer is mounted on the base of the switchboard in order to ease handling and installation operations.

Artu K series floor standing switchboards are equipped with a cable container that makes installation and wiring easier, both for the electrical systems distributed along the false cieling, as under the floor.
It is possible to reach any terminal block in a comfortable way.
Finally, there is a copper equipotential bonding busbar which may lodge up to 20 additional connections, providing grounding connections to all the external masses which are present in the medical premises, and avoiding the creation of further cascade sub-nodes that are not allowed.

This is an insulation monitoring device for group 2 medical locations fully compliant with the IEC 60364-7-710 reference standard. It integrates all the performances established by the reference standard, such as overload and overcurrent monitoring, together with traditional IT system earthing insulation measurement.

Floor standing QSO switchboards are composed of modular ArTu K series enclosures. The switchboards are equipped with venting grooves that guarantee proper natural convection, useful to dissipate the heat produced by the transformer during its normal functioning.

Protection and safety
H+Line products

Solutions for the hospital sector
ABB's extensive experience in the hospital field is certified by several installations in leading hospitals, which represent the current leading-edge in safety and technology. Over the years, ABB has developed an increasingly more complete product with higher performance to meet the needs of more demanding customers and guarantee patient and operator safety.
H+Line products are specifically designed for group 2 medical environments in full compliance with Standard IEC 60364-7-710, specifically:
- Intensive therapy wards, operating theatres, cardio surgical rooms, ICU…
- Day hospitals, clinics, rest homes, dental and veterinary clinics, etc.

H like Hospital

+ like health and first aid

+ like the countless advantages of ABB products

H+Line product range

ISOLTESTER		Insulation monitoring device for IT-M 230 V circuits
SELVTESTER		Insulation monitoring device for SELV 24 V circuits which supply scialitic lamps.
QSD		Remote signalling panel for visual and acoustic fault indication.
TI		Medical insulating transformers for insulated protection systems.
QSO		Wall mounting and floor standing switchboards for medical locations.

Valid assistance for consultants

Everyone knows what the regulations say. ABB tells you what they don’t say. The “Practical guide to group 2 medical locations” is designed to be a useful daily tool for consultants and installers to help them in each group 2 hospital electrical system designing and installation. The document was developed toghether with ABB customers with the intent to support key regulatory questions with practical solutions, considerations and reccomendations on system design. This way, the “Practical guide to group 2 medical locations” is a valid tool, with plenty of of examples, to support consultants in their daily job.

Protection and safety

ISOLTESTER-DIG insulation monitoring devices

ISOLTESTER-DIG

Technical features

	ISOLTESTER-DIG-RZ	ISOLTESTER-DIG-PLUS/RS
Aux supply	115 - 230 V 50-60Hz	
Power consumption	5 VA max	6 VA max
Rated voltage	24 ÷ 230 V 50-60 Hz	24 ÷ 250 V AC/DC
Measurament current	1 mA max	
Measurement voltage	24 V max	
Control signal	Continuous with digital filter	Composite codified (PLUS only)
Internal impedance	200 kΩ	
Insulation measurement	0 ÷ 999 kΩ	
	resolution 1 kΩ	
	accuracy 5% ± 1 digit	
Impedance measurement	0 ÷ 999 kΩ	
	resolution 1 kΩ	
Temperature measurement	PT100 with 2 or 3 wires, PTC	
	0 ÷ 200 °C,	
	resolution 1 °C,	
	accuracy 2 % ± 1 digit	
Current measurement	CT .../5 A external	
	accuracy 5% ± 1 digit, (adjustable transformation rate 1÷40)	
Capacity measurement	no	0 ÷ 9.9 µF (PLUS only)
		resolution 0.1 µF (PLUS only)
Thresholds	Resistance: 50 ÷ 500 kΩ	
	Impedance: 50 ÷ 500 kΩ	
	Thermal overload: 30 ÷200 °C with PT100	
	Electrical overload: 1 ÷ 99.9 A	
Signals	incorrect wiring (link fail)	
	open/short circuit for temp sensor PT100	
	internal error	
Output	QSD supply (max 2 QSD), max 24 V DC	QSD supply (max 4 QSD), max 24 V DC
	Signals to QSD	
	aux relay for low resistance, NO-C-NC 5A 250 V AC	programmable aux relay, NO-C-NC 5A 250 V AC
	-	Serial output RS485, ModbusRTU protocol
Modules	6	
Weight	0.4 kg	0.5 kg
Mechanical features	fire resistant plastic case	
	sealable transparent front cover	
Terminals	screw terminals 2.5 mm^2	
Protection degree	IP20, IP50 when the cover is closed	
Operating temperature	-10 ÷ 60 °C	
Storage temperature	-25 ÷ 70 °C	
Relative humidity	≤ 95 %	
Insulation	2.5 kV 60 sec.	
Reference standards	CEI-EN 61010-1	
	CEI-EN 61557-8	
	IEC 60364-7-710	
	UNE 20615	
	CEI-EN 61326-1	

ISOLTESTER-DIG

H+Line

Assuring operational continuity in medical environments, even in presence of first earthing fault, it's mandatory in operating theatre group 2 medical locations.
For this reason an IT distribution system with insulating transformer is used to supply medical equipment.

ISOLTESTER-DIG
ISOLTESTER range of insulation monitoring device allows IT-M network monitoring, assuring safety for patients and medical personnel avoiding supply interruption in case of first earthing fault according to IEC 60364-7-710 Standard.

The ISOLTESTER-DIG range assures safety to patients and medical personnel, signalling when a fault to earth occurs. Thanks to its innovative technology it is used to sense the insulation level of the network by far more efficiently compared to traditional insulation monitoring devices.

Advanced features	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	884507	ISOLTESTER-DIG-RZ	2CSM244000R1501		0.500	1
RS485, Max-Min values, Programmable relay	568339	ISOLTESTER-DIG-RS	2CSM256833R1521		0.500	1
RS485, Max-Min values, Programmable relay, Noise immunization (with codified signal)	884606	ISOLTESTER-DIG-PLUS	2CSM341000R1501		0.500	1

Protection and safety

SELVTESTER insulation monitoring devices for insulated networks at 24 V AC/DC

2CSC400404F0201

SELVTESTER

H+Line

Technical features

Network voltage and auxiliary power supply	24 V 50-60 Hz/DC ± 20 %
Max power dissipation	3 VA – 3 W
Measurement current	max. 0.5 mA
Internal impedance	50 kohm
Threshold	programmable to 10 ÷ 50 kohm (4 levels using microswitches)
Activation delay	about 1 second
Signals	led ON, led ALARM +, led ALARM -
Output	for up to 2 QSD-230/24-C, max. 24 V 1 A remote panels
Operating temperature	-10 ÷ 60 °C
Storage temperature	-20 ÷ 70 °C
Relative humidity	≤ 95 %
Insulation	2.5 kV 60 sec./4 kV imp. 1.2/50µs
Terminal cross-section	4 mm^2
Protection degree	IP20, IP40 when the cover is closed
Modules	3
Weight	200 g
Reference standards	IEC 60364-7-710, EN 61326-1, EN 61010-1

SELVTESTER for insulated networks at 24 V AC/DC

It is used to monitor permanently the insulation of safety extremely low voltage circuits (up to 24 V) especially scialitic lamps.

Function	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Insulation monitoring	884705	SELVTESTER-24	2CSM211000R1511		0.250	1

Protection and safety

QSD remote signalling panel

2CSC400693F0001

QSD

H+Line

Technical features

Signals	Green LED network ON Red LED overload ALARM Yellow LED insulation ALARM intermittence 2 Hz dB ALARM, acoustic signaller, emission 2400 Hz
Buttons	TEST and MUTE buttons
Terminal cross-section	2.5 mm^2
Protection degree	IP30
Installation type	universal flush mounted box
Weight	200 g
Operating temperature	-10 ÷ 60 °C
Storage temperature	-25 ÷ +80 °C
Relative humidity	≤ 95 %
Insulation	2500 Vrms 50 Hz 60 s
Cables cross-section	0.35 mm^2 for 300 m
Compatibility	ISOLTESTER-DIG-RZ, ISOLTESTER-DIG-RS, ISOLTESTER-DIG, PLUS, SELVTESTER-24
Reference standards	safety EN 61010-1 product EN 61557-8/IEC 60364-7-710/ UNE 20615 electromagnetic compatibility EN 61326-1

QSD remote signalling panel

They are installed in combination with insulation monitoring devices, to remotely report the signals generated by these devices. They can be installed together with ISOLTESTER-DIG and SELVTESTER-24 and they are compatible also with former versions of insulating monitoring devices. Flush mounting box is already included in the packaging.

Version	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Horizontal	730637	QSD-DIG 230/24	2CSM273063R1521		0.800	1
Vertical	570936	QSD-DIG 230/24 V	2CSM257093R1521		0.800	1

Protection and safety

TI switchboards and devices for medical locations

TI

H+Line

Technical characteristics

		TI 3 TI 3-S	TI 5 TI 5-S	TI 7.5 TI7.5-S	TI 10 TI 10-S
Power	[kVA]	3	5	7.5	10
Rated frequency	[Hz]	50-60			
Power dissipation	[W]	120	150	260	320
Electrical protection class		1			
Thermal insulation class	[°C]	B 130	B 130	F 155	F 155
Operating temperature	[°C]	max 40			
Primary winding voltage	[V]	230			
Secondary winding voltage	[V]	230			
No load current	[A]	< 0.39	< 0.65	< 0.98	< 1.3
Short circuit voltage drop		<3%			
Inrush current	[A]	< 221	< 369	< 553	< 738
Power loss	[W]	120	150	260	320
Winding separation		double insulation			
Metallic shield		■			
Reference standard		IEC-EN 61558-1, IEC-EN 61558-2-15, IEC-EN 62041			
Dimensions	[mm]	205x340x150	240x380x150	240x380x160	277x380x260

Insulating transformers for medical locations

Permanently connected to an IT power supply system, single-phase medical insulating transformers provide galvanic separation between the distribution network and the user load in accordance with IEC EN 61558-2-15 concerning power supply group 2 medical locations.

Rated oitput	PT100	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
kVA		EAN	Type code	Order code		kg	pc.
3		2896005	TI 3	2CSM110000R1541		29.5	1
5		2896104	TI 5	2CSM120000R1541		44.0	1
7.5		2896203	TI 7.5	2CSM130000R1541		50.5	1
10		2521204	TI 10	2CSM140000R1541		73.0	1
3	■	2521402	TI 3-S	2CSM210000R1541		29.5	1
5	■	2521501	TI 5-S	2CSM220000R1541		44.0	1
7.5	■	2521600	TI 7.5-S	2CSM230000R1541		50.5	1
10	■	2521709	TI 10-S	2CSM240000R1541		73.0	1

Accessories

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Shock absorber	2557920	AMM	2CSM900000R1541		1	4

Protection and safety

QSO selection table

Series	Type	Power [kVA]	Installation type	IT-M section feeder lines	TN-S section feeder lines	PT100	OVR	Unifix L	I/O KNX	SELV 24 V line
S	QSO 3S Classic	3	wall mounted	2x10A+5x16A +1x25A	-	■				
	QSO 5S Classic	5	wall mounted	2x10A+5x16A +1x25A	-	■				
	QSO 3S Premium	3	wall mounted	2x10A+5x16A +1x25A	1x10A+2x 16A	■				
	QSO 5S Premium	5	wall mounted	2x10A+5x16A +1x25A	1x10A+2x 16A	■				
M	QSO 3M Classic	3	floor standing	3x10A+7x16A	1x10A	■				
	QSO 5M Classic	5	floor standing	3x10A+7x16A	1x10A	■				
	QSO 7.5M Classic	7.5	floor standing	3x10A+7x16A	1x10A	■				
	QSO 3M Premium	3	floor standing	6x10A+8x16A +1x25	1x10A+2x 16A	■	■			■
	QSO 5M Premium	5	floor standing	6x10A+8x16A +1x25	1x10A+2x 16A	■	■			■
	QSO 7.5M Premium	7.5	floor standing	6x10A+8x16A +1x25	1x10A+2x 16A	■	■			■
L	QSO 10L Classic	10	floor standing	6x10A+9x16A	1x10A+2x 16A	■				
	QSO 7.5L Premium	7.5	floor standing	6x10A+11x16A +3x25A+1x32A	1x10A+2x 16A	■	■			■
	QSO 10L Premium	10	floor standing	6x10A+11x16A +3x25A+1x32A	1x10A+2x 16A	■	■		■	■
XL	QSO 7.5XL Premium	7.5+7.5	floor standing	12x10A+22x16A +6x25A+2x32A	1x10A+2x 16A	■	■	■	■	■
	QSO 10XL Premium	10+10	floor standing	12x10A+22x16A +6x25A+2x32A	1x10A+2x 16A	■	■	■	■	■

Protection and safety

QSO switchboards and components for medical locations

QSO

Technical features

	QSO wall type		QSO floor type	
Rated operational voltage (Ue)	230 V ~ ± 15%			
Rated frequency	50 - 60 Hz			
Number of phases	1 + N ~/PE			
Rated voltage of auxiliary service circuits	24 - 230 V ~			
Rated insulation voltage (Ui)	300 V - *2500 V			
Earthing system	TT/TN-S			
Maximum prospective short circuit current to the input terminals (Icc)	10 kA RMS Sym ***			
Max. altitude	2000 m a.s.l.			
Pollution degree	1 **			
Degree of protection against impacts (IK code) EN 50102 I	K 09 (5 kg - 200 mm)			
Degree of relative humidity at temperature °C	50 % with max. temp. +40 °C			
Operating temperature	-5 °C - +55 °C			
Storage temperature	-25 °C - +40 °C			
Protection degree EN 60529	QSO 3S Classic	IP 40	QSO 3M Classic	IP 54
	QSO 5S Classic	IP 40	QSO 5M Classic	IP 54
	QSO 3S Premium	IP 40	QSO 5M Premium	IP 54
	QSO 5S Premium	IP 40	QSO 7.5M Premium	IP 54
			QSO 10L Classic	IP 54
			QSO 7.5L Premium	IP 54
			QSO 10L Premium	IP 54
			QSO 7.5XL Premium	IP 54
			QSO 10XL Premium	IP 54

* Dielectric strength test voltage.
** Corresponds to no pollution or only dry and non-conductive pollution.
*** Value conditioned by upstream coordination with NH 00 100A gL-gG fuses

Electrical switchboard for medical locations

2CSC400101F0004

QSO S

2CSC400102F0004

QSO M

2CSC400103F0004

QSO L

2CSC400104F0004

QSO XL

H+Line

QSO switchboards for operating theatres represent the ideal solution for distribution within group 2 medical locations, in compliance with the requirements of IEC standard 64-8/7-710. Four series are available: S, M, L, and XL. Each one can be customized with two layouts. The CLASSIC version contains the instrumentation essential for protection against direct contacts, while the PREMIUM version also has, depending on the type of switchboard, additional devices intended for:

- emergency power cut-off of operating theatre circuits outside of the patient area (lighting, radiology sockets, etc.)
- 24 V SELV line for supplying scialytic lamps
- overvoltage protection
- Unifix L fast-wiring system
- I/O module for managing xon alarms through KNX protocol

QSOs XL series are equipped with two insulation transformers to ensure dual redundant power supply of the IT-M circuits. ABB provides, for its switchboards for operating theatres, the declaration of conformity required to commission the system, ensuring the installer that the system is built in compliance with technical standards. To ensure the best efficiency of the QSO will be delivered in a new wooden packing.

S series switchboards for medical locations

Applications: surgery clinics, post-op recovery rooms, analysis laboratories, dental offices, veterinary clinics

Power	Instal-lation type	TN-S section feeder lines	IT-M section feeder lines	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
kVA				EAN	Type code	Order code		kg	pc.
3	wall mounted		2x10A +5x16A +1x25A	2611226	QSO 3S Classic	2CSM261122R1551		73	1
5	wall mounted		2x10A +5x16A +1x25A	2736929	QSO 5S Classic	2CSM273692R1551		87.5	1
3	wall mounted	1x10A +2x16A	2x10A +5x16A +1x25A	2736028	QSO 3S Premium	2CSM273602R1551		75	1
5	wall mounted	1x10A +2x16A	2x10A +5x16A +1x25A	2736820	QSO 5S Premium	2CSM273682R1551		90	1

M series switchboards for medical locations

Applications: Day hospital rooms, medium sized operating theatres, ICU rooms

Power	Instal-lation type	TN-S section feeder lines	IT-M section feeder lines	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
kVA				EAN	Type code	Order code		kg	pc.
3	floor standing	1x10A	3x10A +7x16A	2735922	QSO 3M Classic	2CSM273592R1551		126	1
5	floor standing	1x10A	3x10A +7x16A	2736721	QSO 5M Classic	2CSM273672R1551		141	1
7.5	floor standing	1x10A	3x10A +7x16A	2735823	QSO 7.5M Classic	2CSM273582R1551		147.5	1
3	floor standing	1X10A +2x16A	6x10A +8x16A +1x25A	2736622	QSO 3M Premium	2CSM273662R1551		127	1
5	floor standing	1X10A +2x16A	6x10A +8x16A +1x25A	2735724	QSO 5M Premium	2CSM273572R1551		142	1
7.5	floor standing	1X10A +2x16A	6x10A +8x16A +1x25A	2736523	QSO 7.5M Premium	2CSM273652R1551		147.5	1

Protection and safety

QSO switchboards and components for medical locations

L series switchboards for medical locations

Applications: operating theatres, intensive care rooms, cardiac operating rooms

Power	Instal-lation type	TN-S section feeder lines	IT-M section feeder lines	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
kVA				EAN	Type code	Order code		kg	pc.
10	floor standing	1x10A +2x16A	6x10A +9x16A	2735625	QSO 10L Classic	2CSM273562R1551		190	1
7.5	floor standing	1x10A +2x16A	6x10A +11x16A +3x25A +1x32A	2736424	QSO 7.5L Premium	2CSM273642R1551		168	1
10	floor standing	1x10A +2x16A	6x10A +11x16A +3x25A +1x32A	2735526	QSO 10L Premium	2CSM273552R1551		193.5	1

XL series switchboards for medical locations

Applications: resuscitation, intensive care, long term care

Power	Instal-lation type	TN-S section feeder lines	IT-M section feeder lines	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
kVA				EAN	Type code	Order code		kg	pc.
7.5+7.5	floor standing	1x10A +2x16A	12x10A +22x16A +6x25A +2x32A	2736325	QSO 7.5XL Premium	2CSM273632R1551		325	1
10+10	floor standing	1x10A +2x16A	12x10A +22x16A +6x25A +2x32A	2735427	QSO 10XL Premium	2CSM273542R1551		375	1

Protection and safety

ISL industrial insulation monitoring devices

ISL

Technical features ISL-A

			ISL-A		
			A 24-48	**A 115 and A 230**	**A 600**
Power consumption		[VA]	3	4	6
ALARM threshold		[kW]	30 - 300 (5 levels, selectable)		
TRIP threshold		[kW]	10 - 60 (5 levels by switches)	10 - 100 (5 levels selectable)	30 - 300 (adjustable by potentiometer)
LED indications	ON		■	■	■
	TRIP		■	■	■
	ALARM			■	
	+/-		■	■	■
Max trip delay		[s]	0.2	2	2.5
Max measuring current		[mA]	0.5	1.8	1.5
Internal impedance		[kW]	50	ISL-A 115: 200 kΩ L+/L- 100 kΩ L/PE ISL-A 230: 400 kΩ L+/L- 200 kΩ L/PE	880 kW L+/L - 450 kW L/PE
TRIP relay output			1 NO-C-NC	2 NO-C-NC	1 NO-C-NC
ALARM relay output			2 NO-C-NC		
Relay contact capacity			max 250 V, 5 A		
Programmed functions	Alarm output		■		
	Fail safe		■		
	Reset		■		
Insulation			2.5 kV60 sec./ 6 kV imp 1.2/50 µs	2.5 kV 60 sec./ 4 kV imp 1.2/50 µs	2.5 kV 60 sec./ 6 kV imp 1.2/50 µs
Operating temperature		[°C]	-10 ÷ 60		
Storage temperature		[°C]	-20 ÷ 70		
Relative humidity			≤ 90%		
Max terminal cross-section		[mm²]	4	2.5	2.5
Protection degree			IP40 front, IP20 enclosure		
Modules		[n°]	3	6	6
Weight		[g]	200	400	400
Reference standards			EN 61010-1, EN 61557-8, EN 61326-1		

Protection and safety

ISL industrial insulation monitoring devices

ISL-A

Technical features ISL-C and ISL-MOT

			ISL-C			ISL-MOT
			C 230	C 440	C 600	MOT 1000
Auxiliary power supply		[V]	220-240 V AC	220-240 V AC	100÷130 V AC/ 220÷240 V AC	220- 240 V AC
Power consumption		[VA]	3	3	5	3
TRIP threshold		[kW]	100	10 -150 (5 levels)	10-100 (5 levels)	0.1-10 MW (8 levels)
LED indications	ON		■	■	■	■
	TRIP		■	■	■	■
	ALARM				■	
Max trip delay		[s]	1	4	5	0.2
Max measuring current		[mA]	0.1		0.25	0.0015
Max measuring voltage		[V]	12 V DC		48	20
Internal impedance		[kW]	250	250	200	AC: 1000 DC: 1500
TRIP relay output			1 NO-C-NC	1 NO-C-NC	2 NO-C-NC	1 NO-C-NC
Relay contact capacity			max 250 V, 5 A			
Insulation			2.5 kV60 sec./4 kV imp 1.2/50 µs			
Operating temperature		[°C]	-10 ÷ 60			
Storage temperature		[°C]	-20 ÷ 70			
Relative humidity			≤ 95%			
Max terminal cross-section		[mm²]	4	4	2.5	4
Protection degree			IP40 front, IP20 enclosure			
Modules		[n°]	3	3	6	3
Weight		[g]	200	200	500	200
Reference standards			EN 61010-1, EN 61557-8, EN 61326-1			

Insulation monitoring devices for voltageless network

Monitored line voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
20-700 V AC/DC	943204	ISL-MOT 1000	2CSM808000R1500		0.300	1

2CSC400705F0201

ISL-A

Insulation monitoring devices

In IT electrical distribution networks with isolated neutral, the high insulation impedance prevents earth faults from generating currents that would dangerously elevate the potential of exposed conductive parts. Therefore, in case of earth leakage in an IT network it is not necessary to interrupt the supply, but it is still essential to continually monitor the insulation level in order to detect faults and restore optimal functioning of the system.
In industrial installations, IT networks are used when operational continuity is an intrinsic requirement of the production process, due to both technical and economic considerations. Such applications include: metalworking and chemical industries, explosion risk locations, railway lines and vehicles, uninterruptible power supplies, cinema sets, emergency lines, fire water pumps and emergency lighting.

2CSC400704F0201

ISL-C

Insulation monitoring devices for AC networks

Max. monitored line voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
220-240 V AC	942801	ISL-C 230	2CSM444000R1500		0.300	1
380-415 V AC	942900	ISL-C 440	2CSM545000R1500		0.300	1
60-760 V AC	943006	ISL-C 600	2CSM656000R1500		0.500	1

Insulation monitoring devices for DC networks

Max. monitored line voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
100-144 V DC	942603	ISL-A 115	2CSM222000R1500		0.500	1
220 V DC	942702	ISL-A 230	2CSM333000R1500		0.500	1
400-600 V DC	498537	ISL-A 600	2CSM249853R1500		0.500	1

Insulation monitoring devices for AC/DC networks

Monitored line voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
24-28 V AC/DC	942504	ISL-A 24-48	2CSM111000R1500		0.300	1

Electrical installation solutions for buildings
Command and signaling

Index

SD 200 switch disconnectors	6/6
SHD 200 switch disconnectors	6/10
E 200 switches	6/14
E 463/3, E 480/3 switches	6/16
S800PV photovoltaic switch disconnectors	6/17
E 210 switches, pushbuttons and indicator lights	6/20
SL luminous indicators for panel installation	6/29
ESB..N and EN..N installation contactors	6/32
E290 Latching relays	6/50
E297 Installation relay	6/53
FLR latching relays	6/60
E 260 latching relays	6/61
STD50 dimmers	6/63
STD universal dimmer	6/64
Transformers selection table	6/66
Control, isolating and safety transformers selection table	6/68
TM-C, TM-S, TM-I control, isolating and safety transformers	6/69
TS-C safety isolating transformers for general use	6/72
TM bell transformers	6/73
TS bell transformers	6/74
SM, RM, TSM, TSR bells and buzzers	6/75
CP-D primary switch mode power supplies	6/77
Modular sockets selection table	6/79
Modular sockets	6/82
MA1-8001 DIN rail adapter	6/86

The details make the difference
Switch disconnector SD 200

Patented twin terminals with captive screws: highest comfort, safety and flexibility

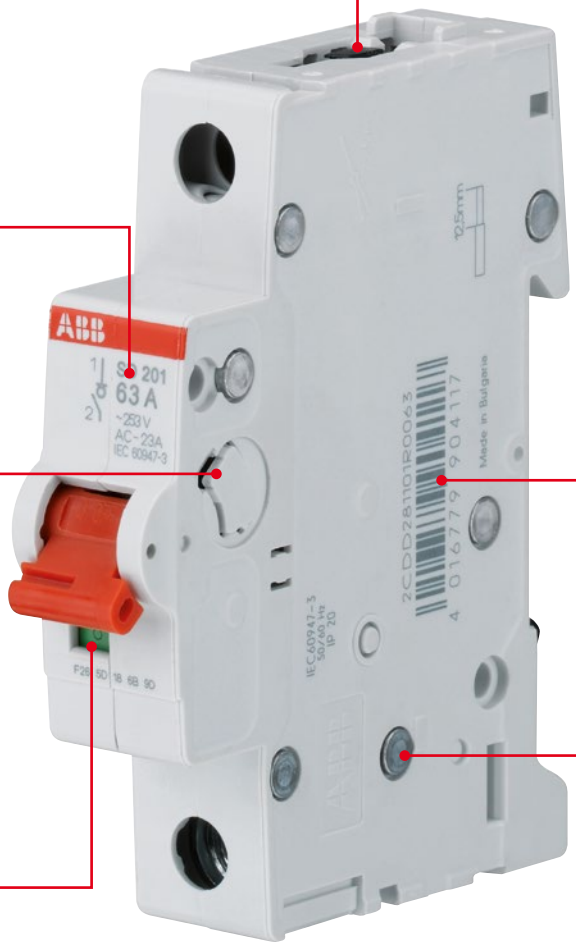
Easy product coding – easy identification: basic technical information already integrated into the name

Fully compatible with all System pro M devices and accessories

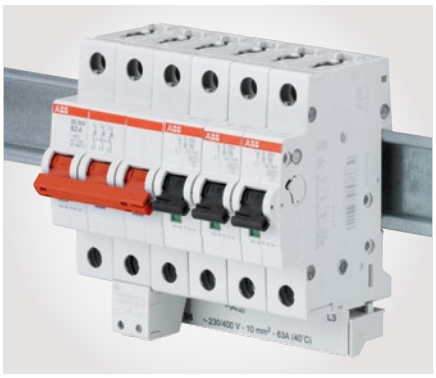
Laser printing: scratch and solvent resistant marking

Patented housing design: environmental friendly and performance-optimized

Real contact position indication, directly connected to the moving contact, for more comfort and safety

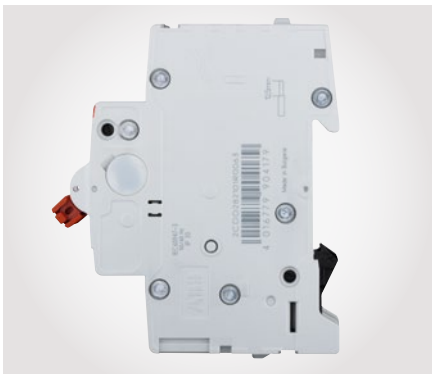


Contact position indication
The switch disconnector SD 200 is suited with a real contact position indication (real CPI). You can easily identify, if the SD 200 is in the ON or the OFF position – easy and safe maintenance work is possible.
The position of the toggle and the red/green display leaves no doubt about the present switching position, while the latter offers additional security, as the exact position of the inner contacts is always displayed.Thus, the device always supplies reliable information in the event of an error.

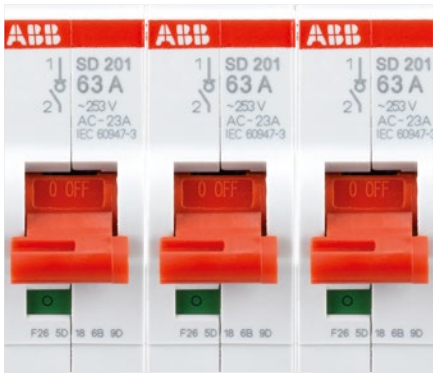


Wide range of accessories
SD 200 is fully compatible to the complete range of System pro M compact accessories like

- Auxiliary contacts, to be mounted on the left side, the right side or bottom fitting
- Shunt trips
- Undervoltage release
- Motor operating devices



PATENTED – Housing Design
By using state-of-the-art housing material, ABB is taking care of the environment. With the latest generation of halogen free thermoplastics for SD 200 it's possible to recycle the switch disconectors completely without environmental pollution. The material works for the stability.



Laser printing
All labels on the SD 200, as the approvals on the dome, technical details and the product identification, are printed by a laser. The laser printing ensures a friction, scratch and solvent resistant marking on the switch disconectors for easy identification in case of maintenance or replacements. For control and acceptance procedure it is important to see all markings also in the mounted position.

Highest performance
With a rated voltage of 253/440 V AC, a rated conditional short-circuit current of 25 kA, terminals with protection from misconnection, a "Real CPI" switching position display, as well as full compatibility with all MCB accessories, the SD 200 is unique in its field of application. SD 200 comply with IEC/EN 60947-3.

PATENTED – IP 20 finger safe terminals
The SD 200 are equipped with 35 mm^2 and 10 mm^2 cylinder lift twin terminals for challenging industrial use. Cross wiring can easily be realized by inserting the busbars into the rear terminal part and the incoming wires into the front part.

Command and signaling

SD 200 and SHD 200 switch disconnector ranges

Series			SD 200	SHD 200	E 200
Standards and approvals			IEC/EN 60947-3 VDE/CCC/EAC/KEMA	IEC/EN 60947-3 VDE/CCC/EAC/KEMA	IEC/EN 60947-3 VDE/CCC/KEMA
Rated currents	16...63 80...125	[A]	16/25/32/40/50/63 –	16/25/32/40/50/63 –	– 80/100/125
Rated voltage		[V AC]	253/440	240/415	230/400
Short circuit withstand capacity		[kA]	25	10	25
Utilization category			AC-23A	AC-22A	AC-22A
Electrical lifetime		[Ops.]	I_e < 32 A: 20,000 (AC) I_e ≥ 32 A: 10,000 (AC)	I_e < 32 A: 20,000 (AC) I_e ≥ 32 A: 10,000 (AC)	I_e < 100 A: 1,500 (AC) I_e ≥ 125 A: 1,000 (AC)
Terminal cross section		[mm²]	35	25	50
Terminal			Cylinder lift terminal	Cage terminal	Cage terminal
Two terminal openings for conductor and busbar			Yes	No	No
Safety wire guard			Yes	No	No
Contact position indication			Marking on toggle (I ON/0 OFF) Real CPI (red ON/green OFF)	Marking on toggle (I ON/0 OFF)	Marking on toggle (I ON/0 OFF)
Combination with auxiliary elements					
Auxiliary contacts			Right side Left side Bottom side	No	Right side
Shunt trip			Yes	No	No
Undervoltage release			Yes	No	No
Motor operated remote control			Yes	No	No
Padlock			Yes	Yes	Yes
Removal without disassembling of the busbar			Yes	No	Yes

Command and signaling
Switch disconnectors selection table

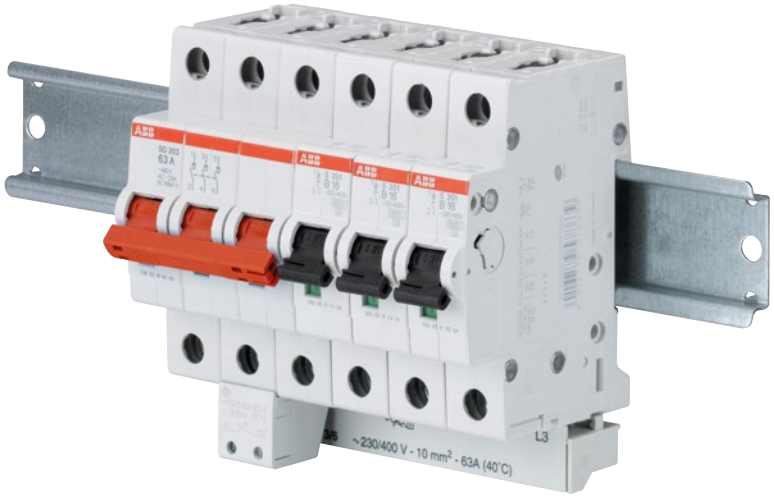
The SD 200 and SHD 200 extend the proven System pro M compact® series by ranges of switch disconnectors which provides state-of-the-art safety and comfort. Both are available with 1 to 4 poles with rated currents from 16 to 63 A and provides disconnection properties according to IEC/EN 60947-3.

The SD 200 offers performance on a different level. With a rated voltage of 253/440 V AC, a rated conditional short-circuit current of 25 kA, terminals with protection from misconnection and a “Real CPI” contact position indication the range is unique in its field of application. In addition SD 200 is fully compatible with all MCB accessories.

The SHD 200 has a rated voltage of 240/415 V AC. A rated conditional short-circuit current of 10 kA enables a wide range of applications.

The laser printing and the design of the devices allow a consistent optical appearance in the distribution board.

The laser printing and the design of the devices allow a consistent optical appearance in the distribution board. A VDE/CCC/EAC and KEMA approval ensures a wide scope of applications.
For technical differences between the ranges please refer to the selection table on the left page.



Command and signaling

SD 200 switch disconnector

SD 201

Technical data

Electrical data	
Standards	IEC/EN 60947-3
Poles	1P, 2P, 3P, 4P
Rated current I_e	16 A, 25 A, 32 A, 40 A, 50 A, 63 A
Utilization category	AC-23A, DC-21A
Rated voltage U_e	1P: 253 V AC, 60 V DC 2P: 440 V AC, 125 V DC 3...4P: 440 V AC
Insulation voltage U_i	440 V AC
Max. power frequency recovery voltage U_{max}	1P: 266 V AC, 63 V DC 2P: 462 V AC, 131 V DC 3...4P: 462 V AC
Min. operating voltage $U_{Bmin.}$	12 V AC
Rated frequency f	50/60 Hz, DC
Suitable for isolation	Yes
Rated conditional short-circuit current	25 kA in series with NH 00 ≤ 63 A gG
Overvoltage category	III
Pollution degree	3
Rated impulse withstand voltage $U_{imp.}$ (1.2/50 µs)	4 kV (test voltage 6.2 kV at sea level; 5 kV at 2,000 m)
Dielectric test voltage	2 kV (50/60 Hz, 1 min.)
Mechanical data	
Housing	Insulation group I, RAL 7035
Toggle	Insulation group II, red, sealable
Contact position indication	Marking on toggle, I ON / 0 OFF Real CPI (green OFF/red ON)
Protection degree acc. to EN 60529	IP20 / IP40 in enclosure with cover
Electrical endurance	I_e < 32 A: 20,000 ops. (AC), 1,500 ops. (DC) I_e ≥ 32 A: 10,000 ops. (AC), 1,500 ops. (DC)
Mechanical endurance	20,000 ops.
Shock resistance acc. to IEC/EN 60068-2-27	25g, 2 shocks, 13 ms
Vibration resistance acc. to IEC/EN 60068-2-6	5g, 20 cycles at 5...150...5 Hz with load 0.8 I_n
Environmental conditions (damp heat cyclic) acc. to IEC/EN 60068-2-30	28 cycles with 55 °C/90-96% and 25 °C/95-100% [°C/RH]
Ambient temperature	-25 ... +55 °C
Storage temperature	-40 ... +70 °C
Installation	
Terminal	**Cylinder lift terminal**
Safety wire guard	**Yes**
Two terminal openings for conductor and busbar	**Yes**
Cross-section of conductors	**35 mm²**
Cross-section of busbars	**10 mm²**
Torque	**2.8 Nm**
Screwdriver	**No. 2 Pozidriv**
Mounting	**On DIN rail 35 mm acc. to EN 60715 by fast clip**
Mounting position	**Optional**
Removal without disassembling of the busbar	**Yes**
Supply	**Optional**

Dimensions and weight	
Mounting dimensions acc. to DIN 43880	Mounting dimension 1
Pole dimensions (H x D x W)	88 x 69 x 17.5 mm
Pole weight	Approx. 85 g
Combination with auxiliary elements	
Auxiliary contact	**Yes**
Signal/auxiliary contact	**Yes**
Shunt trip	**Yes**
Undervoltage release	**Yes**
Motor operating device	**Yes**
Padlock	**Yes**
Approvals	
	CE and RoHS-conform **Approvals: VDE/CCC/EAC/KEMA**

Command and signaling

SD 200 switch disconnector

SD 201

SD 202

SD 203

SD 204

SD 200

Switch disconnector acc. to IEC/EN 60947-3 for panel installation onto DIN rail (35 mm)
Mounting depth: 68 mm
Mounting width: per pole = 17.5 mm = 1 module
Colour: grey, RAL 7035
Colour of switch lever: red RAL 3000

Special features

- Isolating characteristics acc. to IEC/EN 60947-3
- Clear contact position indication in red/green (“Real CPI”)
- Highest performance at an increased voltage level: 25 kA conditional short-circuit current at U_e = 253/440 V AC acc. to IEC/EN 60947-3
- Protection degree IP20 = finger safe
- 35 mm² cylinder lift terminal with 2 terminal openings for two wires or one wire and one busbar for cross wiring
- Bottom fixed auxiliary contact as accessory for a space saving installation or upgrade of existing assemblies without additional mounting width
- Consistent design to other System pro M DIN rail products
- Cross wiring with MCBs or RCDs using busbars PS
- Durable device identification due to laser labeling
- Captive screws
- Compatibility with all MCB accessories
- Approved acc. to IEC/EN 60947-3 for international use

Ordering details

Rated current: 16 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	253	904063	SD201/16	2CDD281101R0016		0.085	10
2	440	904124	SD202/16	2CDD282101R0016		0.170	5
3	440	904186	SD203/16	2CDD283101R0016		0.255	1
4	440	904247	SD204/16	2CDD284101R0016		0.340	1

Rated current: 25 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	**253**	**904070**	**SD201/25**	**2CDD281101R0025**		**0.085**	**10**
2	**440**	**904131**	**SD202/25**	**2CDD282101R0025**		**0.170**	**5**
3	**440**	**904193**	**SD203/25**	**2CDD283101R0025**		**0.255**	**1**
4	**440**	**904254**	**SD204/25**	**2CDD284101R0025**		**0.340**	**1**

Rated current: 32 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	253	904087	SD201/32	2CDD281101R0032		0.085	10
2	440	904148	SD202/32	2CDD282101R0032		0.170	5
3	440	904209	SD203/32	2CDD283101R0032		0.255	1
4	440	904261	SD204/32	2CDD284101R0032		0.340	1

SD 201

SD 202

SD 203

SD 204

Ordering details

Rated current: 40 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	253	904094	SD201/40	2CDD281101R0040		0.085	10
2	440	904155	SD202/40	2CDD282101R0040		0.170	5
3	440	904216	SD203/40	2CDD283101R0040		0.255	1
4	440	904278	SD204/40	2CDD284101R0040		0.340	1

Rated current: 50 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	253	904100	SD201/50	2CDD281101R0050		0.085	10
2	440	904162	SD202/50	2CDD282101R0050		0.170	5
3	440	904223	SD203/50	2CDD283101R0050		0.255	1
4	440	904285	SD204/50	2CDD284101R0050		0.340	1

Rated current: 63 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	253	904117	SD201/63	2CDD281101R0063		0.085	10
2	440	904179	SD202/63	2CDD282101R0063		0.170	5
3	440	904230	SD203/63	2CDD283101R0063		0.255	1
4	440	904292	SD204/63	2CDD284101R0063		0.340	1

Command and signaling

SHD 200 switch disconnector

2CDC051002S0012

SHD 201

Technical data

Electrical data	
Standards	IEC/EN 60947-3
Poles	1P, 2P, 3P, 4P
Rated current I_e	16 A, 25 A, 32 A, 40 A, 50 A, 63 A
Utilization category	AC-22A, DC-21A
Rated voltage U_e	1P: 240 V AC, 60 V DC 2P: 415 V AC, 125 V DC 3…4P: 415 V AC
Insulation voltage U_i	440 V AC
Max. power frequency recovery voltage U_{max}	1P: 252 V AC, 63 V DC 2P: 436 V AC, 131 V DC 3…4P: 436 V AC
Min. operating voltage $U_{Bmin.}$	12 V AC
Rated frequency f	50/60 Hz, DC
Suitable for isolation	Yes
Rated conditional short-circuit current	10 kA in series with NH 00 ≤ 63 A gG
Overvoltage category	III
Pollution degree	3
Rated impulse withstand voltage $U_{imp.}$ (1.2/50 µs)	4 kV (test voltage 6.2 kV at sea level; 5 kV at 2,000 m)
Dielectric test voltage	2 kV (50/60 Hz, 1 min.)
Mechanical data	
Housing	Insulation group II, RAL 7035
Toggle	Insulation group II, red, sealable
Contact position indication	Marking on toggle, I ON / 0 OFF
Protection degree acc. to EN 60529	IP20 / IP40 in enclosure with cover
Electrical endurance	I_e < 32 A: 20,000 ops. (AC), 1,500 ops. (DC) I_e ≥ 32 A: 10,000 ops. (AC), 1,500 ops. (DC)
Mechanical endurance	20,000 ops.
Shock resistance acc. to IEC/EN 60068-2-27	25g, 2 shocks, 13 ms
Vibration resistance acc. to IEC/EN 60068-2-6	5g, 20 cycles at 5…150…5 Hz with load 0.8 I_n
Environmental conditions (damp heat cyclic) acc. to IEC/EN 60068-2-30	28 cycles with 55 °C/90-96% and 25 °C/95-100% [°C/RH]
Ambient temperature	-25 … +55 °C
Storage temperature	-40 … +70 °C
Installation	
Terminal	Cage terminal
Safety wire guard	No
Two terminal openings for conductor and busbar	No
Cross-section of conductors	25 mm²
Torque	2.0 Nm
Screwdriver	No. 2 Pozidriv
Mounting	On DIN rail 35 mm acc. to EN 60715 by fast clip
Mounting position	Optional
Removal without disassembling of the busbar	No
Supply	Optional

Dimensions and weight	
Mounting dimensions acc. to DIN 43880	Mounting dimension 1
Pole dimensions (H x D x W)	85 x 69 x 17.5 mm
Pole weight	Approx. 75 g
Combination with auxiliary elements	
Auxiliary contact	No
Signal/auxiliary contact	No
Shunt trip	No
Undervoltage release	No
Motor operating device	No
Padlock	Yes
Approvals	
	CE and RoHS conform **Approvals: VDE/CCC/EAC/KEMA**

Command and signaling

SHD 200 switch disconnector

SHD 201

SHD 202

SHD 203

SHD 204

SHD 200

Switch disconnector acc. to IEC/EN 60947-3 for panel installation onto DIN rail (35 mm)
Mounting depth: 69 mm
Mounting width: per pole = 17.5 mm = 1 module
Colour: grey, RAL 7035
Colour of switch lever: red RAL 3000

Special features

- Isolating characteristics acc. to IEC/EN 60947-3
- Protection degree IP20 = finger safe
- 25 mm² cage terminal
- Consistent design to all other System pro M DIN rail products
- Cross wiring with MCBs or RCDs using busbars PS
- Durable device identification due to laser labeling
- Captive screws
- Locking device as accessory for unauthorized ON/OFF switching
- Approved acc. to IEC/EN 60947-3 for international use

Ordering details

Rated current: 16 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904308	SHD201/16	2CDD271111R0016		0.075	10
2	415	904360	SHD202/16	2CDD272111R0016		0.150	5
3	415	904421	SHD203/16	2CDD273111R0016		0.225	1
4	415	904483	SHD204/16	2CDD274111R0016		0.300	1

Rated current: 25 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904315	SHD201/25	2CDD271111R0025		0.075	10
2	415	904377	SHD202/25	2CDD272111R0025		0.150	5
3	415	904438	SHD203/25	2CDD273111R0025		0.225	1
4	415	904490	SHD204/25	2CDD274111R0025		0.300	1

Rated current: 32 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904322	SHD201/32	2CDD271111R0032		0.075	10
2	415	904384	SHD202/32	2CDD272111R0032		0.150	5
3	415	904445	SHD203/32	2CDD273111R0032		0.225	1
4	415	904506	SHD204/32	2CDD274111R0032		0.300	1

SHD 201

SHD 202

SHD 203

SHD 204

Ordering details

Rated current: 40 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904339	SHD201/40	2CDD271111R0040		0.075	10
2	415	904391	SHD202/40	2CDD272111R0040		0.150	5
3	415	904452	SHD203/40	2CDD273111R0040		0.225	1
4	415	904513	SHD204/40	2CDD274111R0040		0.300	1

Rated current: 50 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904346	SHD201/50	2CDD271111R0050		0.075	10
2	415	904407	SHD202/50	2CDD272111R0050		0.150	5
3	415	904469	SHD203/50	2CDD273111R0050		0.225	1
4	415	904520	SHD204/50	2CDD274111R0050		0.300	1

Rated current: 63 A

Poles	Rated voltage	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	EAN	Type code	Order code	piece	kg	pc.
1	240	904353	SHD201/63	2CDD271111R0063		0.075	10
2	415	904414	SHD202/63	2CDD272111R0063		0.150	5
3	415	904476	SHD203/63	2CDD273111R0063		0.225	1
4	415	904537	SHD204/63	2CDD274111R0063		0.300	1

Command and signaling

E 200 switches

E 200

Technical data

Electrical Data		
Standards	DIN EN 60947-3 (VDE0660-107); IEC/EN 60947-3	
Number of poles	1P, 2P, 3P, 4P	
Rated current I_e	80...125 A	
Rated voltage U_e	230/400 V AC; 60 V DC	
Rated frequency f	50/60 Hz; DC	
Utilization category	I_e 80 ... 100 A	AC-22A (1..4-pole)
		DC-21B (1/2-pole)
	I_e 125A	AC-23A (1/2-pole)
		DC-21B (1/2-pole)
	Acc. to DIN EN 60947-3 (VDE0660-107); IEC/EN 60947-3	
Protection fuse	NH 00 gG ≤ Rated current E200	
Positive opening	Acc. to DIN VDE 0113	
Rated conditional short-circuit current	16 ... 100 A (1- to 4-pole): 25 kA, 125 A (1-/2-pole): 6 kA	
Surge withstand capability U_{imp}	4 kV (EN 60947-1)	
Min. voltage $U_{min.}$	12 V AC/DC bei 0.1 VA	
Min. contact loading	24 V AC; 4 mA	
Mechanical Data		
Housing	Grey, RAL 7035	
Toggle	Red (RAL 3000) / grey (RAL 7000), sealable	
Contact position indication	On toggle (I ON / 0 OFF), on dome (I / 0)	
Protection degree acc. to IEC/EN 60529	IP10, IP40 in enclosure with cover	
Electrical endurance	80 ... 100 A: 1,500 ops., 125 A: 1,000 ops.	
Mechanical endurance	20,000 ops.	
Environmental conditions acc. to IEC/EN 60068-2-30	Constant climate 23/83, 40/93, 55/20 [°C/RH]	
	Alternating climate 25/95 - 40/93 [°C/RH]	
Ambient temperature	-25 ... +55 °C	
Storage temperature	-40 ... +70 °C	
Installation		
Terminal size	2.5 to 50 mm²	
Cross-section busbar	≥ 16 mm²	
Tigthening torque	2.5 Nm	
Screw driver	Nr. 2 Pozidriv	
Mounting	On DIN rail 35 mm acc. to EN 60715 by fast clip	
Mounting position	Any	
Supply	Any	
Dimensions and weight		
Mounting dimensions acc. to DIN 43880	Mounting dimension 1	
Pole dimensions (H x D x W)	85 x 70 x 17.5 mm	
Pole weight	Ca. 95 g	
Accessories		
Auxiliary contact	Max. 3x S2C-H 6R	
Approvals	CE and RoHS conform	
	Approvals: VDE, CCC, KEMA, EAC	

E 201

E 200 switches

Isolator for panel installation onto DIN rail acc. to DIN EN 60715
Mounting depth: 70 mm
Mounting width: per pole = 17.5 mm = 1 module
Colour: grey, RAL 7035
Colour of switch lever: red RAL 3000 (r); grey RAL 7000 (g)

Special features

- Fast removal without dismantling of the busbar
- Captive screws with recessed/slotted head, Pozidriv size 2
- Add-on of up to 3 auxiliary contact S2C-H6R possible
- Integrated lay-on edge for labeling system ILS
- Locking device as accessory for unauthorized ON/OFF
- Approval: VDE, CCC, KEMA, EAC

Ordering details

Rated current: 80 A

Poles	Rated voltage	Power loss	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	V AC	W	EAN	Type code	Order code		kg	pc.
1NO	230	2.60	645737	E201/80g	2CDE281001R1080		0.095	10
1NO	230	2.60	645744	E201/80r	2CDE281001R0080		0.095	10
2NO	400	5.15	645911	E202/80g	2CDE282001R1080		0.190	5
2NO	400	5.15	645928	E202/80r	2CDE282001R0080		0.190	5
3NO	400	7.75	646093	E203/80g	2CDE283001R1080		0.290	3
3NO	400	7.75	646109	E203/80r	2CDE283001R0080		0.290	3
4NO	400	10.30	646277	E204/80g	2CDE284001R1080		0.390	2
4NO	400	10.30	646284	E204/80r	2CDE284001R0080		0.390	2

Rated current: 100 A

Poles	Rated voltage	Power loss	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	W	EAN	Type code	Order code	piece	kg	pc.
1NO	230	3.95	645751	E201/100g	2CDE281001R1100		0.095	10
1NO	230	3.95	645738	E201/100r	2CDE281001R0100		0.095	10
2NO	400	7.90	645935	E202/100g	2CDE282001R1100		0.190	5
2NO	400	7.90	645942	E202/100r	2CDE282001R0100		0.190	5
3NO	400	11.85	646116	E203/100g	2CDE283001R1100		0.290	3
3NO	400	11.85	646123	E203/100r	2CDE283001R0100		0.290	3
4NO	400	15.80	646291	E204/100g	2CDE284001R1100		0.390	2
4NO	400	15.80	646307	E204/100r	2CDE284001R0100		0.390	2

Rated current: 125 A

Poles	Rated voltage	Power loss	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	V AC	W	EAN	Type code	Order code	piece	kg	pc.
1NO	230	6.10	645775	E201/125g	2CDE281001R1125		0.095	10
1NO	230	6.10	645782	E201/125r	2CDE281001R0125		0.095	10
2NO	400	12.20	645959	E202/125g	2CDE282001R1125		0.190	5
2NO	400	12.20	645966	E202/125r	2CDE282001R0125		0.190	5
3NO	400	18.30	646130	E203/125g ①	2CDE283001R1125		0.33	3
3NO	400	18.30	646147	E203/125r ①	2CDE283001R0125		0.33	3
4NO	400	24.35	646314	E204/125g ①	2CDE284001R1125		0.44	2
4NO	400	24.35	646321	E204/125r ①	2CDE284001R0125		0.44	2

① without approvals

Command and signaling

E 463/3, E 480/3 switches

2CSC400458F0201

E463/3-KB

2CSC400433F0201

E463/3-SL

2CSC400455F0201

SA 2

Technical features	
Switching capacity	1.25 In; 1.1 Un; cosφ = 0.6 according to DIN VDE 0632
Rated voltage	250/400 V a.c.
Connection cross section	1 mm² stranded wire/0.5 mm² wire up to 25 mm²
Pick-up torque	3 Nm max.
Positive opening	according to DIN VDE 0113
Ambient temperature	-25°C to +55°C
Storage temperature	-40°C to +70°C
Poles	3 NO
Short-circuit withstanding capacity	10 kA, 400 V a.c.

E 463/3-KB, E 480/3-KB, E 463/3-SL switches

Rated current	Power loss	Rated voltage	Bbn 7612270	Order details		Price 1	Weight 1 piece	Pack unit
(per pole)	W	V AC	EAN	Type code	Order code	piece	kg	pc.
63	5.4	250/400	932528	E 463/3-KB	2CCE160300R0131		0.190	1
63	5.5	250/400	932535	E 463/3-SL	2CCE160301R0131		0.195	1
80	9.9	250/400	932542	E 480/3-KB	2CCE180300R0141		0.210	1

Padlock for E 463/3-SL with 2 keys

	Bbn 7612270	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
	587704	SA 2	GJF1101903R0002		0.020	1

Command and signaling

S800PV series 1500 switch disconnector

S800PV-M

			S800PV-SD	S802PV-M-H
General Data	Standards		IEC / EN 60947-3 and Annex D	IEC / EN 60947-3
	Poles		2 ... 4	2 (polarized)
	Tripping characteristics			
	Rated current Ie	A	32, 63, 125	32, 63, 100
	Rated frequency f	Hz		
	Rated insulation voltage Ui acc. to IEC/EN 60664-1	V	DC 1500	DC 1500
	Rated impulse withstand voltage Uimp. (1.2/50µs)	kV	8	
	Overvoltage category		III	
	Pollution degree		2	
	Suitability for isolation		yes	
Data acc. to IEC/EN 60947-3	Rated operational voltage Ue	V	DC 800V: 2-pole DC 1200V: 3-pole DC 1500V: 4-pole	DC 1000V: 2-pole
	Min. operating voltage	V	-	-
	Rated short-term withstand current Icw	kA	1,5	
	Rated short-circuit making capacity Icm	kA	0,5	
	Utilisation category		DC-21A	
	Electrical and Mechanical Endurance	ops.	10 ... 100A: 1500 electric; 8500 mechanic 125A: 1000 electric, 7000 mechanic acc. to IEC 60947-3	
Mechanical Data	Housing		Material group I, RAL 7035	
	Toggle		black, lockable	
	Classification acc. To NF F 126-101, NF F 16-102			
	Protection degree acc. to EN 60529		IP20, IP40 (actuating end only)	
	Mechanical endurance	ops.	10‘000 cylces	10‘000 cylces
	Shock resistance acc. to IEC/EN 60068-2-30		IEC 61373 Cat. 1 Class B, 5g / 30ms acc. To IEC 60068-27 Test Ea	
	Vibration resistance acc. to IEC/EN 60068-2-6		IEC 60068-2-6 Test Fc; 2 - 13.2Hz /1mm 13.2 - 100Hz / 0.7g with load 100% x Ie	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH	12 + 12 cycle with 55°C / 90-96% and 25% / 95-100%	
	Environmental conditions (dry heat) acc. to IEC/EN 60068-2-2 Test B	°C/RH	16 hours 55°C / 2 hours 70°C with damp heat 55%	
	Ambient temperature	°C	-25... + 60	
	Storage temperature	°C	-25 ... +70	
Installation	Terminal		Failsafe cage or ringlug terminal	Failsafe cage or ringlug terminal
	Stranded Cross-section of conductors (top / bottom)	mm^2	1 ... 50	
	Flexible Cross-section of conductors (top/bottom)	mm^2	1 ... 70	
	Tightening torque	Nm	3,5	
		in-lbs.	31	
	Screwdriver		POZI 2	
	Mounting		any	
	Mounting position		any	
	Supply		any	any (taking into account the polarization)
Dimensions and weight	Pole dimensions (H x L x W)	mm	95 x 26.5 x 82.5	
	Pole weight	g	240	
Combination with aux. elements	Auxiliary contact		yes	
	Combined auxiliary- / signal contact		yes	
	Shunt trip		yes	
	Undervoltage release		yes	
	Shunt open release		yes	
	Motor Operating Device		yes	

Command and signaling

S800PV series 1500 switch disconnector

I_{cw}	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
kA	In A	EAN	Type code	Order code		kg	pc.
1.5	32	271958	S802PV-SD32	2CCF019635R0001		0.43	1
1.5	63	271934	S802PV-SD63	2CCF019634R0001		0.43	1
1.5	125	271972	S802PV-SD125	2CCF019636R0001		0.43	1

I_{cw}	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
kA	In A	EAN	Type code	Order code		kg	pc.
1.5	32	271996	S803PV-SD32	2CCF019637R0001		0.65	1
1.5	63	272016	S803PV-SD63	2CCF019638R0001		0.65	1
1.5	125	272030	S803PV-SD125	2CCF019639R0001		0.65	1

I_{cw}	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
kA	In A	EAN	Type code	Order code		kg	pc.
1.5	32	272054	S804PV-SD32	2CCF019640R0001		0.86	1
1.5	63	272078	S804PV-SD63	2CCF019641R0001		0.86	1
1.5	125	272092	S804PV-SD125	2CCF019642R0001		0.86	1

S800PV

S800PV-M-H

Function: this polarized disconnector is designed to meet the requirements for photovoltaic systems. Only 54 mm wide, voltage up to 1000 V d.c. and a rated current up to 100 A.

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	32	420703	S802PV-M32-H	2CCP247204R0001		0.43	1
	63	420710	S802PV-M63-H	2CCP247205R0001		0.43	1
	100	420796	S802PV-M100-H	2CCP247212R0001		0.43	1

Command and signaling

E 210 switches

E 210

On-off switches

General		
Overall depth	68 mm	
Width	0.5 or 1 module (9 or 18 mm)	
Colour	grey, RAL 7035	
Climatic resistance to	IEC 60068-2-2 (dry heat)	
	IEC 60068-2-30 (humid heat)	
	IEC 60068-2-1 (low temperatures)	
Ambient temperature	- 25°C to + 55°C	
Storage temperature	- 40°C to + 70°C	
Connection cross-section (Cu)	from 1 x 1 mm2 to 1 x 6 mm2 or 2 x 2.5 mm2 solid;	
	from 1x 0.75 mm2 to 2 x 1.5 mm2 flexible	
	with end ferrule or pin cable lug	
Tightening torque	1,2-1,5 Nm	
Contacts	Double interrupting	
On-off switches (E211; E211X)		
Short-circuit withstand capacity Inc	3 kA; at 400 V cos j = 0.8 (with fusing <_ 35 A / NH00)	
Rated current In	16 A, 25 A, 32 A	
Rated voltage Un		
in accordance with EN	250 VAC, 400 VAC	
in accordance UL 508	240 VAC	
Rated impulse withstand voltage Uimp	6 kV	
Lowest operating voltage	24 VAC; 25 mA	
Isolating features	to EN60669-2-4; IEC/EN 60947-3	
Utilization category	AC-22 A, DC-22 A acc. IEC/EN 60947-3	
LED voltage ranges	On-off switches E211X 115-250 VAC (Tolerance +/- 10%)	
Frequency	50/60 Hz	
Sealable	in the On and Off positions	
Standards	DIN EN 60669-1 *VDE 0632-1	
	DIN EN 60669-2-4 *VDE 0632-2-4	
	UL 508	
Approvals	VDE; UL; GOST; CCC	

Utilization category for E211 On-off switches (according to standard IEC 60947-3)

Type	In	Utilization category		
		DC-22 A		AC-22 A
E211-16-...	16 A	50 VDC / 16 A	200 VDC / 1 A	400 VAC / 16 A
E211-25-...	25 A	50 VDC / 25 A	200 VDC / 2 A	400 VDC / 25 A
E211-32-...-	32 A	50 VDC / 32 A	200 VDC / 3 A	400 VDC / 32 A

Change over, Group and control switches, pushbuttons and indicator lights

Change over, Group and Control switches (E213; E214; E218)	
Rated current In	16 A, 25 A
Rated voltage Un	
in accordance with EN	250 VAC, 400 VAC
in accordance UL 508	240 VAC
Lowest operating voltage	24 VAC; 25 mA
Frequency	50/60 Hz
Switches sealable	in the On and Off positions
Standards	DIN EN 60669-1 *VDE 0632-1
	UL 508
Approvals	VDE; UL; GOST; CCC
Pushbuttons without and with LED (E215; E217)	
Rated current In	16 A
Rated voltage Un	
in accordance with EN	250 VAC
in accordance UL 508	240 VAC
Lowest operating voltage	24 VAC; 25 mA
LED voltage ranges	12-48 VAC / DC; 115-250 VAC; 60-220 VDC (Tolerance +/- 10%)
Frequency	50/60 Hz
Standards	DIN EN 60669-1 *VDE 0632-1
	UL 508
Approvals	VDE; UL; GOST; CCC
Indicator lights (E219)	
LED voltage ranges	12-48 VAC / DC; 115-250 VAC; 60-220 VDC (Tolerance +/- 10%)
Frequency	50/60 Hz
Insulation voltage	250 V
Rated impulse withstand voltage Uimp	4 kV
Dissipated power	0.47-1 W
Standards	DIN EN 62094-1
	UL 508
Approvals	VDE; UL; GOST; *1
Indicator lights with 2 LEDs	
LED voltage ranges	115-250 VAC; 12-48 VAC (tolerance +/- 10%)
Frequency	50/60 Hz
Insulation voltage	250 V
Rated impulse withstand voltage Uimp	4 kV
Dissipated power	0.8 W
Standards	DIN EN 62094-1
Approvals	VDE; GOST; *1
Indicator lights with 3 LEDs	
LED voltage ranges	415/250 VAC (tolerance +/- 10%)
Frequency	50/60 Hz
Insulation voltage	250 V
Rated impulse withstand voltage Uimp	4 kV
Dissipated power	1.2 W
Standards	DIN EN 62094-1
Approvals	VDE; GOST; *1

*1 = CCC approval not required

Command and signaling

E 210 switches

E 211-16-10

E211-16-20

These devices are specifically made for commanding loads and signaling electrical conditions in any low-voltage switchboard. They are available in half module or 1 module, depending on the contact-layout. The devices with indicator lights are equipped with a LED, which grants an optimal illumination with very low consumption.

The functions of these devices are particularly switching, pushing and signaling electrical conditions in any installations (low-voltage area)

General features

- Space-saving through 9 mm modules
- All terminals equipped with Pozidrive 1 screws
- Safe connection due to cage-clamp
- LED with bright colours and available in three different voltage ranges
- Different lens and button colours
- Compliance to international standards

E 211-... ON-OFF switches

For example, such devices are used to switch indicators or other electrical components (like fan's, air-conditions, e.g.). The On-Off switches distinguish themselves through simple handling, easy mounting and optimal functionality.

Rated current = 16 A

Contacts	Rated voltage	Power loss	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	V AC	W	mm	EAN	Type code	Order code		kg	pc.
1 NO	250	0.32	9	938575	E211-16-10	2CCA703000R0001		0.035	10
2 NO	250/400	0.82	9	938582	E211-16-20	2CCA703005R0001		0.045	10
3 NO	250/400	1.14	18	938599	E211-16-30	2CCA703010R0001		0.080	10
4 NO	250/400	1.64	18	938605	E211-16-40	2CCA703015R0001		0.090	10

Rated current = 25 A

Contacts	Rated voltage	Power loss	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	V AC	W	mm	EAN	Type code	Order code		kg	pc.
1 NO	250	0.75	9	938612	E211-25-10	2CCA703001R0001		0.035	10
2 NO	250/400	1.95	9	938629	E211-25-20	2CCA703006R0001		0.045	10
3 NO	250/400	2.70	18	938636	E211-25-30	2CCA703011R0001		0.080	10
4 NO	250/400	3.90	18	938643	E211-25-40	2CCA703016R0001		0.090	10

Rated current = 32 A

Contacts	Rated voltage	Power loss	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	V AC	W	mm	EAN	Type code	Order code		kg	pc.
1 NO	250	1.12	9	938650	E211-32-10	2CCA703002R0001		0.035	10
2 NO	250/400	2.73	9	938667	E211-32-20	2CCA703007R0001		0.045	10
3 NO	250/400	3.85	18	938674	E211-32-30	2CCA703012R0001		0.080	10
4 NO	250/400	5.46	18	938681	E211-32-40	2CCA703017R0001		0.090	10

E211X-16-10

E 211X-... On-Off switches with yellow LED for contact indication

LED voltage 115-250 V AC

Rated current = 16 A									
Contacts	Rated voltage V AC	Power loss	LED colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
		W		mm	EAN	Type code	Order code		kg	pc.
1 NO	250	0.50	yellow	9	938872	E211X-16-10	2CCA703100R0001		0.040	10
2 NO	250/400	1.00	yellow	18	938889	E211X-16-20	2CCA703110R0001		0.050	10
3 NO	250/400	1.50	yellow	18	938896	E211X-16-30	2CCA703115R0001		0.060	10

E211X-16-20

Rated current = 25 A									
Contacts	Rated voltage V AC	Power loss	LED colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
		W		mm	EAN	Type code	Order code		kg	pc.
1 NO	250	1.15	yellow	9	938902	E211X-25-10	2CCA703101R0001		0.040	10
2 NO	250/400	2.30	yellow	18	938919	E211X-25-20	2CCA703111R0001		0.050	10
3 NO	250/400	3.45	yellow	18	938926	E211X-25-30	2CCA703116R0001		0.060	10

E 213-... Change over switches

The change-over switches distinguish themselves through simple handling, easy mounting and optimal functionality. Example applications include opening and closing of electrically operated flaps.

E213-16-001

Rated current = 16 A									
Contacts	Rated voltage V AC	Power loss	LED colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
		W		mm	EAN	Type code	Order code		kg	pc.
1 CO	250	0.32	-	9	938698	E213-16-001	2CCA703040R0001		0.041	10
2 CO	250	0.82	-	18	938704	E213-16-002	2CCA703045R0001		0.082	10

E 213-16-002

Rated current = 25 A									
Contacts	Rated voltage V AC	Power loss	LED colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
		W		mm	EAN	Type code	Order code		kg	pc.
1 CO	250	0.40	-	9	938711	E213-25-001	2CCA703041R0001		0.041	10
2 CO	250	0.88	-	18	938728	E213-25-002	2CCA703046R0001		0.082	10

Command and signaling

E 210 switches

E214-16-101

E214-16-202

E 214-... Group switches (I-0-II, manual-OFF-automatic)
The Group switches can be used to control the main installation of an emergency supply. Such devices distinguish themselves through simple handling, easy mounting and optimal functionality.

Rated current = 16 A

Contacts	Rated voltage	Power loss	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	V AC	W	mm	EAN	Type code	Order code		kg	pc.
1 CO	250	0.32	9	938735	E214-16-101	2CCA703025R0001		0.041	10
2 CO	250	0.82	18	938742	E214-16-202	2CCA703030R0001		0.082	10

Rated current = 25 A

Contacts	Rated voltage	Power loss	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	V AC	W	mm	EAN	Type code	Order code		kg	pc.
1 CO	250	0.40	9	938759	E214-25-101	2CCA703026R0001		0.041	10
2 CO	250	0.88	18	938766	E214-25-202	2CCA703031R0001		0.082	10

E 218-16-11

E 218-16-22

E 218-... Control switches
These devices can be used in distribution board for any control function. The control switches distinguish themselves through simple handling, easy mounting and optimal functionality.

Rated current = 16 A

Contacts	Rated voltage	Power loss	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	V AC	W	mm	EAN	Type code	Order code		kg	pc.
1NO+1NC	250	0.50	9	938773	E218-16-11	2CCA703050R0001		0.041	10
2NO+2NC	250	1.00	18	938780	E218-16-22	2CCA703060R0001		0.082	10
3NO+1NC	250	1.50	18	938797	E218-16-31	2CCA703065R0001		0.082	10

Rated current = 25 A

Contacts	Rated voltage	Power loss	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	V AC	W	mm	EAN	Type code	Order code		kg	pc.
1NO+1NC	250	0.75	9	938803	E218-25-11	2CCA703051R0001		0.041	10

Command and signaling

E 210 pushbuttons

E 215

E 217

E 215-... Pushbuttons (6 different button colours)
Pushbuttons without and with LED
These products are available in 9 mm widths (= 0.5 modules).
The devices can be used in distribution boards and are all distinguished by their simple handling, ease of mounting and optimal functionality. The pushbuttons are used for remote control in all kinds of electrical installation (e.g. public, industrial). The range offers three different voltages. (Ranges: 12-48 V AC/DC; 115-250 V AC and 60-220 V DC).

Rated current = 16 A

Contacts	Rated voltage V AC	Power loss	Button colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
		W		mm	EAN	Type code	Order code		kg	pc.
1NO+1NC	250	0.50	grey	9	938810	E215-16-11B	2CCA703150R0001		0.046	10
1NO+1NC	250	0.50	red	9	938827	E215-16-11C	2CCA703151R0001		0.046	10
1NO+1NC	250	0.50	green	9	938834	E215-16-11D	2CCA703152R0001		0.046	10
1NO+1NC	250	0.50	yellow	9	938841	E215-16-11E	2CCA703153R0001		0.046	10
1NO+1NC	250	0.50	black	9	938858	E215-16-11F	2CCA703154R0001		0.046	10
1NO+1NC	250	0.50	blue	9	938865	E215-16-11G	2CCA703155R0001		0.046	10

E 217-... Luminous Pushbuttons (5 different LED colours)

LED Voltage range = 115-250 V AC

Contacts	Rated voltage V AC	Power loss	LED colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
		W		mm	EAN	Type code	Order code		kg	pc.
1 NO	250	1.10	white	9	938988	E217-16-10B	2CCA703160R0001		0.050	10
1 NO	250	1.10	red	9	938995	E217-16-10C	2CCA703161R0001		0.050	10
1 NO	250	1.10	green	9	939008	E217-16-10D	2CCA703162R0001		0.050	10
1 NO	250	1.10	yellow	9	939015	E217-16-10E	2CCA703163R0001		0.050	10
1 NO	250	1.10	blue	9	939022	E217-16-10G	2CCA703164R0001		0.050	10
1 NC	250	1.10	white	9	939084	E217-16-01B	2CCA703250R0001		0.050	10
1 NC	250	1.10	red	9	939091	E217-16-01C	2CCA703251R0001		0.050	10
1 NC	250	1.10	green	9	939107	E217-16-01D	2CCA703252R0001		0.050	10
1 NC	250	1.10	yellow	9	939114	E217-16-01E	2CCA703253R0001		0.050	10
1 NC	250	1.10	blue	9	939121	E217-16-01G	2CCA703254R0001		0.050	10

Command and signaling

E 210 pushbuttons

E 217

E 217-... Luminous Pushbuttons (5 different LED colours)

LED Voltage range = 12-48 V AC/DC										
Contacts	Rated voltage V AC	Power loss	LED colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
		W		mm	EAN	Type code	Order code		kg	pc.
1 NO	250	0.72	white	9	938933	E217-16-10B48	2CCA703170R0001		0.050	10
1 NO	250	0.72	red	9	938940	E217-16-10C48	2CCA703171R0001		0.050	10
1 NO	250	0.72	green	9	938957	E217-16-10D48	2CCA703172R0001		0.050	10
1 NO	250	0.72	yellow	9	938964	E217-16-10E48	2CCA703173R0001		0.050	10
1 NO	250	0.72	blue	9	938971	E217-16-10G48	2CCA703174R0001		0.050	10
1 NC	250	0.72	white	9	939039	E217-16-01B48	2CCA703260R0001		0.050	10
1 NC	250	0.72	red	9	939046	E217-16-01C48	2CCA703261R0001		0.050	10
1 NC	250	0.72	green	9	939053	E217-16-01D48	2CCA703262R0001		0.050	10
1 NC	250	0.72	yellow	9	939060	E217-16-01E48	2CCA703263R0001		0.050	10
1 NC	250	0.72	blue	9	939077	E217-16-01G48	2CCA703264R0001		0.050	10

LED Voltage range = 60-220 V DC										
Contacts	Rated voltage V AC	Power loss	LED colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
		W		mm	EAN	Type code	Order code		kg	pc.
1 NO	250	1.50	white	9	939138	E217-16-10B220	2CCA703165R0001		0.050	10
1 NO	250	1.50	red	9	939145	E217-16-10C220	2CCA703166R0001		0.050	10
1 NO	250	1.50	green	9	939152	E217-16-10D220	2CCA703167R0001		0.050	10
1 NO	250	1.50	yellow	9	939169	E217-16-10E220	2CCA703168R0001		0.050	10
1 NO	250	1.50	blue	9	939176	E217-16-10G220	2CCA703169R0001		0.050	10
1 NC	250	1.50	white	9	939183	E217-16-01B220	2CCA703255R0001		0.050	10
1 NC	250	1.50	red	9	939190	E217-16-01C220	2CCA703256R0001		0.050	10
1 NC	250	1.50	green	9	939206	E217-16-01D220	2CCA703257R0001		0.050	10
1 NC	250	1.50	yellow	9	939213	E217-16-01E220	2CCA703258R0001		0.050	10
1 NC	250	1.50	blue	9	939220	E217-16-01G220	2CCA703259R0001		0.050	10

Command and signaling

E 210 indicator lights

E 219

E 219-... Indicator Lights with LED (5 different colours)
Indicator Lights with LED
These products are available in 9 mm width (= 0.5 modules) and can be used for indicating any operational condition such as signaling loss of a phase.
The range offers three different voltages.
(Ranges: 12-48 V AC/DC; 115-250 V AC and 110-220 V DC).

Single indicator light - LED Voltage range = 115-250 V AC

Power loss	LED colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
W		mm	EAN	Type code	Order code		kg	pc.
0.47	white	9	939282	E219-B	2CCA703400R0001		0.04	10
0.47	red	9	939299	E219-C	2CCA703401R0001		0.04	10
0.47	green	9	939305	E219-D	2CCA703402R0001		0.04	10
0.47	yellow	9	939312	E219-E	2CCA703403R0001		0.04	10
0.47	blue	9	939329	E219-G	2CCA703404R0001		0.04	10

Single indicator light - LED Voltage range = 12-48 V AC/DC

Power loss	LED colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
W		mm	EAN	Type code	Order code		kg	pc.
0.40	white	9	939237	E219-B48	2CCA703420R0001		0.04	10
0.40	red	9	939244	E219-C48	2CCA703421R0001		0.04	10
0.40	green	9	939251	E219-D48	2CCA703422R0001		0.04	10
0.40	yellow	9	939268	E219-E48	2CCA703423R0001		0.04	10
0.40	blue	9	939275	E219-G48	2CCA703424R0001		0.04	10

Single indicator light - LED Voltage range = 60-220 V DC

Power loss	LED colour	Width	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
W		mm	EAN	Type code	Order code		kg	pc.
1.00	white	9	939336	E219-B220	2CCA703405R0001		0.04	10
1.00	red	9	939343	E219-C220	2CCA703406R0001		0.04	10
1.00	green	9	939350	E219-D220	2CCA703407R0001		0.04	10
1.00	yellow	9	939367	E219-E220	2CCA703408R0001		0.04	10
1.00	blue	9	939374	E219-G220	2CCA703409R0001		0.04	10

Command and signaling

E 210 indicator lights

E 219-2CD

E 219-3CDE

Double indicator light - LED Voltage range = 12-24 V AC

Power loss	LED colour	Width	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
W		mm	EAN	Type code	Order code		kg	pc.
0.8	green, red	9	413347	E219-2CD48	2CCA703911R0001		0.042	10

Double indicator light - LED Voltage range = 115-230 V AC

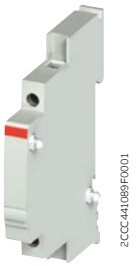
Power loss	LED colour	Width	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
W		mm	EAN	Type code	Order code		kg	pc.
0.8	green, red	9	413330	E219-2CD	2CCA703910R0001		0.042	10

Triple indicator light - LED Voltage range = 415-230 V AC

Power loss	LED colour	Width	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
W		mm	EAN	Type code	Order code		kg	pc.
1.2	red, red, red	9	413309	E219-3C	2CCA703900R0001		0.044	10
1.2	green, green, green	9	413316	E219-3D	2CCA703901R0001		0.044	10
1.2	red, yellow, green	9	413323	E219-3CDE	2CCA703902R0001		0.044	10

Command and signaling

E 210 accessories



E 210-DH

E 210-ASV9

Accessories for E 210 device series

Dummy housing for 9 mm wide units
The modular witht of 18 mm must be complied with to use the devices in the SMISSLINE socket system. The dummy housing is ready-made with two expanding connectors. Always snap on dummy housing on the left.

	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	404208	E210-DH	2CCA703480R0001		0.18	10

Padlock

	Bbn 7612270	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
to use for 9 and 18 mm wide units	404215	E210-ASV9	2CCA703648R0001		0.01	10

Command and signaling

SL luminous indicators for panel installation

2CSC445165F0001

SL 4 LEDs

2CSC445169F0001

SL 12 LEDs

Technical characteristics

Electrical charýacteristics		
Supply	[V]	AC/DC 24, 48 ±20%
		AC 115, 230 ±20%
		DC 115 ±20%
Frequency	[Hz]	0-1000
Power consumption	[W]	0.5 max per input
TEST input consumption	[W]	4 max
Other characteristics		
Operating temperature	[°C]	-20 +60
Storage temperature	[°C]	-20 +70
Relative humidity		30-95%
Overall dimensions	[mm]	48 x 48 x 56 (SL-3 e SL-4)
		96 x 96 x 56 (SL...96)
		72 x 144 x 70 (SL...72-144)
Weight	[gr]	100 (SL-3 e SL-4),
		300 (SL-12-115V/96)
		350 (SL-12-115V/72-144)
Protection degree		IP40
Label dimensions	[mm]	30 x 9

Luminous indicator

These luminous indicator devices provide an intuitive and readily visible front panel display of the state of an electrical line or load situated either remotely or inside the panel itself. The range of luminous indicator includes devices with 3, 4 or 12 LEDs with various supply voltage ratings, and fully-customisable plain labels.
The version with 115 V DC supply rating, is ideal for installation on medium voltage panels and for non-standard applications, and complete an extensive range of easy-to-install indicator devices.

Indicator lamps 24 V AC/DC

Size	Number of LEDs	Characteristics of the LEDs	Label	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm				EAN	Type code	Order code		kg	pc.
48	3	not included	neutral	2659501	SL-3-24V/48	2CSG211010R3001		0.01	1
48	4	not included	neutral	2659600	SL-4-24V/48	2CSG221010R3001		0.01	1
48	3	■	neutral	2659709	SL-3-L1-L2-L3-24V/48	2CSG241020R3001		0.01	1
48	3	■■■	in English	2659808	SL-3-A-C-S-24V/48	2CSG251030R3001		0.01	1
48	4	■■■■	in English	2659907	SL-4-A-C-S-E-24V/48	2CSG251040R3001		0.01	1
96	12	not included	alarm	2660002	SL-12-24V/96	2CSG274050R3001		0.03	1
144	12	not included	alarm	2660408	SL-12-24V/144	2CSG233050R3001		0.35	1

Indicator lamps 48 V AC/DC

Size	Number of LEDs	Characteristics of the LEDs	Label	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm				EAN	Type code	Order code		kg	pc.
48	3	not included	neutral	2660002	SL-3-48V/48	2CSG311010R3001		0.01	1
48	4	not included	neutral	2658603	SL-4-48V/48	2CSG321010R3001		0.01	1
48	3	■	neutral	2658702	SL-3-L1-L2-L3-48V/48	2CSG341020R3001		0.01	1
48	3	■■■	in English	2658801	SL-3-A-C-S-48V/48	2CSG351030R3001		0.01	1
48	4	■■■■	in English	2658900	SL-4-A-C-S-E-48V/48	2CSG351040R3001		0.01	1
96	12	not included	alarm	2660101	SL-12-48V/96	2CSG374050R3001		0.03	1
144	12	not included	alarm	2660507	SL-12-48V/144	2CSG333050R3001		0.35	1

Command and signaling

SL luminous indicators for panel installation

Indicator lamps 115 V AC

Size	Number of LEDs	Characteristics of the LEDs	Label	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm				EAN	Type code	Order code		kg	pc.
48	3	not included	neutral	2659006	SL-3-115V/48	2CSG411010R3001		0.01	1
48	4	not included	neutral	2659105	SL-4-115V/48	2CSG421010R3001		0.01	1
48	3	■■■	in English	2659303	SL-3-A-C-S-115V/48	2CSG451030R3001		0.01	1
48	4	■■■■	in English	2659402	SL-4-A-C-S-E-115V/48	2CSG451040R3001		0.01	1
96	12	not included	alarm	2660200	SL-12-115V/96	2CSG474050R3001		0.03	1
144	12	not included	alarm	2660606	SL-12-115V/144	2CSG433050R3001		0.35	1

Indicator lamps 115 V DC

Size	Number of LEDs	Characteristics of the LEDs	Label	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm				EAN	Type code	Order code		kg	pc.
48	3	not included	neutral	2659006	SL-3-115V/48 DC	2CSG273233R3001		0.01	1
48	4	not included	neutral	2659105	SL-4-115V/48 DC	2CSG273313R3001		0.01	1
48	3	■■■	in English	2659303	SL-3-A-C-S-115V/48 DC	2CSG273223R3001		0.01	1
48	4	■■■■	in English	2659402	SL-4-A-C-S-E-115V/48 DC	2CSG273303R3001		0.01	1
96	12	not included	neutral	2732136	SL12-115V/96 DC	2CSG273213R3001		0.01	1
144	12	not included	neutral	2732938	SL12-115V/72-144 DC	2CSG273293R3001		0.01	1

Indicator lamps 230 V AC

Size	Number of LEDs	Characteristics of the LEDs	Label	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm				EAN	Type code	Order code		kg	pc.
48	3	not included	neutral	2659501	SL-3-230V/48	2CSG511010R3001		0.01	1
48	4	not included	neutral	2659600	SL-4-230V/48	2CSG521010R3001		0.01	1
48	3	■	neutral	2659709	SL-3-L1-L2-L3-230V/48	2CSG541020R3001		0.01	1
48	3	■■■	in English	2659808	SL-3-A-C-S-230V/48	2CSG551030R3001		0.01	1
48	4	■■■■	in English	2659907	SL-4-A-C-S-E-230V/48	2CSG551040R3001		0.01	1
96	12	not included	alarm	2660309	SL-12-230V/96	2CSG574050R3001		0.03	1
144	12	not included	alarm	2660705	SL-12-230V/144	2CSG533050R3001		0.35	1

Accessories for luminous indicators

	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
■	2660804	red LED	2CSG500060R3001		0.05	5 pcs
■	2660903	green LED	2CSG500070R3001		0.05	5 pcs
■	2661009	yellow LED	2CSG500080R3001		0.05	5 pcs
■	2661108	blue LED	2CSG500090R3001		0.05	5 pcs
□	2661207	white LED	2CSG500100R3001		0.05	5 pcs

Command and signaling

A wide range of installation contactors take noise reduction to new levels

ABB's hum-free installation contactor designs offer a wider range of ratings from 16 A to 100 A. Widely used in buildings for switching and controlling lighting, heating, ventilation, motor and pumps, the installation contactors take noise reduction to a new level. With an innovative AC / DC coil design that eliminates hum, a broad selection of common accessories as well as manual and automatic versions, installation contactors offer peace of mind in noise-sensitive applications.

Optimum interface

Quiet and reliable in every application

ABB's hum-free contactors feature innovative AC / DC coils. The range covers ratings from 16 A to 100 A and offers accessories to suit customer requirements in every application.

An integrated indicator makes diagnostics quicker and provides reliable information about the contactor's status at a glance.

Easy to install

Simple solution that saves time

Reduce installation time and stock levels, with a universal auxiliary contact block that can be attached to the contactors by hand.

Installation contactors fit easily with ABB's System Pro M compact range, making them fully compatible with other modular DIN-rail components.

Global availability

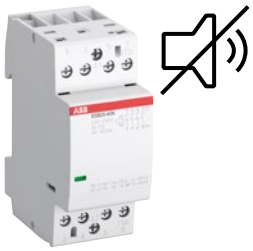
Whatever you need, wherever you need it

Installation contactors are available in single and multi-packs to meet different customer needs and to optimize warehousing space.

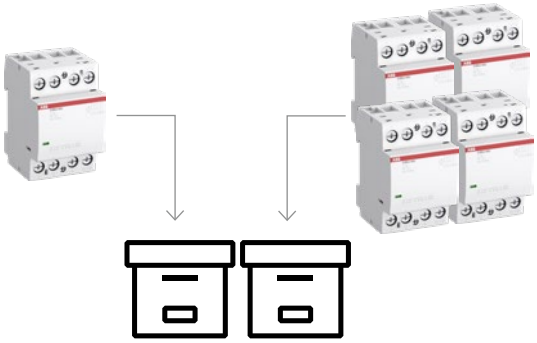
Every ABB product enjoys expert local support worldwide to make communication easier and delivery faster.

Command and signaling

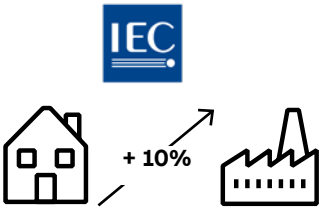
ESB / EN installation contactors - features and benefits



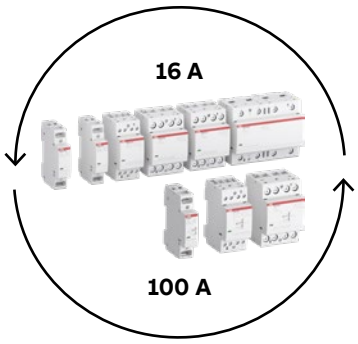
Noise-free operation
With an innovative AC / DC design that eliminates hum, the range meets the needs of applications demanding silent operation, for example hotel rooms and residential buildings.



Single and multi packaging
The right packaging for your needs- our products are available in a choice of different packaging and delivery quantities. This allows you to warehouse according to your needs and save up to 50% on your inventory.



Wide application range
The ESB installation contactors range meets both the industrial standard IEC 60947-4-1 and the household standard IEC 61095 as well as pollution degree class 3. Due to multiple certification and inherant robustness, the contactors can be used in 10% more applications in both residential and industrial settings.

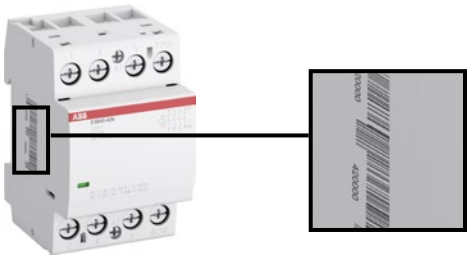


Comprehensive solution
ABB's ESB and EN installation contactors range offers a complete solution from 16 A to 100 A, offering an answer to all customer needs from a single supplier.
With 16 A, 25 A and 100 A versions, tender specifications can be met with competitive pricing.

Save up to 15% space with group mounting
ESB16..N and ESB/EN20..N can be group mounted. There is no need for a distance piece in between contactors, saving both valuable space in cabinets and money.

Built-in protective circuit
Protect the contactor without additional space-demanding components against remote lightning strikes and overvoltages.

Design in accord ance with System Pro M
Contactors and accessories are designed according to System pro M range and ABB´s modular DIN-rail components and fit in dedicated panels.

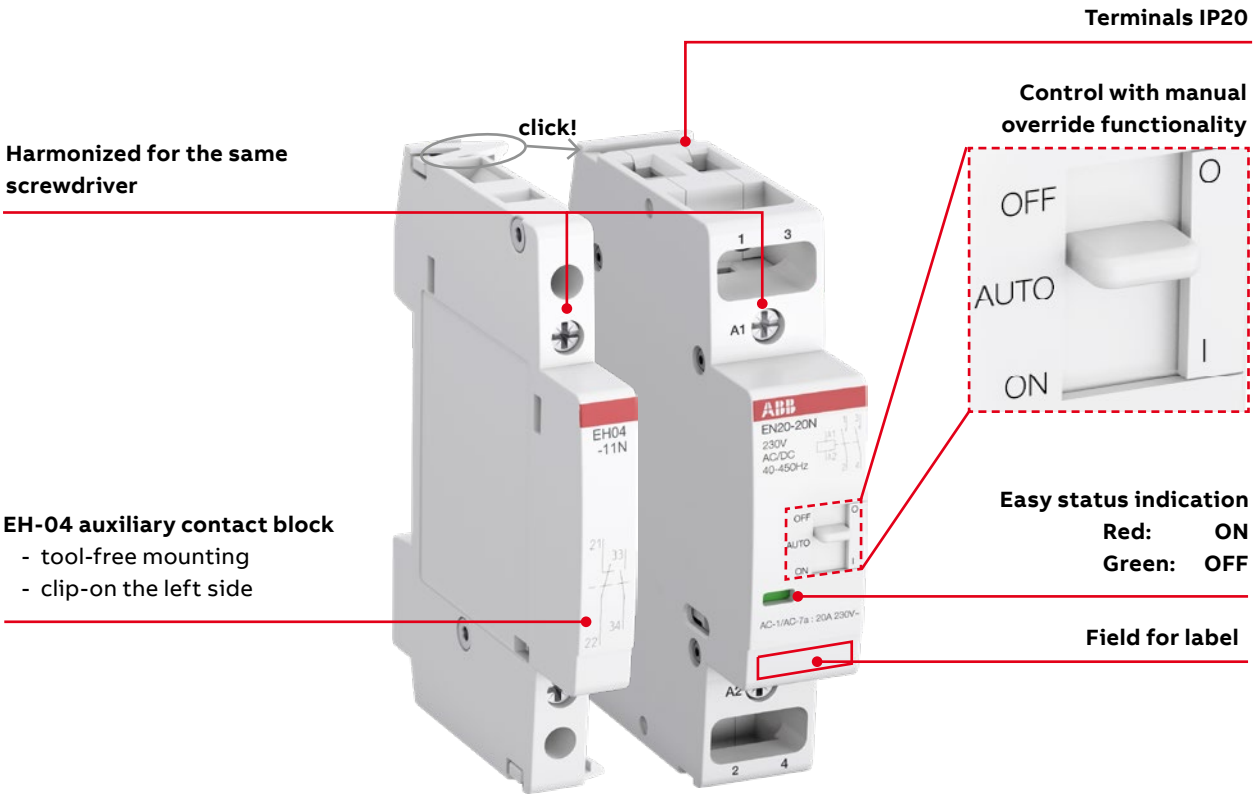


EAN-code for an easy identification
Just scan the EAN-code printed on the side of the devices and save up to 80% time identifying the product in your system. This way, handling and identifying your products in warehouse and cashier system is easy.

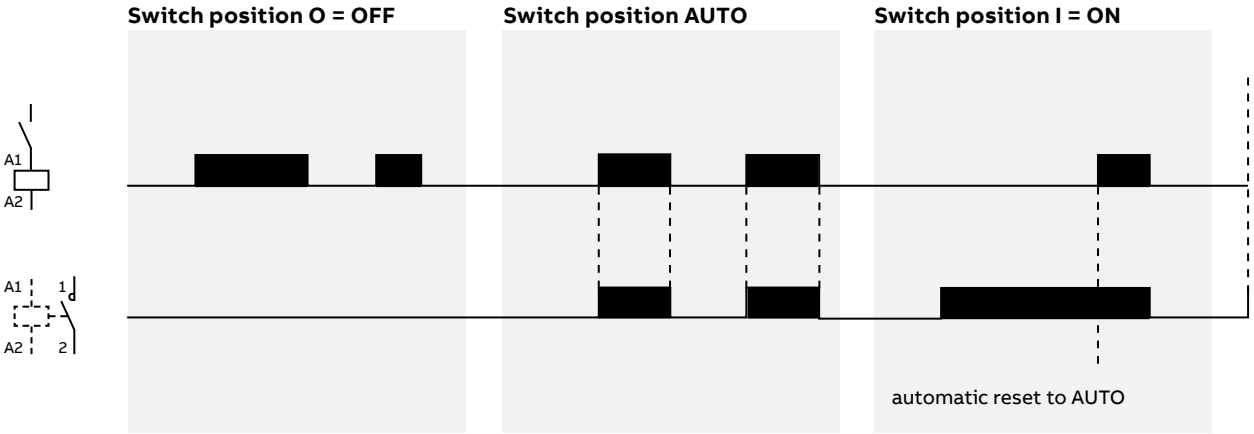
Command and signaling

ESB / EN installation contactors - easy installation and maintenance

ABB´s installation contactors come with many features that make installation and maintenance easier. The mechanical Indicator with green and red color for status indication ensures a quick diagnostic of the system. Also, some speciality types feature a manual override functionality with a toggle switch to control independently from control source. Accessories can be mounted tool-free on the contactor, for example auxiliaries, space holders as well as security and safety covers.



Operation mode EN-versions



Command and signaling

ESB / EN installation contactors - overview

Type		ESB16..N	ESB20..N EN20..N	ESB25..N EN25..N	ESB40..N EN40..N	ESB63..N	ESB100..N
AC-1 / AC-7a (A)		16	20	25	40	63	100
Modular Width		1	1	2	3	3	3/6
Accessories							
Auxiliary contact blocks	2 NO	EH04-20	EH04-20	EH04-20	EH04-20	EH04-20	EH04-20
	1 NO + 1 NC	EH04-11	EH04-11	EH04-11	EH04-11	EH04-11	EH04-11
Distance piece		-	-	ESB-DIS	ESB-DIS	ESB-DIS	ESB-DIS
Covers		-	-	ESB-PLK24 ESB-SPK24	ESB-PLK40/63 ESB-SPK40/63	ESB-PLK40/63 ESB-SPK40/63	-

Command and signaling

Installation contactors

Main circuit – Utilization characteristics according to IEC/EN

Contactor type		ESB16..N	ESB20..N / EN20..N	ESB25..N / EN25..N	ESB40..N / EN40..N	ESB63..N	ESB100..N
Standards		IEC/EN 60947-1, IEC/EN 60947-4-1, IEC/EN 61095					
Rated operational voltage U_e		220 V DC 250 V AC	220 V DC 250 V AC	220 V DC 400 V AC	220 V DC 400 V AC	220 V DC 400 V AC	220 V DC 400 V AC
Rated frequency		DC, 50/60 Hz					
AC-1 / AC-7a utilization category for air temperature near the contactor ≤ 55 °C							
Rated operational current Ie AC-1 / AC-7a		16 A	20 A	25 A	40 A	63 A	100 A
Rated operational power AC-1	230 V 1 phase	3.7 kW	4.6 kW	5.8 kW	9.2 kW	14.5 kW	23 kW
	400 V 3 phases	–	–	17.3 kW	27.7 kW	43.6 kW	69.3 kW
AC-3 / AC-7b utilization category for air temperature close to contactor ≤ 55 °C							
Rated operational current Ie AC-3 / AC-7b	230 V 1 phase	6 A	9 A	9 A	22 A	30 A	–
	400 V 3 phases	–	–	9 A	22 A	30 A	–
Rated operational power AC-3	230 V 1 phase	0.9 kW	1.3 kW	1.3 kW	3.7 kW	5 kW	–
	400 V 3 phases	–	–	4 kW	11 kW	15 kW	–
Rated making capacity AC-3 acc. to IEC 60947-4-1		10 x Ie / AC-3	10 x Ie / AC-3	10 x Ie / AC-3	10 x Ie / AC-3	10 x Ie / AC-3	–
Rated breaking capacity AC-3 acc. to IEC 60947-4-1		8 x Ie / AC-3	8 x Ie / AC-3	8 x Ie / AC-3	8 x Ie / AC-3	8 x Ie / AC-3	–
Short-circuit protective devices - gG type fuses		20 A	20 A	35 A	63 A	80 A	125 A
Rated short-time withstand current I_{cw} at 40 °C ambient temp. in free air, from a cold state	10 s	72 A	72 A	72 A	176 A	240 A	–
Power loss per pole		0.9 W	1.4 W	2 W	3 W	4.5 W	6 W
Maximum electrical switching frequency	AC-1 / AC-7a	300 cycles/h	300 cycles/h	300 cycles/h	300 cycles/h	300 cycles/h	150 cycles/h
	AC-3 / AC-7b	600 cycles/h	600 cycles/h	600 cycles/h	600 cycles/h	600 cycles/h	–
Electrical durability	AC-1 / AC-7a	150000 cycles	150000 cycles	130000 cycles	150000 cycles	100000 cycles	70000 cycles
	AC-3 / AC-7b	150000 cycles	150000 cycles	500000 cycles	150000 cycles	240000 cycles	–
Mechanical durability		1000000 cycles					

Main circuit – Utilization characteristics according to UL/CSA

Contactor type		ESB16..N	ESB20..N / EN20..N	ESB25..N / EN25..N	ESB40..N / EN40..N	ESB63..N	ESB100..N
Standards		UL 60947-1, UL 60947-4-1					
General use rating	240 V	16 A	20 A	25 A	40 A	63 A	100 A
Motor rating							
Full load current	220 ... 240 V 1 phase	6.9 A	8 A	9.6 A	22 A	28 A	–
	440 ... 480 V 3 phases	–	–	7.6 A	21 A	21 A	–
Horse power rating	220 ... 240 V 1 phase	0.8 hp	1 hp	1 hp	3 hp	5 hp	–
	440 ... 480 V 3 phases	–	–	5 hp	15 hp	15 hp	–
Short-circuit protection for contactors without thermal O/L relay - Motor protection excluded							
Fuse rating		20 A	20 A	25 A	40 A	75 A	125 A
Fuse type 480 V		K5	K5	K5	K5	K5	K5
Max. electrical switching frequency							
for general use		300 cycles/h	300 cycles/h	300 cycles/h	300 cycles/h	300 cycles/h	150 cycles/h
for motor use		600 cycles/h	600 cycles/h	600 cycles/h	600 cycles/h	600 cycles/h	–

General technical data

Contactor type		ESB16..N	ESB20..N / EN20..N	ESB25..N / EN25..N	ESB40..N / EN40..N	ESB63..N	ESB100..N
Rated insulation voltage Ui							
acc. to IEC 60947-4-1 and VDE 0110 (Gr. C)		400 V	400 V	500 V	500 V	500 V	500 V
Rated impulse withstand voltage U_{imp}		6 kV	ESB: 6 kV EN: 6 kV	ESB: 6 kV EN: 4 kV / 6 kV with protection cover		6 kV	6 kV
Ambient air temperature (1)	operation	-25 ... +55 °C					
	storage	-40 ... +80 °C					
Maximum operating altitude permissible		2000 m					
Resistance to shock acc. to IEC 60068-2-27	11 ms pulse	15g					

(1) If several contactors are mounted adjacently and the ON time is longer than one hour, every second contactor needs a distance piece, Type ESB-DIS (1/2 module). This is not necessary at an ambient temperature ≤ 40 °C or on Type ESB20.

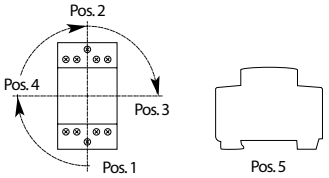
Magnet system characteristics

Contactor type	ESB16..N	ESB20..N / EN20..N	ESB25..N / EN25..N	ESB40..N / EN40..N	ESB63..N	ESB100..N
Coil operating limits acc. to IEC/EN60947-4-1	0.85 ... 1.1 x UC (at θ ≤ 55 °C)					
Rated frequency	DC, 50 / 60 / 400 Hz					
Frequency range	DC, 40 ... 450 Hz					
Coil consumption						
average holding value DC	2.5 W	2.5 W	4 W	5 W	5 W	8.5 W
average pull-in value DC	2.5 W	2.5 W	4 W	5 W	70 W	100 W

Command and signaling

Installation contactors

Mounting characteristics and conditions for use

Contactor type	ESB16..N	ESB20..N / EN20..N	ESB25..N / EN25..N	ESB40..N / EN40..N	ESB63..N	ESB100..N
Mounting position	Position 1 to 5 					
Mounting on DIN rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715					

Connecting characteristics - Main circuit

Contactor type	ESB16..N	ESB20..N / EN20..N	ESB25..N / EN25..N	ESB40..N / EN40..N	ESB63..N	ESB100..N
Connecting capacity						
Rigid	1x 1 ... 10 mm² 2x 1 ... 4 mm²	1x 1 ... 10 mm² 2x 1 ... 4 mm²	1x 1.5 ... 10 mm² 2x 1.5 ... 4 mm²	1x 1.5 ... 25 mm² 2x 1.5 ... 10 mm²	1x 1.5 ... 25 mm² 2x 1.5 ... 10 mm²	1x 10 ... 50 mm² 2x -
Flexible with ferrule	1x 1 ... 6 mm² 2x 1 ... 2.5 mm²	1x 1 ... 6 mm² 2x 1 ... 2.5 mm²	1 x 1 .5 ... 10 mm² 2x 1.5 ... 2.5 mm²	1x 1.5 ... 16 mm² 2x 1.5 ... 10 mm²	1x 1.5 ... 16 mm² 2x 1.5 ... 10 mm²	1x 10 ... 35 mm² 2x -
Flexible with insulated ferrule	1x 1 ... 6 mm² 2x 1 ...1.5 mm²	1x 1 ... 6 mm² 2x 1 ...1.5 mm²	1 x 1 .5 ... 10 mm² 2x 1 .5 mm²	1x 1.5 ... 16 mm² 2x 1.5 ... 10 mm²	1x 1.5 ... 16 mm² 2x 1.5 ... 10 mm²	1x 10 ... 35 mm² 2x -
Flexible	1x 1 ... 6 mm² 2x 1... 4 mm²	1x 1 ... 6 mm² 2x 1... 4 mm²	1 x 1 .5 ... 10 mm² 2x 1 .5 ... 4 mm²	1x 1.5 ... 16 mm² 2x 1.5 ... 10 mm²	1x 1.5 ... 16 mm² 2x 1.5 ... 10 mm²	1x 10 ... 35 mm² 2x -
Stranded acc. to UL/CSA	1 4-8 AWG	1 4-8 AWG	16-8 AWG	16-4 AWG	16-4 AWG	8-0 AWG
Degree of protection	IP20					
Wire stripping length	10 mm	10 mm	10 mm	13 mm	13 mm	15 mm
Tightening torque	1.2 N·m / 11 lb.in	1.2 N·m / 11 lb.in	1 N·m/ 9 lb.in	2.5 N·m/ 20 lb.in	2.5 N·m/ 20 lb.in	3 N·m/ 27 lb.in
Recommended screw driver	Pozidriv 1			Pozidriv 2		

Connecting characteristics - Control circuit

Contactor type	ESB16..N	ESB20..N / EN20..N	ESB25..N / EN25..N	ESB40..N / EN40..N	ESB63..N	ESB100..N
Connecting capacity						
Rigid	1x 1 ... 4 mm² 2x 1 ... 2.5 mm²					
Flexible with ferrule	1x 0.75 ... 2.5 mm² 2x 0.75 ... 1 mm²					
Flexible with insulated ferrule	1x 1 ... 2.5 mm² 2x 0.75 ... 1 mm²					
Flexible	1x 1 ... 4 mm² 2x 1 ... 2.5 mm²					
Stranded acc. to UL/CSA	16-10 AWG					
Degree of protection	IP20					
Wire stripping length	7 mm					
Tightening torque	0.9 N·m / 8 lb.in					
Recommended screw driver	Pozidriv 1					

Command and signaling

ESB16..N installation contactors

1SBC101551V0000

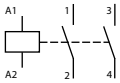
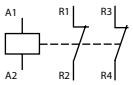
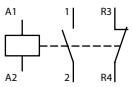
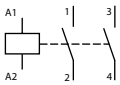
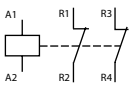
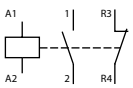
ESB16..N

16 A, AC-1 /AC-7a
AC / DC operated

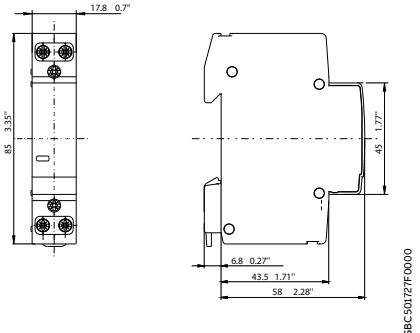
The ESB16..N installation contactors are used to control single-phase loads up to 16 A and can be operated by AC or DC voltages.These contactors are made for use in household applications as well as in industrial environment.

ESB16..N series is providing the following benefits:

- Hum-free operation, low power consumption and integrated overvoltage protection.
- Various contact combinations and accessories are available.

Main contacts	Width in number of modular spacings	Rated control circuit voltage (1)	Type	Order code	Pkg qty	Weight (1 pce)
		V AC / DC				kg
Single packaging						
	1	24	ESB16-20N-01	1SBE111111R0120	1	0.14
		230	ESB16-20N-06	1SBE111111R0620	1	0.14
	1	24	ESB16-02N-01	1SBE111111R0102	1	0.14
		230	ESB16-02N-06	1SBE111111R0602	1	0.14
	1	24	ESB16-11N-01	1SBE111111R0111	1	0.14
		230	ESB16-11N-06	1SBE111111R0611	1	0.14
Multiple packaging						
	1	24	ESB16-20N-01	1SBE111111M0120	12	0.14
		230	ESB16-20N-06	1SBE111111M0620	12	0.14
	1	24	ESB16-02N-01	1SBE111111M0102	12	0.14
		230	ESB16-02N-06	1SBE111111M0602	12	0.14
	1	24	ESB16-11N-01	1SBE111111M0111	12	0.14
		230	ESB16-11N-06	1SBE111111M0611	12	0.14

(1) Other control voltages: see voltage code table and contact ABB for availability of products



1SBC501727F0000

ESB16..N

Dimensions mm, inches

Command and signaling

ESB20..N installation contactors

1SBC101552V0000

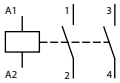
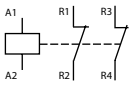
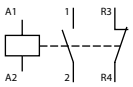
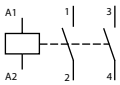
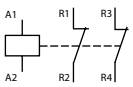
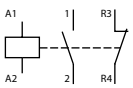
ESB20..N

20 A, AC-1 /AC-7a
AC / DC operated

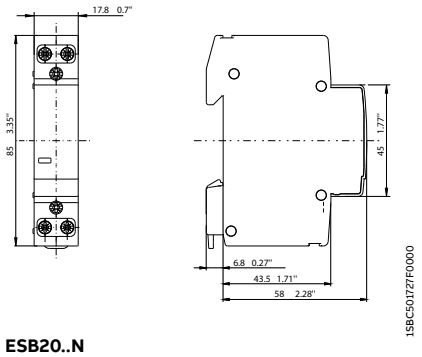
The ESB20..N installation contactors are used to control single-phase loads up to 20 A and can be operated by AC or DC voltages. These contactors are made for use in household applications as well as in industrial environment.

ESB20..N series is providing the following benefits:

- Hum-free operation, low power consumption and integrated overvoltage protection.
- Various contact combinations and accessories are available.

Main contacts	Width in number of modular spacings	Rated control circuit voltage (1)	Type	Order code	Pkg qty	Weight (1 pce)
		V AC / DC				kg
Single packaging						
	1	24	ESB20-20N-01	1SBE121111R0120	1	0.14
		230	ESB20-20N-06	1SBE121111R0620	1	0.14
	1	24	ESB20-02N-01	1SBE121111R0102	1	0.14
		230	ESB20-02N-06	1SBE121111R0602	1	0.14
	1	24	ESB20-11N-01	1SBE121111R0111	1	0.14
		230	ESB20-11N-06	1SBE121111R0611	1	0.14
Multiple packaging						
	1	24	ESB20-20N-01	1SBE121111M0120	12	0.14
		230	ESB20-20N-06	1SBE121111M0620	12	0.14
	1	24	ESB20-02N-01	1SBE121111M0102	12	0.14
		230	ESB20-02N-06	1SBE121111M0602	12	0.14
	1	24	ESB20-11N-01	1SBE121111M0111	12	0.14
		230	ESB20-11N-06	1SBE121111M0611	12	0.14

(1) Other control voltages: see voltage code table and contact ABB for availability of products



ESB20..N

Dimensions mm, inches

Command and signaling

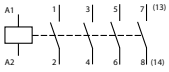
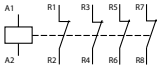
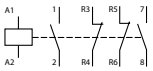
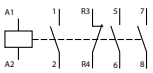
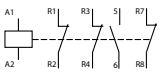
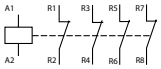
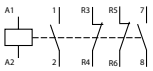
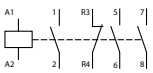
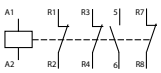
ESB25..N installation contactors

ESB25..N

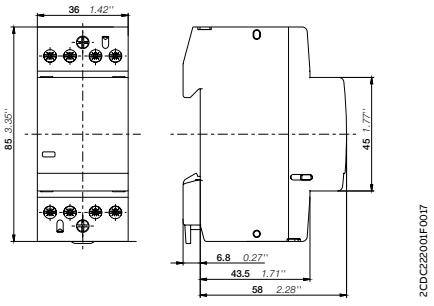
25 A, AC-1 / AC-7a
AC / DC operated

The ESB25..N installation contactors are used to control single and three-phases loads up to 25 A and can be operated by AC or DC voltages. These contactors are made for use in household applications as well as in industrial environment.
ESB25..N series is providing the following benefits:

- Hum-free operation, low power consumption and integrated overvoltage protection.
- Various contact combinations and accessories are available.

Main contacts	Width in number of modular spacings	Rated control circuit voltage (1)	Type	Order code	Pkg qty	Weight (1 pce)
		V AC / DC				kg
Single packaging						
	2	24	ESB25-40N-01	1SAE231111R0140	1	0.245
		230 ... 240	ESB25-40N-06	1SAE231111R0640	1	0.235
	2	24	ESB25-04N-01	1SAE231111R0104	1	0.245
		230 ... 240	ESB25-04N-06	1SAE231111R0604	1	0.235
	2	24	ESB25-22N-01	1SAE231111R0122	1	0.245
		230 ... 240	ESB25-22N-06	1SAE231111R0622	1	0.235
	2	24	ESB25-31N-01	1SAE231111R0131	1	0.245
		230 ... 240	ESB25-31N-06	1SAE231111R0631	1	0.235
	2	24	ESB25-13N-01	1SAE231111R0113	1	0.245
		230 ... 240	ESB25-13N-06	1SAE231111R0613	1	0.235
Multiple packaging						
	2	24	ESB25-40N-01	1SAE231111M0140	6	0.245
		230 ... 240	ESB25-40N-06	1SAE231111M0640	6	0.235
	2	24	ESB25-04N-01	1SAE231111M0104	6	0.245
		230 ... 240	ESB25-04N-06	1SAE231111M0604	6	0.235
	2	24	ESB25-22N-01	1SAE231111M0122	6	0.245
		230 ... 240	ESB25-22N-06	1SAE231111M0622	6	0.235
	2	24	ESB25-31N-01	1SAE231111M0131	6	0.245
		230 ... 240	ESB25-31N-06	1SAE231111M0631	6	0.235
	2	24	ESB25-13N-01	1SAE231111M0113	6	0.245
		230 ... 240	ESB25-13N-06	1SAE231111M0613	6	0.235

(1) Other control voltages: see voltage code table and contact ABB for availability of products



ESB25..N

Dimensions mm, inches

Command and signaling

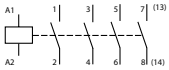
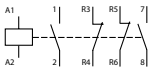
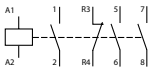
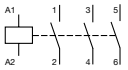
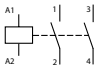
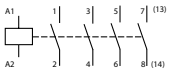
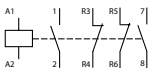
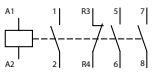
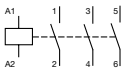
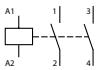
ESB40..N installation contactors

ESB40..N

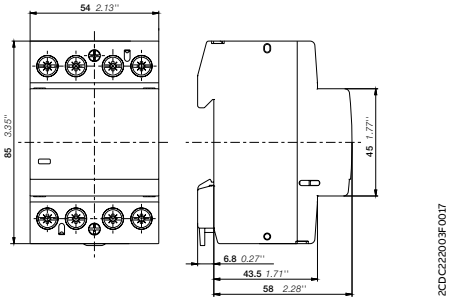
40 A, AC-1 / AC-7a
AC / DC operated

The ESB40..N installation contactors are used to control single and three-phases loads up to 40 A and can be operated by AC or DC voltages. These contactors are made for use in household applications as well as in industrial environment.
ESB40..N series is providing the following benefits:

- Hum-free operation, low power consumption and integrated overvoltage protection.
- Various contact combinations and accessories are available.

Main contacts	Width in number of modular spacings	Rated control circuit voltage (1)	Type	Order code	Pkg qty	Weight (1 pce)
		V AC / DC				kg
Single packaging						
	3	24	ESB40-40N-01	1SAE341111R0140	1	0.405
		230	ESB40-40N-06	1SAE341111R0640	1	0.405
	3	24	ESB40-22N-01	1SAE341111R0122	1	0.405
		230	ESB40-22N-06	1SAE341111R0622	1	0.405
	3	24	ESB40-31N-01	1SAE341111R0131	1	0.405
		230	ESB40-31N-06	1SAE341111R0631	1	0.405
	3	24	ESB40-30N-01	1SAE341111R0130	1	0.385
		230	ESB40-30N-06	1SAE341111R0630	1	0.385
	3	24	ESB40-20N-01	1SAE341111R0120	1	0.370
		230	ESB40-20N-06	1SAE341111R0620	1	0.370
Multiple packaging						
	3	24	ESB40-40N-01	1SAE341111M0140	4	0.405
		230	ESB40-40N-06	1SAE341111M0640	4	0.405
	3	24	ESB40-22N-01	1SAE341111M0122	4	0.405
		230	ESB40-22N-06	1SAE341111M0622	4	0.405
	3	24	ESB40-31N-01	1SAE341111M0131	4	0.405
		230	ESB40-31N-06	1SAE341111M0631	4	0.405
	3	24	ESB40-30N-01	1SAE341111M0130	4	0.385
		230	ESB40-30N-06	1SAE341111M0630	4	0.385
	3	24	ESB40-20N-01	1SAE341111M0120	4	0.370
		230	ESB40-20N-06	1SAE341111M0620	4	0.370

(1) Other control voltages: see voltage code table and contact ABB for availability of products.



ESB40..N

Dimensions mm, inches

Command and signaling

ESB63..N installation contactors

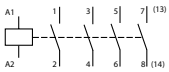
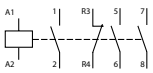
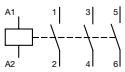
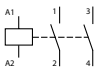
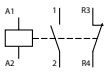
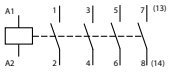
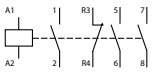
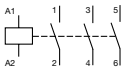
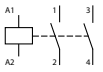
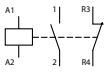
2CDC221009V0017

ESB63..N

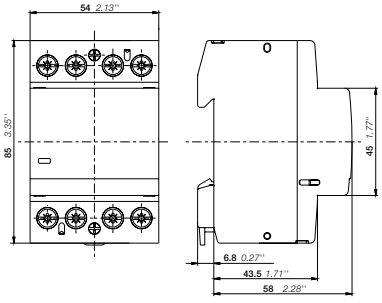
63 A, AC-1 / AC-7a
AC / DC operated

The ESB63..N installation contactors are used to control single and three-phases loads up to 63 A and can be operated by AC or DC voltages. These contactors are made for use in household applications as well as in industrial environment.
ESB63..N series is providing the following benefits:

- Hum-free operation, low power consumption and integrated overvoltage protection.
- Various contact combinations and accessories are available.

Main contacts	Width in number of modular spacings	Rated control circuit voltage 1)	Type	Order code	Pkg qty	Weight (1 pce)
		V AC / DC				kg
Single packaging						
	3	24	ESB63-40N-01	1SAE351111R0140	1	0.405
		230	ESB63-40N-06	1SAE351111R0640	1	0.405
	3	230	ESB63-31N-06	1SAE351111R0631	1	0.405
	3	230	ESB63-30N-06	1SAE351111R0630	1	0.385
	3	24	ESB63-20N-01	1SAE351111R0120	1	0.37
		230	ESB63-20N-06	1SAE351111R0620	1	0.37
	3	230	ESB63-11N-06	1SAE351111R0611	1	0.37
Multiple packaging						
	3	24	ESB63-40N-01	1SAE351111M0140	4	0.405
		230	ESB63-40N-06	1SAE351111M0640	4	0.405
	3	230	ESB63-31N-06	1SAE351111M0631	4	0.405
	3	230	ESB63-30N-06	1SAE351111M0630	4	0.385
	3	24	ESB63-20N-01	1SAE351111M0120	4	0.37
		230	ESB63-20N-06	1SAE351111M0620	4	0.37
	3	230	ESB63-11N-06	1SAE351111M0611	4	0.37

(1) Other control voltages: see voltage code table and contact AB B for availability of products.



2CDC222003F0017

ESB63..N

Dimensions mm, inches

Command and signaling

ESB100..N installation contactors

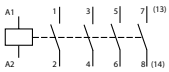
ESB100-20N

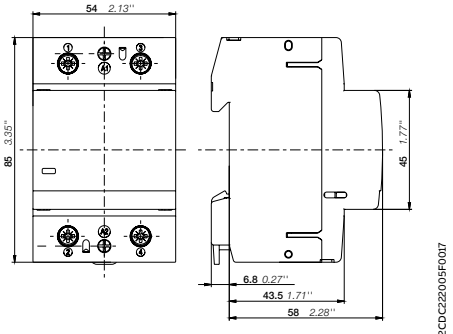
ESB100-40N

100 A, AC-1 / AC-7a
AC / DC operated

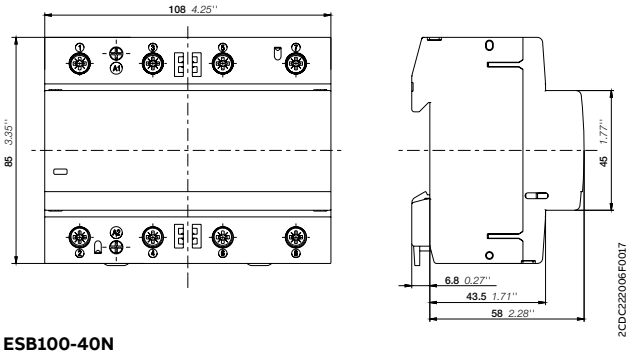
The ESB100..N installation contactors are used to control single and three-phases loads up to 100 A and can be operated by AC or DC voltages. These contactors are made for use in household applications as well as in industrial environment.
ESB100..N series is providing the following benefits:

- Hum-free operation, low power consumption and integrated overvoltage protection.
- Various contact combinations and accessories are available.

Main contacts	Width in number of modular spacings	Rated control circuit voltage	Type	Order code	Pkg qty	Weight (1 pce)
		V AC / DC				kg
Single packaging						
	6	24	ESB100-40N-01	1SAE661111R0140	1	0.405
		230	ESB100-40N-06	1SAE661111R0640	1	0.405
	3	24	ESB100-20N-01	1SAE361111R0120	1	0.81
		230	ESB100-20N-06	1SAE361111R0620	1	0.81
Multiple packaging						
	3	24	ESB100-20N-01	1SAE361111M0120	2	1.62
		230	ESB100-20N-06	1SAE361111M0620	2	1.62



ESB100-20N



ESB100-40N

Dimensions mm, inches

Command and signaling

EN20..N installation contactors - manually / automatic operated

1SBC101553V0000

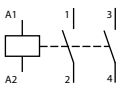
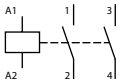
EN20..N

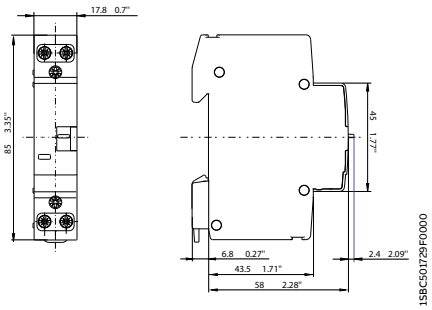
20 A, AC-1 / AC-7a
AC / DC operated

The EN20..N installation contactors are used to control single-phase loads up to 20 A and can be operated by AC or DC voltages. They have a built-in toggle switch to be operated manually or automatically. These contactors are made for use in household applications as well as in industrial environment.

EN16..N series is providing the following benefits:

- Hum-free operation, low power consumption and integrated overvoltage protection and manual override.
- Various contact combinations and accessories are available.

Main contacts	Width in number of modular spacings	Rated control circuit voltage	Type	Order code	Pkg qty	Weight (1 pce)
		V AC / DC				kg
Single packaging						
	1	24	EN20-20N-01	1SBE122111R0120	1	0.14
		230	EN20-20N-06	1SBE122111R0620	1	0.14
Multiple packaging						
	1	24	EN20-20N-01	1SBE122111M0120	12	0.14
		230	EN20-20N-06	1SBE122111M0620	12	0.14



EN20..N

Dimensions mm, inches

Command and signaling

EN25..N installation contactors - manually / automatic operated

2CDC221003V0017

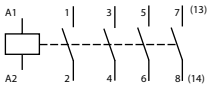
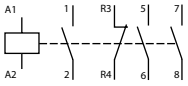
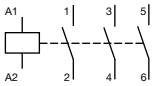
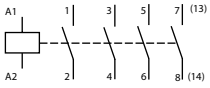
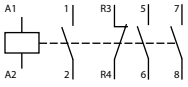
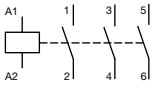
EN25..N

25 A, AC-1 / AC-7a
AC / DC operated

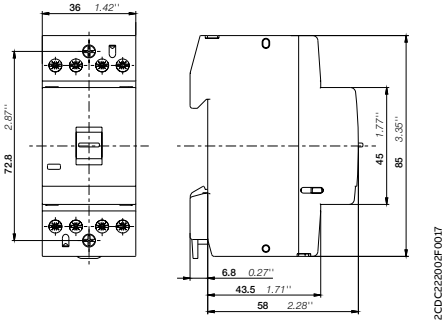
The EN25..N installation contactors are used to control single- and three-phase loads up to 25 A and can be operated by AC or DC voltages. They have a built-in toggle switch to be operated manually or automatically. These contactors are made for use in household applications as well as in industrial environment.

EN25..N series is providing the following benefits:

- Hum-free operation, low power consumption and integrated overvoltage protection and manual override.
- Various contact combinations and accessories are available.

Main contacts	Width in number of modular spacings	Rated control circuit voltage (1)	Type	Order code	Pkg qty	Weight (1 pce)
		V AC / DC				kg
Single packaging						
	2	24	EN25- 40N- 01	1SAE232111R0140	1	0.250
		230 ... 240	EN25-40N-06	1SAE232111R0640	1	0.240
	2	24	EN25-31N-01	1SAE232111R0131	1	0.250
		230 ... 240	EN25-31N-06	1SAE232111R0631	1	0.240
	2	230 ... 240	EN25-30N-06	1SAE232111R0630	1	0.235
Multiple packaging						
	2	24	EN25-40N-01	1SAE232111M0140	6	0.250
		230 ... 240	EN25-40N-06	1SAE232111M0640	6	0.240
	2	24	EN25-31N-01	1SAE232111M0131	6	0.250
		230 ... 240	EN25-31N-06	1SAE232111M0631	6	0.240
	2	230 ... 240	EN25-30N-06	1SAE232111M0630	6	0.235

(1) Other control voltages: see voltage code table and contact ABB for availability of products.



2CDC222002F0017

EN25..N

Dimensions mm, inches

Command and signaling

EN40..N installation contactors - manually / automatic operated

2CDC221004V0017

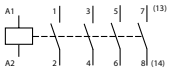
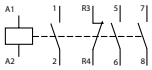
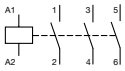
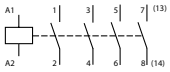
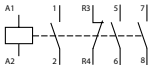
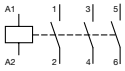
EN40..N

40 A, AC-1 / AC-7a
AC / DC operated

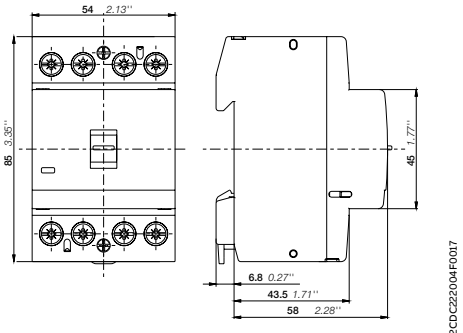
The EN40..N installation contactors are used to control single- and three-phase loads up to 40 A and can be operated by AC or DC voltages. They have a built-in toggle switch to be operated manually or automatically. These contactors are made for use in household applications as well as in industrial environment.

EN40..N series is providing the following benefits:

- Hum-free operation, low power consumption and integrated overvoltage protection and manual override.
- Various contact combinations and accessories are available.

Main contacts	Width in number of modular spacings	Rated control circuit voltage (1)	Type	Order code	Pkg qty	Weight (1 pce)
		V AC / DC				kg
Single packaging						
	3	24	EN40-40N-01	1SAE342111R0140	1	0.410
		230	EN40-40N-06	1SAE342111R0640	1	0.410
	3	24	EN40-31N-01	1SAE342111R0131	1	0.410
		230	EN40-31N-06	1SAE342111R0631	1	0.410
	3	230	EN40-30N-06	1SAE342111R0630	1	0.410
	3	230	EN40-20N-06	1SAE342111R0620	1	0.375
Multiple packaging						
	3	24	EN40-40N-01	1SAE342111M0140	4	0.410
		230	EN40-40N-06	1SAE342111M0640	4	0.410
	3	24	EN40-31N-01	1SAE342111M0131	4	0.410
		230	EN40-31N-06	1SAE342111M0631	4	0.410
	3	230	EN40-30N-06	1SAE342111M0630	4	0.410
	3	230	EN40-20N-06	1SAE342111M0620	4	0.375

(1) Other control voltages: see voltage code table and contact ABB for availability of products.



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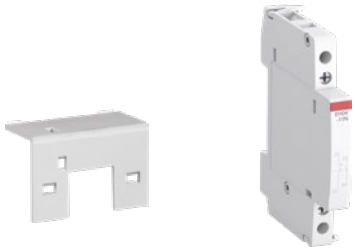
EN40..N

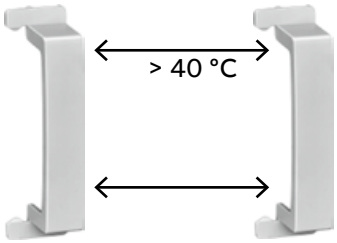
Dimensions mm, inches

Command and signaling

ESB / EN installation contactors - accessories overview



Tool-free accessories
Speed up installation and maintenance time by mounting accessories tool-free to the contactor. Auxiliaries, security safety covers and space holders are easily and quickly installed.



Distance pieces
If the ambient temperature in your control cabinet exceeds 40°C and the on-time is longer than an hour, you need to use a distance piece between each second contactor for the ESB25..N to ESB100..N.

Sealing covers
Protect the security of your employees/ customers´installation with sealing covers. They are available in different sizes and can be clipped on easily.

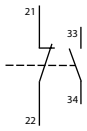
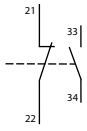
Auxiliary contact blocks
ABB´s new range of auxiliary contact blocks are mounted on the left side of the contactors. Simply clip them on - no tools required! Valuable inventory space can be saved with the new auxiliary contact block which is designed to fit all contactors of the range.

Command and signaling

Installation contactors - accessories

EH04-11N

Auxiliary contact blocks

Suitable for	Auxiliary contacts	Type	Order code	Pkg qty	Weight (1 pce)
					kg
Single packaging					
ESB16..N, ESB20..N, ESB25..N, ESB40..N, ESB63..N, ESB100..N, EN20..N, EN25..N, EN40..N		EH04-11N	1SAE901901R1011	1	0.040
		EH04-20N	1SAE901901R1020	1	0.040
Multiple packaging					
ESB16..N, ESB20..N, ESB25..N, ESB40..N, ESB63..N, ESB100..N, EN20..N, EN25..N, EN40..N		EH04-11N	1SAE901901M1011	6	0.040
		EH04-20N	1SAE901901M1020	6	0.040

ESB-PLK24

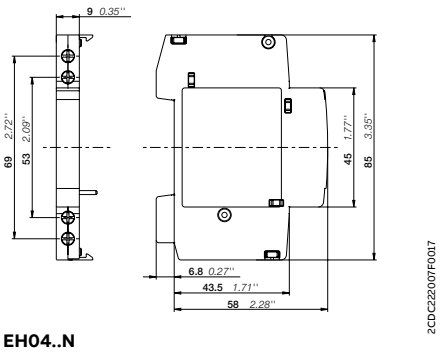
ESB-DIS

ESB-SPK40/63

Accessories

Suitable for	Description	Type	Order code	Pkg qty	Weight (1 pce)
					kg
Sealing covers					
ESB25..N, EN25..N	sealing cover	ESB-PLK24	GHE3201903R0001	10	0.002
ESB40..N, ESB63..N, EN40..N	sealing cover	ESB-PLK40/63	GHE3401903R0001	10	0.003
ESB25..N, EN25..N	protection cover	ESB-SPK24	GHE3201903R0002	10	0.005
ESB40..N, ESB63..N, EN40..N	protection cover	ESB-SPK40/63	GHE3401903R0002	10	0.010
Distance piece					
ESB25..N, ESB40..N, ESB63..N, EN25..N, EN40..N, ESB100..N, EN100..N		ESB-DIS (1)	GHE3201902R0001	10	0.002

(1) If several contactors are mounted adjacently and the ON time is longer than one hour, every second contactor needs a distance piece, Type ESB-DIS (1/2 module). This is not necessary at an ambient temperature ≤ 40 °C or on Type ESB16..N and ESB/EN20..N.



EH04..N

Dimensions mm, inches

Command and signaling

E290 Latching relays

E290

E290 Latching relays

General			
Overall depth		68 mm	
Overall width		1 module (18 mm)	
Colour		grey, RAL 7035	
Climate resistance in accordance with		IEC 60068-2-2 (dry heat)	
		IEC 60068-2-30 (humid heat)	
		IEC 60068-2-1 (low temperatures)	
Ambient temperature		-25 °C to +55 °C	
Storage temperature		-40 °C to +70 °C	
Contact system		Double interruption	
Tightening torque		1.2 - 1.5 Nm	
Weight		0.122 kg	
Standards		EN 60669-1; EN 60669-2-2	
Approval		VDE; EAC	
Power circuit			
Rated current In	E290-16-.../...	16 A	----
	E290-32-.../...	----	32 A
Rated voltage Un		250 VAC	250 VAC
Frequency		50 Hz	50 Hz
Short circuit withstand capacity Inc		3 kA	3 kA
Back-up fuses (gL)		max. 16 A	max. 32 A
Latching relay contact configurations for 16 A and 32 A		1NO; 2NO; 1NO + 1NC	
Additional Power contacts 16A (attachable) (not for 32 A version)		1CO; 2NO; 1NO + 1NC	
Max. DC current per contact with 24 VDC		5 A	8 A
Min. switching load		24 V; 10 mA*	
Bounce time		< 3 ms	
Power loss in W per contact		0.32 W	1.2 W
Rated impulse withstand voltage Uimp		4 kV	
Max. lamp load			
Glow lamps (20 W - 200 W)		3000 W	4000 W
Fluorescent lamps, uncorrected power factor (cos. 0.5)		1800 W	2200 W
Fluorescent lamps, corrected power factor (cos. 0.9)	serial	3000 W	4000 W
	parallel	2500 W	3200 W
	single	1800 W	2200 W
	double	2500 W	3200 W
(see also lamp load table)			

NO = normally-open contact; NC = normally-closed contact; CO = changeover contact
* E291S (Sequential Latching Relays Min. Switching load 24 V, 200 mA)

E290

E290 Latching Relays

Lifetime (switching cycles)	
Electrical (AC1 rated current load)	150,000
Mechanical	250,000
Connector cross-sections	
Connecting terminals	solid from 1 x 1 mm^2 to 1 x 10 mm2 or 2 x 2.5 mm^2 flexible from 1 x 0.75 mm^2 to 1 x 6 mm^2 (Cu) with end ferrule or pin cable lug
Control circuit	
Rated control voltages Un	AC: 8 V; 12 V; 24 V; 48 V; 115 V; 230 V
	DC: – ; – ; 12 V; 24 V; 60 V; 110 V
AC/DC ratio 1)	1: 0.5 (not available for 8 VAC and 12 VAC coils)
Operation limits	+/- 10% = 0.9 - 1.1 x Un
Minimum command duration	50 ms
Max. switching operations	15 x per min. at In 16 A; 8 x per min. at In 32 A
Switching noise	60 dB (A) (distance 1 m)
Max. number of illuminated buttons (0.6 mA)	(see table on page 3/6)
Max. glow lamp current parallel to the 230 V control buttons	5 mA

NO = normally-open contact; NC = normally-closed contact; CO = changeover contact

Command and signaling
E290 Latching relays

Switching components for E290

E292-16... Contact Module (attachable only to 16 A In version)	
Rated current In per E292 contact	16 A
Rated voltage Un	250 VAC
Frequency	50 Hz
Max. no. attachable 2) (additional main contacts)	1 unit (attachable on the right side of the main module)
Contact configurations	1CO; 2NO; 1NO+1NC
Max. DC current per contact with 24 VDC	8 A
Min. switching load	24 V;10 mA
E299-11/-20 Auxiliary Contacts	
Max. no. attachable 2) (signaling or control contacts)	1 unit (attachable on the right side of the main module)
Number of contacts	1 NO + 1 NC; 2NO
Max. current per contact with AC	5.0 A
Max. current per contact with 24 VDC	5.0 A

Control components for E290

E293X Central On-Off Control Module (same control voltage potential)	
Max. no. attachable 2)	1 unit (attachable on the left side of the main module)
Rated current In max.	1 A
Rated voltage Un	250 VAC
E294 Central On-Off Control Module (different control voltage potential)	
Max. no. attachable 2)	1 unit (attachable on the left side of the main module)
Rated current In max.	1 A
Rated voltage Un	250 VAC
E295-PS Permanent Signal Module	
Max. no. attachable 2)	1 unit (attachable on the left side of the main module)
Rated current In max.	1 A
Rated voltage Un	250 VAC
E295-GM Group Module	
Use of group switching modules	1 unit per defined group
Rated current In max.	1 A
Rated voltage Un	250 VAC
E296-CP Compensator	
Compensation when using illuminated buttons	Wiring parallel to the main module
Compensation	2.2 µF
Rated voltage Un	250 VAC

NO = normally-open contact; NC = normally-closed contact; CO = changeover contact

Command and signaling

E297 Installation relay

E290

E297 Installation Relays

General		
Overall depth		68 mm
Overall width		1 module (18 mm)
Colour		grey, RAL 7035
Climate resistance in accordance with		IEC 60068-2-2 (dry heat)
		IEC 60068-2-30 (humid heat)
		IEC 60068-2-1 (low temperatures)
Ambient temperature		- 25 °C to + 55 °C
Storage temperature		- 40 °C to + 70 °C
Tightening torque		1.2 - 1.5 Nm
Weight		0.122 kg
Standards		EN 60669-1; EN 60669-2-2
Approval		VDE; EAC
Power circuit		
Rated current In		16 A
Rated voltage Un		250 VAC
Frequency		50-60 Hz
Short circuit withstand capacity Inc		3 kA
Back-up fuses (gL)		max. 16 A
Installation relay contact configurations		1NO; 2NO; 1NO+1NC
Additional Power contacts 16A (attachable)		1CO; 2NO; 1NO+1NC
Max. DC current per contact with 24 VDC		8 A
Min. switching load		24 V; 10 mA
Bounce time		< 3 ms
Power loss in W per contact		0.50 W
Rated Impulse withstand voltage Uimp		4 kV
Max. lamp load		
Glow lamps (20 W-200 W)		3000 W
Fluorescent lamps, uncorrected power factor (cos. 0.5)		1800 W
Fluorescent lamps, corrected power factor (cos. 0.9)	serial	3000 W
	parallel	2500 W
	single	1800 W
	double	2500 W
(see also lamp load table)		
Lifetime (switching cycles)		
Electrical (AC1 rated current load)		150,000
Mechanical		250,000

NO = normally-open contact; NC = normally-closed contact; CO = changeover contact

Command and signaling

E297 Installation relay

E297 Installation Relays

Application categories			
Switching capacity in accordance with	AC-1 (based on EN 60947)	16 A	
	AC-5b (based on EN 60947)	5 A	
	AC-7a (based on EN 61095)	16 A	
	AC-7c (based on EN 61095)	5 A	
Connector cross-sections			
Main connecting terminals		solid from 1 x 1 mm2 to 1 x 10 mm2 or 2 x 2.5 mm2	
		flexible from 1 x 0.75 mm2 up to 1 x 6 mm2 (Cu)	
		with end ferrule or pin cable lug	
Control circuit			
Coil rated voltages Un AC/DC		8 VAC; 12 VAC; 24 VAC/24 VDC; 48 VAC/48 VDC;	
		115 VAC/110 VDC; 230 VAC	
AC/DC ratio 3)		1 : 1	
Operation limits		+/- 10 % = 0.9 - 1.1 x Un	
Switching noise		60 dB (A) (distance 1 m)	
Max. switching operations		15 x per min. at In 16 A	
Coil power loss			
		AC	DC
Pick up		< 2.8 VA	< 2.0 W
Holding		< 2.6 VA	< 1.8 W

Switching components for E297

E298 Contact Module	
Max. no. attachable 2) (additional main contacts)	1 unit (attachable on the right side of the main module)
Rated current In per E298 contact	16 A
Rated voltage Un	250 VAC
Frequency	50 Hz
Number of contacts	1CO; 2NO; 1NO+1NC
Max. DC current per contact with 24 VDC	5 A
Min. switching load	24 V; 10 mA
E299-11 Auxiliary Contacts	
Max. no. attachable 2) (signaling or control contacts)	1 unit (attachable on the right side of the main module)
Number of contacts	1 NO+1 NC
Max. current per contact with AC	5.0 A
Max. current per contact with 24 VDC	5.0 A

NO = normally-open contact; NC = normally-closed contact; CO = changeover contact
2) See overview of chapter 4

Command and signaling

E290 Latching relays

E290

Latching Relay

This 18 mm wide DIN rail mounted device is designed for direct installation in main distribution or sub-distribution systems (mounted on 35 mm DIN mounting rails). The devices are activated by means of control pulses and guarantee energy-optimized lighting control. As a rule, installations with latching relays are used where the lighting control system can be operated from at least three points in different locations. Those latching relays are designed for a rated current of 16 A or 32 A.

Standard number of contacts:
1 NO contact, 2 NO contacts or 1 NO contact + 1 NC contact

The number of switching contacts can be increased by a maximum of two main contacts using a snap-on main module (E292-..-..). As a result, up to four lighting sets can be switched by a single device.
A signaling and/or indicating facility can be created using the additional snap-on auxiliary contact module (E299-11).
The various standard AC/DC coil voltages complete the comprehensive and interesting product range. The additional devices can be snapped onto the latching relay on the left or right side.

Rated current = 16 A

Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
1NO	0.32	18	8VAC	939558	E290-16-10/8	2TAZ312000R2061		0.114	10
	0.32	18	12VAC	939565	E290-16-10/12	2TAZ312000R2051		0.114	10
	0.32	18	24VAC/12VDC	939572	E290-16-10/24	2TAZ312000R2041		0.114	10
	0.32	18	48VAC/24VDC	939589	E290-16-10/48	2TAZ312000R2031		0.114	10
	0.32	18	115VAC/60VDC	939596	E290-16-10/115	2TAZ312000R2021		0.114	10
	0.32	18	230VAC/110VDC	939602	E290-16-10/230	2TAZ312000R2011		0.114	10

Rated current = 32 A

Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
1NO	1.20	18	8VAC	939619	E290-32-10/8	2TAZ322000R2061		0.114	10
	1.20	18	12VAC	939626	E290-32-10/12	2TAZ322000R2051		0.114	10
	1.20	18	24VAC/12VDC	939633	E290-32-10/24	2TAZ322000R2041		0.114	10
	1.20	18	48VAC/24VDC	939640	E290-32-10/48	2TAZ322000R2031		0.114	10
	1.20	18	115VAC/60VDC	939657	E290-32-10/115	2TAZ322000R2021		0.114	10
	1.20	18	230VAC/110VDC	939664	E290-32-10/230	2TAZ322000R2011		0.114	10

Rated current = 16 A

Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
2NO	0.64	18	8VAC	939671	E290-16-20/8	2TAZ312000R2062		0.122	10
	0.64	18	12VAC	939688	E290-16-20/12	2TAZ312000R2052		0.122	10
	0.64	18	24VAC/12VDC	939695	E290-16-20/24	2TAZ312000R2042		0.122	10
	0.64	18	48VAC/24VDC	939701	E290-16-20/48	2TAZ312000R2032		0.122	10
	0.64	18	115VAC/60VDC	939718	E290-16-20/115	2TAZ312000R2022		0.122	10
	0.64	18	230VAC/110VDC	939725	E290-16-20/230	2TAZ312000R2012		0.122	10

NO = normally-open contact; NC = normally-closed contact; CO = changeover contact

Command and signaling

E290 Latching relays

Rated current = 32 A									
Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
2NO	2.40	18	8VAC	939732	E290-32-20/8	2TAZ322000R2062		0.122	10
	2.40	18	12VAC	939749	E290-32-20/12	2TAZ322000R2052		0.122	10
	2.40	18	24VAC/12VDC	939756	E290-32-20/24	2TAZ322000R2042		0.122	10
	2.40	18	48VAC/24VDC	939763	E290-32-20/48	2TAZ322000R2032		0.122	10
	2.40	18	115VAC/60VDC	939770	E290-32-20/115	2TAZ322000R2022		0.122	10
	2.40	18	230VAC/110VDC	939787	E290-32-20/230	2TAZ322000R2012		0.122	10

Rated current = 16 A									
Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
1NO+1NC	0.50	18	8VAC	939794	E290-16-11/8	2TAZ312000R2063		0.122	10
	0.50	18	12VAC	939800	E290-16-11/12	2TAZ312000R2053		0.122	10
	0.50	18	24VAC/12VDC	939817	E290-16-11/24	2TAZ312000R2043		0.122	10
	0.50	18	48VAC/24VDC	939824	E290-16-11/48	2TAZ312000R2033		0.122	10
	0.50	18	115VAC/60VDC	939831	E290-16-11/115	2TAZ312000R2023		0.122	10
	0.50	18	230VAC/110VDC	939848	E290-16-11/230	2TAZ312000R2013		0.122	10

Rated current = 32 A									
Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
1NO+1NC	1.20	18	8VAC	939855	E290-32-11/8	2TAZ322000R2063		0.122	10
	1.20	18	12VAC	939862	E290-32-11/12	2TAZ322000R2053		0.122	10
	1.20	18	24VAC/12VDC	939879	E290-32-11/24	2TAZ322000R2043		0.122	10
	1.20	18	48VAC/24VDC	939886	E290-32-11/48	2TAZ322000R2033		0.122	10
	1.20	18	115VAC/60VDC	939893	E290-32-11/115	2TAZ322000R2023		0.122	10
	1.20	18	230VAC/110VDC	939909	E290-32-11/230	2TAZ322000R2013		0.122	10

NO = normally-open contact; NC = normally-closed contact; CO = changeover contact

E291S

Sequential Latching Relay

The sequential latching relay is an 18 mm wide device which has two NO contacts. The preset switching sequence for the main contacts enables the switching on and off, of different lighting sets to be „programmed“. The E291S has an easily visible switch position display on the front.

Standard number of contacts:

2 NO contacts

Rated current = 16 A

Contact config.	Power loss [W]	Width [mm]	Coil control voltage [VAC/VDC]	Bbn 7612270 EAN	Order details Type code	Order code	Price 1 piece	Weight kg.	Pack unit pc.
2NO	0.64	18	8VAC	939919	E291S-16-20/8	2TAZ313000R2062		0.110	10
	0.64	18	12VAC	939923	E291S-16-20/12	2TAZ313000R2052		0.110	10
	0.64	18	24VAC/12VDC	939930	E291S-16-20/24	2TAZ313000R2042		0.110	10
	0.64	18	230VAC/110VDC	939947	E291S-16-20/230	2TAZ313000R2012		0.110	10

E292

E293/X

E294

E295

E299

Accessories for E290 Latching Relays

Accessories and additional devices for combinations with Latching Relays

Main Contact Module

Rated current = 16 A

Contact config.	Power loss [W]	Width [mm]	Coil control voltage [VAC/VDC]	Bbn 7612270 EAN	Order details Type code	Order code	Price 1 piece	Weight kg.	Pack unit pc.
2NO	0.64	9		939480	E292-16-20	2CCA704300R0001		0.045	10
1NO+1NC	0.32	9		939503	E292-16-11	2CCA704301R0001		0.045	10
1CO	0.32	9		939527	E292-16-001	2CCA704302R0001		0.045	10

Central On-Off Control Module

	9	same control voltage	939381	E293/X	2TAZ312004R1003		0.041	10

Central On-Off Control Module (with different control voltages)

	18	24VAC	939411	E294/24	2TAZ312001R2043		0.110	5
	18	230VAC	939442	E294/230	2TAZ312001R2013		0.110	5

Permanent Signal Module

	18		939459	E295-PS	2TAZ312005R1003		0.041	10

Group Module

	18		939466	E295-GM	2TAZ310002R1000		0.059	10

Compensator

	18		939473	E296-CP	2TAZ310003R1000		0.055	10

Auxiliary Contact for Latching and Installation relays

Rated current = 5 A

1NO+1NC	0.10	9		939985	E299-11	2CCA704340R0001		0.045	10
2NO	0.10	9			E200-20	2CCA704341R0001		0.045	10

Intermediate piece (for heating dissipation - bag contains 5 items)

	18		100989	ZLS725	2CCS500900R0181		0.100	1 bag
	9		104703	ZLS726	2CCS400900R0091		0.070	1 bag

Command and signaling

E297 Installation relay

E297

E297 Installation Relays

The E297 installation relay is an electromechanical switching device controlled by means of a continuous pulse. The coils have a low level of switching noise, are optimized for low power loss and therefore ensure safe and fault-free use in various applications. Either AC or DC control voltage can be applied. The installation relay is designed for a rated current of 16 A.

Standard number of contacts:

1 NO contact, 2 NO contacts or 1 NO contact + 1 NC contact

In addition, the number of main contacts can be increased to four contact lines using the snap-on E298 Main contact module so that three different groups of loads can be switched and controlled safely.

The various AC/DC coil voltages complete the comprehensive and interesting product range. The additional devices can be snapped onto the installation relay on the right side.

Rated current = 16 A

Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
1NO	0.50	18	8VAC	940004	E297-16-10/8	2TAZ311000R2061		0.113	10
	0.50	18	12VAC	940011	E297-16-10/12	2TAZ311000R2051		0.113	10
	0.50	18	24VAC/24VDC	940028	E297-16-10/24	2TAZ311000R2041		0.113	10
	0.50	18	48VAC/48VDC	940035	E297-16-10/48	2TAZ311000R2031		0.113	10
	0.50	18	115VAC/110VDC	940042	E297-16-10/115	2TAZ311000R2021		0.113	10
	0.50	18	230VAC	940059	E297-16-10/230	2TAZ311000R2011		0.113	10

Rated current = 16 A

Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
1NO+1NC	0.50	18	8VAC	940066	E297-16-11/8	2TAZ311000R2063	940066	0.121	10
	0.50	18	12VAC	940073	E297-16-11/12	2TAZ311000R2053	940073	0.121	10
	0.50	18	24VAC/24VDC	940080	E297-16-11/24	2TAZ311000R2043	940080	0.121	10
	0.50	18	48VAC/48VDC	940097	E297-16-11/48	2TAZ311000R2033	940097	0.121	10
	0.50	18	115VAC/110VDC	940103	E297-16-11/115	2TAZ311000R2023	940103	0.121	10
	0.50	18	230VAC	940110	E297-16-11/230	2TAZ311000R2013	940110	0.121	10

Rated current = 16 A

Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
2NO	1.00	18	8VAC	940127	E297-16-20/8	2TAZ311000R2062		0.121	10
	1.00	18	12VAC	940134	E297-16-20/12	2TAZ311000R2052		0.121	10
	1.00	18	24VAC/24VDC	940141	E297-16-20/24	2TAZ311000R2042		0.121	10
	1.00	18	48VAC/48VDC	940158	E297-16-20/48	2TAZ311000R2032		0.121	10
	1.00	18	115VAC/110VDC	940165	E297-16-20/115	2TAZ311000R2022		0.121	10
	1.00	18	230VAC	940172	E297-16-20/230	2TAZ311000R2012		0.121	10

E298

E299

Accessories for E297 Installation Relays

Accessories and additional devices for combinations with Installation Relays

Main Contact Module 16A

Rated current = 16 A

Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
2NO	0.64	9		939961	E298-16-20	2CCA704320R0001		0.045	10
1NO+1NC	0.32	9		939954	E298-16-11	2CCA704321R0001		0.045	10
1CO	0.32	9		939978	E298-16-001	2CCA704322R0001		0.045	10

Contact config.	Power loss	Width [mm]	Coil control voltage	Bbn 7612270	Order details		Price 1 piece	Weight	Pack unit
	[W]		[VAC/VDC]	EAN	Type code	Order code		kg.	pc.
Auxiliary Contact for Latching and Installation relays									
Rated current = 5 A									
1NO+1NC	0.10	9		939985	E299-11	2CCA704340R0001		0.045	10
2NO	0.10	9			E200-20	2CCA704341R0001		0.045	10
Intermediate piece (for heating dissipation - bag contains 5 items)									
		18		100989	ZLS725	2CCS500900R0181		0.100	1 bag
		9		104703	ZLS726	2CCS400900R0091		0.070	1 bag

Command and signaling

FLR latching relays

FLR

Technical features		FLR1	FLR5
Contact type		1NO	2NO
Number of sequences	[No.]	2	4
Rated voltage	[V]	12 / 230 AC	
Rated load		10 A / 250 V AC	
Max. Peak current	[A]	15	
Max. switching power	[VA]	2500	
Max. switching voltage	[V]	250 AC	
Incandescent lamp load	[W]	805	
Fluorescent lamp load	[W]	345	
Frequency	[Hz]	50-60	
Type of operation		sequential - mechanical	
Protection degree		IP20	
Max. number of electrical operations	[No.]	100000	
Max. number of mechanical operations	[No.]	300000	
Insulation resistance	[MW]	100 (500 V DC)	
Dielectric strength (contacts)	[V]	2000 AC	
Dielectric strength (coil)	[V]	3500 AC	
Power dissipation	[VA]	4.5	
Operating temperature	[°C]	-25...+55	
Max. Cable section at terminals	[mm²]	1...2.5	
Terminals		screw	
Tightening torque	[Nm]	0.5	
Installation type		wall/flush mounting	
Dimensions (LxWxH)	[mm]	45 x 22 x 45	
Standards		EN 60669-1 ; EN 60669-2-1	

Characteristics of the contact

Type	No. of pulses	Sequences			
		1	2	3	4
FLR1-12	2				
FLR1-230	2				
FLR5-12	2				
FLR5-230	2				

Flush mounting latching relays

Speed and ease of assembly, along with their compact size, make the FLR flush mounting latching relays suitable for installation inside flush mount or junction boxes. They are ideal for implementing multipoint command of lighting systems in residential and commercial installations, so as to simplify and reduce the cost of wiring.

Contacts	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
1	063650	FLR1-12	2CSM206365R0241		0.06	20
1	063759	FLR1-230	2CSM206375R0241		0.06	20
2	063858	FLR5-12	2CSM206385R0241		0.06	20
2	063957	FLR5-230	2CSM206395R0241		0.06	20

Command and signaling

E 260 latching relays

E 260

Technical features	
	E 260/E 260 C
Rated load at 250 V AC	8 A
Incandescent lamp load	1000 W
Fluorescent lamp load in twin-lamp circuit	1000 W
Fluorescent lamp load shunt compensated	350 W ①
Fluorescent lamp load inductive or capacitive	500 W
Electronic ballast	Ion m 70 A/10 ms ②
Inductive load, cosφ = 0.6/230 V ~	5 A
Contact rating at DC	100 W
Minimum contact rating	4 V AC/10 mA
Contact gap/contact material	0.5 mm/Ag Sn02
Service life mechanical switchover at 103/h	> 10^7
Service life at rated load cosφ = 1 and 103/h	> 10^5
Service life with filament lamps at 103/h	800 W > 10^5, 1000 W > 0.8x10^5
Service life at rated load cosφ = 0.6 and 103/h	> 10^4
Max. switching rate	10^3/h
Bounce time	3 ms
Connection capacity	2 x 1.5 mm² with connector sleeve
Tightening torque	0.5 … 0.8 Nm
ON duration at rated voltage	100%
Coil voltage range	0.9 to 1.1 Un
Minimum command time/interval between commands	50/1000 ms
Ambient temperature	-20 °C / -4 °F to 50 °C / 122 °F
Control current when controlled locally	230 V AC 115 mA, after 10s 8 mA ± 20%
Control current when controlled centrally	230 V AC 8 mA, after 10s 3 mA ± 20%
Max. parallel capacity of individual control wire at 230 V ~	0.7 µF (ca. 2000 m)
Max. parallel capacity of central control wire at 230 V ~	0.2 µF (ca. 700 m)
Max. glow lamp current – parallel to 230 V control buttons	10 mA
Max. induced voltage at 230 V control inputs	0.2 Un

Latching relays for lamp installations on request.
① E 260 C can not be used with fluorescent lamp load shunt compensated.
② In the case of electronic control gear, take into account a 40-fold inrush current.

E 260 electronic latching relays

The electronic version of latching relays guarantees maximum reliability, life, and noiseless operation. The E 260 C version also allows centralized reset function (ON/OFF).

Command and signaling

E 260 latching relays

E 260

Latching relays with control electronics
Coil voltage UC = 24 V AC/DC

Contacts	Power loss	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	W ①	EAN	Type code	Order code		kg	pc.
1 NO	2.4 (3.0)	57592 8	E 261-24	2CDE441000R0301		0.085	1
1 NO+1 NC	2.4 (3.5)	57595 9	E 266-24	2CDE444000R0301		0.096	1
2 NO	2.4 (3.5)	57593 5	E 262-24	2CDE442000R0301		0.096	1

Coil voltage UC = 230 V AC

Contacts	Power loss	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	W ①	EAN	Type code	Order code		kg	pc.
1 NO	1.5 (2.0)	57596 6	E 261-230	2CDE141000R0301		0.085	1
1 NO+1 NC	1.7 (3.6)	57598 0	E 266-230	2CDE144000R0301		0.096	1
2 NO	1.7 (3.6)	57597 3	E 262-230	2CDE142000R0301		0.096	1

Latching relays with control electronics for central ON/OFF switch

The central commands have always priority and reliably switch on/off any given number of devices connected in parallel, irrespective of their previous switching position. Local control inputs are blocked when a central command is received. Same potential at central / local control input.

Coil voltage UC = 24 V AC/DC

Contacts	Power loss	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	W ①	EAN	Type code	Order code		kg	pc.
1 NO	2.4 (3.0)	57599 7	E 261 C-24	2CDE441000R0311		0.085	1
1 NO+1 NC	2.4 (3.5)	57601 7	E 266 C-24	2CDE444000R0311		0.096	1
2 NO	2.4 (3.5)	57600 0	E 262 C-24	2CDE442000R0311		0.096	1

Coil voltage UC = 230 V AC

Contacts	Power loss	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	W ①	EAN	Type code	Order code		kg	pc.
1 NO	1.5 (2.0)	57602 4	E 261 C-230	2CDE141000R0311		0.085	1
1 NO+1 NC	1.7 (3.0)	57604 8	E 266 C-230	2CDE144000R0311		0.096	1
2 NO	1.7 (3.0)	57603 1	E 262 C-230	2CDE142000R0311		0.096	1

Command and signaling

STD50 dimmers

STD 50

STD-EP

Technical features	
Rated voltage	230 V ~ 50 Hz
Ambient temperature	0 °C to + 35 °C
Interference suppression	CE

STD50 dimmers for the control of lamps and ballast

Dimmer for brightness control of filament lamps , 230 V tungsten halogen lamps, lv halogen lamps with conventional transformers (phase control)

Description/ application	Power loss	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	W	EAN	Type code	Order code		kg	pc.
	5 ①	02790 6	STD 50-3	GHV0211370R0074		0.155	1

Dimmer for brightness control of filament lamps , 230 V tungsten halogen lamps, lv halogen lamps with ABB electronic transformers (reverse phase)

Description/ application	Power loss	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	W	EAN	Type code	Order code		kg	pc.
	4 ①	03300 8	STD 50-4	GHV0211370R0075		0.105	1

① power loss = 1% of connected load (4 or 5 W max)

Electronic potentiometer for electronic control gear with control input 0/1 - 10 V DC, control current 50 mA DC Rated current (terminal 3 and 4) 4 A cosφ = 0.9; switching capacity 700 VA

Description/ application	Power loss	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	W	EAN	Type code	Order code		kg	pc.
	5 ②	27050 2	STD-EP	GHV0211370R0076		0.073	1

Memory touch controller for electronic control gear Rated voltage/switching output 4 A (~ 10 electronic control gear units) cosφ = 0.9; 3 A cosφ = 0.5, switching capacity 700 VA

Description/ application	Power loss	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	W	EAN	Type code	Order code		kg	pc.
for electronic control gear with control input 1 – 10 V DC control current 50 mA max.	1	27070 0	STD-MTS	GHV0210881R0004		0.110	1

② power loss = 1% of connected load (7 W max)

Command and signaling

STD universal dimmer for phase control and reverse phase control

STD-500 U

STD-420 E

STD OCP, STD-OCD, STD-OCT

Technical features		
Rated voltage		230 V ~ ± 10%, 50/60 Hz
Rated current	STD U	2.17 A
	STD E	1.83 A
Max. connected load	U	500 W/VA
	E	420 W/VA
Power extension		1 U + max. 6 E/phase = > max. 3 kVA
Min. connected load	STD U	60 W/VA
	STD E	200 W/VA
Max. line length		100 m pushbutton cable, 2 m data line
Interference suppression		CE
Ambient temperature		0 ... + 45 °C, higher temperatures reduce the power

Electronic protection against short circuit, overload, excessive temperature, automatic load recognition, soft-OFF function optional, memory function, minimum brightness control, visual overload indication.

Universal dimmer for phase control and reverse phase control
Universal dimmer STD-500 U and the connected power extension unit STD-420 E are suitable for the brightness control of:
- glow lamps
- 230 V halogen glow lamps
- lv halogen glow lamps with conventional transformer (phase control)
- electronic transformers for lv halogen glow lamps (reverse phase control) e.g.:
  ABB ETR-70-230, 105-230, 150-230

The STD-500 U dimmer can be operated by one or more unlit pushbuttons (N- or L-controlled) or via a data line:
- EIB control element SB/S
- Powernet control element PSB

Power unit STD-420 E is used to boost the connected load and is controlled exclusively by the preset command of the STD-500 U dimmer. The parallel connection of the outputs of the universal high-performance dimmer and the pertaining power extensions (up to 6 units; connection with enclosed RJ 12 line cut to length) allow for a dimming power of 3,000 W/VA max at one load line.
Not suitable for dimming fluorescent lamps, transformers with current monitor and high-reactance transformers.

Contacts	Power loss	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	W	EAN	Type code	Order code		kg	pc.
high-performance dimmer	6	06692 8	STD-500 U	GJB0006590A0178			1
extension	6	06693 5	STD-420 E	GJB0006590A0179			1
rotary operation element	–	06698 0	STD-OCD	GJB0006590A0183			1
button operation element	–	06695 9	STD-OCP	GJB0006590A0181			1
timer operation element	–	07056 7	STD-OCT	GJB0006590A0185			1

Note: Load and control cables must not be laid in one cable

Plug-in operation elements:
pushbutton operation element (STD-OCP)
rotary operation element (STD-OCD)
timer (STD-OCT)

Application
Remove dimmer cap and snap on operation element to provide for control of dimmer with central pushbutton or rotary operation. Local operation elements are still active.
Apart from the manual local control feature, the timer also allows for time-programmed operations.

Basic timer functions:
- year time switch with 48 time programs
- optional with/without decentralized pushbutton control
- special programs: adjustable background brightness, cycle, display and emergency light, holiday program
- running reserve: 5 hours

6586-500

The universal Master dimmer for LED retrofit Lamps. 6586-500

Product advantages
- Reliable and comfortable dimming of LED lamps
- Tuned to replacement lamps (retrofit LEDs)
- Brightness regulator downward compatible also suitable for conventional incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional inductive and electronic transformers.
- Touch-dimmer with local operation
- Adjustable minimum / maximum brightness Staircase light function with automatic switch-off function and pre-warning function according to DIN 18015-2
- Perfect function and comfortable operation
- Harmonious and flicker-free dimming process
- No humming or buzzing due to transistor technology
- Numerous practical special functions
- Extremely compact construction as MDRC device (1 MW)

Tecnical features	
Max. connected load	2 - 100 W/VA (Retrofit-LED-load).
Max. connected load	10 - 200 W/VA (Non-LED-load).
Rated voltage	230 V~, +10 % / -10 %, 50 Hz - 60 Hz
Ambient temperature	0 °C bis 35 °C
Standards	IEC 60669-2-1, British Standard EN 60669-2-1

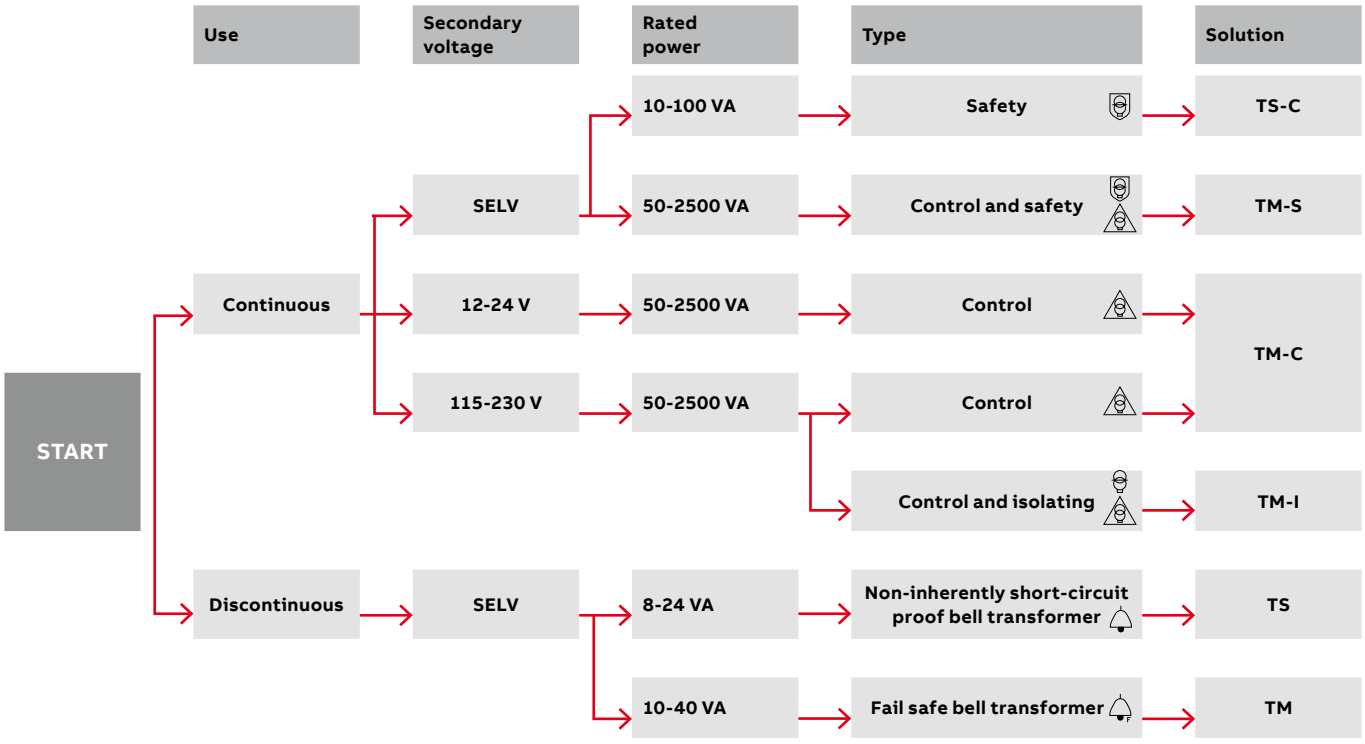
	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	208519	6586-500	6590-0-0191			1

Command and signaling

Transformers selection table

		Bell transformers for discontinuous use	
Series		TM	TS
Reference standard		IEC EN 61558-2-8	IEC EN 61558-2-8
Classification		Fail safe	Non-inherently short-circuit proof
Thermal protection integrated in secondary			■
Rated power		10, 15, 30, 40 VA	8, 16, 24 VA
Operation		Discontinuous	Discontinuous
Primary circuit voltage ratings		230 V a.c.	230 V a.c.
Secondary circuit characteristics	Double insulation between primary and secondary windings	■	■
	Full power on all outputs		
	SELV secondary (no-load output voltage <50 V a.c.)	■	■
Dimensions		2 modules [10, 15 VA]	2 modules [8, 16 VA]
		3 modules [30, 40 VA]	3 modules [24 VA]

① See page 6/58 for the choice of the protections.



Safety transformers for general use	**Control transformers for general use**	**Control and Safety transformers for general use**	**Control and Isolating transformers for general use**
TS-C	TM-C	TM-S	TM-I
IEC EN 61558-2-6	CEI EN 61558-2-2	CEI EN 61558-2-2 CEI EN 61558-2-6	CEI EN 61558-2-2 CEI EN 61558-2-4
Non-inherently short-circuit proof	Non-short-circuit proof control transformer a	Non-short-circuit-proof control and safety transformer a	Non-short-circuit-proof control and isolating transformer a
■			
10, 16, 25, 40, 63, 100 VA	50 to 2500 VA	50 to 2500 VA	50 to 2500 VA
Continuous	Continuous	Continuous	Continuous
230 V a.c.	230/400 V a.c.	230/400V a.c.	230/400 V a.c.
■		■	■
■	■	■	■
■		■	
2 modules [10 VA]	See overall dimensions 13/60	See overall dimensions 13/60	See overall dimensions 13/60
3 modules [16 VA]			
4 modules [25 VA, 40 VA]			
5 modules [63 VA]			
6 modules [100 VA]			

Bell transformer **TM, TS**

Transformers for supplying extra low voltage, suitable for loads that require a discontinuous supply, in particular doorbells and chimes. The primary and secondary circuits are perfectly isolated and separated.
Reference standard: IEC EN 61558-2-8

Control transformer **TM-C, TM-S*, TM-I***

Transformer for supplying control circuits, for example commands, signaling, interlocks, etc.
Reference standard: CEI EN 61558-2-2

Safety transformer **TS-C, TM-S***

Isolation transformer for supplying safety extra low voltage circuits (<50 V on no load). Accidental contact with the secondary winding phases can be withstood without any danger.
Reference standard: CEI EN 61558-2-6

Isolating transformer **TM-I***

Transformer in which the primary and secondary windings are electrically separated by a double or reinforced insulation, to protect the circuit supplied by the secondary against hazards due to accidental simultaneous contact with earth and live parts, or grounded parts that may become live in the event of an insulation fault.
Reference standard: CEI EN 61558-2-4

* TM-S and TM-I both comply to two standards.

Command and signaling

Control, isolating and safety transformers selection table

Selection table of products and secondary protections

Primary protection: see in Chapter 6 of Electrical installation solutions for buildings - Technical details

		TM-C Control				TM-S Control/Safety				TM-I Control/Isolating	
Power VA	Secondary voltage	12 V	24 V	115 V	230 V	12 V	24 V	24 V	48 V	115 V	230 V
50	Transformer	2CSM207113R0801		2CSM207213R0801		2CSM236893R0801		2CSM204653R0801 ②		2CSM204583R0801	
	Fuse gauge ①	4 A	2 A	0.4 A	0.2 A	4 A	2 A	2 A	1 A	0.4 A	0.2 A
100	Transformer	2CSM207103R0801		2CSM236933R0801		2CSM207163R0801		2CSM204643R0801		2CSM201123R0801	
	Fuse gauge ①	8 A	4 A	0.8 A	0.4 A	8 A	4 A	4 A	2 A	0.8 A	0.4 A
	Breaker type	S202 C8	S202 C4	S202 C1	S202 C0,5	S202 C8	S202 C4	S202 C4	S202 C2	S202 C1	S202 C0,5
160	Transformer	2CSM236853R0801		2CSM207203R0801		2CSM202073R0801		2CSM204633R0801		2CSM204533R0801	
	Fuse gauge ①	12 A	6.3 A	1.25 A	0.63 A	12 A	6,3 A	6.3 A	3.15 A	1.25 A	0.63 A
	Breaker type	S202 C13	S202 C8	S202 C1.6	S202 C-	S202 C13	S202 C8	S202 C8	S202 C4	S202 C1.6	-
200	Transformer	2CSM236823R0801		2CSM236883R0801		2CSM260043R0801				2CSM204513R0801	
	Fuse gauge ①	16 A	8 A	1.6 A	0.8 A	16 A	8 A			1.6 A	0.8 A
	Breaker type	S202 C16	S202 C8	S202 C2	S202 C1	S202 C16	S202 C8			S202 C2	S202 C1
250	Transformer	2CSM207093R0801		2CSM236923R0801		2CSM260063R0801		2CSM204673R0801		2CSM204493R0801	
	Fuse gauge ①	20 A	10 A	2 A	1 A	20 A	10 A	10 A	5 A	2 A	1 A
	Breaker type	S202 C20	S202 C10	S202 C2	S202 C1	S202 C20	S202 C10	S202 C10	S202 C6	S202 C2	S202 C1
320	Transformer	2CSM236843R0801		2CSM236923R0801		2CSM260063R0801		2CSM204673R0801		2CSM204493R0801	
	Fuse gauge ①	25 A	12 A	2.5 A	1.25 A	25 A	12 A	12 A	6.3 A	2.5 A	1.25 A
	Breaker type	S202 C25	S202 C13	S202 C3	S202 C1,6	S202 C25	S202 C13	S202 C13	S202 C8	S202 C3	S202 C1,6
400	Transformer	2CSM289703R0801		2CSM207193R0801		2CSM260103R0801		2CSM204613R0801		2CSM201073R0801	
	Fuse gauge ①	32 A	16 A	3.15 A	1.6 A	32 A	16 A	16 A	8 A	3.15 A	1.6 A
	Breaker type	S202 C32	S202 C16	S202 C4	S202 C2	S202 C32	S202 C16	S202 C16	S202 C8	S202 C4	S202 C2
630	Transformer	2CSM236813R0801		2CSM207183R0801		2CSM260053R0801		2CSM204603R0801		2CSM204423R0801	
	Fuse gauge ①	50 A	25 A	5 A	2.5 A	50 A	25 A	25 A	12 A	5 A	2.5 A
	Breaker type	S202 C50	S202 C25	S202 C6	S202 C3	S202 C50	S202 C25	S202 C25	S202 C13	S202 C6	S202 C3
1000	Transformer	2CSM292873R0801		2CSM236913R0801		2CSM260093R0801				2CSM204413R0801	
	Fuse gauge ①	80 A	40 A	8 A	4 A	80 A	40 A			8 A	4 A
	Breaker type	S292 C80	S202 C40	S202 C8	S202 C4	S292 C80	S202 C40			S202 C8	S202 C4
1600	Transformer	2CSM292863R0801		2CSM201813R0801		2CSM260083R0801				2CSM204403R0801	
	Fuse gauge ①	125 A	63 A	16 A	8 A	125 A	63 A			16 A	8 A
	Breaker type	S292 C125	S202 C63	S202 C16	S202 C8	S292 C125	S202 C63			S202 C16	S202 C8
2000	Transformer	2CSM292853R0801		2CSM236903R0801		2CSM260073R0801				2CSM204383R0801	
	Fuse gauge ①	160 A	80 A	16 A	8 A	160 A	80 A			16 A	8 A
	Breaker type	-	S292 C80	S202 C20	S202 C10	-	S292 C80			S202 C20	S202 C10
2500	Transformer	2CSM236943R0801		2CSM207173R0801		2CSM204663R0801				2CSM204363R0801	
	Fuse gauge ①	200 A	100 A	20 A	10 A	200 A	100 A			20 A	10 A
	Breaker type	-	S292 C100	S202 C25	S202 C13	-	S292 C100			S202 C25	S202 C13

① FUSES
- Gauge ≤ 6.3 A use aM fuses with high breaking capacity and IEC601268-compliant
- Gauge > 6.3 A use gG fuses IEC60269-2 or IEC60269-3-compliant

② TM-S 50/24-48 P complies with IEC EN 61558-2-4 on the secondary circuit at 48 V and with IEC EN 61558-2-6 on the secondary circuit at 24 V

Command and signaling

TM-C, TM-S, TM-I control, isolating and safety transformers

2CSC400201F0202

TM

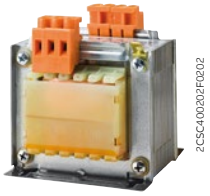
Technical characteristics				
		TM-C	**TM-S**	**TM-I**
Rated primary voltage Un	[V]	230/400 a.c.	230/400 a.c.	230/400 a.c.
Primary voltage adjustment outlets ±15 V		No	Yes	Yes
Max ambient temperature ③	[°C]	40	40	40
Rated secondary voltage Un	[V]	12-24, 115-230 a.c.	12-24, 24-48 a.c. b	115-230 a.c.
Rated frequency	[Hz]	50/60	50/60	50/60
Isolation voltage between primary and secondary	[kV]	3.5	4.8	4.8
Rated powers	[VA]	50-2500	50-2500	50-2500
Primary cable section (Ø max)	[mm²]	6	6	6
Operating temperature	[°C]	①	①	①
Approvals		ENEC (Up to 1000 VA), UR, CSA	ENEC (Up to 1000 VA), UR, CSA	ENEC (Up to 1000 VA), UR, CSA
Standards		CEI EN 61558-2-2	CEI EN 61558-2-2 CEI EN 61558-2-6	CEI EN 61558-2-2 CEI EN 61558-2-6

① See technical details
② TM-S 50/24-48 P complies to CEI EN 61558-2-4 on the 48 V secondary and to CEI EN 61558-2-6 on the 24 V secondary
③ Maximum temperature without any power draw. See technical details for power draw according to temperature.

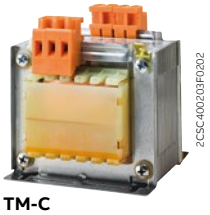
Command and signaling

TM-C, TM-S, TM-I control, isolating and safety transformers

TM-I



TM-S



TM-C

TM-C

TM-C control transformer
Transformer for supplying control circuits, for example commands, signaling, interlocks, etc.
Reference standard: CEI EN 61558-2-2.

TM-S safety transformer
Isolation transformer for supplying safety extra low voltage circuits (<50 V on no load). Accidental contact with the secondary winding phases can be withstood without any danger. Reference standard: CEI EN 61558-2-6

TM-I isolating transformer
Transformer in which the primary and secondary windings are electrically separated by a double or reinforced insulation, to protect the circuit supplied by the secondary against hazards due to accidental simultaneous contact with earth and live parts, or grounded parts that may become live in the event of an insulation fault.
Reference standard: CEI EN 61558-2-4

Since TM-C, TM-S and TM-I transformers are not provided with built-in protection, they must therefore be protected according with these rules:
- Primary: line protection must reach or exceed the recommended value in Chapter 6 of Electrical installation solutions for buildings - Technical details. This device guarantees line protection and service continuity but doesn't protect the transformer.
- Secondary: transformer protection must be chosen according to tables in the previous pages. This device protect the transformer.

TM-C single phase control transformers, primary 230-400 V

Rated power	Secondary voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
VA	V a.c.	EAN	Type code	Order code		kg	pc.
50	12-24	071136	TM-C 50/12-24	2CSM207113R0801		1.1	1
100	12-24	071037	TM-C 100/12-24	2CSM207103R0801		2	1
160	12-24	368533	TM-C 160/12-24	2CSM236853R0801		3	1
200	12-24	368236	TM-C 200/12-24	2CSM236823R0801		3.2	1
250	12-24	070931	TM-C 250/12-24	2CSM207093R0801		3.6	1
320	12-24	368434	TM-C 320/12-24	2CSM236843R0801		4.4	1
400	12-24	897033	TM-C 400/12-24	2CSM289703R0801		5.5	1
630	12-24	368137	TM-C 630/12-24	2CSM236813R0801		7.8	1
1000	12-24	928737	TM-C 1000/12-24	2CSM292873R0801		13.2	1
1600	12-24	928638	TM-C 1600/12-24	2CSM292863R0801		21.2	1
2000	12-24	928539	TM-C 2000/12-24	2CSM292853R0801		25.5	1
2500	12-24	369431	TM-C 2500/12-24	2CSM236943R0801		26.8	1
50	115-230	072133	TM-C 50/115-230	2CSM207213R0801		1.1	1
100	115-230	369332	TM-C 100/115-230	2CSM236933R0801		2	1
160	115-230	072034	TM-C 160/115-230	2CSM207203R0801		3	1
200	115-230	368830	TM-C 200/115-230	2CSM236883R0801		3.2	1
250	115-230	071532	TM-C 250/115-230	2CSM207153R0801		3.6	1
320	115-230	369233	TM-C 320/115-230	2CSM236923R0801		4.4	1
400	115-230	071938	TM-C 400/115-230	2CSM207193R0801		5.5	1
630	115-230	071839	TM-C 630/115-230	2CSM207183R0801		7.8	1
1000	115-230	369134	TM-C 1000/115-230	2CSM236913R0801		13.2	1
1600	115-230	018131	TM-C 1600/115-230	2CSM201813R0801		21.2	1
2000	115-230	369035	TM-C 2000/115-230	2CSM236903R0801		25.5	1
2500	115-230	071730	TM-C 2500/115-230	2CSM207173R0801		26.8	1

TM-S single phase control and safety transformers, primary 230-400 V ±15

Rated power	Secondary voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
VA	V a.c.	EAN	Type code	Order code		kg	pc.
50	12-24	368939	TM-S 50/12-24 P	2CSM236893R0801		1.1	1
100	12-24	071631	TM-S 100/12-24 P	2CSM207163R0801		2	1
160	12-24	020738	TM-S 160/12-24 P	2CSM202073R0801		3	1
200	12-24	600435	TM-S 200/12-24 P	2CSM260043R0801		3.2	1
250	12-24	601135	TM-S 250/12-24 P	2CSM260113R0801		3.6	1
320	12-24	600633	TM-S 320/12-24 P	2CSM260063R0801		4.4	1
400	12-24	601036	TM-S 400/12-24 P	2CSM260103R0801		5.5	1
630	12-24	600534	TM-S 630/12-24 P	2CSM260053R0801		7.8	1
1000	12-24	600930	TM-S 1000/12-24 P	2CSM260093R0801		13.2	1
1600	12-24	600831	TM-S 1600/12-24 P	2CSM260083R0801		21.2	1
2000	12-24	600732	TM-S 2000/12-24 P	2CSM260073R0801		25.5	1
2500	12-24	046639	TM-S 2500/12-24 P	2CSM204663R0801		26.8	1
50	24-48	046530	TM-S 50/24-48 P	2CSM204653R0801		1.1	1
100	24-48	046431	TM-S 100/24-48 P	2CSM204643R0801		2	1
160	24-48	046332	TM-S 160/24-48 P	2CSM204633R0801		3	1
250	24-48	046837	TM-S 250/24-48 P	2CSM204683R0801		3.2	1
320	24-48	046738	TM-S 320/24-48 P	2CSM204673R0801		3.6	1
400	24-48	046134	TM-S 400/24-48 P	2CSM204613R0801		4.4	1
630	24-48	046035	TM-S 630/24-48 P	2CSM204603R0801		5.5	1

TM-I single phase control and isolating transformers, primary 230-400 V ±15

Rated power	Secondary voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
VA	V a.c.	EAN	Type code	Order code		kg	pc.
50	115-230	045830	TM-I 50/115-230 P	2CSM204583R0801		1.1	1
100	115-230	011231	TM-I 100/115-230 P	2CSM201123R0801		2	1
160	115-230	045335	TM-I 160/115-230 P	2CSM204533R0801		3	1
200	115-230	045137	TM-I 200/115-230 P	2CSM204513R0801		3.2	1
250	115-230	045038	TM-I 250/115-230 P	2CSM204503R0801		3.6	1
320	115-230	044932	TM-I 320/115-230 P	2CSM204493R0801		4.4	1
400	115-230	010739	TM-I 400/115-230 P	2CSM201073R0801		5.5	1
630	115-230	044239	TM-I 630/115-230 P	2CSM204423R0801		7.8	1
1000	115-230	044130	TM-I 1000/115-230 P	2CSM204413R0801		13.2	1
1600	115-230	044031	TM-I 1600/115-230 P	2CSM204403R0801		21.2	1
2000	115-230	043836	TM-I 2000/115-230 P	2CSM204383R0801		25.5	1
2500	115-230	043638	TM-I 2500/115-230 P	2CSM204363R0801		26.8	1

Accessories

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Mounting bracket for DIN rail (up to 160 VA)	010333	TM-C-DIN	2CSM201033R0801		0.10	10

Command and signaling

TS-C safety isolating transformers for general use

TS 25 C

TS 100 C

TS-C							
		TS 10 C	TS 16 C	TS 25 C	TS 40 C	TS 63 C	TS 100 C
Primary rated voltage Un	[V]	230 a.c.	230 a.c.	230 a.c.	230 a.c.	230 a.c.	230 a.c.
Secondary rated voltage Un	[V]	12 - 24 V a.c.	12 - 24 V a.c.	12 - 24 V a.c.	12 - 24 V a.c.	12 - 24 V a.c.	12 - 24 V a.c.
Tolerance on secondary voltage (full load)	[%]	< +/- 5% (according to standards)					
Tolerance on secondary voltage (off load)	[%]	<100% rated secondary voltage (according to standards)					
Rated frequency	[Hz]	50/60	50/60	50/60	50/60	50/60	50/60
Rated power (continuous use)	[VA]	10	16	25	40	63	100
Maximum output current (at 24 V)	[A]	0.42	0.67	1.04	1.67	2.63	4.17
Power loss (off load)	[W]	< 2.5	< 3	< 4	< 4.5	< 4.5	< 1
Power loss (full load)	[W]	< 5	< 5	< 5	< 10	< 15	< 20
Modules	[No.]	2	3	4	4	5	6
Cable section	[mm²-AWG]	2.5					
Tightening torque	[Nm]	0.5					
Protection degree		IP 20					
Standards		IEC/EN 61558-2-6					
Approvals							
Temperature class resistance		B (corresponding to maximum 120 °C)					

TS-C safety isolating transformers for general use

These transformers are non-inherently short-circuit proof. In fact they are equipped with a thermal protective device which automatically restores the power when the transformer is sufficiently cooled down. So even during an overload or a short-circuit they maintain their temperature below the specified limits and they continue functioning after the fault's removal.

They are ideal for supplying permanent power to meters, auxiliary electronic devices (e.g. measu-rement, video-entry phone systems, BUS communication) and circuits with safety extremely-low voltage (SELV) for bathrooms and showers, lighting, fountains, electro-medical devices and suchlike. These devices take up very little space, from 2-module size for the 10 VA version up to 6-module size for the 100 VA version.

Rated power (continuous)	Secondary rated voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
VA	V	EAN	Type code	Order code		kg	pc.
10	12-24	285557	TS 10/12-24 C	2CSM228555R0812		0.35	1
16	12-24	285656	TS 16/12-24 C	2CSM228565R0812		0.45	1
25	12-24	928508	TS 25/12-24 C	2CSM251043R0811		0.92	1
40	12-24	928607	TS 40/12-24 C	2CSM401043R0811		1.1	1
63	12-24	928706	TS 63/12-24 C	2CSM631043R0811		1.15	1
100	12-24	285755	TS 100/12-24 C	2CSM228575R0812		1.45	1

Command and signaling
TM bell transformers

TM 15/12

TM 40/12

Technical characteristics		
Primary rated voltage Un	[V]	230 a.c.
Secondary rated voltage Un	[V]	4, 8, 12, 24
Tolerance on secondary voltage (with load)	[%]	+/- 15% (according to standards)
Rated frequency	[Hz]	50/60
Rated power (discontinuous use)	[VA]	10, 15, 30, 40
Power loss (off load)	[W]	<2.5 (TM10, TM15), <3 (TM30, TM40), <1.25 (TM15 ES)
Modules	[No.]	2 (TM10, TM15), 3 (TM30, TM40)
Cable section	[mm²-AWG]	2.5 - 14
Tightening torque	[Nm]	0.5
Protection degree		IP 20
Standards		IEC/EN 61558-2-8
Approvals		

TM fail safe bell transformers

These transformers, with safety extremely-low voltage secondary (SELV), are suitable for loads that require a discontinuous supply, and in particular doorbells and chimes. Fail safe operation and excellent safety are assured thanks to the perfect isolation and separation between the primary and secondary circuits. In addition, the Energy Saving TM-ES version allows reducing power losses by 50%.

Maximum rated power a (disccontinuous) VA	Secondary voltage rating V c.a.	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
10	4-8-12	287155	TM10/12	2CSM228715R0802		0.30	6
10	12-24	287254	TM10/24	2CSM228725R0802		0.30	6
15	4-8-12	287353	TM15/12	2CSM228735R0802		0.30	6
15	12-24	287452	TM15/24	2CSM228745R0802		0.30	6
15	4-8-12	285854	TM15/12 ES	2CSM228585R0802		0.30	1
30	4-8-12	287551	TM30/12	2CSM228755R0802		0.45	4
30	12-24	287650	TM30/24	2CSM228765R0802		0.45	4
40	4-8-12	287759	TM40/12	2CSM228775R0802		0.45	4
40	12-24	287858	TM40/24	2CSM228785R0802		0.45	4

① See diagrams below for the RMS power on each secondary output

Command and signaling

TS bell transformers

TS 8/8

TS 8/12 SW

TS 24/8-12-24

Technical characteristics		
Primary rated voltage Un	[V]	230 a.c.
Secondary rated voltage Un	[V]	4, 6, 8, 12, 24
Tolerance on secondary voltage (with load)	[%]	± 15% (according to standards)
Rated frequency	[Hz]	50/60
Rated power (discontinuous use)	[VA]	8, 16, 24
Power loss (off load)	[W]	<2.5 (TS8, TS16), <3 (TS24), <0.8 (TS8/8 ES), <1.2 (TS16/8-12 ES)
Modules	[No.]	2 (TS8, TS16), 3 (TS24)
Cable section	[mm²-AWG]	2.5 - 14
Tightening torque	[Nm]	0.5
Protection degree		IP 20
Standards		IEC/EN 61558-2-8
Approvals		

TS non-inherently short-circuit proof bell transformers

These transformers, with safety extremely-low voltage secondary (SELV), are suitable for driving loads that call for a discontinuous supply, and in particular doorbells and chimes.
In addition to perfect isolation and separation between the primary and secondary circuits, the TS transformers have a thermal protection device integrated into the secondary that makes them resistant to short circuit currents (non-inherently short-circuit proof).
The TS range is extended with the Energy Saving TS-ES series, which allows reducing power losses by 50%, and the TS8/SW series, that is equipped with a switch for controlling loads connected to the secondary.

Maximum rated power a (disccont.) VA	Secondary voltage rating V c.a.	Switch 0-1	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
8	8		285953	TS8/8 ES	2CSM228595R0812		0.35	1
8	8		286653	TS8/8	2CSM228665R0812		0.35	6
8	12		286851	TS8/12	2CSM228685R0812		0.35	6
8	24		286752	TS8/24	2CSM228675R0812		0.35	6
8	8	■	368304	TS8/8 SW	2CSM081302R0811		0.35	6
8	12	■	368403	TS8/12 SW	2CSM081402R0811		0.35	6
8	4-6-8	■	368601	TS8/4-6-8 SW	2CSM081012R0811		0.35	6
8	4-8-12	■	368700	TS8/4-8-12 SW	2CSM081022R0811		0.35	6
16	8-12		286059	TS16/8-12 ES	2CSM228605R0812		0.35	1
16	8		286455	TS16/8	2CSM228645R0812		0.35	6
16	12		286356	TS16/12	2CSM228635R0812		0.35	6
16	24		286158	TS16/24	2CSM228615R0812		0.35	6
16	4-6-8		286554	TS16/4-6-8	2CSM228655R0812		0.35	6
16	4-8-12		286257	TS16/4-8-12	2CSM228625R0812		0.35	6
24	4-8-12		287056	TS24/4-8-12	2CSM228705R0812		0.45	4
24	8-12-24		286950	TS24/8-12-24	2CSM228695R0812		0.45	4

① See diagrams below for the rms power on each secondary output

Command and signaling

SM, RM, TSM, TSR bells and buzzers

SM 1-230

TSM

Technical characteristics							
		SM1-12, RM1-12	SM1-230, RM1-230	SM2-12, RM2-12	SM2-24, RM2-24	SM2-230, RM2-230	TSM, TSR
Rated Voltage Un	[V c.a.]	8-12	230	12	24	230	230
Rated frequency	[Hz]	50	50	50	50	50	50
Power consumption	[VA]	2,5-6,5	4,5	4,5	4,5	4,5	5,5
Sound level at 1 meter	Bell [dB]	82	82	82	82	82	80
	Buzzer [dB]	80	80	80	80	80	70
	Three-tones [dB]						84
Max permanent working time		15 min	15 min	12 h ①	12 h a	12 h a	TSM: 1 min TSR: 5 min
Max cable cross-section	[mm²]	10	10	10	10	10	10
Mounting position		vertical only					
Protection degree		IP20-IP40, switchboard mounting					
Modules	[No.]	1	1	1	1	1	2

① Continuative work for more than 12 hours could affect the sound level

Bells and buzzers

The range of bells and buzzers includes modular versions for discontinuous use SM1, RM1, TSM and TSR, suitable for acoustic signaling in residential and commercial sectors, and versions for continuous use SM2 and RM2, which are able to operate continuously for up to 12 hours while maintaining the quality and level of the sound. RM2 and SM2 are dedicated to specific applications such as acoustic signaling in the industry, alarms notification, supervision and intensive use (schools, factories etc...). TSM and TSR versions also include a transformer: the input is 230V a.c. and the bell is supplied in 12 or 24 V.

SM electro-mechanical modular bells

Rated voltage	Use	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V AC		EAN	Type code	Order code		kg	pc.
8/12	Discontinuous	886204	SM1-12	2CSM111000R0821		0.076	12
230	Discontinuous	886303	SM1-230	2CSM131000R0821		0.076	12
12	Continuous	886600	SM2-12	2CSM112000R0821		0.076	12
24	Continuous	886709	SM2-24	2CSM122000R0821		0.076	12
230	Continuous	886808	SM2-230	2CSM132000R0821		0.076	12

RM electro-mechanical modular buzzers

Rated voltage	Use	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V AC		EAN	Type code	Order code		kg	pc.
8/12	Discontinuous	886419	RM1-12	2CSM211000R0821		0.076	12
230	Discontinuous	886518	RM1-230	2CSM231000R0821		0.076	12
12	Continuous	886907	RM2-12	2CSM212000R0821		0.076	12
24	Continuous	887003	RM2-24	2CSM222000R0821		0.076	12
230	Continuous	887102	RM2-230	2CSM232000R0821		0.076	12

Command and signaling

SM, RM, TSM, TSR bells and buzzers

TSR

TSM modular electronic bell (two-tones) + transformer included

Rated voltage	Use	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V AC		EAN	Type code	Order code		kg	pc.
230	Discontinuous	007005	TSM	2CSM100000R0841		0.300	6

TSR bell + buzzer + transformer included

Rated voltage	Use	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
V AC		EAN	Type code	Order code		kg	pc.
230	Discontinuous	369608	TSR	2CSM100000R0831		0.300	1

Command and signaling

CP-D primary switch mode power supplies

CP-D

Technical features							
		CP-D 12/0.83	CP-D 12/2.1	CP-D 24/0.42	CP-D 24/1.3	CP-D 24/2.5	CP-D 24/4.2
Input circuit							
Rated input voltage U_{in}	[V AC]	100-240					
Input voltage range	[V AC]	90-264					
	[V DC]	120-375					
Frequency range	[Hz]	47-63					
Hold-up time	[ms]	min. 30	min. 30	min. 30	min. 30	min. 60	min. 60
Internal input fuse, slow-acting (250 V AC)	[A]	1	2	1	2	2	3.15
Typical power dissipation at 230 V AC	[W]	13	31	12	38	70	114
Inrush current limiting (max 3 ms)	[A]	30	50	30	50	60	60
Output circuit							
Rated output voltage	[V DC]	12	12	24	24	24	24
Tolerance of the output		±1%					
Adjustment range of the output voltage	[V DC]	-	-	-	24-28	24-28	24-28
Rated output current I_r	[A]	0.83	2.10	0.42	1.30	2.50	4.20
Rated output power	[W]	10	30	10	30	60	100
Resistance to reverse feed	[V DC]	18 / 1 s	18 / 1 s	35 / 1 s	35 / 1 s	35 / 1 s	35 / 1 s
Parallel connection		Yes, using CP-D RU					
Series connection		Allowed, to increase voltage					
Output circuit: no-load, overload, and short-circuit behaviour							
Characteristic curve of output		U/I characteristic curve					
Short-circuit behavior		continuous short-circuit stability					
Overload protection		output power limiting					
No-load protection		continuous no-load stability					
Currrent limiting at short circuit	[A]	typ 1.4	typ 5.9	typ 0.78	typ 4.2	typ 6.05	typ 11.5
LED status indicator							
Green LED (DC ON)		Output voltage applied					
Red LED (DC LOW)		Output voltage too low					
Operating temperature	[°C]	-40...+70					
Derating of the output current 60°C < Ta ≤ 70 °C		2.5% / °C					
Approval / Marks (depending on device)		cULus, cURus, CCC, EAC, CE, RCM					

Command and signaling

CP-D primary switch mode power supplies

CP-D 12/0.83,
CP-D 24/0.42

CP-D 12/2.1
CP-D 24/1.3

CP-D 24/2.5

CP-D 24/4.2

Primary switch mode power supplies

- Output voltages 12 V, 24 V
- Adjustable output voltages (devices > 10 W)
- Output currents 0.42 A / 0.83 A / 1.3 A / 2.1 A / 2.5 A / 4.2 A
- Power range 10 W, 30 W, 60 W, 100 W
- Wide range input 100-240 V AC (90-264 V AC, 120-375 V DC)
- High efficiency of up to 89 %
- Low power dissipation and low heating
- Free convection cooling (no forced cooling with ventilators)
- Ambient temperature range during operation -40°C...+70 °C
- Open-circuit, overload and short-circuit stable
- Integrated input fuse
- U/I characteristic (fold-forward behaviour at overload – no switch-off)
- LEDs for status indication
- Light-grey enclosure in RAL 7035

Rated input voltage	Rated output voltage/current	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
V	V / A	EAN	Type code	Order code		kg (lb.)	pc.
100-240 V AC	12 V DC / 0.83 A		CP-D 12/0.83	1SVR427041R1000		0.06/0.13	1
100-240 V AC	12 V DC / 2.1 A		CP-D 12/2.1	1SVR427043R1200		0.19/0.41	1
100-240 V AC	24 V DC / 0.42 A		CP-D 24/0.42	1SVR427041R0000		0.06/0.13	1
100-240 V AC	24 V DC / 1.3 A		CP-D 24/1.3	1SVR427043R0100		0.19/0.41	1
100-240 V AC	24 V DC / 2.5 A		CP-D 24/2.5	1SVR427044R0200		0.25/0.56	1
100-240 V AC	24 V DC / 4.2 A		CP-D 24/4.2	1SVR427045R0400		0.32/0.71	1

CP-D RU for decoupling of two CP-D power suply units

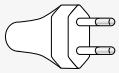
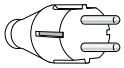
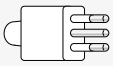
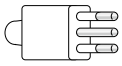
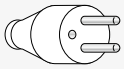
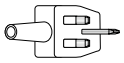
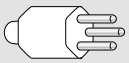
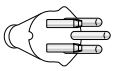
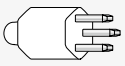
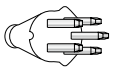
Input voltage range	Rated input current	Rated output voltage/ current	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
V	A	V / A	EAN	Type code	Order code		kg (lb.)	pc.
9-35 V DC	2 x 5 A	24 V DC / 1 x 10 A		CP-D RU	1SVR427049R0000		0.075 / 0.165	1

Command and signaling

Modular sockets selection table

Series selection

For further information about sockets selection by country please see in Chapter 6 of Electrical installation solutions for buildings - Technical details

		M1175	M1173	M1170	M1174	M1363	M1011
	EU 10A	■	■	■	■		■
	Schuko 10 A / 16 A	■	■	■			
	Italian 10 A		■	■			
	Italian 16 A			■			
	French 10 A / 16 A	Pluggable but not earthed	Pluggable but not earthed	Pluggable but not earthed	■		
	British 13 A					■	
	Swiss						■
							■
							■
							■

Command and signaling

Modular sockets selection table

Model selection

				RAL 7035
German Schuko Strandard				
	M1175			2CSM210000R0721
	M1175-L	Indicator light		2CSM212000R0721
	M1175-FL	Indicator light	Fuse 6.3 A aM	2CSM214000R0721
	M1175-C	Cover IP30		2CSM211000R0721
Italian P30 standard				
	M1173			2CSM110000R0701
	M1173-L	Indicator light		2CSM112000R0701
Italian dual standard				
	M1170			2CSM210000R0701
French Standard				
	M1174	2CSM110000R0711		2CSM110000R0711

			RAL 7035
British Standard			
	M1363	2CSM259343R0721	2CSM259343R0721
	M1363-L	Indicator light	2CSM258163R0721
Swiss standard SEV 2011			
	M1011-T13	Single-phase 10 A Type 13	2CSM220685R0721
	M1011-T23	Single-phase 16 A Type 23	2CSM220695R0721
	M1011-T15	Three-phase 10 A Type 15	2CSM220705R0721
	M1011-T25	Three-phase 16 A Type 25	2CSM220715R0721

Command and signaling

Modular sockets

Modular sockets

Technical specifications

Rated voltage Un		[V]	250 a.c.					
Rated current In		[A]	16 (M1170, M1173, M1174, M1175), 13 (M1363),					
Rated frequency		[Hz]	50/60					
Power loss		[W]	0,6					
Modules		[No.]	2.5 for M117x 3 for M1011, M1363					
Safety shutters			yes, on entire range					
Cable section (ø min./max.)		[mm²]	2.5 / 16					
Tightening torque		[Nm]	1.2					
Temperature	storage	[°C]	-40 ... +70					
	operating	[°C]	-25 ... +35					
Protection degree			IP20 / IP30 versions with cover, when cover is closed					
			M1011	M1175	M1173	M1170	M1174	M1363
Reference standards			SEV 1011	DIN VDE 0620-1	CEI 23-50		NF C 61 314	BS1363
Approvals			SEV	VDE, EAC	IMQ, EAC	EAC	LCIE, CEBEC, EAC	BSI

Indicator light technical specifications

Type		fluorescent torpedo-shaped lamp
Function		Indication of power supply presence (M1363, M1173, M1175)
Light colour		green
Power consumption	[W]	0.25

Fuse technical specifications

Type		5 x 20 mm up to 6.3 A aM
Function		phase protection
Breaking capacity	[A]	1500
Reference standard		IEC EN 60127

M1175

M1175-C

M1175-C

M1175-FL

M1173

Modular sockets

Modular sockets allow the connection of devices, tools or electrical and electronic non modular equipments in civil and industrial electrical switchboards.
The range is composed by standard versions as well as upgraded versions with additional features as light indicator, protection fuse and cover.

German Shuko standard modular sockets

Color	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
grey	027850	M1175	2CSM210000R0721		0,120	4
grey with cover	029052	M1175-C	2CSM211000R0721		0,140	4

German Shuko standard modular sockets with integrated indicator light and fuse

Color	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
grey with light	028253	M1175-L	2CSM212000R0721		0,140	4
grey with light and fuse	028659	M1175-FL	2CSM214000R0721		0,160	4

Italian P30 standard modular sockets

Color	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
grey	004103	M1173	2CSM110000R0701		0,120	4

Italian P30 standard modular sockets with integrated indicator light

Color	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
grey with light	027058	M1173-L	2CSM112000R0701		0,140	4

Command and signaling

Modular sockets

M1170

M1174

M1363

Italian dual standard modular sockets

Color	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
grey	027454	M1170	2CSM210000R0701		0,120	4

French standard modular sockets

Color	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
grey	006602	M1174	2CSM110000R0711		0,140	4

British standard modular sockets.

Color	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
grey	593430	M1363	2CSM259343R0721		0,140	4
grey with light	581635	M1363-L	2CSM258163R0721		0,140	4

M1011-T13

M1011-T23

M1011-T15

M1011-T25

Swiss standard modular sockets
The M1011 series, with SEV certification, allows to plug four types of swiss standard plugs, single- and three-phase e with currents up to 10 A or 16 A.
They can be mounted on DIN rail or Smissline rails without supply connection.

Color		Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
		EAN	Type code	Order code		kg	pc.
grey	Single-phase 10 A	206873	M1011-T13	2CSM220685R0721		0.140	2
grey	Single-phase 16 A	206972	M1011-T23	2CSM220695R0721		0.140	2
grey	Three-phase 10 A	207078	M1011-T15	2CSM220705R0721		0.170	2
grey	Three-phase 16 A	207177	M1011-T25	2CSM220715R0721		0.170	2

Command and signaling

MA1-8001 DIN rail adapter

MA1-8001

MA1-8121

MA1-8001 DIN rail adapter

Through an appropriate kit, this product born with the Modular Range of Pilot devices is the perfect case for alongside Ø 22 mm pilot devices with “System pro M compact” products. The Ø 22 mm pilot devices can now find a greater use even within distribution or automation switchboards with modular panels maintaining an high aesthetic level.
The MA1-8001 offers a lot of advantages:

- Fast and easy mounting
- Simple wiring
- Simple maintenance
- Less depth of operators
- Perfect harmony alongside the “System pro M compact” products

Using MA1-8001 it’s possible to put together “System pro M compact” products with LED pilot light, potentiometer, key selectors, toggle switches, selector switches, push- buttons, mushroom buttons and emergency stop, illuminated or not.
For detailed description of the industrial devices that can be installed using this kit, see technical catalogue 1SFC151003C0201

Color	Bbn 7320500	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
DIN rail adapter KIT (2 modules) ① ②	357880	MA1-8001	1SFA611920R8001		0.023	1
DIN rail adapter (2 modules) ①	357702	MA1-8131	1SFA611920R8131		0.020	10

① Can be used only with Modular range pilot devices units; it cannot be used with the old CBK range or Compact range products.
② KIT includes one Din rail adapter, one empty block and 2 pins

Technical notes

- To assemble the new housing with push-buttons, selector switch and indicator lamps, contact blocks and lamp blocks for DIN rails must be used.
- The MCBH-00 holder is not necessary, because the housing hooks directly to contact blocks.
- To line up with “System pro M compact” products, a maximum of 3 blocks must be used.
- In the configuration with 3 contacts, it is advisable to use securing pins to make the blocks more solid.
- In making up actuators or indicator lamps that use a single contact, one or two MDB-2 empty blocks must be used.

Electrical installation solutions for buildings
Control and automation

Index

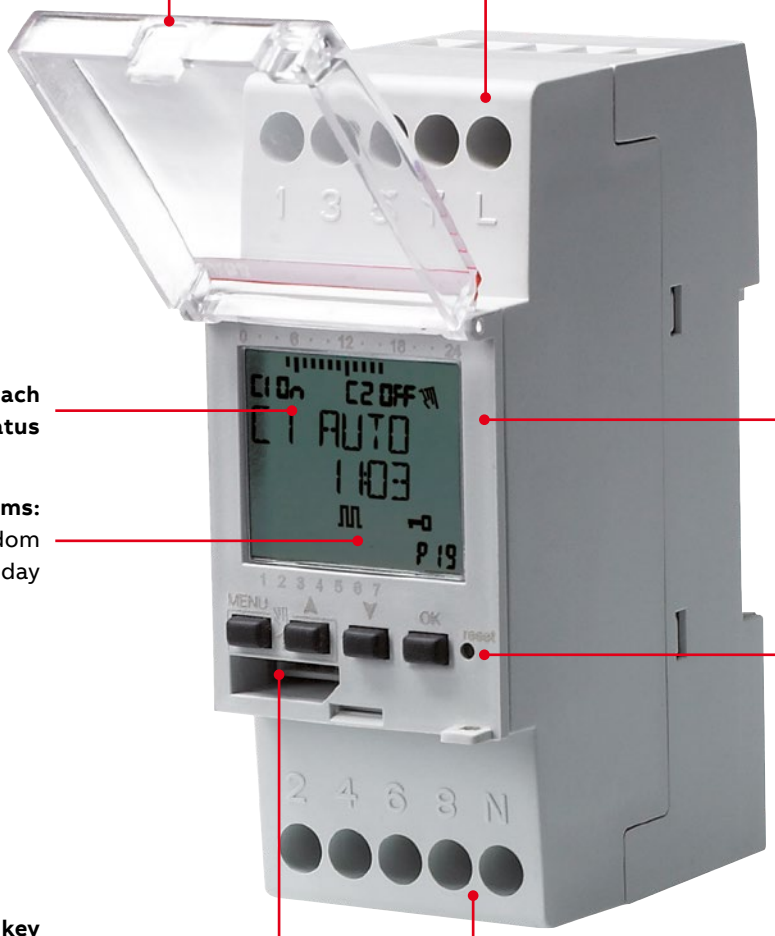
D Line digital time switches	7/2
ATe electro-mechanical time switches	7/7
AT72e electro-mechanical time switches	7/8
E 232 staircase lighting time-delay switches	7/9
E 234 electronic timers	7/11
T Line twilight switches	7/15
T1 POLE twilight switches	7/17
TWA twilight switches	7/18
THS modular thermostats	7/20
CL logic relays, display system	7/22
E 450 priority switches	7/29
RAL overload relays	7/30
LSS1/2 load shedding switch	7/31
E 235 mains disconnection relays	7/32
LEE 230 extractable power failure signalling lamp	7/34

D Line. Simply precise

An ideal range for automating the functions of the installation

Sealable glass and keypad lock to prevent tampering by unauthorised personnel

Inputs for the connection of remote controls (i.e. switches and buttons) and for DCF77 or GPS receiver connection



Clear display of each contact status

High contrast LCD monitor for excellent visibility in all conditions due to timed back-lighting

Wide range of programs: standard, cyclic, random and holiday

Permanent or temporary manual deviation, directly activated with a single touch

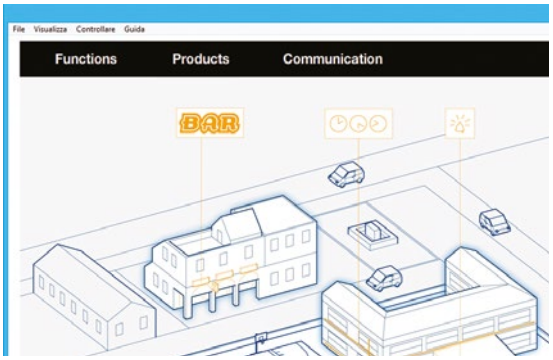
Programming key slot to run, copy or save programs

Terminals for wires up to 6 mm².

Wide range of programs: standard, cyclic, random and holiday

- Permanent or temporary manual deviation, directly activated with a single touch
- Graphical display of the complete sequence of switchings provided by the program in memory, for each of the channels in the day in question
- External inputs for the connection of one or more remote commands, for example: switches or buttons
- 64 memory locations
- Accuracy of ±0,5 seconds/24h
- Switching solar time/daylight saving time
- Running reserves of 6 years (lithium battery)

Programming key D KEY allows to run a program in EMD external memory automatically, to save the programs in the time switch or created by the D SW programming software, on the D KEY external memory and viceversa.
Furthermore, the holiday programs can be loaded and unloaded on D KEY.



D Line time switches' programming can be executed directly on your PC thanks to D SW software that lets you quickly, simply and easily create complex programs from your desktop. Indeed, it is possible to transfer the program to the D KEY memory unit and then copy it on multiple devices, avoiding any errors in reprogramming. Once created, the program can be printed or saved to file as pdf.

Time synchronization via DCF77 or GPS antennas. The D DCF77 antenna receives scheduled messages transmitted by the atomic clock installed c/o Mainflingen (Germany), near Frankfort. Thanks to this signal, the time switches are automatically setted to: hour, date and proper daylight saving time. The D GPS antenna receives time from the Global Positioning System, providing an accurate location and time information for an unlimited number of people in all weathers, day or night, anywhere in the world; time is derived from different sources simultaneously that allow the time switch to compensate for propagation delays.

Control and automation

D Line digital time switches

D Line

Technical specifications D Line							
		D1	D1 PLUS	D1 SYNCHRO	D2	D2 PLUS	D2 SYNCHRO
Rated voltage	[V]	230 AC ± 10%					
Rated pulsating voltage	[kV]	4					
Contact type		Contact relay in free exchange from potential					
Programming key		-	■	■	-	■	■
External input		■	■	-	■	■	-
DCF77 antenna		-	-	■	-	-	■
GPS antenna		-	-	■	-	-	■
Programming software		-	■	■	-	■	■
250 V contact capacity							
Resistive loads cosφ 1	[A]	16	16				
Inductive loads cosφ 0.6	[A]	10	2				
Rated frequency	[Hz]	50/60					
Time base		quartz					
Minimum switching	[sec.]	1					
Max programs per cycle	[n°]	64 (can be coupled in day blocks)					
Running reserve	[year]	6 from the first start-up (lithium battery)					
External input	[n°]	1		-	2		-
Activity suspension		From 1 day to 12 months					
Operating accuracy	[sec/ 24h]	± 0.5					
Max. dissipated power	[VA]	6.5			7.8		
Max. switching power	[VA]	3500					
Switching capacity							
Incandescent lamps	[W]	3000					
Non-rephased fluorescent lamps	[W]	1100					
Fluorescent tube lamps rephased in parallel	[W]	900					
Fluorescent tube lamps with electronic reactor	[W]	7 ÷ 23 (max. 23 lamp.)					
Fluorescent tube lamps rephased in series	[W]	1100					
Protection degree	[IP]	20					
Max. terminal cross-section	[mm²]	6					
Terminals		loss-proof screw					
Tightening torque	[Nm]	0.5					
Installation type		DIN rail					
Operating temperature	[°C]	-5 … +55					
Storage temperature	[°C]	-10 … +65					
Modules	[n°]	2					
Reference standards		EN 60730-1; EN 60730-2-7					

Technical features Accessories for D Line			
		D DCF77	D GPS
Rated voltage	[V]	230 AC ±20%	
Rated frequency	[Hz]	50/60	
Power loss	[W]	0.1	2
Operating temperature	[°C]	-10…+70	-10…+40
Storage temperature	[°C]	-30…+90	-40…+85
Power consumption	[VA]	9.2	2
Time of the signal		1 sending / min.	min 30 sendings/hour; max 50 sendings/hour
Protection degree	[IP]	65	65
Max. number of connected devices	[No.]	10	10
Max. wiring length	[m]	1000	1000
Terminal size for cable	[mm²]	0.5…2.5	0.5…2.5
Mounting		pole/wall	pole/wall

Control and automation

D Line digital time switches

D1

D1 PLUS

D Line weekly digital time switches

The unique design, with white backlit LCD display, and extreme ease of use with two lines of text menu and only four buttons, make D Line ideal to automate the installation functions. Thanks to the innovative management of time vacation, the D Line digital time switches allow the exclusion of the normal weekly program in one or more periods of several years or between two different years.

The range includes 1 and 2 channel versions, equipped with large capacity internal battery to maintain operation without power supply and permanent memory EEPROM, to avoid the risk of program loss and to maintain the date and time settings in case of power failure, irrespective of its duration.

The “PLUS” version can transfer different types of programs by using a D KEY to be quickly copied in other digital time switches, avoiding the errors due to future modification. The “SYNCHRO” version can be coupled to the D DCF77 antenna, that allows an automatic synchronization of the digital time switch with the Frankfurt DCF77 time signal, or can be coupled to the D GPS antenna to allow synchronization received from the Global Positioning System.

The D Line is particularly useful in environments and situations where user management is required with a time schedule flexible enough to predict or exclude activities according to time and day of week or month.

Channels no.	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
1	587637	D1	2CSM258763R0621		0.140	1
1	575832	D1 PLUS	2CSM257583R0621		0.140	1
1	574934	D1 SYNCHRO	2CSM257493R0621		0.140	1
2	563136	D2	2CSM256313R0621		0.140	1
2	775836	D2 PLUS	2CSM277583R0621		0.140	1
2	773634	D2 SYNCHRO	2CSM277363R0621		0.140	1

Accessories for D Line digital time switches						
Version	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
Programming key	771432	D KEY	2CSM277143R0621		0.005	1
Programming software	999737	D SW	2CSM299973R0621		0.020	1
DCF77 antenna	999836	D DCF77	2CSM299983R0621		0.150	1
GPS antenna	999935	D GPS	2CSM299993R0621		0.150	1

Control and automation

ATe electro-mechanical time switches

AT1e-R

AT2e-R

Technical features									
		AT1e	AT1e-R	AT2	AT2-R	AT2-7R	AT2e	AT2e-R	AT2e-7R
Rated voltage	[V]	230 AC ± 10%	230 AC ± 10%	230 AC ± 10%	230 AC ± 10%	230 AC ± 10%	230 AC ± 10%	230 AC ± 10%	230 AC ± 10%
Contact type		1NO	1NO	1NO/NC	1NO/NC	1NO/NC	1NO/NC	1NO/NC	1NO/NC
Resistive load	[A]	16	16	16	16	16	16	16	16
Inductive load	[A]	4	4	4	4	4	4	4	4
Rated frequency	[Hz]	45-60	45-60	50-60	50-60	50-60	50-60	50-60	50-60
Time base		quartz	quartz	quartz	quartz	quartz	quartz	quartz	quartz
Setting step (tappet)	[min]	15	15	30	30	210	15	15	105
Number of tappets		96	96	48	48	48	96	96	96
Running reserve	[h]	-	100	-	150	150	-	150	150
Power consumption	[VA]	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Max. switching power	[W]	3500	3500	3500	3500	3500	3500	3500	3500
Max. terminal cross-section	[mm²]	4	4	2.5	2.5	2.5	2.5	2.5	2.5
Tightening torque	[Nm]	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5
Terminals		with captive screws	with captive screws	with captive screws	with captive screws	with captive screws	with captive screws	with captive screws	with captive screws
Installation type		on DIN rail	on DIN rail	on DIN rail	on DIN rail	on DIN rail	on DIN rail	on DIN rail	on DIN rail
Operating temperature	[°C]	-10...+50	-10...+50	-10...+50	-10...+50	-10...+50	-10...+50	-10...+50	-10...+50
Storage temperature	[°C]	-10...+50	-10...+50	-10...+50	-10...+50	-10...+50	-10...+50	-10...+50	-10...+50
Modules	[n°]	1	1	2	2	2	2	2	2
Reference standards		EN 60730-1; EN 60730-2-7	EN 60730-1; EN 60730-2-7	EN 60730-1; EN 60730-2-7	EN 60730-1; EN 60730-2-7	EN 60730-1; EN 60730-2-7	EN 60730-1; EN 60730-2-7	EN 60730-1; EN 60730-2-7	EN 60730-1; EN 60730-2-7

AT and ATe electro-mechanical time switches

They control circuit opening and closing according to the scheduled program. Both available on daily and weekly versions and equipped with a 16 A contact, they can be set on the scheduled program or on the permanent ON function (ON-OFF only for two modules versions). The AT3-R, AT2e-R and AT2e-7R versions are equipped with a built-in battery, charged by the network voltage, which allows the devices to maintain the set time also in case of long (up to 150 h) power supply failures. The products fit applications such as control of lighting systems of shops or commercial buildings, heating and ventilation systems as well as control of automatic irrigation systems of private or external gardens.

Contacts	Version	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
		EAN	Type code	Order code	piece	kg	pc.
1NO	Daily time switch without reserve	312055	AT1e	2CSM231205R0601		0.095	1
1NO	Daily time switch, running reserve	312154	AT1e-R	2CSM231215R0601		0.095	1
1NO/1NC	Daily time switch without reserve	041054	AT2	2CSM204105R0601		0.118	1
1NO/1NC	Daily time switch, running reserve	041153	AT2-R	2CSM204115R0601		0.118	1
1NO/1NC	Weekly time switch, running reserve	041252	AT2-7R	2CSM204125R0601		0.118	1
1NO/1NC	Daily time switch without reserve	312253	AT2e	2CSM231225R0601		0.118	1
1NO/1NC	Daily time switch, running reserve	312352	AT2e-R	2CSM231235R0601		0.118	1
1NO/1NC	Weekly time switch, running reserve	312451	AT2e-7R	2CSM231245R0601		0.118	1

Control and automation

AT72e electro-mechanical time switches

AT72e-R

Technical features				
		AT72e	AT72e-R	AT72e-7R
Rated voltage	[V]	230 AC + 10%	230 AC + 10%	230 AC + 10%
Contact type		1NO/NC	1NO/NC	1NO/NC
Ohmic loads	[A]	16	16	16
Inductive loads	[A]	2	2	2
Rated frequency	[Hz]	50/60	50/60	50/60
Time base				quartz
Setting step (tappet)	[Min]	15 (daily)	15 (daily)	120 (weekly)
Number of tappets		96 (daily)	96 (daily)	84 (weekly)
Running reserve	[h]	72	72	72
Power loss	[W]	0.9	0.9	0.9
Max. switching power	[W]	3.500	3.500	3.500
Max. terminal cross-section	[mm²]	4	4	4
Tightening torque	[Nm]	0.8	0.8	0.8
Installation type		wall/panel	wall/panel	wall/panel
Protection degree		IP30	IP30	IP30
Operating temperature	[°C]	-10 ...+50	-10 ...+50	-10 ...+50
Storage temperature	[°C]	-10 ...+50	-10 ...+50	-10 ...+50
Reference standards		EN 60730-1, EN60730-2-7	EN 60730-1, EN60730-2-7	EN 60730-1, EN60730-2-7

AT72e electro-mechanical time switches

These switches are used to control circuit opening and closing according to a preset program. Available in daily or weekly versions, with or without running reserve, they are characterized by the settings on the front, which during the holding time of the load, allows for the contact status in ON/OFF to be forced until the next switching time. The AT72e range is the perfect solution for controlling lighting systems in shops and public buildings, heating and irrigation systems, etc.

Contacts	Version	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
		EAN	Type code	Order code	piece	kg	pc.
1NO/NC	Daily time switch without reserve	312550	AT72e	2CSM231255R0601		0.142	1
1NO/NC	Daily time switch, running reserve	312659	AT72e-R	2CSM231265R0601		0.142	1
1NO/NC	Weekly time switch, running reserve	312758	AT72e-7R	2CSM231275R0601		0.142	1

Control and automation

E 232 staircase lighting time-delay switches

Technical features					
	E 232-230	**E 232E-230N**	**E 232E-8/230N**	**E 232E-230 Multi 10**	**E 232E-8/230 Multi 10**
Time range (stepless)	1 – 7 min. in 15 sec. increments	0.5 – 20 min. stepless	0.5 – 20 min. stepless	0.5 – 20 min. stepless	0.5 – 20 min. stepless
Control voltage 230 V AC	■	■	■	■	■
Universal voltage in addition			8 … 240 V AC/DC		8…240 V AC/DC
Glow lamp load	50 mA	150 mA	150 mA	150 mA	150 mA
3/4 conductor operated	switches	automatically	automatically	automatically	automatically
Resettable	■	■	■	■	■
Steady-light switch	■	■	■	■	■
Advance warning acc. DIN 18015-2				■	■
Long-time range of 60 min.				■	■
Multi-functional (10 functions)				■	■
Rated voltage	230 V AC	240 V AC	240 V AC	240 V AC	240 V AC
Rated Frequency	50Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Control voltage range	0.9 ... 1.1 Un	0.85 ... 1.1 Un	0.85 ... 1.1 Un	0.85 ... 1.1 Un	0.85 ... 1.1 Un
Power loss	1 VA	6 VA	6 VA	6 VA	6 VA
Rated switching capacity	16 A, 230 V AC	16 A, 230 V AC	16 A, 230 V AC	16 A, 230 V AC	16 A, 230 V AC
Filament lamps	2,300 W	2,300 W	2,300 W	3,600 W	3,600 W
Halogen lamps	2,300 W	2,300 W	2,300 W	3,600 W	3,600 W
Fluorescent lamps series compensated / uncorrected	2,300 VA	2,300 VA	2,300 VA	3,600 VA *	3,600 VA *
Fluorescent lamps inductive or capacitive	2,300 VA	2,300 VA	2,300 VA	3,600 VA *	3,600 VA *
Fluorescent lamps shunt compensated	1,300 VA (70 µF)	400 VA (42 µF)	400 VA (42 µF)	1,200 VA (120 µF) *	1,200 VA (120 µF) *
Electronic controlgear	9x7 W, 6x11 W	9x7 W, 7x11 W,	9x7 W, 7x11 W,	34x7 W, 27x11 W,	34x7 W, 27x11 W,
	5x15 W, 5x20 W	7x20 W, 7x23 W	7x20 W, 7x23 W	24x15 W, 22x23 W	24x15 W, 22x23 W
Inductive load (cos φ = 0.6/230 V AC)	2,300	2,300	2,300	2,300	2,300
Contact material	AgSnO2	AgSnO2	AgSnO2	AgSnO2	AgSnO2
Contact gap	≥ 3 mm	< 3 mm	< 3 mm	< 3 mm	< 3 mm
Mech. serviceable life	> 106	> 107	> 107	> 107	> 107
Serviceable life at rated load, cos φ =1	> 105	> 2x105	> 2x105	> 2x105	>2x105
Serviceable life at rated load, cos φ =0.6	> 104	> 4x104	> 4x104	> 4x104	> 4x104
Max. terminal cross-section	10.7 mm²	13 mm²	13 mm²	13 mm²	13 mm²
Max. conductor cross-section	6 mm²	4 mm²	4 mm²	4 mm²	4 mm²
ON duration	Resettable after 30 sec.	100 %	100 %	100 %	100 %
Ambient temperature	– 10 °C to + 50 °C	– 25 °C to + 50 °C	– 25 °C to + 50 °C	– 25 °C to + 50 °C	– 25 °C to + 50 °C
Housing and insulation material	heat resistant, self-extinguishing thermoplast	heat resistant, self-extinguishing thermoplast	heat resistant, self-extinguishing thermoplast	heat resistant, self-extinguishing thermoplast	heat resistant, self-extinguishing thermoplast
Control current at 230 V AC	4.5 mA	26 mA	26 mA	26 mA (min. 8 mA at 8 V AC)	26 mA (min. 8 mA at 8 V AC)
Minimum command duration	10 ms	20 ms	20 ms	20 ms / 50 ms for multi voltage input	20 ms / 50 ms for multi voltage input

* no disconnection advance warning possible for this application.

Control and automation

E 232 staircase lighting time-delay switches

E 232-230

E 232 E-230N

E 232 staircase lighting time-delay switches

Staircase lighting time-delay switches are usually operated by pushbuttons, often fitted with a glow lamp. Switches are designed for a glow lamp current of up to 150 mA and thus perfectly suitable for installations in multi-storey buildings.

The E 232-230 staircase lighting time-delay switch includes an electro-mechanical timer with a synchronous motor drive to ensure high operational safety in whatever mounting position. The time range is adjustable in increments of 15 seconds from 1 to seven minutes. Resettable after 30 seconds.

E 232E–230N and E 232E-8/230N devices feature electronic time delays. A high switching capacity, 150 mA glow lamp current parallel to the pushbuttons, steplessly adjustable time range from 0.5 to 20 min, as well as low switching noise make these devices so special.

Devices of the E 232E-230 Multi 10 and E 232E-8/230 Multi 10 series are multi-functional products with 10 functions to choose from that can be adjusted from the front. Through an electronically controlled connection of the load at voltage zero, a very high switching capacity of 3,600 W (load of filament lamp) is reached.

The devices include an integrated warning feature (warning by blinking) according to DIN 18015-2 as well as a 60 minute long-time function.

The E 232E-8/230N and E 232E-8/230 Multi 10 staircase lighting time-delay switches offer an additional metallically separated control input for 8…240 V AC/DC.

Time range	Power loss	Bbn 4013614	Order details		Price 1	Weight 1 piece	Pack unit
	W	EAN	Type code	Order code	piece	kg	pc.
1 … 7 min.	1 V A	54824 3	E 232-230	2CDE110000R0501		0.081	10
20 min	6 V A	65416 6	E 232 E-230N	2CDE110003R0511		0.095	10
20 min	6 V A	65417 3	E 232 E-8/230N	2CDE010003R0511		0.1	10
20 min	6 V A	65418 0	E 232 E-230 Multi 10	2CDE110013R0511		0.095	10
20 min	6 V A	65419 7	E 232 E-8/230 Multi 10	2CDE010013R0511		0.1	10

Control and automation

E 234 electronic timers

E 234

Technical data			
Data at Ta = 25 °C and rated values, unless otherwise indicated			
Type		CT-D with 1 c/o contact	CT-D with 2 c/o contacts
Input circuit - Supply circuit			
Rated control supply voltage US	A1-A2	24-240 V AC / 24-28 V DC ①	
Rated control supply voltage US tolerance		-15...+10 %	
Rated frequency	DC	50/60 Hz	
Frequency range	AC	47-63 Hz	
Typical power consumption		see data sheet	
Power failure buffering time		min. 20 ms	min. 20 ms
Input circuit - Control circuit			
Control input, Control function	A1-Y1/B1	start timing external	
Kind of triggering		voltage-related triggering	
Maximum cable length to the control input		50 m - 100 pF/m	
Minimum control pulse length		20 ms	
Control voltage potential		see rated control supply voltage	
Current consumption of the control input		see data sheet	
Parallel load / polarized		yes / yes	
Timing circuit			
Time ranges 7 time ranges 0.05 s - 100 h		1.) 0.05-1 s 2.) 0.5-10 s 3.) 5-100 s 4.) 0.5-10 min 5.) 5-100 min 6.) 0.5-10 h 7.) 5-100 h	
4 time ranges 0.05 s - 10 min (CT-SDD, CT-SAD)		1.) 0.05-1 s 2.) 0.5-10 s 3.) 5-100 s 4.) 0.5-10 min	
Recovery time		< 50 ms	
Repeat accuracy (constant parameters)		Δt < ±0.5 %	
Accuracy within the rated control supply voltage tolerance		Δt < 0.005 % / V	
Accuracy within the temperature range		Δt < 0.06 % / °C	
Star-delta transition time	CT-SDD	fixed 50 ms	
	CT-SAD	adjustable: 20 ms, 30 ms, 40 ms, 50 ms, 60 ms, 80 ms or 100 ms	
Star-delta transition time tolerance	CT-SDD, CT-SAD	±3 ms	
Indication of operational states			
Control supply voltage / timing	U: green LED	: ⎍ control supply voltage applied	
		: ⎍⎍⎍ timing	
Relay status	R: yellow LED	: ⎍ output relay 1 or 2 energized	
Output circuit			
Kind of output	15-16/18	relay, 1 c/o contact	-
	15-16/18; 25-26/28	-	relay, 2 c/o contacts
	17-18; 17-28	relay, 2 n/o contacts (CT-SDD, CT-SAD)	
Contact material		Cd-free, see data sheet	
Rated operational voltage Ue		250 V	
Minimum switching voltage / minimum switching current		12 V / 100 mA	
Maximum switching voltage / maximum switching current		see load limit curves	

① CT-MFD.2x on request

Control and automation

E 234 electronic timers

Technical data				
Data at Ta = 25 °C and rated values, unless otherwise indicated				
Type			CT-D with 1 c/o contact	CT-D with 2 c/o contacts
Rated operational current Ie (IEC 60947-5-1) for category		AC12 (resistive) at 230 V	6 A	5 A
		AC15 (inductive) at 230 V	3 A	3 A ①
		DC12 (resistive) at 24 V	6 A	5 A
		DC13 (inductive) at 24 V	2 A	3 A ①
Mechanical lifetime			30 x 10^6 switching cycles	
Electrical lifetime		at AC12, 230 V, 4 A	0.1 x 10^6 switching cycles	
Short-circuit proof / maximum fuse rating (IEC/EN 60947-5-1)		n/c contact	6 A fast-acting	
		n/o contact	10 A fast-acting	
General data				
Duty time			100%	
Dimensions (W x H x D)			17.5 mm x 70 mm x 58 mm	17.5 mm x 80 mm x 58 mm
			(0.69 x 2.76 x 2.28 inches)	(0.69 x 3.15 x 2.28 inches)
Weight			see ordering details	
Mounting			DIN rail (EN 60715), snap-mounting without any tool	
Mounting position			any	
Minimum distance to other units horizontal / vertical			no / no	
Protection degree enclosure/terminals			IP50 / IP20	
Electrical connection				
Wire size	fine-strand	with wire end ferrule	2 x 0.5-1.5 mm^2 (2 x 20-16 AWG) 1 x 0.5-2.5 mm^2 (1 x 20-14 AWG)	
		without wire end ferrule	2 x 0.5-1.5 mm^2 (2 x 20-16 AWG) 1 x 0.5-2.5 mm^2 (1 x 20-14 AWG)	
	rigid		2 x 0.5-1.5 mm^2 (2 x 20-16 AWG) 1 x 0.5-4 mm^2 (1 x 20-12 AWG)	
Stripping length			7 mm (0.28 inches)	
Tightening torque			0.5-0.8 Nm	
Environmental data				
Ambient temperature range		operation	-20 ... +60 °C	
		storage	-40 ... +85 °C	
Damp heat (cyclic) (IEC/EN 60068-2-30)			6 x 24 h cycles, 55 °C, 95 % RH	
Vibration (sinusoidal) (IEC/EN 60068-2-6)			20 m/s^2, 10 cycles, 10...150...10 Hz	
Shock (half-sine) (IEC/EN 60068-2-27)			150 m/s^2, 11 ms	

① CT-MFD.2x on request

Technical data			
Data at Ta = 25 °C and rated values, unless otherwise indicated			
Type		CT-D with 1 c/o contact	CT-D with 2 c/o contacts
Isolation data			
Rated impulse withstand voltage U_{imp} between all isolated circuits		4 kV; 1.2/50 µs	
Pollution category		3	
Overvoltage category		III	
Rated insulation voltage U_i	input circuit / output circuit	300 V	
	output circuit 1 / output circuit 2	not available	300 V
Basic insulation (IEC/EN 61140) input circuit / output circuit		300 V	
Protective separation (IEC/EN 61140, EN 50178)	input circuit / output circuit	250 V	
Power-frequency withstand voltage test (test voltage) between all isolated circuits		2.5 kV; 50 Hz; 60 s	
Standards / Directives			
Standards		IEC/EN 61812-1	
Low Voltage Directive		2014/35/EU	
EMC Directive		2014/30/EU	
RoHS Directive		2011/65/EU	
Electromagnetic compatibility			
Interference immunity		IEC/EN 61000-6-2	
electrostatic discharge (ESD)	IEC/EN 61000-4-2	Level 3 (6 kV / 8 kV)	
radiated, radio-frequency, electromagnetic field	IEC/EN 61000-4-3	Level 3 (10 V/m)	
fast transients (Burst)	IEC/EN 61000-4-4	Level 3 (2 kV / 5 kHz)	
surge	IEC/EN 61000-4-5	Level 4 (2 kV L-L)	
conducted disturbances, induced by radio-frequency fields	IEC/EN 61000-4-6	Level 3 (10 V)	
Interference emission		IEC/EN 61000-6-3	
high-frequency radiated	IEC/CISPR 22, EN 55022	Class B	
high-frequency conducted	IEC/CISPR 22, EN 55022	Class B	

Control and automation

E 234 electronic timers

E 234 CT-MFD

E 234 CT-ERD

⊠	ON-delay
■	OFF-delay
1⎍⊠	Impulse-ON
1⎍■	Impulse-OFF
⎍⊠	Flasher starting with ON
⎍■	Flasher staring with OFF
1⎍	Pulse former
⊠⎍	Pulse generator
⚠	Star-delta change-over

Description

The CT-D range in MDRC design with a width of only 17.5 mm fits into all domestic installation and distribution panels.
The CT-D range represents a link between industry and the installation types. For maximum flexibility in operation, 10 single-function as well as 2 multifunction devices with 7 timing functions are available. The devices offer 4 or 7 time ranges from 0.05 seconds up to 100 hours. Their wide input range allows the use in applications worldwide.

Timing function	Rated control supply voltage	Time ranges	Control input	Output	Bbn EAN	Type	Order code	Price 1 piece	Weight 1 piece kg (lb)
Multifunctional[1]	24-240 V AC 24-48 V DC	7 (0.05 s - 100 h)	■	1 c/o		CT-MFD.12	1SVR500020R0000		0.060 (0.132)
Multifunctional[1]	12-240 V AC/DC	7 (0.05 s - 100 h)	■	2 c/o		CT-MFD.21	1SVR500020R1100		0.065 (0.143)
ON-delay	24-240 V AC 24-48 V DC	7 (0.05 s - 100 h)	-	1 c/o		CT-ERD.12	1SVR500100R0000		0.060 (0.132)
			-	1 c/o		CT-ERD.22	1SVR500100R0100		0.065 (0.143)
OFF-delay			■	1 c/o		CT-AHD.12	1SVR500110R0000		0.060 (0.132)
			■	2 c/o		CT-AHD.22	1SVR500110R0100		0.065 (0.143)
Impulse-ON			-	1 c/o		CT-VWD.12	1SVR500130R0000		0.060 (0.132)
Flasher starting with ON			-			CT-EBD.12	1SVR500150R0000		
Pulse generator		2×7 (0.05 s - 100 h)	■			CT-TGD.12[2]	1SVR500160R0000		0.060 (0.132)
			■	2 c/o		CT-TGD.22[2]	1SVR500160R0100		0.065 (0.143)
Star-delta change-over		4 (0.05 s - 10 min)	-	2 n/o		CT-SDD.22[3]	1SVR500211R0100		0.065 (0.143)
			-			CT-SAD.22[4]	1SVR500210R0100		

1) Functions: ON-delay, OFF-delay with auxiliary voltage, Impulse-ON, Impulse-OFF with auxiliary voltage, Flasher starting with ON, Flasher starting with OFF, Pulse former
2) ON and OFF times adjustable independently: 2 x 7 time ranges 0.05 s - 100 h
3) Transition time 50 ms fixed
4) Transition time adjustable

■ Control input with voltage-related triggering
- no triggering

Synonyms

used expression	alternative expression(s)	used expression	alternative expression(s)
1 c/o contact	SPDT	voltage-related	wet / non-floating
2 c/o contacts	DPDT	volt-free	dry / floating

Control and automation

T Line twilight switches

T1

Technical features				
			T1	T1 PLUS
Rated voltage		[V]	110 ÷ 230 AC	
Contact type			1NO	
resistive load cosφ 1		[A]	16	
inductive load cosφ 0.6		[A]	3	
Switching capacity				
incandescent lamps		cosφ 1	max 3600 W	
fluorescent lamps		cosφ 0.8	max 3600 W	
fluorescent - duo./electronic lamps		cosφ 0.9	max 300 W	
LED lamps		cosφ 0.97	max 400 W	
Rated frequency		[Hz]	50/60	
Switching delay				
ON		[s]	30 ±10%	15...120 ±10%
OFF		[s]	40 ±10%	15...120 ±10%
Brightness range		[lx]	2:200	2:40 20:200 200:2000 2000:15000
Protection degree				
twilight switch			IP20	IP20
sensor			IP65	IP65
Operating temperature				
twilight switch		[°C]	-25...+55	
sensor		[°C]	-40...+70	
Storage temperature				
twilight switch		[°C]	-40...+70	
sensor		[°C]	-50...+80	
Power consumption		[VA]	4.5	
Max. switching power		[W]	3500	
Max. terminal cross-section		[mm²]	2.5	
Terminals			loss-proof screw	
Tightening torque	terminals	[Nm]	0.5	
	sensor screw	[Nm]	0.4	
Installation type			on DIN rail	
Switching status indication/ brightness range			red Led / green Led	
Max wiring length		[m]	100	
Modules		[n°]	1	
Reference standards			EN 60669-1; EN 60669-2-1; EN 60730-1	

Control and automation

T Line twilight switches

T1

T1 PLUS

LS-D

T Line modular twilight switches

These twilight switches allow to switch ON and switch OFF lighting devices according to a scheduled level of the ambient light. They are used in combination with an external sensor to detect if the ambient light is higher or lower than the set level . A switching delay prevents them from operating unnecessarily when the light intensity suddenly changes (e.g. lightning, moving vehicles, etc.). The T1 twilight switch 1 channel is preset with a 10 LUX from factory and it is equipped with 2 signalling LEDs that indicate the setpoint value and display the status of the contact . The operating instructions are printed on the side of the product. T1 PLUS switches feature a setpoint that can be adjusted for 4 different scale values (2:40, 20:200, 200:2000, 2000:15000).This makes them ideal for daytime applications where the LUX values are very high.

Brightness range	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
lx	EAN	Type code	Order code	piece	kg	pc.
2 : 200	955634	T1	2CSM295563R1341		0.076	1
2 : 15000	957935	T1 PLUS	2CSM295793R1341		0.078	1

Accessories for T Line modular twilight switches

The external sensor LS-D is supplied in the same package of the switch, but it's also available separately as spare part. The upper part of the external case (with screw locking), made up of thermoplastic material, bears up against ultraviolet rays to guarantee an homogeneous diffusion of the daylight internally. The sensor is also equipped with a cable gland.

	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
External sensor	957232	LS-D	2CSM295723R1341		0.069	1

Control and automation

T1 POLE twilight switches

T1 POLE

Technical features		
		T1 POLE
Rated voltage	[V]	110 ÷ 230 AC
Contact type		1NO polarized
resistive load cosφ 1	[A]	16
inductive load cosφ 0.6	[A]	3
Switching capacity		
incandescent lamps	cosφ 1	max 3600 W
fluorescent lamps	cosφ 0.8	max 3600 W
fluorescent - duo./electronic lamps	cosφ 0.9	max 300 W
LED lamps	cosφ 0.97	max 400 W
Rated frequency	[Hz]	50/60
Switching delay		
ON	[s]	30 ± 10%
OFF	[s]	40 ± 10%
Brightness range	[lx]	2:200
Protection degree		IP65
Operating temperature	[°C]	-40...+70
Storage temperature	[°C]	-50...+80
Power consumption	[VA]	4.5
Max. switching power	[W]	3500
Max. terminal cross-section	[mm²]	2.5
Terminals		loss-proof screw
Tightening torque	[Nm]	0.4
Installation type		pole/wall
Switching status indication/		
brightness range		- / red Led
Reference standards		EN 60669-1; EN 60669-2-1; EN 60730-1

T1 pole mounting twilight switch

The T1 POLE version is designed for installation on the pole/wall, with photocell inputs and integrated cabling including cable gland seals to ensure a high protection degree. Thanks also to the high quality, T1 POLE provides excellent resistance to atmospheric agents and a long service life. T1 POLE is also internally equipped with a preset sensor of 10 LUX. The sensor is extractable from the base and allows an easy and efficient maintenance without needing further wiring. T1 POLE is the ideal solution to manage the external light systems such as the public ones, more precisely, in cases where there is a need of controlling the lighting of public or private roads, gardens, courtyards at the decline of solar radiation during twilight.

Brightness range	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
lx	EAN	Type code	Order code	piece	kg	pc.
2 : 200	957539	T1 POLE	2CSM295753R1341		0.140	1

Control and automation

TWA twilight switches

TWA

Technical features

		TWA-1	TWA-2
Rated voltage	[V]	230 ±15% AC	
Contact type		1NO/NC	2 NO/NC
Resistive load cosφ 1	[A]	16	
Inductive load cosφ 0.6	[A]	10	
Max. number of lamps			
Switching capacity			
Incandescent and halogen lamps	[W]	2300	
Compensated (max. 45 µF) lamps	[W]	400	
Non compensated, series compensated lamps	[W]	1000	
Compact fluorescent lamps	[W]	500	
Rated frequency	[Hz]	50/60	
Max. programs per cycle		56	
Operating accuracy		±1.5 sec/24h	
Time base		quartz	
Minimum switching	[min]	1	
Running reserve	[year]	5	
Astronomical time accuracy	[min]	±10	
Protection degree		IP20	
Operating temperature	[°C]	-10...+55	
Storage temperature	[°C]	-20...+60	
Power consumption	[VA]	6	
Max. switching power	[W]	4000	
Min./Max. terminal cross-section			
Flexible	[mm²]	1 to 6	
Rigid	[mm²]	1.5 to 10	
Terminals		loss-proof screw	
Tightening torque	[mm²]	1.2	
Installation type		on DIN rail	
Modules	[n°]	2	
Reference standards		EN 60730-1 EN 60730-2-7	

TWA-1

TWA twilight astronomical switches

The twilight astronomical switches TWA-1 and TWA-2, respectively, in 1 and 2 channels, automatically control lighting circuits depending on the time of sunrise and sunset, greatly increasing energy efficiency.

The programming is in fact based on a mathematical algorithm able to calculate the time of the rising and setting of the sun in a certain location for each day of the year. Once powered the device, simply insert date, time, geographical coordinates and time zone so that it is ready to work. The installation of these devices is particularly useful when using a twilight switch with external sensor is not recommended because it may be subject to malfunctions caused by air pollution, excessive brightness or vandalism. TWA-1 and TWA-2 are also indicated for the control of public lighting, shop windows of shops, neon signs, monuments, facades and illuminated fountains.

Brightness range	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
lx	EAN	Type code	Order code		kg	pc.
1NO/NC	043652	TWA-1	2CSM204365R1341		0. 160	1
2NO/NC	043751	TWA-2	2CSM204375R1341		0. 160	1

Control and automation

THS modular thermostats

THS

Technical features				
		THS-C	THS-W	THS-S
Rated voltage	[V]	230 AC		
Contact type		1 NO/NC		2NO
Contact capacity				
Resistive load cosφ 1	[A]	16		
Inductive load cosφ 0.6	[A]	3		
Rated frequency	[Hz]	50/60		
Number of temperature setpoints		1 continuously adjustable		2 continuously adjustable
Adjustment range	[°C}	-20...+40	0...+60	0...+10 / +20...+60
Max switching power	[W]	3500		
Differential	[°C]	fixed Δt = 1		fixed Δt = 2
Thermal gradient		1 °K / 15 minutes		
Type of operation		ON / OFF fixed differential		
Protection degree		IP20		
Relay ON/OFF indication		LED indicator		
Temperature tolerance	[°C]	±1		
T limits in operation	[°C]	0 ÷ +50		0 ÷ +70
Storage temperature	[°C]	-10...+65		-10...+70
Installation type		DIN rail		
Case / color		thermoplastic / grey RAL 7035		
Power consumption	[VA]	3		
Terminals		Loss-proof screw		
Max. terminal cross-section	[mm²]	2.5		
Tightening torque	[Nm]	0.5		
Application type		services / industrial		
Programming		graduated scale with mechanical pointer		

2CSC400719F0001

THS-C

2CSC400718F0001

THS-S

THS modular thermostats

The THS series modular thermostats are suited for a wide array of refrigeration and heating applications. The THS-C and THS-W models, both with a potential-free switching contact, are ideal for controlling temperature in heating systems, industrial settings or difficult-to-access locations, as well as for temperature regulation in refrigeration systems, refrigerated counters, greenhouses, dryers, etc....

The THS-S model, with two independent potential-free contacts, allows regulation of cooling between +20 and +60 °C and anti-condensation between 0 and +10 °C. The THS-S thermostat is supplied with remote sensor and is ideal for temperature control of electrical cabinets.

Temperature	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
°C	EAN	Type code	Order code	piece	kg	pc.
-20...+40	511632	THS-C	2CSM251163R1380		0.20	1
0...+60	070832	THS-W	2CSM207083R1380		0.20	1
*+20...+60 / 0...+10	368038	THS-S	2CSM236803R1380		0.17	1

* cooling / anticondensation

Temperature sensors for THS-C and THS-W thermostats

The remote sensors (supplied separately) are used in conjunction with the THS-C and THS-W series thermostats to detect temperature overshoot or undershoot from the programmed setpoint. The THS-1 and THS-4 models work in a temperature range between -30 °C and +130 °C and are respectively 1.5 and 4 meters long.

Lenght	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
m	EAN	Type code	Order code	piece	kg	pc.
1.5	020332	THS-1	2CSM202033R1380		0.05	1
4	776031	THS-4	2CSM277603R1380		0.12	1

Control and automation

CL logic relays, display system

CL

Technical Data overview
Logic relays
8 or 12 digital inputs
4 or 6 digital relay outputs
optionally with 4 or 8 transistor outputs
128 rungs
3 contacts as n/o or n/c contacts in series plus 1 coil per rung
optionally with 2 or 4 analog inputs (not 100-240 V AC version)
power flow display for checking the circuit diagram (devices with display)
expansions for local or remote level
enclosure color RAL 7035
DIN rail mounting
Display system
useable as compact HMI logic relay
fully graphic, backlit display module
12 digital inputs
4 digital relay outputs
optionally with 4 transistor outputs
265 rungs
4 contacts as n/o or n/c contacts in series plus 1 coil per rung
optionally with 4 analog inputs (not 100-240 V AC version)
networking-compatible via CL-NET
front panel mounting
expansion for local
Remote display
Remote display up to a distance of 5 m
Illustration of text and status displays
Remote adjustment via keypad
Front panel mounting
Software
16 timing relays 0.01-99:59 h
16 counting relays for up-, down counting
8 weekly timer, 8 annual timers
16 analog value comparators
16 freely editable text display
32 markers or auxiliary relays

Further Documentation
(download from the internet: www.abb.com/lowvoltage > Control Products > Electronic Relays and Controls)

Technical catalogue

Electronic Products and Relays	2CDC 110 004 C0205

Manuals

Logic relay manual	1SVC 440 795 M0100
Remote display manual	1SVC 440 795 M2100
Display system manual	1SVC 440 795 M1100

2CDC310034F0b06

CL-LSR

2CDC310033F0b06

CL-LST

CL concept

CL range logic relays are suitable for small and medium-sized control tasks and are able to substitute logic wiring in a quick and simple manner. They can be used for applications in control as well as for timing functions, e.g.

- in buildings, lighting systems, air-conditioning systems, general control functions,
- in small machines and systems or
- as stand-alone control module for small applications.

Steps to the application of CL range

- CL range can be used easily, rapidly and comfortably without any time-consuming planning and programming.
- The user can discover the advantages and the benefit of these logic relays in no time at all.
- CL range provides for the control statements according to a simple circuit diagram.
- Setup, storage, simulation and documentation are performed using the compact and user-friendly CL-SOFT software (CL-LAS.PS002).

Software characteristics (CL-SOFT)

- display on a PC monitor according to IEC, ANSI
- up to 10 languages to choose from
- easy installation on all Microsoft WindowsTM operating systems

Logic relays

Logic relays – 8 inputs, 4 relay outputs

Rated operational voltage	Display + Keypad	Timer	Expandable	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
				EAN	Type code	Order code	piece	kg/lb	pc.
24 V AC	■	■			CL-LSR.C12AC1	1SVR440712R0300		0.20/0.44	1
24 V AC		■			CL-LSR.CX12AC1	1SVR440712R0200		0.20/0.44	1
100-240 V AC	■				CL-LSR.12AC2	1SVR440713R0100		0.20/0.44	1
100-240 V AC	■	■			CL-LSR.C12AC2	1SVR440713R0300		0.20/0.44	1
100-240 V AC		■			CL-LSR.CX12AC2	1SVR440713R0200		0.20/0.44	1
12 V DC	■	■			CL-LSR.C12DC1	1SVR440710R0300		0.20/0.44	1
12 V DC		■			CL-LSR. CX12DC1	1SVR440710R0200		0.20/0.44	1
24 V DC	■				CL-LSR.12DC2	1SVR440711R0100		0.20/0.44	1
24 V DC	■	■			CL-LSR.C12DC2	1SVR440711R0300		0.20/0.44	1
24 V DC		■			CL-LSR. CX12DC2	1SVR440711R0200		0.20/0.44	1

Logic relays – 8 inputs, 4 transistor outputs

Rated operational voltage	Display + Keypad	Timer	Expandable	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
				EAN	Type code	Order code	piece	kg/lb	pc.
24 V DC	■	■			CL-LST.C12DC2	1SVR440711R1300		0.20/0.44	1
24 V DC		■			CL-LST.CX12DC2	1SVR440711R1200		0.20/0.44	1

Control and automation

CL logic relays, display system

CL-LMR

CL-LMT

CL-LER

CL-LEC

Logic relays – 12 inputs, 6 relay outputs

Rated operational voltage	Display + Keypad	Timer	Expandable	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
				EAN	Type code	Order code	piece	kg/lb	pc.
24 V AC	■	■	■		CL-LMR.C18AC1	1SVR440722R0300		0.36/0.79	1
24 V AC		■	■		CL-LMR.CX18AC1	1SVR440722R0200		0.36/0.79	1
100-240 V AC	■	■	■		CL-LMR.C18AC2	1SVR440723R0300		0.36/0.79	1
100-240 V AC		■	■		CL-LMR.CX18AC2	1SVR440723R0200		0.36/0.79	1
12 V DC	■	■	■		CL-LMR.C18DC1	1SVR440720R0300		0.36/0.79	1
12 V DC		■	■		CL-LMR.CX18DC1	1SVR440720R0200		0.36/0.79	1
24 V DC	■	■	■		CL-LMR.C18DC2	1SVR440721R0300		0.36/0.79	1
24 V DC		■	■		CL-LMR.CX18DC2	1SVR440721R0200		0.36/0.79	1

Logic relays – 12 inputs, 8 transistor outputs

Rated operational voltage	Display + Keypad	Timer	Expandable	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
				EAN	Type code	Order code	piece	kg/lb	pc.
24 V DC	■	■	■		CL-LMT.C20DC2	1SVR440721R1300		0.36/0.79	1
24 V DC		■	■		CL-LMT.CX20DC2	1SVR440721R1200		0.36/0.79	1

Expansion – 2 relays outputs

Rated operational voltage	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
-		CL-LER.2O	1SVR440709R5000		0.07/0.15	1

Expansions – 12 inputs, 6 relay outputs

Rated operational voltage	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
100-240 V AC		CL-LER.18AC2	1SVR440723R0000		0.26/0.57	1
24 V DC		CL-LER.18DC2	1SVR440721R0000		0.22/0.49	1

Expansion - 12 inputs, 8 transistor outputs

Rated operational voltage	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
24 V DC		CL-LET.20DC2	1SVR440721R1000		0.21/0.46	1

Coupler unit for remote expansion with a distance of up to 30 m

Rated operational voltage	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
-		CL-LEC.CI000	1SVR440709R0000		0.07/0.15	1

Accessories for logic relays

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CL-LAS.PS002

Software CL-SOFT for programming and control of CL range devices						
Description	**Bbn**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**	**piece**	**kg/lb**	**pc.**
Installation CD-ROM for Microsoft Windows™		CL-LAS.PS002	1SVR440799R8000		0.10/0.21	

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CL-LAS.MD003

Memory module for logic relays						
Description	**Bbn**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**	**piece**	**kg/lb**	**pc.**
Memory size: 32 kB		CL-LAS.MD003	1SVR440799R7000		0.02/0.04	1

Connecting cable with serial interface to connect PC and logic relay						
Description	**Bbn**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**	**piece**	**kg/lb**	**pc.**
Length: 2 m		CL-LAS.TK001	1SVR440799R6000		0.10/0.22	1

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CL-LAS.TK001

Connecting cable with USB interface to connect PC and logic relay						
Description	**Bbn**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**	**piece**	**kg/lb**	**pc.**
Length:		CL-LAS.TK002	1SVR440799R6100			1

Connecting cable for point-to-point connection of remote-display connection module and logic relay						
Description	**Bbn**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**	**piece**	**kg/lb**	**pc.**
Length: 5 m, adaptable		CL-LAD.TK007	1SVR440899R6600		0.20/0.44	1

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CL-LAS.TK011

Fixing brackets for screw mounting of logic relay, expansion, display base module						
Description	**Bbn**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**	**piece**	**kg/lb**	**pc.**
content: 9 fixing brackets		CL-LAS.FD001	1SVR440799R5000		0.01/0.01	1

Connecting plug CL-LINK for connection of logic relay to expansion						
Description	**Bbn**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
	EAN	**Type code**	**Order code**	**piece**	**kg/lb**	**pc.**
CL-LINK		CL-LAS.TK011	1SVR440799R5100		0.10/0.22	1

Control and automation

CL logic relays, display system

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CL-LAS.SD..

Input-/ output simulator with wall power supply, fits to CL-LSR and CL-LST

Rated input voltage	Rated output voltage/current	Bbn EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg/lb	Pack unit pc.
100-240 V AC	24 V DC		CL-LAS.TD001	1SVR440793R0000		0.19/0.43	1

Primary switch mode power supplies

Rated input voltage	Rated output voltage/ current	Bbn EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg/lb	Pack unit pc.
100-240 V AC	24 V DC / 0.35 A 12 V DC / 20 mA		CL-LAS.SD001	1SVR440703R0000		0.10/0.22	1
100-240 V AC	24 V DC / 1.25 A		CL-LAS.SD002	1SVR440713R0000		0.20/0.44	1

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CL-LDC.S..

Remote display connection modules to displace the display from the logic relay, incl. connecting cable CL-LAD.TK007, 5 m, length adaptable

Rated operational voltage	Bbn EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg/lb	Pack unit pc.
24 V DC		CL-LDC.SDC2	1SVR440841R0000		0.16/0.36	1
100-240 V AC		CL-LDC.SAC2	1SVR440843R0000		0.16/0.36	1

Display system

2CDC311028F0b06

CL-LDD.K

Grafic Display modules 132 x 64 pixel

Description	Bbn EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg/lb	Pack unit pc.
without keyboard		CL-LDD.XK	1SVR440839R4500		0.14/0.30	1
with keyboard		CL-LDD.K	1SVR440839R4400		0.13/0.29	1

Display base modules - CPU / power supply

Rated operational voltage	Bbn EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg/lb	Pack unit pc.
24 V DC		CL-LDC.LDC2	1SVR440821R0000		0.16/0.36	1
100-240 V AC		CL-LDC.LAC2	1SVR440823R0000		0.16/0.36	1

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CL-LDC.LN..

Display base modules - CPU / power supply, networking-compatible (CL-NET)

Rated operational voltage	Bbn EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg/lb	Pack unit pc.
24 V DC		CL-LDC.LNDC2	1SVR440821R1000		0.17/0.38	1
100-240 V AC		CL-LDC.LNAC2	1SVR440823R1000		0.17/0.38	1

Display I/O modules - 8 inputs, 4 relay outputs

Rated operational voltage	Bbn EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg/lb	Pack unit pc.
100-240 V AC		CL-LDR.16AC2	1SVR440853R0000		0.17/0.38	1
24 V DC		CL-LDR.16DC2	1SVR440851R0000		0.17/0.38	1

CL-LDR

Display I/O modules - 8 inputs, 4 relay outputs, 1 analog output						
Rated operational voltage	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
24 V DC		CL-LDR.17DC2	1SVR440851R2000		0.17/0.38	1

Display I/O module - 8 inputs, 4 transistor outputs						
Rated operational voltage	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
24 V DC		CL-LDT.16DC2	1SVR440851R1000		0.14/0.30	1

CL-LAD.MD004

Display I/O module - 8 inputs, 4 transistor outputs, 1 analog output						
Rated operational voltage	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
24 V DC		CL-LDT.17DC2	1SVR440851R3000		0.14/0.30	1

Accessories for display system

CL-LAD.TK009

Memory module for display base modules						
Description	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
Memory size: 256 kB		CL-LAD.MD004	1SVR440899R7000		0.02/0.03	1

Connecting cable with serial interface to connect PC and display base module						
Description	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
Length: 2 m		CL-LAD.TK001	1SVR440899R6000		0.11/0.23	1

Connecting cable with USB interface to connect PC and display base module						
Description	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
Length:		CL-LAD.TK011	1SVR440899R6700			1

Network cable (CL-NET) to connect 2 display base modules						
Description	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
Length: 0.3 m		CL-LAD.TK002	1SVR440899R6100		0.05/0.12	1
Length: 0.8 m		CL-LAD.TK003	1SVR440899R6200		0.07/0.14	1
Length: 1.5 m		CL-LAD.TK004	1SVR440899R6300		0.08/0.18	1

Connecting cable for point-to-point connection of remote display connection modules and display base module						
Description	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
Length: 5 m, adaptable		CL-LAD.TK005	1SVR440899R6400		0.20/0.44	1

Control and automation

CL logic relays, display system

Connecting cable for point-to-point connection of 2 display base modules, length adaptable

Description	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
Length: 5 m		CL-LAD.TK006	1SVR440899R6500		0.12/0.26	1

Termination resistor

Description	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
content: 2 pieces		CL-LAD.TK009	1SVR440899R6900		0.01/0.02	1

Protective covers, transparent

Description	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
for harsh environmental conditions and application in the food industry		CL-LAD.FD001	1SVR440899R1000		0.03/0.07	1
sealable		CL-LAD.FD011	1SVR440899R2000		0.03/0.07	1

Assembly tool for mounting of display modules

Description	Bbn	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg/lb	pc.
-		CL-LAD.FD002	1SVR440899R3000			1

Control and automation

E 450 priority switches

E 450

Technical characteristics		
	E 451-5.7	E 452-5.7
Operating coil		
Range of rated current equivalent to	6.7 ... 39 A correlates 1.5 ... 9 kW at 230 V, 4.6 ... 27 kW at 230/400 V	
Threshold current	3.1 ... 5.3 A	
OFF delay (max.)	0 main half waves	2 main half waves
Max. continuous current	43 A	
Therm. continuous capacity at 40 °C/104 °F	5 W	
Contact assembly		
Control contact	1 NC contact	
Rated contact current at 250 V	1 A	
Contact material	solid silver	
Max. switching voltage	400 V	
Max. switching capacity	230 VA	
Max. switched current	1 A	
Max. inrush current peak	5 A	
Electr. service life	> 10^5 operations	
Mechanical service life	app. 2 x 10^6 operations	
Max. electrical switching rate	app. 1800 operations/hour	
ON duration	100 %	
Ambient temperature	– 20 °C/– 4 °F to + 40 °C/104 °F	
Response time	10 ... 20 ms	
Release time	5 ... 20 ms	≥ 20 ms
Test voltage contact/coil	2.5 kV	
Clearance and creepage distance	C/250 V AC cording to IEC 669-1-23	
Protection degree	IP 40	
Protection against electric shock	according to DIN VDE 0106 Part 100 (BGV A2)	
Terminal contact	series coil up to 16 mm^2, control contact up to 2.5 mm^2	

E 450 priority switches

The priority switch is used in wiring systems where existing lead cross sections or the size of the power supply service box do not allow for simultaneous operation of two powerful loads (e.g. storage heating and flow-type heater).

The priority switch disconnects the long-term load (storage heating) for as long as the short-term consumer (flow-type heater) is switched on.

The coil of the priority switch is connected in series to the short-term load. When this load is switched on, the NC contact of the priority switch disconnects e.g. the heating system contactor.

For pneumatically controlled flow-type heaters							
Rated current range	**Power loss**	**Bbn 4016779**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
	W	**EAN**	**Type code**	**Order code**	**piece**	**kg**	**pc.**
6,7 ... 39 A	2.4	41590 3	E 451- 5.7 A	2CDE160000R0901		0.1	10

For electronically controlled flow-type heaters							
Rated current range	**Power loss**	**Bbn 4016779**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
	W	**EAN**	**Type code**	**Order code**	**piece**	**kg**	**pc.**
6.7 ... 39 A	2.4	20950 2	E 452-5.7 A	2CDE160010R0901		0.1	10

Control and automation

RAL overload relays

RAL

Technical characteristics			
		RAL3	RAL6
Rated voltage Un	[V]	230 AC	
Rated current In	[A]	18.3	27.5
Rated contact capacity In	[A]	12 cosφ=1; 4 cosφ=0.8	
Rated frequency	[Hz]	50	
Adjustment ranges	[A]	0 ...18.3	0...27.5
Power consumption	[W]	10	
Modules	[n°]	2	
Intervention delay		instantaneous	

RAL overload relays

Installed downstream of the main circuit-breaker in a single-phase system, they constantly compare the actual power consumption to the preset threshold. An acoustic alarm alerts that some appliances must be switched off to avoid tripping the main circuit-breaker whenever the preset threshold is exceeded. The device calibration is 3 kW.
RAL built in relay output contact allows the following functions to be implemented:
a) remote signalling (acoustic or lighting)
b) opening a divisional circuit-breaker to disable a non essential electrical appliance.
Function b) allows one or more appliances to be automatically switched off in order to keep the power consumption within the preset limit and avoid unwanted tripping of the current-limiting device installed outside the home (e.g. in the basement). RAL must be reset manually.

Version	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
0/3	400509	RAL 3	2CSM111200R1301		0.200	1
0/6	400608	RAL 6	2CSM121200R1301		0.200	1

Control and automation

LSS1/2 load shedding switch

LSS1/2

Technical characteristics			
Rated voltage Un		[V]	230 AC
Rated capacity In		[A]	90
Rated contact capacity In NPL1 and NPL2		[A]	16 each (terminals 12 and 14)
Rated frequency		[Hz]	50/60
Regulating thresholds		[A]	5...30
			10...60
			15...90
Load reinsertion delay			5-7 min. (NPL1); 4-5, 50 min. (NPL2)
Load disinsertion delay			about 2 sec.
Indicators			1 green LED = supply voltage available
			2 red LEDs = loads switched off
Load OFF remote signalling		[A]	1 (terminals 11 and 13)
Terminals	Primary load		35 mm²
	Non prioritary loads		10 mm²
Power consumption		[W]	5
Modules		[n°]	5

LSS1/2 load shedding switch

Installed downstream of the main circuit-breaker, it compares the actual power consumption of the system to a preset maximum permitted value, and prevents tripping of the main circuit-breaker by sequentially switching off a maximum of two non-prioritary loads (NPL1 and NPL2) when the preset threshold is exceeded. A green LED indicates the presence of the supply voltage, and two red LEDs indicate the load OFF conditions. At preset time intervals, the device automatically attempts to reconnect the previously disabled loads.
Note: In unbalanced threephase systems same function of LSS1/2 can be implemented via DMTME multimeters. Digital outputs of the multimeter can be set to trip with an user defined delay to switch off - by means of external contactors - non prioritary loads of arbitrary consumption. See for details in Chapter 7 of Electrical installation solutions for buildings - Technical details.

	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
	274407	LSS1/2	2CSM112500R1311		0.400	1

Control and automation

E 235 mains disconnection relays

E 235

Technical features		
Short circuit rupturing capacity		16 A/230 AC
Rated frequency		50/60 Hz
Range of control voltage		0.9 to 1.1 Un
Filament lamps		2300 W
Fluorescent lamps:		
	twin lamp circuit	100 W
	shunt compensated	56 W
	electronic ballast	max. 36 W, dependent on manufacturer
Inductive load cosφ 0.6		6 A
Max. switching capacity (cosφ 0.5)		3500 VA
Intrinsic consumption ca.		1 W
Control voltage		5 V a.c.
Adjustable making capacity		2 - 15 VA
Breaking capacity		0.66 x making capacity
ON delay		50 ms
OFF delay		ca. 3 sec.
Contact assembly		1 NO contact
Service life at rated load		> 100000 switching cycles
Ambient temperature		- 10 °C/14 °F to +45 °C/113 °F
Max terminal cross-section		2.5 mm^2

E 235-NFS

E 235-GLE

E 235 Mains disconnection relay

Application and method of operation

According to building biologists, electrical interference fields emitted from live cables can impair well-being when the human organism is exposed to them for longer periods, e.g. in the bedroom. The E 235 demand switch automatically cuts off the mains voltage of an electric circuit when the last consumer in that circuit has been switched off. When the first consumer is switched on, the device switches the mains voltage back on with almost no delay. A low voltage of approx. 3 V is used to monitor whether consumers are switched on. As alternating voltage is used for this, it is virtually certain that even small consumer units with a capacitor and transformer power pack - e.g. charging stations for rechargeable devices, standard lamps, etc. - will be reliably detected and switched. Interference fields emitted by the monitoring voltage are so small that they cannot be registered. The mains is switched on when the consumer load exceeds the making capacity set in the demand switch. It is cut off when the consumer load falls to 2/3 of the set making capacity. The ON state is indicated by the integrated LED. You can choose between „Automatic monitoring“ and „Permanent ON“ using a rotary switch on the E 235.

Accessories

The E 235-GLA base load adapter is also available, and is used for switching the demand switch on manually. The adapter is plugged into a socket that is monitored by the demand switch. The toggle switch switches the base load, which is used to switch on the demand switch.
Some consumers require an initial voltage equal to the mains voltage in order to be switched on. These include brightness controllers, and fluorescent and energy-saving lamps. The PTC base load element E 235-GLE and base load adapter E 235-GLA are available for ensuring reliable switch-on of the mains field relay. The indicator light on the adapter displays the switched on mains voltage, irrespective of the position of the toggle switch. It tells you whether the mains voltage has been cut off or whether other consumers are still switched on. If you wish to connect a dimmer to the output of the demand switch, this must feature an additional switching contact. A base load element is also switched in parallel.

Description	Bbn 4016779	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
mains disconnection relay	571821	E 235-NFS	2CDE110000R1701		0.065	1
base load element	571814	E 235-GLE	2CDE100500R1711		0.001	1
base load adapter	571869	E 235-GLA	2CDE100510R1711		0.070	1

Control and automation

LEE 230 extractable power failure signalling lamp

LEE-230

Technical characteristics		
2P 10 A plug		distance between pins 19 mm, pin ø 4 mm
Supply	[V]	230 AC 50/60Hz
Recharge time	[h]	24
Endurance	[h]	3
Lighting level	[mcd]	3000
Operating temperature	[°C]	0...+45
Min. life cycle		5 years (battery

Additional technical features

LEE-230 lamp automatically switches on when the voltage fails; the built-in rechargeable battery guarantees the supply.
It is particularly useful thanks to its construction and functional characteristics:

- it can be extracted from the socket and used as a torch with ON-OFF button on its frontal side
- when necessary it can work with standard sockets
- it can be moved when it is needed
- it has a long operation endurance, up to three hours
- it is ready to use, it does not require installation
- with a screw (ø 3.5 mm, L 16 mm) it is possible to fix it preventing the extraction from the M1173 ABB sockets with central hole
- the projecting part of the Schuko profile is very small (8 mm).
- The two LEDs placed on the frontal side of the lamp indicate its operation condition:
- the red LED indicates the recharge activity and that, in the case of a network voltage back-out, the lamp will remain off
- the green LED indicates the recharge activity and that, in the case of a network voltage black-out, the lamp will switch on (it will automatically switch off when the voltage returns).

By pushing the frontal pushbutton it is possible to change the status; if you do not use the lamp for a prolonged time it is suggested to set the first condition in order to preserve the battery life.

LEE 230 extractable power failure signalling lamp

The LEE 230 lamp is an automatic electronic lamp that can be installed in any modular socket or wiring accessory socket conforming to the German VDE Schuko standard (e.g. ABB M1173 or M1175), to the Italian standard P11 10A, or to the 10/16 A italian dual standard.
The device functions both as a power failure signalling lamp and as a lighting device, to be used for example during maintenance activities or when seeking faults in the panel.

Pack	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
		Type code	Order code			
	EAN			piece	kg	pc.
Blister	507406	LEE-230	2CSM111000R1361		0.100	1

Electrical installation solutions for buildings
Energy efficiency

Index

M2M, ANR and DMTME selection table	8/2
M2M network analyser	8/5
ANR network analyser	8/9
DMTME multimeters	8/12
CUS serial converter	8/14
Energy meters selection table	8/17
A-series EQ meters	8/20
B-series EQ meters	8/28
C-series EQ meters	8/35
G-series EQ meters	8/39
Analogue and digital instruments selection table	8/40
Modular digital instruments	8/43
Front panel digital instruments	8/45
Analogue instruments selection table	8/46
Modular analogue instruments	8/47
Scales for modular analogue ammeters	8/49
Front-panel analogue instruments	8/51
Scales for front-panel analogue instrument	8/57
Voltmetric and current switches	8/64
E 233 hour counters	8/65
HMT hour counters	8/66
TMD temperature control units	8/67
Current transformers selection table	8/68
CT measurement current transformers with through primary	8/72
CTA measurement current transformers with wound primary	8/77
CTO split core measurement current transformers	8/78
TRF M measurement modular current transformers	8/79
SNT current transformer for d.c. applications	8/80
TV voltage transformers	8/81
CMS – Circuit Monitoring System	8/82
CMS – Control Units	8/88
CMS – Sensors and Accessories	8/90

M2M. The measure of efficiency

Measurement and advanced analysis of electrical parameters

Multi-voltage auxiliary power supply range, from 24 V DC to 230 V AC

Easy fixing system with clips which ensure the device is held reliably on the front-panel.

Real time display of energy consumption also in Euros and kg CO_2

Communication without limits thanks to the availability of different protocols for any types of network

Multilingual backlit display with two lines of scrolling text to guide and help the user in reading data and programming.

Intuitive and easy-to-use front keypad for navigating in the menu and configuring the device.

Reduced depth: only 57 mm inside the panel.

The fixing system allows the device to be installed safely and reliably on the panel, not only upon installation but also during the working period when the unit is subject to vibrations and temperature fluctuations.

The removable terminals, accessible from three sides, along with wiring parallel to the panel guarantee ease of installation. The screw fastenings of the amperometric measurement circuits offer reliability and precision. The network analyser performs constant verification of correct wiring thanks to its autodiagnostic function, signalling any operating errors.

With the M2M analyser it is possible to keep the electrical consumption of all types of system under control, measuring them in real time both in economic and environmental impact terms, thanks to the immediate conversion into Euros and CO_2 kg.

All the information gathered by the M2M analyzer can be transmitted quickly to remote locations through specific communication interfaces – RS485, RJ45 - with the support of numerous protocols including Modbus RTU, Modbus TCP/IP and Profibus DP. Interaction with the control and supervision systems is possible via digital inputs and digital, relay or analogue outputs, all programmable.

The reduced depth of only 57 mm inside the panel makes the analyser ideal for installation even in switchboard with reduced space.
At only 96 mm x 96 mm x 77 mm it still contains everything necessary to measure power quality parameters in real time.

Advanced functionalities to optimise consumptions like monitoring of absorbed power by measuring maximum demand to avoid paying penalties to the electricity distributor, bidirectional reading to display the amount of produced and consumed energy and verification of energy quality through THD measurement.

Energy efficiency

DMTME, M2M and ANR selection table

	Modular and front panel multimeters			Front panel network analysers	
	DMTME	**DMTME-72**	**DMTME-96**	**M2M**	**ANR96**
Overall dimensions	6 DIN modules	72x72x90	96x96x103	96x96x77	96x96x130
Display	LED			LCD backlit	LCD graphic backlit
Power supply	110 V a.c. 230 V a.c.	230 V a.c. 400 V a.c.	110 V a.c. 230 V a.c.	24-240 V a.c./d.c.	20-60 V a.c./d.c.
TRMS voltage	**Electrical parameters measurement**				
TRMS current					
Frequency					
Power factor					
Cosφ					
Active power					
Reactive power					
Apparent power					
Active energy					
Reactive energy					
Apparent energy					
Peak value Min/Max/Avg					
Timer and count-down					
Power 4Q	**Power quality**				
Energy 4Q					
Current THD					
Voltage THD					
Password set up					
Neutral current					
Maximum demand	**Energy management**				
Tariff					
Harmonic analysis up to 31°					
Wave form visualisation					
Memory 1 MB					
Outputs	**Digital**			**Digital Electromechanical relays Analogue**	**Digital**
Inputs	**Digital**				
Serial port	**RS485**			**RS485 RJ45**	**RS485 RS232 RJ45**
Protocols	**Modbus RTU**			**Modbus RTU Ethernet TCP/IP Profibus DP**	

M2M

Technical features		
Auxiliary power supply		
Voltage range	[V]	From 24 to 240 V AC/DC From 48 to 240 V AC/DC M2M I/O From 24 to 240 V DC and from 48 to 240 V AC M2M ETHERNET, M2M PROFIBUS
Frequency range	[Hz]	45 - 65
Protection fuse		T 0.5 A from 24 V to 100 V T 0.25 A from 100 V to 240 V
Power consumption	[VA]	7 max
Measurement type		Sampling TRMS
Measurement accuracy		
Voltage		±0.5% F.S. ±1 digit
Current		±0.5% F.S. ±1 digit
Frequency		40.0 - 99.9 Hz: ± 0,2% ± 0,1 100 - 500 Hz: ± 0.2% ± 1
Power factor		± 1% ± 1 digit (from cosφ= 0.3 Inductive to cosφ = 0.3 Capacitive)
Active power		± 1% ± 0.1% F.S (from cosφ= 0.3 Inductive to cosφ = 0.3 Capacitive)
Active energy		Class 1
Measurement range		
Voltage	[V]	From 10 to 500 V AC phase to neutral; From 17 to 865 V AC phase to phase. No decimal places.
Current		From 50 mA to 5 A TRMS 2 decimal places displayed
Frequency	[Hz]	From 40 to 500 1 decimal place displayed up to 99,9 and in integers above 100
Power factor		2 decimal places displayed
Installation		
Distribution networks		Low and medium voltage Low voltage M2M LV, M2M LV MODBUS Single-phase connection Three-phase with neutral - Three-phase without neutral
Current inputs	[A]	Always use external CT
		Primary from 1 to 10,000 A AC approx.
		Secondary 5 A and 1 A AC approx.
		N.B.: in case of CT secondary at 1 A the accuracy class is reduced to 2.5% F.S. ±1 digit, in the range 5-100% F.S.
Voltage inputs	[V]	Direct insertion up to 500 AC approx.
		Indirect insertion with VT:
		Primary from 60 to 60,000 V AC approx - secondary from 60 to 190 V AC
		N.B.: In case of VT secondary at less than 100 V the accuracy class is reduced to 2.5% F.S. ±1 digit, in the range 5-100% F.S.
Protection fuse for voltage inputs	[A]	0.1
Data update frequency		2 times/second

Energy efficiency

M2M network analyser

THD		
Voltage and current		Up to 31st harmonic
Energy measurement		
Single-phase maximum value counted		10 GWh / GVarh / GVAh
Three-phase maximum value counted		30 GWh / GVarh / GVAh
Energy balance maximum value counted		10 GWh / GVarh / GVAh with sign
Input pulses maximum energy value counted		40 GWh / GVarh
Terminal characteristics		
Current inputs		Cross section 6 mm^2 - Step 6.35 mm
Voltage inputs		Cross section 2.5 mm^2 - Step 7.62 mm
Impulsive outputs		Cross section 2.5 mm^2 - Step 5.08 mm
RS485 Serial port		Cross section 2.5 mm^2 - Step 5.08 mm
Relay outputs		Cross section 2.5 mm^2 - Step 5.08 mm
Overall dimensions		96 mm x 96 mm x 77 mm (Depth inside switchboard: 57 mm)
Weight	[Kg]	0.400 max
Standards		
Overall dimensions		IEC 61554
Protection degree		IEC 60529
Accuracy class		IEC 60688, IEC 61326-1, IEC 62053-21 , IEC 62053-23, IEC 62053-31.
Electrical safety		IEC 61010-1
User interface		
Display		Scrolling text in user-selectable language
Display type		LCD with backlighting which can be set by user
Display dimensions	[mm]	72x57
Communication interface		
RS485 (M2M MODBUS, M2M LV MODBUS, M2M ALARM, M2M I/O)		
- Protocol		Modbus RTU
- Electrical standard		RS485 with optical isolation
- Baud rate		4.8, 9.6, 19.2 kbps
- Parity number		Odd, Even, None
- Stop bit		1, 2
- Address		1-247
- Connectors		4-pole terminal (integrated 120 Ohm termination)
Profibus (M2M PROFIBUS)		
- Protocol		Profibus with slave DP-V0 function in compliance with IEC 61158 regulations
- Electrical standard		RS485 with optical isolation
- Baud rate		Automatic detection [9.6 - 12 Mbps]
- LED indicators		Green for communication status and Red for communication error
- Address		0-126
- Connectors		DB 9 female connector (do not use connectors with 90° cable outlet)
Ethernet (M2M ETHERNET)		
- Protocol		Modbus TCP/IP
- Connectors		RJ45

Digital output programmed as pulse		
Contact supply external voltage	[V]	48 max (peak AC/DC)
Maximum current	[mA]	100 (peak AC/DC)
Pulse duration	[ms]	50 OFF (min) / 50 ON closed contact
Pulse frequency		10 pulses/s (max)
Digital output programmed as alarm		
Contact supply external voltage	[V]	48 max (peak AC/DC)
Maximum current	[mA]	100 (peak AC/DC)
Alarm activation delay	[s]	1 - 900 s (programmable)
Alarm return hysteresis		0 - 40% (programmable)
Relay output (M2M ALARM)		
Normal current	[A]	16 AC1 - 3 AC15
Max. instantaneous current	[A]	30
Nominal voltage	[V]	250 V AC
Max. instantaneous voltage	[V]	400 V AC
Nominal load	[VA]	4000 AC1 - 750 AC15
Analogue output (M2M I/O)		
Programmable electrical parameters		Span [0 - 20 mA or 4 - 20 mA]
Load		Typical 250 Ohm, max 600 Ohm
Digital intputs (M2M I/O)		
Nominal voltage	[V]	24 V DC (absorption = 13 mA)
Maximum voltage	[V]	32 V DC (absorption = 22 mA)
Max. voltage for OFF status	[V]	8 V DC
Min. voltage for ON status	[V]	18 V DC
Hour counters		
Countdown timer		Countdown of system operating time with the activation of a programmable threshold on total current.
		Upon expiry of the maintenance period set an icon will appear on the display.
Count-up timer		Operational time of device
Climatic conditions		
Storage	[°C]	from -10 to +60
Operation	[°C]	from -5 to +55
Relative humidity		Max 93% (non-condensing) at 40°C
Protection degree		
Frontal		IP54
At terminals		IP25

Energy efficiency

M2M network analyser

M2M

M2M network analyser has advanced analysis functions which allow effective measurement of the main single-phase or three-phase electrical parameters: voltage, current, frequency, power factor, active and reactive power, active and reactive energy.
Fitted to low- and medium-voltage electrical panels (except for LV versions, suitable only for low voltage applications), the new analyser allows the measurement and analysis in real time of electrical parameters, also verifying the quality of the energy thanks to THD measurement.

M2M keeps the system's consumption under control, giving figures in CO_2 kg and Euros to ensure more efficient and rational use of energy. Bidirectional metering of energy and power on the 4 quadrants allows both production and consumption of energy to be monitored with a single device.
Aside from optimising the use of loads, real time measurement contributes to containing both environmental and budgetary impact.
All information gathered by the analyser can be transmitted quickly to remote locations through specific communication interfaces (RS485, RJ45), with the support of numerous protocols including Modbus RTU, Modbus TCP/IP and Profibus DP.

For interaction with control and supervision systems are available digital pulse outputs to remotely control active and reactive energy consumption, digital outputs programmable as threshold alarms with activation delay and return hysteresis, relay outputs with nominal current up to 16 A, and analogue outputs with programmable span (0 - 20 mA or 4 - 20 mA) for remoting status and events. Digital inputs allow pulse acquisition from other energy counters or users.

Communication protocol and interface	2 relay outputs	3 digital inputs, 2 analogue outputs	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
			EAN	Type code	Order code	piece	kg	pc.
			998839	M2M	2CSG299883R4052		0.300	1
Modbus RTU RS485			998938	M2M MODBUS	2CSG299893R4052		0.350	1
Ethernet RJ45			999034	M2M ETHERNET	2CSG299903R4052		0.400	1
Profibus RS485			999133	M2M PROFIBUS	2CSG299913R4052		0.400	1
Modbus RTU RS485	■		999232	M2M ALARM	2CSG299923R4052		0.400	1
Modbus RTU RS485		■	999331	M2M I/O	2CSG299933R4052		0.400	1
			999430	M2M LV	2CSG299943R4052		0.300	1
Modbus RTU RS485			969921	M2M LV MODBUS	2CSG296992R4052		0.350	1

Energy efficiency

ANR network analyser

2CSC400753F0001

ANR

Technical features			
Dimensions			
Overall dimensions	[mm]	96 x 96 x 130	IEC 61554
Max cable section	[mm²]	2.5	
Protection degree		IP52 on front - IP20 on terminal	EN 60529
Weight	[g]	430	
Display			
Graphic LCD		Backlit 128 x 128 pixel graphic LCD display	
Display dimensions	[mm]	ANR96: 50 x 50	
Voltage (TRMS)			
Direct measurement	[V]	10-600 Vrms between phase-phase.	
Ratio transformer range kVT	[V]	0.01 - 5,000.00	
Max over voltage	[V]	750, beyond this value must use VT	
Consumption	[VA]	0.2	
Input resistor	[MW]	>2	
Current (TRMS). always use external CT .../5A			
3 isolated inputs	[A]	0.01 - 5	
Min current value	[mA]	10	
Consumption	[VA]	0.2	
Max over current	[A]	10 (100 A for 1 second)	
Ratio transformer range kCT		0.01 - 5,000.00	
THD			
Voltage and current		Up to 31st harmonic	
Frequency			
Range	[Hz]	30 - 500	
Accuracy class			
Current	[%]	<0.5	
Voltage	[%]	<0.5	
Power	[%]	<1	
Power factor	[%]	<1	
Active energy	[%]	<1	IEC 62052-11 IEC 62053-11
Reactive energy	[%]	2	IEC 62053-23
Auxiliary supply			
ANR96-230, ANR96P-230, ANR96LAN-230, ANR96PRF-230, ANR96-230 02	[V]	85 ÷265 a.c./d.c.	
ANR96-24, ANR96P-24, ANR96LAN-230, ANR96PRF-230, ANR96-230 02	[V]	20 ÷ 60 a.c./d.c.	
Internal fuse		5x20 mm 315 mA 250 V Fast	
Frequency	[Hz]	50-60	
Operating environment			
Operating temperature	[°C]	-10 ÷ +50	
Storage temperature	[°C]	-15 ÷ +70	
Operating humidity	[°C]	90% without condensation	
Insulation			
Voltage insulation		3,700 V a.c. rms for 1 minute	
Remote coomunication			
RS485, RJ45			
Baud rate	[bps]	1,200 - 19,200	
Protocols		Modbus RTU, ASCII, Modbus TCP/IP, Profibus DP	

Energy efficiency

ANR network analyser

Internal memory		
For ANR96	[kbytes]	128 (usable: 80)
For ANR96P	[Mbytes]	1
Memory		Non-volatile data storage using internal battery
Data retention		5 years at 25 °C
Internal clock		
RTC clock		IEC 61038
Class of accuracy	[ppm]	5
Digital output		
Connection area	[mm²]	0 ÷ 2.5
External pulse voltage	[V]	12 ÷ 230 V a.c./d.c.
Max current	[mA]	150
Digital input		
Voltage	[V]	12 - 24 d.c.

2CSC400753F0001

ANR96

ANR Network analyser

In highly demanding applications, where the need is to monitor not only the electrical parameters of the network, but also the network quality, ABB has in its range of front-panel devices the ANR network analysers - measuring instruments that permit advanced analysis of single- and three-phase electrical distribution networks. In particular, the ANR devices are able to measure and also record network parameters and alarms, associating them to a time-stamp for the retrieval of load profiles and exact time and date of occurrence of pre-programmed events; it finally allows routing data towards supervision and monitoring systems.

It also works as panel manager thanks to its digital inputs; the latter allows to have in a central unit the information about more devices like breakers, fuses and energy meters which convey to it the information about their status, alarms and energy pulses (whether equipped with output relays).

Available in 96 x 96 mm front-panel format, ANRs are equipped with a backlit graphic LCD display, allowing clear and immediate readings even in unlighted environments.
The ANR analysers measure TRMS current, TRMS voltage, frequency and temperature of the connected phases; they calculate concatenate voltages and three-phase system voltage and current, power factor and cosj, apparent, active and reactive power, THD total harmonic distortion up to the 31st harmonic, and measure active energy consumed and produced.
All codes have built-in communication features allowing remote communication via Modbus RTU, Modbus TCP/IP and Prodfibus DP.

All the parameters can be stored in the 128 kbyte internal memory, expanded to 1 Mbyte in the ANR96P version. All the measures can be stored in the internal memory; the amount of information that can be stored is further specified in the specific manual.

The devices come with the calibration certificate of the specific S/N and a mini-CD containing:
- Instruction manual
- Technical datasheet
- SW-01 software for managing the recorded data: the software can be used as first-hand tool to retrieve and record the measures, to set alarms and to create load profile. For more detailed information about its features and use, refer to the software's manual.

All ANR versions have 2 digital inputs, 2 digital outpus and RS485/RS232 serial port.
ANR96PRF models have built-in Profibus DP protocol. ANR96LAN models have built-in Modbus TCP/IP protocol and RJ45 port. ANR96 02 models have improved 0,2% accuracy class of measures.

Auxiliary supply	Storage	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
V a.c./d.c.		EAN	Type code	Order code	piece	kg	pc.
20÷60	128 Kb	943402	ANR96-24	2CSG113000R4051		0.430	1
85÷265	128 Kb	943501	ANR96-230	2CSG213000R4051		0.430	1
20÷60	1 Mb	943600	ANR96P-24	2CSG123000R4051		0.430	1
85÷265	1 Mb	943709	ANR96P-230	2CSG223000R4051		0.430	1
20÷60	128 kb	583332	ANR96PRF-24	2CSG258333R4051		0.430	1
85÷265	128 kb	571537	ANR96PRF-230	2CSG257153R4051		0.430	1
20÷60	128 kb	772538	ANR96LAN-24	2CSG277253R4051		0.430	1
85÷265	128 kb	770336	ANR96LAN-230	2CSG277033R4051		0.430	1
20÷60	128 kb	573838	ANR96-24 02	2CSG257383R4051		0.430	1
85÷265	128 kb	562030	ANR96-230 02	2CSG256203R4051		0.430	1

Energy efficiency

DMTME multimeters

DMTME

1,3 mm			
Auxiliary supply	[V rms]	230 +15% - 10% DMTME, DMTME-72 and DMTME-96	
[V rms]		400 +15% - 10% DMTME-72	
[V rms]		115 +15% - 10% DMTME , DMTME-96	
Frequency	[Hz]	45…65	
Power consumption	[VA]	<6	
Fuse protection		T0.1A	
Voltage measuring inputs			
Range	[V rms]	From 10 to 500 V AC phase to neutral; From 17 to 865 V AC phase to phase.	
Max. non destructive	[V rms]	550	
Impedance (L-N)	[MΩ]	>8	
Current measuring inputs (only external CTs .../5 A)			
Range	[A rms]	0.05…5	
Overload		1.1 permanent	
Measurement accuracy			
Voltage		±0.5% F.S. ±1 digit in range	
Current		±0.5% F.S. ±1 digit in range	
Active power		±1% ±0.1% F.S. from cosφ = 0.3 to cosφ = -0.3	
Frequency		±0.2% ±0.1Hz from 40.0 to 99.9 Hz	
		±0.2% ±1Hz from 100 to 500 Hz	
Energy metering			
Maximum metered value for single phase		4,294.9 MWh (MVarh) with KA = KV = 1	
Maximum metered value for three phase		4,294.9 MWh (MVarh) with KA = KV = 1	
Accuracy		Class 1	
Max. power consumption	[VA]	1.4 for each input (with Imax = 5A rms)	
Digital outputs			
Pulse duration		50 ms OFF (min)/ 50 ms ON	
Vmax on contact		48 V (d.c. or a.c. peak)	
Wmax dissipation		450 mW	
Max frequency		10 pulses/sec	
Imax contact		100 mA (d.c. or a.c. peak value)	
Insulation		750 Vmax	
Programmable parameters			
kVT transformer ratio Vprim/Vsec		1…500	
kCT transformer ratio Iprim/Isec		1…1,250	
Free hour counter	[h]	0…10,000,000, resettable	
Countdown	[h]	1…32,000	
Operating temperature	[°C]	0…+50	
Storage temperature	[°C]	-10…+60	
Relative humidity		90% max. (non condensing) at 40°C	
Overall dimensions	[mm]	105x90x58	DMTME
	[mm]	96x96x103	DMTME-96
	[mm]	72x72x90	DMTME-72

DMTME

DMTME-96

DMTME-72

DMTME multimeters

The instruments DMTME are digital multimeters that allow the measurement, in TRMS mode, of the principal electrical parameters in three-phase and single-phase 110/230/400 Vac networks, including the max/min/average detection of the main electrical parameters and the active and reactive energy count. The multiple measured variables are displayed locally on four red 7-segment LED displays providing easy readability and simultaneous display of the measures of the electrical parameters of the phases individually and of the whole network.

The instruments DMTME combine, in a single instrument, the functions of multiple devices: voltmeter, ammeter, power factor meter, wattmeter, varmeter, frequency meter, active and reactive energy meters; it allows remarkable financial savings thanks to the reduction of space taken up in the panel and also of time required for cabling, along with the advantage of providing clear readings on a single device.

The DMTME-I-485, DMTME-I-485-96 and DMTME-I-485-72 models are additionally equipped with two digital outputs, fully programmable as either pulse outputs for remote metering of energy consumption, or as alarm outputs. The output relay can be set as NO or NC. Communication over Modbus RTU protocol is possible through the RS485 serial port. All versions come complete with Mini CD containing the instruction manual, technical documentation, Modbus communication protocol and the DMTME-SW tool, intended to be a first-hand PC-based application for the remote visualization of the measures.

DMTME modular multimeters

Auxiliary supply 230 V a.c. and 110 V a.c.

RS485 serial port	Program. digital output	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
		EAN	Type code	Order code	piece	kg	pc.
-	-	975700	DMTME	2CSM170040R1021		0.450	1
■	2	975809	DMTME-I-485	2CSM180050R1021		0.450	1

DMTME-96 panel multimeters

Auxiliary supply 230 V a.c. and 110 V a.c. Dimensions 96x96 mm

RS485 serial port	Program. digital output	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
		EAN	Type code	Order code	piece	kg	pc.
-	-	046752	DMTME-96	2CSG133030R4022		0.450	1
■	2	046851	DMTME-I-485-96	2CSG163030R4022		0.450	1

DMTME-72 panel multimeters

Auxiliary supply 230 V a.c. and 400 V a.c. Dimensions 72x72 mm

RS485 serial port	Program. digital output	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
		EAN	Type code	Order code	piece	kg	pc.
-	-	046554	DMTME-72	2CSG132030R4022		0.450	1
■	2	046653	DMTME-I-485-72	2CSG162030R4022		0.450	1

Energy efficiency

CUS 485 TCP/IP converter

CUS 485 TCP/IP

Technical features CUS 485 TCP/IP		
Supply voltage	[V]	220-240 a.c. ±15%
Power consumption	[VA]	4 max
Ethernet		100 base -T, RJ45 connector, TCP/IP protocol
RS485 serial port		standard, baudrate from 4800 to 19200 bps
Display, buttons		3 LED (1 green: ON, 1 red: LINK, 1 yellow: DATA) programming button
Mechanical features		protection degree: IP52 front - IP20 case and terminals - weight: 0.40 kg, connections with screw terminal for cable max. 2.5 mm^2, self extinguishing plastic case, DIN rail mounting, 3 modules-17,5 mm each
Environmental features		operating temperature: -10 +60 °C, humidity <90% storage temperature: -25 +70 °C
Standards		IEC EN 50081-2
		IEC EN 50082-1
		IEC EN 61010-1

CUS 485 TCP/IP converter

The CUS 485 TCP/IP converter allows the conversion of an RS485 serial communication port into a TCP/IP ethernet bus.
The CUS 485 TCP/IP converter acts as a bridge between Modbus/TCP/IP and Modbus/ASCII/RTU.
The serial port is linked to a device using Modbus/ASCII or Modbus/RTU communication or to a network of devices, while the ethernet port is linked to server/PC or PLC systems.
Server commands are sended via ethernet to CUS 485 TCP/IP that convert and send the commands to the slave device.

Version	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
serial converter - LAN TCP/IP network	585633	CUS 485 TCP/IP	2CSG258563R4051		0.5	1

Electricity meters
The details make the difference

Seals for terminals

Infrared port for communication between communications adapter and meter

DIN-Rail mounted and pro M design

MID approved and verified

Pixel or Segment LCD back-lit display

Configurable for both 3 and 4 wire networks

Seals for access to the SET button

Energy efficiency

Electricity meters. The details make the difference.

A series

Key applications

- Facility management installations
- Critical power
- Production lines
- System solutions
- Power quality
- Etc.

Key performance

Single phase or three phase
Direct connected up to 80 A or transformer current- and/or voltage transformers (CTVT)
Active energy measurement
- Class B (Cl. 1) or
- Class C (Cl. 0,5 S) on CTVT connected meters

Wide voltage range
- 100 - 690 V phase to phase
- 57,7 - 400 V phase to neutral

Alarm functions
MID (Module B and D)
Reactive energy measurement
Import/export measurement of energy
Optional communication
- via M-Bus or
- RS-485 (For Modbus RTU or EQ bus)

4 tariffs controlled by inputs,
- communication or
- built-in clock

Previous values by
- day or
- week or
- month

Demand measurement (per period)
- 3 maximum
- 1 minimum

Load profiles
- 8 channels independently configurable
- 40 000 values total

Harmonics measurement up to 16th harmonic
- Current
- Voltage
- and evaluation of THD

Pulse outputs (S0 compatible)

Instrumentation

The A series meters support reading of instrument values. A large number of electrical properties can be read. Depending on version of the meter the following data is available:
- Active power
- Apparent power
- Reactive power
- Current
- Voltage
- Frequency
- Power factor
- Harmonics (Current and Voltage)
- Total harmonic distortion

B series

Key applications

- Cost transfer/billing
- Solar power
- EV chargers
- Elevators/escalators
- Lighting
- Installation beside machines
- Etc.

Key performance

Single phase or three phase
Direct connected up to 65 A or CT connected (three phase types)
Active energy measurement
- Class B (Cl. 1) or
- Class C (Cl. 0,5 S) on CT connected meters

Alarm functions
MID (Module B and D)
Reactive energy measurement
Import/export measurement of energy
- Optional communication via via M-Bus or
- RS-485 (For Modbus RTU or EQ bus)

4 tariffs controlled by
- input or
- communication

Pulse outputs (S0 compatible)

Instrumentation

The B series meters support reading of instrument values.
A large number of electrical properties can be read. Depending on version of the meter the following data is available:
- Active power
- Apparent power
- Reactive power
- Current
- Voltage
- Frequency
- Power factor

C series

Key applications

- HVAC applications
- Stand-alone applications
- Domestic applications
- Camping and Marinas
- Etc.

Key performance

Single phase or three phase
Very compact
- 1 & 3 modules.

Direct connected up to 40 A
Active energy measurement
Accuracy class 1
Alarm functions
MID (Module B and F) as option
Pulse output (S0 compatible)

Instrumentation

The C series meters support reading of instrument values. A number of electrical properties can be read:
- Power factor
- Active power
- Current
- Voltage

G13

Key applications

- Meter management and configuration
- Remote reading of meter data
- Integration of meters in system solutions
- Etc.

Key performance

Connection to meters via
- RS-485 EQ bus or
- M-Bus
- IR (one port)

Ethernet connection
- https, JSON

Upgrade of firmware
- Gateway
- Meters (EQ bus)

Time synchronization
Routing of data

Built-in webserver

Meter readout via webserver
- Individual meters
- Cluster of meters
- CSV export of meter data
- Read instrument values

User authentication
- Administrator
- Restricted user

Gateway settings
- IP address
- Gateway name
- Time and date

Meter communication
- Meter registration
- Scan network
- Register meter
- Add meter access rights
- Read all data, all data found in the meters could be read in the webserver
- Meter settings

Meter configuration via webserver
Basic meter settings
- Ratio
- Time/date
- Pulse output/alarm
- Tariff settings
- Inputs/outputs settings

Advanced function settings
- Demand
- Previous values
- Load profile

Energy efficiency

Selection guide EQ meters.

How do I select the best meter for my application?
There are many versions of EQ meters in order to meet your requests. The EQ program comprises meters with different functionalities such as tariffs, communication interfaces or advanced clock functions. Spend a little time to evaluate the functions and imagine how they could add extra value to your metering. For example, the input counter (from Silver level) on an EQ meter can be used to count products produced by a machine and be read out together with the energy consumption of the same machine. In one easy go you can allocate energy to any produced product from one source. Another useful function is previous values (from Gold level). If you charge users in intervals the meter can secure the data even in the event of a broken communication link. You can collect the correct interval data later and also make it visible for your counterpart immediately on the meters display in case of any discussions.

Make the meter to an asset.
Take the step from passive meter reading to an active user of the data you can retrieve. The meter can be an important asset for you in order to avoid costs like penalties or extra charge for reactive energy (from Bronze level). Keep track of your maximum demand and reduce them to avoid charges. EQ meters can tell you the value of the maximum/minimum demand and also when it occurred. Harmonics is the source of many problems for all sorts of equipment connected to the low voltage network. Use an EQ meter (Platinum level) to measure the THD and isolate the source before you have to take the cost and consequences of poor power quality.

Function	Single phase					Three phase				
	C11	B21	A41	A42	C13	B23	B24	A43	A44
Direct connected	1	1 3	1 3 4		1	1 2 3		1 2 3 5	
Transformer connected				1 3 5			1 2 3		1 2 3 4 5
2 element metering						1 2 3	1 2 3	1 2 3 5	1 2 3 4 5
3 element metering					1	1 2 3	1 2 3	1 2 3 5	1 2 3 4 5
Accuracy 1 %, Class 1, Class B	1	1 3	1 3 4	1 3	1	1 2 3	1 2	1 2 3 5	1 2 3
Accuracy 0.5 %, Class 0,5 S, Class C				5			3		3 4 5
Active energy	1	1 3	1 3 4	1 3 5	1	1 2 3	1 2 3	1 2 3 5	1 2 3 4 5
Reactive energy		3	3 4	3 5		2 3	2 3	2 3 5	2 3 4 5
Apparent energy		3	3 4	3 5		2 3	2 3	2 3 5	2 3 4 5
Import/Export energy		3	3 4	3 5		2 3	2 3	2 3 5	2 3 4 5
Tariff registers, 1-4		3	3 4	3 5		3	3	3 5	3 4 5
Instrument values	1	1 3	1 3 4	1 3 5	1	1 2 3	1 2 3	1 2 3 5	1 2 3 4 5
Alarm function	1	1 3	1 3 4	1 3 5	1	1 2 3	1 2 3	1 2 3 5	1 2 3 4 5
Harmonics, 2th-16th and THD				5				5	5
Previous values - day, week, month			4	5				5	4 5
Max and min demand			4	5				5	4 5
Load profiles - 8 channels				5				5	5
Pulse output	1	1	1	1	1	1 2	1 2	1 2	1 2
I/O board - 2 in, 2 out		3	3 4	3		3	3	3	3 4
Configurable I/O - 4 I/O channels				5				5	5
Tariffs controlled by input		3	3 4	3 5		3	3	3 5	3 4 5
Tariffs controlled by communication		3	3 4	3 5		3	3	3 5	3 4 5
Tariffs controlled by clock			4	5				5	4 5
MID approved, verified	optional	1 3	1 3 4	1 3 5	optional	1 2 3	1 2 3	1 2 3 5	1 2 3 4 5
IEC approved	1	1 3	1 3 4	1 3 5	1	1 2 3	1 2 3	1 2 3 5	1 2 3 4 5
Communication - Infrared (M-Bus)		1 3	1 3 4	1 3 5		1 2 3	1 2 3	1 2 3 5	1 2 3 4 5
Communication - M-Bus		optional	optional	optional		optional	optional	optional	optional
Communication - RS-485 Modbus		optional	optional	optional		optional	optional	optional	optional
Communication - RS-485 EQ bus		optional	optional	optional		optional	optional	optional	optional

1 = Steel
2 = Bronze
3 = Silver
4 = Gold
5 = Platinum
☐ = Not available
Optional = Available on some order codes

Energy efficiency

Energy meters selection table

	EQ meters C11	EQ meters C13	EQ meters B21	EQ meters B23	EQ meters B24
Overall dimensions	1 DIN module	3 DIN modules	2 DIN modules	4 DIN modules	
Display	LCD		Backlit LCD		
Operating voltage	230 V AC	3x230/400 V AC	220...240 V AC	3x220/380...240/415 V AC	
Frequency	50 / 60 Hz				
Max current	40 A		65 A		6 A
CTVT connection	Direct	Direct	Direct	Direct	CT
Active energy	Standard feature				
Reactive energy	-	-	Optional		
Apparent energy	-	-			
Accuracy	Cl. 1 (B)				Cl. 1 (B), Cl. 0,5 S (C)
Up to 4 tariffs	-	-	Optional		
Max/min demand	-	-	-	-	-
Previous values	-	-	-	-	-
Load profiles	-	-	-	-	-
Alarm function	Standard feature				
Harmonic analysis	-	-	-	-	-
Event log	-	-	Standard feature		
Active power	Instrumentation parameters (standard)				
Voltage					
Current					
Power factor					
Frequency	-	-	Instrumentation parameters		
Pulse output	Standard feature				
I/O	1 Output*		1 Output* or 2 outputs/2 inputs (optional)		
Built-in serial communication	-	-	IR / M-Bus (optional) / RS-485 (optional)		
Protocols	-	-	M-Bus, Modbus RTU, EQ bus		

*) The pulse output can be assigned as an output if it is not used for pulses
**) For 16,7 Hz meters

	EQ meters A41	EQ meters A42	EQ meters A43	EQ meters A44	EQ meters G13
	4 DIN modules		7 DIN modules		4 DIN modules
	Backlit Pixel (LCD)				No display
	57.7...288 V AC	57.7...288 V AC or 100...288** V AC	3x57.7/100 ... 288/500	3x57.7/100 ... 288/500 or 3x57.7/100 ... 400/690	100...240 V AC
	50 / 60 Hz	50 / 60 Hz (or 16,7 / 50 / 60 Hz)		50 / 60 Hz	
	80 A	6 A	80 A	6 A	-
	Direct	CTVT	Direct	CTVT	-
	Standard feature				-
	optional				-
					-
	Cl. 1 (B)	Cl. 1 (B), Cl. 0,5 S (C)	Cl. 1 (B)	Cl.1 (B), Cl. 0,5 S (C)	-
	Optional				-
	Optional				-
					-
					-
	Standard feature				
	Power quality (optional)				-
	Standard feature				-
	Instrumentation parameters (standard)				-
					-
					-
					-
	Instrumentation parameters (optional)				-
	Standard feature				-
	1 output or 2 outputs/2 inputs (optional) or 4 configurable inputs and outputs (optional)				-
	IR / M-Bus (optional) / RS-485 (optional)				IR, RS-485, M-Bus, Ethernet
	M-Bus, Modbus, EQ bus				HTTPS, EQ bus, M-Bus, JSON

Energy efficiency

EQ meters A series

A-series

Technical features	
	A41
Voltage/current inputs	
Nominal voltage	230 V AC
Voltage range	57.7 - 288 V AC (-20% - +15%)
Power dissipation voltage circuits	1.5 VA (0.6 W) total at 230 V AC
Power dissipation current circuits	0.006 VA (0.006 W) at I_{ref} and I_b
Base current I_b	5 A
Rated current I_n	-
Reference current I_{ref}	5 A
Transitional current I_{tr}	0.5 A
Maximum current I_{max}	80 A
Minimum current I_{min}	0.25 A
Starting current I_{st}	< 20 mA
Terminal wire area	1 - 25 mm^2
Recommended tightening torque	2 Nm
Communication	
Terminal wire area	0.5 - 1 mm^2
Recommended tightening torque	0.25 Nm
Transformer ratios	
Configurable current ratio (CT)	-
Configurable voltage ratio (VT)	-
Pulse indicator (LED)	
Pulse frequency	1000 imp/kWh
Pulse length	40 ms
Frequency	50 or 60 Hz ± 5%
Accuracy Class	B (Cl.1) and Reactive Cl. 2
Active energy	1%
Display of energy	Pixel oriented display (LCD)
Environmental	
Operating temperature	-40°C - +70°C
Storage temperature	-40°C - +85°C
Humidity	75% yearly average, 95% on 30 days/year
Resistance to fire and heat	Terminal 960°C, cover 650°C (IEC 60695-2-1)
Resistance to water and dust	IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529.
Mechanical environment	Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU).
Electromagnetic environment	Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU).

*) For 690 V AC meters:
Power dissipation voltage circuits 2.2 VA (1.0 W) total at 230 V AC
Power dissipation current circuits 0.001 VA (0.001 W) per phase at Iref and In

A42	A43	A44
	3x230/400 V AC	
57.7 - 288 or 100 ... 288 V AC (-20% - +15%)	3x57.7/100 ... 288/500 V AC (-20% - +15%)	3x57.7/100 ... 288/500 or 3x100/173 ... 400/690 V AC (-20% - +15%)
	1.8 VA (0.8 W) total at 230 V AC	
0.001 VA (0.001 W) at I_{ref} and I_n	0.006 VA (0.006 W) per phase at I_{ref}	0.001 VA (0.001 W) at I_{ref} and I_n*
-	5 A	-
1 A	-	1 A
1 A	5 A	1 A
0.05 A	0.5 A	0.05 A
6 A	80 A	6 A
0.02 A	0.25 A	0.01 A
< 1 mA	< 20 mA	< 1 mA
0.5 - 10 mm²	1 - 25 mm²	0.5 - 10 mm²
1.2 Nm	2 Nm	1.2 Nm
		0.5 - 1 mm²
		0.25 Nm
1/9 - 9999/1	-	1/9 - 9999/1
1/999 - 999999/1	-	1/999 - 999999/1
5000 imp/kWh	1000 imp/kWh	5000 imp/kWh
40 ms		
50 or 60 Hz ± 5 % (or 16.7 Hz optional)	50 or 60 Hz ± 5 %	
B (Cl.1), C (Cl. 0,5 S) and Reactive Cl. 2	A (Cl.2), B (Cl.1) and Reactive Cl. 2	B (Cl.1), C (Cl. 0,5 S) and Reactive Cl. 2
0.5%, 1%	1%	0.5%, 1%
-40°C - +70°C		
-40°C - +85°C		
75% yearly average, 95% on 30 days/year		
Terminal 960°C, cover 650°C (IEC 60695-2-1)		
IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529.		
Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU).		
Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU).		

Energy efficiency
EQ meters A series

The A series meters ranges from single phase to three phase meters and from basic up to advanced functionality without any comparison. The A series meters are mounted on a DIN rail and are suitable for installation in distribution boards and small enclosures such as consumer units. With the main terminals in accordance with DIN 43857 and accessible from the below the meters, the A series is suitable for many applications.

The low rated or base currents of these products ensures high dynamic performance with superior accuracy even at low currents. The meters support a wide voltage range as well as a wide temperature range. The display is pixel-oriented and can display up to four quantities at the same time. Navigating the meter is easily done via the push-buttons below the display. To configure the meter settings, the set button must be accessed and this
button is protected against unauthorized use when the “glass lid” on the front of the meter is closed and sealed. The exceptional low power consumption of the meters makes them economical in the long run - an important feature specially for large meter populations.

Data from the A series meters can be collected via pulse output or serial communication. The pulse output is a solid state relay that generates pulses proportionally to the measured energy. The meters can also be equipped with built-in serial communication interfaces for M-Bus or Modbus RTU (RS-485). Meters with RS-485 interface can also be set to communicate over the new EQ bus with the gateway G13. All meters in the A series come with an infrared port for communication with an external Serial Communication Adapter (SCA) such as the KNX adapter.

A series supports following instrumentation values dependent on version of meter:
- Active energy
- Current
- Voltage
- Power factor
- Reactive power
- Total harmonic distortion
- Apparent power
- Frequency
- Harmonics

A series meters with a functionality level of Gold or Platinum have an internal clock for advanced functionality:
- Event log
- Previous values
- Load profile
- Maximum and minimum demand

The tariffs are controlled via inputs, via communication or via an internal clock in Gold and Platinum versions.

The A series support up to four I/O’s. It can be two inputs and two outputs in a fixed configuration or four I/O points that are freely configured to input or output. Inputs can be used for counting pulses from e.g. a water meter, or reading status from external devices. Outputs can be used as pulse outputs or controlling external apparatus like
a contactor or an alarm (connected via an external relay). The I/O’s need an external voltage supply. The A series meters are type approved according to IEC and they are both type approved and verified according to MID. MID is the Measuring Instruments Directive 2014/32/EU from the European Commission. MID type approval and verification is mandatory for meters in billing applications within EU and EEA. The type approval is according to standards that covers all relevant technical aspects of the meter. These include climate conditions, electromagnetic compatibility (EMC), electrical requirements, mechanical requirements and accuracy.

A series

Technical features		
	A series	
Outputs		
Type	Transistor or MOSFET	
Current	2 - 100 mA	
Voltage	5 - 240 V AC/DC. For meters with only 1 output, 5 - 40 V DC.	
Pulse output frequency	Programmable: 1 - 999999 imp/kWh	
Pulse length	Programmable: 10 - 990 ms	
Terminal wire area	0.5 - 1 mm^2	
Recommended tightening torque	0.25 Nm	
Inputs		
Voltage	0 - 240 V AC/DC	
OFF	0 - 5 V AC/DC	
ON	57 - 240 V AC/24 - 240 V DC	
Min. pulse lenght	30 ms	
Terminal wire area	0.5 - 1 mm^2	
Recommended tightening torque	0.25 Nm	
EMC compatibility		
Impulse voltage test	6 kV 1.2/50 µs (IEC 60060-1)	
Surge voltage test	4 kV 1.2/50 µs (IEC 61000-4-5)	
Fast transient burn test	4 kV (IEC 61000-4-4)	
Immunity to electromagnetic HF-fields	80 MHz - 2 GHz at 10 V/m (IEC 61000-4-3)	
Immunity to conducted disturbance	150 kHz - 80 MHz, (IEC 61000-4-6)	
Immunity to disturbance with harmonics	2kHz - 150kHz	
Radio frequency emission	EN 55022, class B (CISPR22)	
Electrostatic discharge	15 kV (IEC 61000-4-2)	
Standards	EC 62052-11, IEC 62053-21 class 1 & 2, IEC 62053-22 class 0,5 S, IEC 62053-23 class 2, IEC 62054-21, GB/T 17215.211-2006, GBT 17215.321-2008 class 1 & 2, GB/T 17215.322-2008 class 0,5 S, GB 4208-2008, EN 50470-1, EN 50470-3 category A, B & C EQ meters.	
Mechanical		
Material	Polycarbonate in transparent front glass, bottom case, upper case and terminal cover, Glass reinforced polycarbonate in terminal block.	
Dimensions	**A41 / A42**	**A43 / A44**
Width	70 mm	123 mm
Height	97 mm	97 mm
Depth	65 mm	65 mm
DIN modules	4	7

Energy efficiency

EQ meters A series

A41

Direct connected electricity meter up to 80 A. Verified and approved according to MID. IEC approval.Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

EQ meters single phase electricity meter, 4 DIN with IR port, 80 A

Class B (Cl. 1) with functionality level Steel. Active energy

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
57.7...288 V AC, Pulse output	705547	A41 111 - 100	2CMA170554R1000		0.230	1
57.7...288 V AC, Pulse output, RS-485	705004	A41 112 - 100	2CMA170500R1000		0.230	1
57.7...288 V AC, Pulse output, M-Bus	002400	A41 113 - 100	2CMA100240R1000		0.230	1

Class 1 (Reactive Class 2) with functionality level Silver. Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
57.7...288 V AC, 2 output, 2 input, RS-485	705035	A41 312 - 100	2CMA170503R1000		0.230	1
57.7...288 V AC, 2 output, 2 input. M-Bus	705042	A41 313 - 100	2CMA170504R1000		0.230	1

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Gold. Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
57.7...288 V AC, 2 output, 2 input, RS-485	705059	A41 412 - 100	2CMA170505R1000		0.230	1

A42

Transformer CTVT connected electricity meter up to 6 A. Verified and approved according to MID. IEC approval. Voltage V - 57...288 V AC. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

EQ meters single phase electricity meter, 4 DIN with IR port, 6 A

Class B (Cl. 1) with functionality level Steel. Active energy

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
57.7...288 V AC, Pulse output	705554	A42 111 - 100	2CMA170555R1000		0.200	1
57.7...288 V AC, Pulse output, RS-485	705103	A42 112 - 100	2CMA170510R1000		0.200	1
57.7...288 V AC, Pulse output, M-Bus	002424	A42 113 - 100	2CMA100242R1000		0.200	1

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver. Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
57.7...288 V AC, 2 output, 2 input, RS-485	705127	A42 312 - 100	2CMA170512R1000		0.200	1

Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Platinum. Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand, advanced load profiles, harmonics and THD. Versions for 16.7, 50 or 60 Hz.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
57.7...288 V AC, Configurable 4 I/O channels, RS-485	002387	A42 552 - 100	2CMA100238R1000		0.200	1
100...288 V AC, Configurable 4 I/O channels, RS-485 16.7*, 50 or 60 Hz	705189	A42 552 - 120	2CMA100518R1000		0.200	1
100...288 V AC, Configurable 4 I/O channels, M-Bus 16.7*, 50 or 60 Hz	705196	A42 553 - 120	2CMA100519R1000		0.200	1

*) The meters are not tested and approved for placement on rolling stock.

Energy efficiency

EQ meters A series

A43

Direct connected electricity meter up to 80 A. Verified and approved according to MID. IEC approval. 2- and 3-element metering. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

EQ meters three phase electricity meter, 7 DIN with IR port, 80 A

Class B (Cl. 1) with functionality level Steel. Active energy

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 57.7/100...288/500 V AC, Pulse output	705202	A43 111 - 100	2CMA170520R1000		0.440	1
3 x 57.7/100...288/500 V AC, Pulse output, RS-485	002448	A43 112 - 100	2CMA100244R1000		0.440	1
3 x 57.7/100...288/500 V AC, Pulse output, M-Bus	002455	A43 113 - 100	2CMA100245R1000		0.440	1

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Bronze. Active and reactive energy, import/export.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 57.7/100...288/500 V AC, Pulse output, RS-485	705226	A43 212 - 100	2CMA170522R1000		0.440	1
3 x 57.7/100...288/500 V AC, Pulse output, M-Bus	705233	A43 213 - 100	2CMA170523R1000		0.440	1

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver. Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 57.7/100...288/500 V AC, 2 output, 2 input, RS-485	705257	A43 312 - 100	2CMA170525R1000		0.440	1
3 x 57.7/100...288/500 V AC, 2 output, 2 input, M-Bus	705264	A43 313 - 100	2CMA170526R1000		0.440	1

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Platinum. Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand, advanced load profiles, harmonics and THD.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 57.7/100...288/500 V AC, Configurable 4 I/O channels, RS-485	705318	A43 512 - 100	2CMA170531R1000		0.440	1
3 x 57.7/100...288/500 V AC, Configurable 4 I/O channels, M-Bus	705325	A43 513 - 100	2CMA170532R1000		0.440	1

A44

Transformer CTVT connected electricity meter up to 6 A. Verified and approved according to MID. IEC approval. 2- and 3-element metering. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

EQ meters three phase electricity meter, 7 DIN with IR port, 6 A

Class B (Cl. 1) with functionality level Steel. Active energy

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 57.7/100...288/500 V AC, Pulse output	705332	A44 111 - 100	2CMA170533R1000		0.350	1
3 x 57.7/100...288/500 V AC, Pulse output, RS-485	002486	A44 112 - 100	2CMA100248R1000		0.350	1
3 x 57.7/100...288/500 V AC, Pulse output, M-Bus	002493	A44 113 - 100	2CMA100249R1000		0.350	1

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Bronze. Active and reactive energy, import/export.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 57.7/100...288/500 V AC, Pulse output	000130	A44 211 - 100	2CMA100013R1000		0.350	1
3 x 57.7/100...288/500 V AC, Pulse output, RS-485	705349	A44 212 - 100	2CMA170534R1000		0.350	1
3 x 57.7/100...288/500 V AC, Pulse output, M-Bus	705356	A44 213 - 100	2CMA170535R1000		0.350	1

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver. Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 57.7/100...288/500 V AC, 2 output, 2 input	705363	A44 311 - 100	2CMA170536R1000		0.350	1

Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Silver. Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 57.7/100...288/500 V AC, 2 output, 2 input, RS-485	705370	A44 352 - 100	2CMA170537R1000		0.350	1
3 x 57.7/100...288/500 V AC, 2 output, 2 input, M-Bus	705387	A44 353 - 100	2CMA170538R1000		0.350	1

Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Gold. Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock,previous values, max and min demand.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 57.7/100...288/500 V AC, 2 output, 2 input, RS-485	705400	A44 452 - 100	2CMA170540R1000		0.350	1

Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Platinum. Active and reactive energy, import/export, tariffs 1-4, tariff controlled via inputs, communication or clock, previous values, max and min demand, advanced load profiles, harmonics and THD.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 57.7/100...288/500 V AC, Configurable 4 I/O channels, RS-485	705455	A44 552 - 100	2CMA170545R1000		0.350	1
3 x 57.7/100...288/500 V AC, Configurable 4 I/O channels, M-Bus	705462	A44 553 - 100	2CMA170546R1000		0.350	1
3 x 57.7/100...400/690 V AC, 1 input + 1 output, RS-485	705493	A44 552 - 110	2CMA170549R1000		0.350	1
3 x 57.7/100...400/690 V AC, 1 input + 1 output, M-Bus	705486	A44 553 - 110	2CMA170548R1000		0.350	1

Energy efficiency

EQ meters B series

B series

Technical features	
	B21
Voltage/current inputs	
Nominal voltage	230 V AC
Voltage range	220...240 VAC (-20% - +15%)
Power dissipation voltage circuits	1.1 VA (0.5 W) total at 230 V AC
Power dissipation current circuits	0.012 VA (0.012 W) at I_{ref} and I_b
Base current I_b	5 A
Rated current I_n	-
Reference current I_{ref}	5 A
Transitional current I_{tr}	0.5 A
Maximum current I_{max}	65 A
Minimum current I_{min}	0.25 A
Starting current I_{st}	< 20 mA
Terminal wire area	1 - 25 mm^2
Recommended tightening torque	2 Nm
Communication	
Terminal wire area	0.5 - 1 mm^2
Recommended tightening torque	0.25 Nm
Transformer ratios	
Configurable current ratio (CT)	-
Pulse indicator (LED)	
Pulse frequency	1000 imp/kWh
Pulse length	40 ms
General data	
Frequency	50 or 60 Hz ± 5%
Accuracy Class	B (Cl. 1) and Reactive Cl. 2
Active energy	1%
Display of energy	6 digit LCD
Environmental	
Operating temperature	-40°C - +70°C
Storage temperature	-40°C - +85°C
Humidity	75% yearly average, 95% on 30 days/year
Resistance to fire and heat	Terminal 960 °C, cover 650°C (IEC 60695-2-1)
Resistance to water and dust	IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529.
Mechanical environment	Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU).
Electromagnetic environment	Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU).

B23	**B24**
3x230/400 V AC	
3x220/380...240/415 VAC (-20% - +15%)	
1.7 VA (0.8 W) total at 230 V AC	
0.007 VA (0.007 W) per phase at I_{ref} and I_b	0.0007 VA (0.0005 W) per phase at I_{ref} and I_n
	-
	1 A
	-
	0.05 A
	6 A
	0.02 A
	< 1 mA
	0.5 - 10 mm^2
	1.2 Nm
	1/9 - 9999/1
	5000 imp/kWh
B (Cl. 1) or C (Cl. 0.5 S) and Reactive Cl. 2	
	0.5%, 1%
7 digit LCD	
IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529.	
Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU).	
Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU).	

Energy efficiency
EQ meters B series

The EQ meters, B series is a range of meters for single phase and three phase metering. The B series meters are mounted on a DIN rail and are suitable for installation in distribution boards and small enclosures such as consumer units. The B series are suitable in applications where there is a need for reliable energy measurements and where space is limited.

The low rated or base currents of these products ensures high dynamic performance with superior accuracy even at low currents. The B series meters are meters for many applications and installations. Navigating the meter is easily done via the push-buttons below the display. To configure the meter settings, the set button must be accessed and this button is protected against unauthorized use when the “glass lid” on the front of the meter is closed and sealed. The exceptional low power consumption of the meters, less than 0.9 VA and 1.6 VA, makes them economical in the long run - an important feature specially for large meter populations.

Data from the B series meters can be collected via pulse output or serial communication. The pulse output is a solid state relay that generates pulses proportionally to the measured energy. The meters can also be equipped with built-in serial communication interfaces for M-Bus or Modbus RTU (RS-485). Meters with RS-485 interface can also be set to communicate over the new EQ bus with the new gateway G13. All meters in the B series come with an infrared port for communication with an external Serial Communication Adapter (SCA) such as the KNX adapter.

The B series meters support reading of instrument values. A large number of electrical properties can be read. Depending on version of the meter the following data is available:
- Active power
- Apparent power
- Reactive power
- Current
- Voltage
- Frequency
- Power factor

Up to 4 tariffs are controlled via inputs or communication.

The B series support two inputs and two outputs in a fixed configuration. Inputs can be used for counting pulses from e.g. a water meter, or reading status from external devices. Outputs can be used as pulse outputs or controlling external apparatus like a contactor or an alarm (connected via an external relay).

The B series meters are type approved according to IEC and they are both type approved and verified according to MID. MID is the Measuring Instruments Directive 2014/32/EU from the European Commission. MID type approval and verification is mandatory for meters in billing applications within EU and EEA. The type approval is according to standards that covers all relevant technical aspects of the meter. These include climate conditions, electromagnetic compatibility (EMC), electrical requirements, mechanical requirements and accuracy.

B series

Technical features		
	B series	
Outputs		
Type	Transistor or MOSFET	
Current	2 - 100 mA	
Voltage	5 - 240 V AC/DC. For meters with only 1 output 5 - 40 VDC.	
Pulse output frequency	Programmable 1 - 999999 imp/kWh	
Pulse length	Programmable 10 - 990 ms	
Terminal wire area	0.5 - 1 mm^2	
Recommended tightening torque	0.25 Nm	
Inputs		
Voltage	0 - 240 V AC/DC	
OFF	0 - 5 V AC/DC	
ON	57 - 240 V AC/24 - 240 V DC	
Min. pulse length	30 ms	
Terminal wire area	0.5 - 1 mm^2	
Recommended tightening torque	0.25 Nm	
EMC compatibility		
Impulse voltage test	6 kV 1.2/50µs (IEC 60060-1)	
Surge voltage test	4 kV 1.2/50µs (IEC 61000-4-5)	
Fast transient burn test	4kV (IEC 61000-4-4)	
Immunity to electromagnetic HF-fields	80 MHz - 2 GHz (IEC 61000-4-6)	
Immunity to conducted disturbance	150kHz - 80MHz (IEC 61000-4-6)	
Immunity to disturbance with harmonics	2kHz - 150kHz	
Radio frequency emission	EN 55022, class B (CISPR22)	
Electrostatic discharge	15 kV (IEC 61000-4-2)	
Standards	IEC 62052-11, IEC 62053-21 class 1 & 2, IEC 62053-22 class 0,5 S, IEC 62053-23 class 2, IEC 62054-21, GB/T 17215.211-2006, GB/T 17215.312-2008 class 1 & 2, GB/T 17215.322-2008 class 0,5 S, GB 4208-2008, EN 50470-1, EN 50470-3 category A, B & C	
Mechanical		
Material	Polycarbonate in transparent front glass. Glass reinforced polycarbonate in bottom case and upper case. Polycarbonate in terminal cover.	
Dimensions	**B21**	**B23/B24**
Width	35 mm	70 mm
Height	97 mm	97 mm
Depth	65 mm	65 mm
DIN modules	2	4

Energy efficiency

EQ meters B series

B21

Direct connected electricity meter up to 65 A. Verified and approved according to MID. IEC approval. Instrument values. Alarm function. - Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

EQ meters single phase electricity meter, 2 DIN with IR port, 65 A

For direct connection up to 65 A. Class B (Cl. 1) with functionality level Steel.
Active energy

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1 x 230 V AC, Pulse output	001496	B21 111 - 100	2CMA100149R1000		0.140	1
1 x 230 V AC, Pulse output, RS-485	001502	B21 112 - 100	2CMA100150R1000		0.150	1
1 x 230 V AC, Pulse output, M-Bus	001519	B21 113 - 100	2CMA100151R1000		0.150	1

For direct connection up to 65 A. Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver.
Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1 x 230 V AC, 2 output, 2 input	001540	B21 311 - 100	2CMA100154R1000		0.140	1
1 x 230 V AC, 2 output, 2 input, RS-485	001557	B21 312 - 100	2CMA100155R1000		0.150	1
1 x 230 V AC, 2 output, 2 input, M-Bus	001564	B21 313 - 100	2CMA100156R1000		0.150	1

B23

Direct connected electricity meter up to 65 A. Verified and approved according to MID. IEC approval. 2- and 3-element metering. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

EQ meters three phase electricity meter, 4 DIN with IR port, 65 A

Class B (Cl. 1) with functionality level Steel.
Active energy

Description	Bbn 7392696 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 230/400 V AC, Pulse output	001632	B23 111 - 100	2CMA100163R1000		0.310	1
3 x 230/400 V AC, Pulse output, RS-485	001649	B23 112 - 100	2CMA100164R1000		0.320	1
3 x 230/400 V AC, Pulse output, M-Bus	001656	B23 113 - 100	2CMA100165R1000		0.330	1

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Bronze.
Active and reactive energy, import/export.

Description	Bbn 7392696 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 230/400 V AC, Pulse output, RS-485	001663	B23 212 - 100	2CMA100166R1000		0.320	1

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Silver.
Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

Description	Bbn 7392696 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 230/400 V AC, 2 output, 2 input	001687	B23 311 - 100	2CMA100168R1000		0.330	1
3 x 230/400 V AC, 2 output, 2 input, RS-485	001694	B23 312 - 100	2CMA100169R1000		0.340	1
3 x 230/400 V AC, 2 output, 2 input, M-Bus	001700	B23 313 - 100	2CMA100170R1000		0.350	1

Energy efficiency

EQ meters B series

B24

Transformer CT connected electricity meter up to 6 A. Verified and approved according to MID. IEC approval. 2- and 3-element metering. Instrument values. Alarm function. Communication - Infrared (M-Bus). Optional - Communication with M-Bus, RS-485 Modbus, RS-485 EQ bus.

EQ meters three phase electricity meter, 4 DIN with IR port, 6 A

Class B (Cl. 1) with functionality level Steel. Active energy

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 230/400 V AC, Pulse output	001779	B24 111 - 100	2CMA100177R1000		0.250	1
3 x 230/400 V AC, Pulse output, RS-485	001786	B24 112 - 100	2CMA100178R1000		0.250	1
3 x 230/400 V AC, Pulse output, M-Bus	001793	B24 113 - 100	2CMA100179R1000		0.270	1

Class B (Cl. 1) (Reactive Cl. 2) with functionality level Bronze.
Active and reactive energy, import/export.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 230/400 V AC, Pulse output, RS-485	001809	B24 212 - 100	2CMA100180R1000		0.250	1

Class C (Cl. 0.5 S) (Reactive Cl. 2) with functionality level Silver.
Active and reactive energy, import/export, tariffs 1-4, tariff controll via inputs and communication.

Description	Bbn 7392696 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
3 x 230/400 V AC, 2 output, 2 input, RS-485	001830	B24 352 - 100	2CMA100183R1000		0.270	1
3 x 230/400 V AC, 2 output, 2 input, M-Bus	001847	B24 353 - 100	2CMA100184R1000		0.290	1

Energy efficiency
EQ meters C series

The EQ meters, C series are truly compact meters for single phase and three phase metering. The C series is mounted on a DIN rail and is suitable for installation in distribution boards and small consumer units.

Only one or three module wide, the C series is a very compact meter for single phase and three phase applications. The meters have an LCD with large digits showing energy register and instrumentation values. The meters have a wide temperature range which makes it possible to install the meters in many locations. Navigating the meters are easily done via the push-button below the display. The exceptional low power consumption of the meters, less than 0,3 W and 0,6 W at 230 V AC, makes them economical in the long run - an important feature specially for large meter populations.

The C series meters support reading of instrument values. A number of electrical properties can be read:
- Power factor
- Active power
- Current
- Voltage

The C series meters have an output that can be used as pulse output or alarm output. The alarm quantity and levels is easily configured on the meter with the push button. The output can be used for controlling external apparatus like a contactor or an alarm indicator (connected via an external relay).

The C series meters are type approved according to IEC and MID. MID is the Measuring Instruments Directive 2014/32/EU from the European Commission. The type approval is according to standards that covers all relevant technical aspects of the meter. These include climate conditions, electromagnetic compatibility (EMC), electrical requirements, mechanical requirements and accuracy.

MID versions have initial verification according to annex F of the Measuring Instruments Directive.

Energy efficiency

EQ meters C series

C series

Technical features		
	C11	**C13**
Voltage/current inputs		
Nominal voltage	230 V AC	3x230/400 V AC
Voltage range	230 V AC (-20% - +15%)	3x230/400 V AC (-20% - +15%)
Power dissipation voltage circuits	7.4 VA (0.3 W) at 230 V	1.5 VA (0.6 W) total at 230 V
Power dissipation current circuits	0.04 VA (0.04 W) at I_b and I_{ref}	0.04 VA (0.04 W) per phase at I_b and I_{ref}
Base current I_b	5 A	
Rated current I_n	-	
Reference current I_{ref}	5 A	
Transitional current I_{tr}	0.5 A	
Maximum current I_{max}	40 A	
Minimum current I_{min}	0.25 A	
Starting current I_{st}	< 20 mA	
Terminal wire area	0.5 - 10 mm^2	0.5 - 10 mm^2
Recommended tightening torque	0.8 Nm	
General data		
Frequency	50 or 60 Hz ± 5%	
Accuracy Class	B (Cl.1)	
Active energy	1%	
Display of energy	6 digit LCD	7 digits LCD
Communication		
Terminal wire area	-	
Recommended tightening torque	-	
Pulse indicator (LED)		
Pulse frequency	1000 (imp/kWh)	
Pulse length	40 ms	
Environmental		
Operating temperature	- 25°C - +70°C	
Storage temperature	- 25°C - +85°C	
Humidity	75% yearly average, 95% on 30 days/year	
Resistance to fire and heat	Terminal 960°C, cover 650°C (IEC 60695-2-1)	
Resistance to water and dust	IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529.	
Mechanical environment	Class M2 in accordance with the Measuring Instrument Directive (MID). (2014/32/EU).	
Electromagnetic environment	Class E2 in accordance with the Measuring Instrument Directive (MID), (2014/32/EU).	

Technical features		
	C11	**C13**
Outputs		
Type	Transistor	
Current	2 - 100 mA	
Voltage	5 - 40 V DC	
Pulse output frequency	100 or 1000 (imp/kWh)	
Pulse length	100 ms	
Terminal wire area	0.5 - 10 mm^2	0.5 - 6 mm^2
Recommended tightening torque	0.8 Nm	0.25 Nm
EMC compatibility		
Impulse voltage test	6 kV 1.2/50 µs (IEC 60060-1)	
Surge voltage test	4 kV 1.2/50 µs (IEC 61000-4-5)	
Fast transient burn test	4 kV (IEC 61000-4-4)	
Immunity to electromagneti HF-fields	80 MHz - 2 GHz at 10 V/m (IEC 61000-4-3)	
Immunity to conducted disturbance	150 kHz - 80 MHz, (IEC 61000-4-6)	
Immunity to disturbance with harmonics	2kHz - 150kHz	
Radio frequency emission	EN 55022, class B (CISPR22)	
Electrostatic discharge	15 kV (IEC 61000-4-2)	
Standards	IEC 62052-11, IEC 62053-21 class 1, GB/T 17215.211-2006, GBT 17215.321-2008 class 1, GB 4208-2008, EN 50470-1, EN 50470-3 category B	
Mechanical		
Material	Glass reinforced polycarbonate	
Dimensions		
Width	17,5 mm	54 mm
Height	111 mm	122 mm
Depth	65 mm	65 mm
DIN modules	1	3

Energy efficiency

EQ meters C series

C11

Direct connected electricity meter up to 40 A. IEC approval. Instrument values. Alarm function. Optional - Verified and approved according to MID.D.

EQ meters single phase electricity meter, 1 DIN, 40 A

Class B (Cl.1) with functionality level Steel. Active energy						
Description	**Bbn**	**Order details**		**Price**	**Weight**	**Pack**
	7392696			**1 piece**	**1 piece**	**unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
1 x 230 V AC, Pulse output 1000 imp/kWh	035712	C11 110 - 101*)	2CMA103571R1000		0.070	1
Class 1 with functionality level Steel. Active energy						
1 x 230 V AC, Pulse output 1000 imp/kWh	035729	C11 110 – 301	2CMA103572R1000		0.070	1

C13

Direct connected electricity meter. IEC approval. 3 elementmetering. Instrument values. Alarm function. Optional - Verified and approved according to MID.

EQ meters three phase electricity meter, 3 DIN, 40 A

For direct connection up to 40 A. Class B (Cl.1) with functionality level Steel. Active energy						
Description	**Bbn**	**Order details**		**Price**	**Weight**	**Pack**
	7392696			**1 piece**	**1 piece**	**unit**
	EAN	**Type code**	**Order code**		**kg**	**pc.**
3 x 230/400 V AC, Pulse output 1000 imp/kWh	035743	C13 110 - 101*)	2CMA103574R1000		0.170	1
For direct connection up to 40 A. Class 1 with functionality level Steel. Active energy						
3 x 230/400 V AC, Pulse output 1000 imp/kWh	035750	C13 110 - 301	2CMA103575R1000		0.170	1

*) MID approval according to Module B and F

Energy efficiency

EQmatic and EQ meters G series

QA/S 3.16.1

QA/S 3.64.1

Energy Analyzer, M-Bus, MDRC

NEW

Compact and web-based stand-alone devices for energy management applications. For monitoring, logging, displaying and analyzing consumption data of up to 16 or 64 electricity, gas, water or heat meters via M-Bus. Automatic detection for ABB EQ meters (A/B-Series). Access to the device via web browser. The user interface provides graphical analysis functions, e.g. dashboard, historical data, instantaneous values, benchmark functions, cost allocation according to consumer groups and more.

Description	Order details		Price	Weight	Pack
			1 piece	1 piece	unit
	EAN	Type code	Order code	kg	pc.
64 Devices	4016779997768	QA/S 3.64.1	2CDG110227R0011	0.15	1
16 Devices		QA/S 3.16.1	2CDG110226R0011	0.15	1

QA/S 4.xx.1

Energy Analyzer, Modbus RTU, MDRC

NEW

Compact and web-based stand-alone devices for energy management applications. For monitoring, logging, displaying and analyzing consumption data of up to 16 or 64 electricity, gas, water or heat meters via Modbus RTU. Automatic detection for ABB EQ meters (A/B-Series). Access to the device via web browser. The user interface provides graphical analysis functions, e.g. dashboard, historical data, instantaneous values, benchmark functions, cost allocation according to consumer groups and more.

Description	Order details		Price	Weight	Pack
			1 piece	1 piece	unit
	EAN	Type code	Order code	kg	pc.
Modbus RTU, 16 Devices		QA/S 4.16.1	2CDG110228R0011	0.15	1
Modbus RTU, 64 Devices		QA/S 4.64.1	2CDG110229R0011	0.15	1

Energy efficiency

EQmatic and EQ meters G series

G13

EQ meters G series

G13 is the Ethernet gateway that will make data collection from a meter network very convenient. communication is performed using JSON (JavaScript Object Notation) on the Ethernet side. The gateway is also equipped with a webserver that provides a detailed overview of all meters installed in a network as well as the possibility to perform advanced configurations of the meters and read-out data. High data security is obtained by encryption using SSL (Secure Sockets Layer).

The gateway communicates with EQ meters over EQ bus, a communication protocol based on the IEC standards (DLMS/cosem), using RS-485, and can also work as an M-Bus master for M-Bus enabled ABB meters.

Communication protocols on the meter side: EQ bus over RS-485, M-Bus and ABB IR port. Communication protocols on the system side: Ethernet with JSON. built-in webserver for meter reading and meter management.

Description	Order details		Price	Weight	Pack
			1 piece	1 piece	unit
	EAN	Type code	Order code	kg	pc.
100 - 240 V AC	7392696705523	G13 100-000	2CMA170552R1000	0.190	1

ZS/S 1.1

Meter Interface Module, KNX

It records consumption and measured values of the electrical energy consumption meters. Using an infra-red interface, the ABB energy meter types of the A- and B-series are incorporated. The information and data which is read can be used, for example, for cost centre accounting, energy optimisation, monitoring of installations and visualisation.

Description	Order details		Price	Weight	Pack
			1 piece	1 piece	unit
	EAN	Type code	Order code	kg	pc.
KNX meter module	4016779662079	ZS/S 1.1	2CDG110083R0011	0.100	1

EQ meters

A step toward environmental improvement and fair cost allocation

Improving energy efficiency starts with metering. Find out where energy is being wasted and keep track of tenants' individual energy patterns. With EQ meters you gain control and can allocate costs to tenants or any type of energy users. Act responsibly and install an EQ meter today! Read more under Modular DIN Rail Products on **abb.com/lowvoltage.**

Energy efficiency

Analogue and digital instruments selection table

Measure	Technology	Mounting	Insertion	Characteristics	Accessories	Type	
Voltage	Analogue	3 modules	Direct	a.c. and d.c.	MCV voltage switches	VLM page 8/45	
		48x48, 72x72, 96x96	Direct		MCV voltage switches	VLM-1 VLM-2 page 8/50	
		48x48, 72x72, 96x96	Indirect		TV voltage transformers MCV voltage switches	VLM1-TV VLM2-TV page 8/50	
	Digital	3 modules	Direct	a.c. and d.c. Auxiliary supply 230 V a.c.	MCV voltage switches	VLMD page 8/42	
		36x72	Direct		MCV voltage switches	VLMD P page 8/43	
Current	Analogue	3 modules	Direct	a.c. and d.c.	MCA current switches	AMT page 8/45	
			Indirect		CT a.c. current transformer SNT shunt for d.c. SCL interchangeable scale MCA current switches	AMT1/A AMT2 page 8/46	
		48x48, 72x72, 96x96	Direct		MCA current switches	AMT1-A1 AMT2-A2 page 8/52	
			Indirect		CT a.c. current transformer SNT shunt for d.c. SCL interchangeable scale MCA current switches	AMT1-A1 AMT1-A5 AMT2-A2 page 8/52	
	Digital	3 modules	Indirect	a.c. and d.c. Auxiliary supply 230 V a.c.	CT a.c. current transformer SNT shunt for d.c. MCA current switches	AMTD page 8/42	
		36x72	Indirect		CT a.c. current transformer SNT shunt for d.c. MCA current switches	AMTD P page 8/43	
Frequency	Analogue	3 modules	Direct	a.c.		FRZ1 page 8/46	
		48x48, 72x72, 96x96	Direct			FRZ page 8/54	
	Digital	3 modules	Direct	Auxiliary supply 230 V a.c.		FRZ-DIG page 8/42	

Energy efficiency

Modular digital instruments

Digital instruments

Technical features		
Power supply	[V]	230 V a.c.
Rated frequency	[Hz]	50÷60
Ammeter full scale value	[A]	5, 20, 25, 40, 60, 100, 150, 200, 250, 400, 600, 999
Voltmeter full scale value	[V]	600
Frequency meter range	[Hz]	35...400
Tripping delay	[s]	1, 5, 10, 20, 30
Hysteresis	[%]	5, 10, 20, 30 set threshold
Output pins		3-4
Output relay		NO
Rated voltage relay	[V]	230 V a.c.
Rated current relay	[A]	AC1 16, AC15 3
Relay configuration		NO relay closes in alarm status
		NC relay opens in alarm status, positive safety
Overload	[In/Vn]	1, 2
Accuracy class	[%]	±0,5 full scale ±1digit at 25 °C
Max. signal input value for ammeters		5 A a.c./60 mV d.c.
Display		3 digit LED display
Operating temperature	[°C]	-10...+55
Storage temperature	[°C]	-40...+70
Protection degree		IP20
Power consumption	[VA]	4
Modules		3
Overall dimensions front panel devices	[mm]	36x72x61.5 (51.5 depth inside the switchboard)
Standard		IEC EN 61010

Energy efficiency

Modular digital instruments

VLMD

AMTD

FRZ

Modular digital instruments

The wide range of modular digital instruments starts with single-phase mono-function measurement devices for measuring voltage, current and frequency.
The range is composed by a voltmeter for a.c./d.c. voltage monitoring, two ammeter for a.c. and d.c. current, and a frequency meter. Ammeters measure in indirect insertion thanks to measuring accessories, like current transformer for a.c. and shunt for d.c.
The full-scale value is programmable by the user, according to the current flow on the primary windings.

Version	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
a.c./d.c. digital voltmeter	620402	VLMD-1-2	2CSM110000R1011		0,300	1
a.c. digital ammeter	620501	AMTD-1	2CSM320000R1011		0,300	1
d.c. digital ammeter	620600	AMTD-2	2CSM420000R1011		0,300	1
Digital frequency meter	620709	FRZ-DIG	2CSM710000R1011		0,300	1

Modular digital instruments with alarm relay

The range is widened by three additional devices with extended features: one voltmeter and two ammeters, trip the internal relay to signal an alarm condition if the measured parameter exceeds or falls below a programmable threshold. The measured maximum and minimum peak values are stored in the non-volatile instrument's memory.
The contact type is NO, so that the contact is open when the instrument is powered off, but it is possible to obtain positive safety operation setting, directly on the instrument, the NC relay contact type.
The instrument with relay can be used to signal the exceeding or the fall below a certain threshold, but not for both functions simultaneously.

Version	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
a.c./d.c. digital voltmeter with alarm relay	746935	VLMD-1-2-R	2CSM274693R1011		0,300	1
a.c. digital ammeter with alarm relay	747734	AMTD-1-R	2CSM274773R1011		0,300	1
d.c. digital ammeter with alarm relay	610731	AMTD-2-R			0,300	1

Energy efficiency

Front panel digital instruments

VLMD P

Front-panel digital instruments

The wide range of front-panel digital instruments starts with single-phase mono-function measurement devices for measuring voltage and current.
The range is composed by a voltmeter for a.c./d.c. voltage monitoring, and two ammeter for a.c. and d.c. current. Ammeters measure in indirect insertion thanks to measuring accessories, like current transformer for a.c. and shunt for d.c.
The full-scale value is programmable by the user, according to the current flow on the primary windings.

Version	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
a.c./d.c. digital voltmeter	136057	VLMD P	2CSG213605R4011		0,300	1
a.c. digital ammeter	136156	AMTD-1 P	2CSG213615R4011		0,300	1
d.c. digital ammeter	136255	AMTD-2 P	2CSG213625R4011		0,300	1

AMTD-_ P

Front-panel digital instruments with alarm relay

The range is widened by three additional devices with extended features: one voltmeter and two ammeters that trip the internal relay to signal an alarm condition if the measured parameter exceeds or falls below a programmable threshold. The measured maximum and minimum peak values are stored in the non-volatile instrument's memory.
The contact type is NO, so that the contact is open when the instrument is powered off, but it is possible to obtain positive safety operation setting, directly on the instrument, the NC relay contact type.
The instrument with relay can be used to signal the exceeding or the fall below a certain threshold, but not for both functions simultaneously.

Version	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
a.c./d.c. digital voltmeter with alarm relay	136354	VLMD-R P	2CSG213635R4011		0,300	1
a.c. digital ammeter with alarm relay	136453	AMTD-1-R P	2CSG213645R4011		0,300	1
d.c. digital ammeter with alarm relay	136552	AMTD-2-R P	2CSG213655R4011		0,300	1

Energy efficiency

Analogue instruments selection table

Instrument mounting	a.c / d.c.	Size	Full-scale value Visualization	Instrument type		Scale type	
Modular	a.c.	-	90°	AMT1/A1		SCL 1	
		-	78°	AMT1/A5		SCL 1/A5	
	d.c.	-	90°	AMT2		SCL 2	
Front-panel	a.c.	48x48 mm	90°	AMT1-A1/48		SCL-A1 ... /48	
			78°	AMT1-A5/48		SCL-A5 ... /48	
		72x72 mm	90°	AMT1-A1/72		SCL-A1 ... /72	
			78°	AMT1-A5/72		SCL-A5 ... /72	
		96x96 mm	90°	AMT1-A1/96		SCL-A1 ... /96	
			78°	AMT1-A5/96		SCL-A5 ... /96	
	d.c.	48x48 mm	90°	AMT2-A2/48		SCL-A2 ... /48	
		72x72 mm	90°	AMT2-A2/72		SCL-A2 ... /72	
		96x96 mm	90°	AMT2-A2/96		SCL-A2 ... /96	

Analogue instruments with scales

The range of mono-function analogue instruments, employable in single-phase networks, is composed of measurement devices performing the measure and visualization of one electrical parameter: voltage, current and frequency.
The range of voltmeters, both in modular and front-panel versions, is composed by devices fully equipped with the proper scale, even when the use of a voltage transformer is required. The connection, whether it's direct or indirect using VT, allows the immediate visualization of the measures on the display.
The range of ammeters is composed of devices for direct and indirect connection to the network. The devices directly connected to the network are fully equipped with proper scale, while the devices that require a current transformer or a shunt, need to be combined with a separate scale to be mounted on the front of the instrument.
The wide range of scales for ammeters allows the employability of the latter even in application with high nominal current, up to 10000 A a.c.

Energy efficiency

Modular analogue instruments

2CSC400497F0001

VLM1

2CSC400517F0201

AMT1

Technical features			
Rated voltage Un		[V]	a.c. 300, 500; d.c. 100, 300
Rated currents in a.c.	Direct reading	[A]	full scale values 5...30
	Indirect reading		full scale values 5...2500
Rated currents in d.c.	Direct reading	[A]	full scale values 0.1...30
	Indirect reading		full scale values 5...500
Frequency		[Hz]	50/60
Overload capacity		[%]	20 compared to the voltage or to the rated current
Accuracy class		[%]	1.5 (0.5 for frequency meters)
Ammeters power consumption		[VA]	5 A: 0.3 VA; 10 A: 0.6 VA; 25 A:1 VA; 30 A: 1.2 VA
Voltmeters power consumption		[VA]	300 V: 1.5 VA; 500 V: 4 VA
Frequency meters power consumption		[VA]	<1.5 VA
Modules		[No.]	3
Protection degree			IP20
Standards			EN 60051

The range of modular analogue instruments is composed by mono-function measurement devices employable in single-phase networks. It includes voltmeters, ammeters and frequency meters. In particular, the range of ammeters is composed of devices fully equipped with the appropriate scale in the range between 5 A and 30 A. In case of greater current values, the range features devices to be used together with the proper scale and CT according to the application.

Modular analogue instruments for alternating current

Suitable for direct or indirect measurement through the appropriate accessories.

Voltmeters: direct connection						
Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
300 V	007906	VLM1/300	2CSM110190R1001		0.200	1
500 V	000006	VLM1/500	2CSM110220R1001		0.200	1

Ammeters: direct connection						
Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
5 A	000709	AMT1/5	2CSM310030R1001		0.200	1
10 A	000105	AMT1/10	2CSM310040R1001		0.200	1
15 A	000204	AMT1/15	2CSM310050R1001		0.200	1
20 A	000303	AMT1/20	2CSM310060R1001		0.200	1
25 A	000402	AMT1/25	2CSM310070R1001		0.200	1
30 A	000501	AMT1/30	2CSM310080R1001		0.200	1

Energy efficiency

Modular analogue instruments

VLM2

AMT2

Ammeters without scale: connection using CT.../5

Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
A1	000600	AMT1/A1	2CSM320250R1001		0.200	1
A5	000808	AMT1/A5	2CSM320260R1001		0.200	1

Frequency meters: 45-65 Hz, 100/280 V

Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
	008606	FRZ1	2CSM810310R1001		0.200	1

Modular analogue instruments for direct current

Voltmeters: direct connection

Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
100 V	008002	VLM2/100	2CSM210130R1001		0.200	1
300 V	008101	VLM2/300	2CSM210190R1001		0.200	1

Ammeters: direct connection

Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
10 mA	028307	AMT2/0.01	2CSM410330R1001		0.200	1
100 mA	028406	AMT2/0.1	2CSM410340R1001		0.200	1
1000 mA	028505	AMT2/1	2CSM410020R1001		0.200	1
5 A	028604	AMT2/5	2CSM410030R1001		0.200	1
10 A	028703	AMT2/10	2CSM410040R1001		0.200	1
15 A	028802	AMT2/15	2CSM410050R1001		0.200	1
20 A	028901	AMT2/20	2CSM410060R1001		0.200	1
25 A	029007	AMT2/25	2CSM410070R1001		0.200	1
30 A	029106	AMT2/30	2CSM410080R1001		0.200	1

Ammeters without scale: connection using shunt

Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
	029205	AMT2	2CSM420270R1001		0.200	1

Energy efficiency

Scales for modular analogue ammeters

2CSC400521F0201

SCL

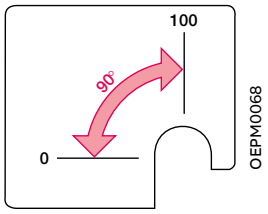
Scales for modular analogue ammeters

Scales SCL 1/A1 for AMT1						
Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
A1-5A	001201	SCL 1/5	2CSM110021R1041		0.010	10
A1-10A	001300	SCL 1/10	2CSM110032R1041		0.010	10
A1-20A	001409	SCL 1/20	2CSM110075R1041		0.010	10
A1-25A	030706	SCL 1/25	2CSM110096R1041		0.010	10
A1-30A	001508	SCL 1/30	2CSM110107R1041		0.010	10
A1-40A	030805	SCL 1/40	2CSM110128R1041		0.010	10
A1-50A	001607	SCL 1/50	2CSM110149R1041		0.010	10
A1-60A	030904	SCL 1/60	2CSM110159R1041		0.010	10
A1-75A	031000	SCL 1/75	2CSM110169R1041		0.010	10
A1-80A	001706	SCL 1/80	2CSM110179R1041		0.010	10
A1-100A	001805	SCL 1/100	2CSM110189R1041		0.010	10
A1-150A	001904	SCL 1/150	2CSM110209R1041		0.010	10
A1-200A	002000	SCL 1/200	2CSM110229R1041		0.010	10
A1-250A	031109	SCL 1/250	2CSM110249R1041		0.010	10
A1-300A	002109	SCL 1/300	2CSM110259R1041		0.010	10
A1-400A	002208	SCL 1/400	2CSM110279R1041		0.010	10
A1-500A	002307	SCL 1/500	2CSM110299R1041		0.010	10
A1-600A	031208	SCL 1/600	2CSM110309R1041		0.010	10
A1-800A	002406	SCL 1/800	2CSM110329R1041		0.010	10
A1-1000A	002505	SCL 1/1000	2CSM110339R1041		0.010	10
A1-1500A	274704	SCL 1/1500	2CSM110359R1041		0.010	10
A1-2000A	274803	SCL 1/2000	2CSM110379R1041		0.010	10
A1-2500A	274902	SCL 1/2500	2CSM110389R1041		0.010	10

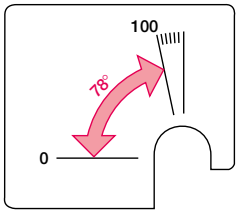
Scale SCL 1/A5 for AMT1						
Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
A5-5A	031307	SCL 1/A5/5	2CSM120021R1041		0.010	10
A5-10A	031406	SCL 1/A5/10	2CSM120032R1041		0.010	10
A5-20A	031505	SCL 1/A5/20	2CSM120075R1041		0.010	10
A5-30A	031604	SCL 1/A5/30	2CSM120107R1041		0.010	10
A5-50A	031703	SCL 1/A5/50	2CSM120149R1041		0.010	10
A5-80A	031802	SCL 1/A5/80	2CSM120179R1041		0.010	10
A5-100A	031901	SCL 1/A5/100	2CSM120189R1041		0.010	10
A5-150A	032007	SCL 1/A5/150	2CSM120209R1041		0.010	10

Energy efficiency

Scales for modular analogue ammeters



SCL1/A1/100
Full scale at 90°



SCL1/A5/100
Full scale at 78°
(with extra scale)

Scales SCL 2/A1 for AMT2

Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
A1-5A	032106	SCL 2/5	2CSM230025R1041		0.010	10
A1-6A	032205	SCL 2/6	2CSM230345R1041		0.010	10
A1-10A	032304	SCL 2/10	2CSM230035R1041		0.010	10
A1-20A	032403	SCL 2/20	2CSM230075R1041		0.010	10
A1-30A	032502	SCL 2/30	2CSM230105R1041		0.010	10
A1-50A	032601	SCL 2/50	2CSM230145R1041		0.010	10
A1-80A	032700	SCL 2/80	2CSM230179R1041		0.010	10
A1-100A	032809	SCL 2/100	2CSM230189R1041		0.010	10
A1-150A	032908	SCL 2/150	2CSM230209R1041		0.010	10
A1-200A	033004	SCL 2/200	2CSM230229R1041		0.010	10
A1-250A	033103	SCL 2/250	2CSM230249R1041		0.010	10
A1-300A	033202	SCL 2/300	2CSM230259R1041		0.010	10
A1-400A	033301	SCL 2/400	2CSM230279R1041		0.010	10
A1-500A	033400	SCL 2/500	2CSM230299R1041		0.010	10

Energy efficiency

Front-panel analogue instruments

Front panel analogue instruments

Technical features		
Rated max. reference voltage for insulation	[V]	600 (a.c meters), 300 (d.c. meters)
Test voltage	[V]	2000 eff. (50 Hz/1 min)
Accuracy class		1.5 (0.5 for frequency meters)
Overload capacity ①		
- ammetric windings		up to In x 10/< sec. up to In x 2/permanent
- voltmetric windings		up to Un x 2/< 5 sec. up to Un x 1.2/permanent
Operating temperature	[°C]	-10...+55
Storage temperature	[°C]	-40...+70
Average and max. relative humidity (DIN 40040) ②		65% (yearly average) 85% (+35 °C/60 days a year)
Vibration resistance (IEC 50-1)	[g (9.81 m/s)]	0.08-1.8 (0.35 mm/10-55 Hz; 3 axis/6 h)
Degree of protection		IP52 indoors
		IP00 on the terminals (IEC 144. DIN 40050)
		IP20 with suitable terminal covers
Materials		
- cases and front edge		self-extinguishing thermosetting material in accordance with UL94 V-0, fungus and termite resistant
- pointers (DIN 43802) ③		molded aluminium
- terminals		brass
Assembly		vertical/horizontal with special screw-on brackets ④
Dimensions W x H x D (DIN 43700/43718)	[mm]	48 x 48 X 53 72 x 72 x 53 96 x 96 X 53
Applicable standards		IEC EN 61010-1

① The overload can be greater for instruments enabled by a CT because the transformer generally keeps secondary current peaks to within 10 In.
② Tropicalization enables the instruments to withstand up to 95% max. relative humidity (+35 °C/60 days). In accordance with DIN standard 40040, they must be protected against any penetration of humidity inside the device. Terminals, screws, washers, bolts and magnets are galvanically protected against rust, while the electrical circuits are painted with the special Multicolor PC52 varnish.
③ The pointer damping time is 1 second. The recorded values are cleared by pressing the control provided.
④ With 0.5 mm -19 mm thick panels, the screws must be attached in the fixing position nearest to the front edge of the measuring device, whereas the 20 mm - 39 mm thick panels require the screws to be fixed in the position furthest away from the front edge.

Energy efficiency

Front-panel analogue instruments

VLM-1 48

Available in both alternating current and direct current versions, the front-panel mono-function measurement devices come in three standard sizes, 48 mm x 48 mm, 72 mm x 72 mm and 96 mm x 96 mm (special versions available on request), employable in single-phase networks. The range is composed of voltmeters and ammeters for a.c. and d.c. applications, and frequency meters for a.c. applications. Ammeters without scale for indirect connection must be completed with the appropriate scale, chosen according to the full-scale value.

Front-panel analogue voltmeters for alternating current

Size	Inser-tion	Scale	VT type	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		V a.c.		EAN	Type code	Order code	piece	kg	pc.
48	D	50		541707	VLM-1-50/48	2CSG111100R4001			1
48	D	60		541806	VLM-1-60/48	2CSG111110R4001			1
48	D	80		541905	VLM-1-80/48	2CSG111120R4001			1
48	D	100		542001	VLM-1-100/48	2CSG111130R4001			1
48	D	150		542100	VLM-1-150/48	2CSG111150R4001			1
48	D	200		542209	VLM-1-200/48	2CSG111160R4001			1
48	D	250		542308	VLM-1-250/48	2CSG111180R4001			1
48	D	300		542407	VLM-1-300/48	2CSG111190R4001			1
48	D	400		542506	VLM-1-400/48	2CSG111210R4001			1
48	D	500		542605	VLM-1-500/48	2CSG111220R4001			1
48	D	600		542704	VLM-1-600/48	2CSG111230R4001			1
48	I	200	110/100	743705	VLM1-TV-110-100/200/48	2CSG121140R4001			1
48	I	300	230/100	542803	VLM1-TV-230-100/300/48	2CSG121170R4001			1
48	I	500	380/100	542902	VLM1-TV-380-100/500/48	2CSG121200R4001			1
48	I	500	400/100	743804	VLM1-TV-400-100/500/48	2CSG121210R4001			1
48	I	600	500/100	543008	VLM1-TV-500-100/600/48	2CSG121220R4001			1
48	I	800	600/100	743903	VLM1-TV-600-100/800/48	2CSG121230R4001			1
48	I	1100	1000/100	744009	VLM1-TV-1000-100/1100/48	2CSG121240R4001			1

Size	Inser-tion	Scale	VT type	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		V a.c.		EAN	Type code	Order code	piece	kg	pc.
72	D	50		544104	VLM-1-50/72	2CSG112100R4001			1
72	D	60		544203	VLM-1-60/72	2CSG112110R4001			1
72	D	80		544302	VLM-1-80/72	2CSG112120R4001			1
72	D	100		544401	VLM-1-100/72	2CSG112130R4001			1
72	D	150		544500	VLM-1-150/72	2CSG112150R4001			1
72	D	200		544609	VLM-1-200/72	2CSG112160R4001			1
72	D	250		544708	VLM-1-250/72	2CSG112180R4001			1
72	D	300		544807	VLM-1-300/72	2CSG112190R4001			1
72	D	400		544906	VLM-1-400/72	2CSG112210R4001			1
72	D	500		545002	VLM-1-500/72	2CSG112220R4001			1
72	D	600		545101	VLM-1-600/72	2CSG112230R4001			1
72	I	200	110/100	744108	VLM1-TV-110-100/200/72	2CSG122140R4001			1
72	I	300	230/100	545200	VLM1-TV-230-100/300/72	2CSG122170R4001			1
72	I	500	380/100	545309	VLM1-TV-380-100/500/72	2CSG122200R4001			1
72	I	500	400/100	744207	VLM1-TV-400-100/500/72	2CSG122210R4001			1
72	I	600	500/100	545408	VLM1-TV-500-100/600/72	2CSG122220R4001			1
72	I	800	600/100	744306	VLM1-TV-600-100/800/72	2CSG122230R4001			1
72	I	1100	1000/100	744405	VLM1-TV-1000-100/1100/72	2CSG122240R4001			1

VLM-1 96

VLM-2 48

Size	Inser-tion	Scale	VT type	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		V a.c.		EAN	Type code	Order code	piece	kg	pc.
96	D	50		546702	VLM-1-50/96	2CSG113100R4001			1
96	D	60		546801	VLM-1-60/96	2CSG113110R4001			1
96	D	80		546900	VLM-1-80/96	2CSG113120R4001			1
96	D	100		547006	VLM-1-100/96	2CSG113130R4001			1
96	D	150		547105	VLM-1-150/96	2CSG113150R4001			1
96	D	200		547204	VLM-1-200/96	2CSG113160R4001			1
96	D	250		547303	VLM-1-250/96	2CSG113180R4001			1
96	D	300		547402	VLM-1-300/96	2CSG113190R4001			1
96	D	400		547501	VLM-1-400/96	2CSG113210R4001			1
96	D	500		547600	VLM-1-500/96	2CSG113220R4001			1
96	D	600		547709	VLM-1-600/96	2CSG113230R4001			1
96	I	200	110/100	744504	VLM1-TV-110-100 /200/96	2CSG123140R4001			1
96	I	300	230/100	547808	VLM1-TV-230-100 /300/96	2CSG123170R4001			1
96	I	500	380/100	547907	VLM1-TV-380-100 /500/96	2CSG123200R4001			1
96	I	500	400/100	744603	VLM1-TV-400-100 /500/96	2CSG123210R4001			1
96	I	600	500/100	548003	VLM1-TV-500-100 /600/96	2CSG123220R4001			1
96	I	800	600/100	744702	VLM1-TV-600-100 /800/96	2CSG123230R4001			1
96	I	1100	1000/100	744801	VLM1-TV-1000-100 /1100/96	2CSG123240R4001			1

Front-panel analogue voltmeters for direct current

Size	Inser-tion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		V d.c.	EAN	Type code	Order code	piece	kg	pc.
48	D	10	549307	VLM-2-10/48	2CSG211040R4001			1
48	D	15	549406	VLM-2-15/48	2CSG211050R4001			1
48	D	25	549505	VLM-2-25/48	2CSG211070R4001			1
48	D	40	549604	VLM-2-40/48	2CSG211090R4001			1
48	D	60	549703	VLM-2-60/48	2CSG211110R4001			1
48	D	80	549802	VLM-2-80/48	2CSG211120R4001			1
48	D	100	549901	VLM-2-100/48	2CSG211130R4001			1
48	D	150	550006	VLM-2-150/48	2CSG211150R4001			1
48	D	200	550105	VLM-2-200/48	2CSG211160R4001			1
48	D	250	550204	VLM-2-250/48	2CSG211180R4001			1
48	D	400	550303	VLM-2-400/48	2CSG211210R4001			1
48	D	600	550402	VLM-2-600/48	2CSG211230R4001			1

D: direct connection
I: indirect connection with VT, CT and shunt, according to the type

Energy efficiency

Front-panel analogue instruments

VLM-2 96

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		V d.c.	EAN	Type code	Order code	piece	kg	pc.
72	D	10	551003	VLM-2-10/72	2CSG212040R4001			1
72	D	15	551102	VLM-2-15/72	2CSG212050R4001			1
72	D	25	551201	VLM-2-25/72	2CSG212070R4001			1
72	D	40	551300	VLM-2-40/72	2CSG212090R4001			1
72	D	60	551409	VLM-2-60/72	2CSG212110R4001			1
72	D	80	551508	VLM-2-80/72	2CSG212120R4001			1
72	D	100	551607	VLM-2-100/72	2CSG212130R4001			1
72	D	150	551706	VLM-2-150/72	2CSG212150R4001			1
72	D	200	551805	VLM-2-200/72	2CSG212160R4001			1
72	D	250	551904	VLM-2-250/72	2CSG212180R4001			1
72	D	400	552000	VLM-2-400/72	2CSG212210R4001			1
72	D	600	552109	VLM-2-600/72	2CSG212230R4001			1

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		V d.c.	EAN	Type code	Order code	piece	kg	pc.
96	D	10	552703	VLM-2-10/96	2CSG213040R4001			1
96	D	15	552802	VLM-2-15/96	2CSG213050R4001			1
96	D	25	552901	VLM-2-25/96	2CSG213070R4001			1
96	D	40	553007	VLM-2-40/96	2CSG213090R4001			1
96	D	60	553106	VLM-2-60/96	2CSG213110R4001			1
96	D	80	553205	VLM-2-80/96	2CSG213120R4001			1
96	D	100	553304	VLM-2-100/96	2CSG213130R4001			1
96	D	150	553403	VLM-2-150/96	2CSG213150R4001			1
96	D	200	553502	VLM-2-200/96	2CSG213160R4001			1
96	D	250	553601	VLM-2-250/96	2CSG213180R4001			1
96	D	400	553700	VLM-2-400/96	2CSG213210R4001			1
96	D	600	553809	VLM-2-600/96	2CSG213230R4001			1

D: direct connection
I: indirect connection with VT, CT and shunt, according to the type

AMT1-A1 48

Front-panel analogue ammeters for alternating current

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		A a.c.	EAN	Type code	Order code	piece	kg	pc.
48	D	1	543107	AMT1-A1-1/48	2CSG311020R4001			1
48	D	5	543206	AMT1-A1-5/48	2CSG311030R4001			1
48	D	10	543305	AMT1-A1-10/48	2CSG311040R4001			1
48	D	15	543404	AMT1-A1-15/48	2CSG311050R4001			1
48	D	20	543503	AMT1-A1-20/48	2CSG311060R4001			1
48	D	25	543602	AMT1-A1-25/48	2CSG311070R4001			1
48	D	30	543701	AMT1-A1-30/48	2CSG311080R4001			1
48	D	40	543800	AMT1-A1-40/48	2CSG311090R4001			1
48	I	SCL-A1	543909	AMT1-A1/48	2CSG321250R4001			1
48	I	SCL-A5	544005	AMT1-A5/48	2CSG321260R4001			1

AMT1-A1 72

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		A a.c.	EAN	Type code	Order code	piece	kg	pc.
72	D	1	545507	AMT1-A1-1/72	2CSG312020R4001			1
72	D	5	545606	AMT1-A1-5/72	2CSG312030R4001			1
72	D	10	545705	AMT1-A1-10/72	2CSG312040R4001			1
72	D	15	545804	AMT1-A1-15/72	2CSG312050R4001			1
72	D	20	545903	AMT1-A1-20/72	2CSG312060R4001			1
72	D	25	546009	AMT1-A1-25/72	2CSG312070R4001			1
72	D	30	546108	AMT1-A1-30/72	2CSG312080R4001			1
72	D	40	546207	AMT1-A1-40/72	2CSG312090R4001			1
72	D	50	546306	AMT1-A1-50/72	2CSG312100R4001			1
72	D	60	546405	AMT1-A1-60/72	2CSG312110R4001			1
72	I	SCL-A1	546504	AMT1-A1/72	2CSG322250R4001			1
72	I	SCL-A5	546603	AMT1-A5/72	2CSG322260R4001			1

AMT1-A1 96

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		A a.c.	EAN	Type code	Order code	piece	kg	pc.
96	D	1	548102	AMT1-A1-1/96	2CSG313020R4001			1
96	D	5	548201	AMT1-A1-5/96	2CSG313030R4001			1
96	D	10	548300	AMT1-A1-10/96	2CSG313040R4001			1
96	D	15	548409	AMT1-A1-15/96	2CSG313050R4001			1
96	D	20	548508	AMT1-A1-20/96	2CSG313060R4001			1
96	D	25	548607	AMT1-A1-25/96	2CSG313070R4001			1
96	D	30	548706	AMT1-A1-30/96	2CSG313080R4001			1
96	D	40	548805	AMT1-A1-40/96	2CSG313090R4001			1
96	D	50	548904	AMT1-A1-50/96	2CSG313100R4001			1
96	D	60	549000	AMT1-A1-60/96	2CSG313110R4001			1
96	I	SCL-A1	549109	AMT1-A1/96	2CSG323250R4001			1
96	I	SCL-A5	549208	AMT1-A5/96	2CSG323260R4001			1

D: direct connection
I: indirect connection with VT, CT and shunt, according to the type

AMT2-A2 48

Front-panel analogue ammeters for direct current

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		A d.c.	EAN	Type code	Order code	piece	kg	pc.
48	D	0,5	550501	AMT2-A2-0,5/48	2CSG411010R4001			1
48	D	1	550600	AMT2-A2-1/48	2CSG411020R4001			1
48	D	5	550709	AMT2-A2-5/48	2CSG411030R4001			1
48	D	10	550808	AMT2-A2-10/48	2CSG411040R4001			1
48	I	SCL-A2	550907	AMT2-A2/48	2CSG421270R4001			1

Energy efficiency

Front-panel analogue instruments

AMT2-A2 72

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm		A d.c.	EAN	Type code	Order code	piece	kg	pc.
72	D	0,5	552208	AMT2-A2-0,5/72	2CSG412010R4001			1
72	D	1	552307	AMT2-A2-1/72	2CSG412020R4001			1
72	D	5	552406	AMT2-A2-5/72	2CSG412030R4001			1
72	D	10	552505	AMT2-A2-10/72	2CSG412040R4001			1
72	I	SCL-A2	552604	AMT2-A2/72	2CSG422270R4001			1

AMT2-A2 96

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
mm		A d.c.	EAN	Type code	Order code		kg	pc.
96	D	0,5	553908	AMT2-A2-0,5/96	2CSG413010R4001			1
96	D	1	554004	AMT2-A2-1/96	2CSG413020R4001			1
96	D	5	554103	AMT2-A2-5/96	2CSG413030R4001			1
96	D	10	554202	AMT2-A2-10/96	2CSG413040R4001			1
96	I	SCL-A2	554301	AMT2-A2/96	2CSG423270R4001			1

D: direct connection
I: indirect connection with VT, CT and shunt, according to the type

Front-panel analogue frequency meters

FRZ 48

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm			EAN	Type code	Order code	piece	kg	pc.
48	D	90°	555605	FRZ-90/48	2CSG811310R4001			1

FRZ 72

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm			EAN	Type code	Order code	piece	kg	pc.
72	D	90°	555704	FRZ-90/72	2CSG812310R4001			1
72	D	240°	555902	FRZ-240/72	2CSG812320R4001			1

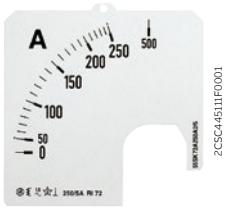
FRZ 96

Size	Insertion	Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
mm			EAN	Type code	Order code	piece	kg	pc.
96	D	90°	555803	FRZ-90/96	2CSG813310R4001			1
96	D	240°	556008	FRZ-240/96	2CSG813320R4001			1

D: direct connection
I: indirect connection with VT, CT and shunt, according to the type

Energy efficiency

Scales for front-panel analogue instrument



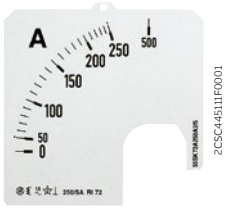
SCL

Scales for front-panel analogue ammeters

Scales 48 x 48 mm: SCL-A1 for AMT1-A1/48 a.c. ammeters						
Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
A a.c.	EAN	Type code	Order code	piece	kg	pc.
1	769408	SCL-A1-1/48	2CSG111010R5011		0.010	10
5	769507	SCL-A1-5/48	2CSG111021R5011		0.010	10
10	769606	SCL-A1-10/48	2CSG111032R5011		0.010	10
15	769705	SCL-A1-15/48	2CSG111054R5011		0.010	10
20	769804	SCL-A1-20/48	2CSG111075R5011		0.010	10
25	769903	SCL-A1-25/48	2CSG111096R5011		0.010	10
30	770008	SCL-A1-30/48	2CSG111107R5011		0.010	10
40	770107	SCL-A1-40/48	2CSG111128R5011		0.010	10
50	770206	SCL-A1-50/48	2CSG111149R5011		0.010	10
60	770305	SCL-A1-60/48	2CSG111159R5011		0.010	10
80	770404	SCL-A1-80/48	2CSG111179R5011		0.010	10
100	560500	SCL-A1-100/48	2CSG111189R5011		0.010	10
150	560609	SCL-A1-150/48	2CSG111209R5011		0.010	10
200	560708	SCL-A1-200/48	2CSG111229R5011		0.010	10
250	560807	SCL-A1-250/48	2CSG111249R5011		0.010	10
300	560906	SCL-A1-300/48	2CSG111259R5011		0.010	10
400	561002	SCL-A1-400/48	2CSG111279R5011		0.010	10
500	561101	SCL-A1-500/48	2CSG111299R5011		0.010	10
600	561200	SCL-A1-600/48	2CSG111309R5011		0.010	10
800	561309	SCL-A1-800/48	2CSG111329R5011		0.010	10
1000	561408	SCL-A1-1000/48	2CSG111339R5011		0.010	10
1500	561507	SCL-A1-1500/48	2CSG111359R5011		0.010	10
2000	561606	SCL-A1-2000/48	2CSG111379R5011		0.010	10
2500	561705	SCL-A1-2500/48	2CSG111389R5011		0.010	10
3000	561804	SCL-A1-3000/48	2CSG111399R5011		0.010	10
4000	561903	SCL-A1-4000/48	2CSG111409R5011		0.010	10
5000	562009	SCL-A1-5000/48	2CSG111419R5011		0.010	10
6000	562108	SCL-A1-6000/48	2CSG111429R5011		0.010	10
8000	562207	SCL-A1-8000/48	2CSG111439R5011		0.010	10
10000	562306	SCL-A1-10000/48	2CSG111449R5011		0.010	10

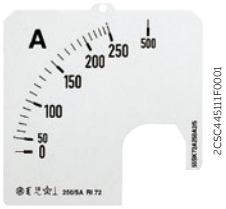
Energy efficiency

Scales for front-panel analogue instrument



SCL

Scales 48 x 48 mm: SCL-A5 for AMT1-A5/48 a.c. ammeters						
Scale	**Bbn 8012542**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
A a.c.	**EAN**	**Type code**	**Order code**	**piece**	**kg**	**pc.**
1	770503	SCL-A5-1/48	2CSG121010R5011		0.010	10
5	770602	SCL-A5-5/48	2CSG121021R5011		0.010	10
10	770701	SCL-A5-10/48	2CSG121032R5011		0.010	10
15	770800	SCL-A5-15/48	2CSG121054R5011		0.010	10
20	770909	SCL-A5-20/48	2CSG121075R5011		0.010	10
25	771005	SCL-A5-25/48	2CSG121096R5011		0.010	10
30	771104	SCL-A5-30/48	2CSG121107R5011		0.010	10
40	771203	SCL-A5-40/48	2CSG121128R5011		0.010	10
50	771302	SCL-A5-50/48	2CSG121149R5011		0.010	10
60	771401	SCL-A5-60/48	2CSG121159R5011		0.010	10
80	771500	SCL-A5-80/48	2CSG121179R5011		0.010	10
100	562405	SCL-A5-100/48	2CSG121189R5011		0.010	10
150	562504	SCL-A5-150/48	2CSG121209R5011		0.010	10
200	562603	SCL-A5-200/48	2CSG121229R5011		0.010	10
250	562702	SCL-A5-250/48	2CSG121249R5011		0.010	10
300	562801	SCL-A5-300/48	2CSG121259R5011		0.010	10
400	562900	SCL-A5-400/48	2CSG121279R5011		0.010	10
500	563006	SCL-A5-500/48	2CSG121299R5011		0.010	10
600	563105	SCL-A5-600/48	2CSG121309R5011		0.010	10
800	563204	SCL-A5-800/48	2CSG121329R5011		0.010	10
1000	563303	SCL-A5-1000/48	2CSG121339R5011		0.010	10
1500	563402	SCL-A5-1500/48	2CSG121359R5011		0.010	10
2000	563501	SCL-A5-2000/48	2CSG121379R5011		0.010	10
2500	563600	SCL-A5-2500/48	2CSG121389R5011		0.010	10
3000	563709	SCL-A5-3000/48	2CSG121399R5011		0.010	10
4000	563808	SCL-A5-4000/48	2CSG121409R5011		0.010	10
5000	563907	SCL-A5-5000/48	2CSG121419R5011		0.010	10
6000	564003	SCL-A5-6000/48	2CSG121429R5011		0.010	10
8000	564102	SCL-A5-8000/48	2CSG121439R5011		0.010	10
10000	564201	SCL-A5-10000/48	2CSG121449R5011		0.010	10



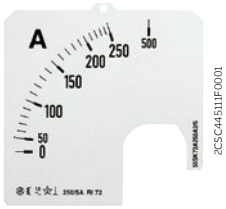
SCL

Scales 72 x 72 mm: SCL-A1 for AMT1-A1/72 a.c. ammeters

Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
A a.c.	EAN	Type code	Order code	piece	kg	pc.
1	771609	SCL-A1-1/72	2CSG112010R5011		0.010	10
5	771708	SCL-A1-5/72	2CSG112021R5011		0.010	10
10	771807	SCL-A1-10/72	2CSG112032R5011		0.010	10
15	771906	SCL-A1-15/72	2CSG112054R5011		0.010	10
20	772002	SCL-A1-20/72	2CSG112075R5011		0.010	10
25	772101	SCL-A1-25/72	2CSG112096R5011		0.010	10
30	772200	SCL-A1-30/72	2CSG112107R5011		0.010	10
40	772309	SCL-A1-40/72	2CSG112128R5011		0.010	10
50	772408	SCL-A1-50/72	2CSG112149R5011		0.010	10
60	772507	SCL-A1-60/72	2CSG112159R5011		0.010	10
80	772606	SCL-A1-80/72	2CSG112179R5011		0.010	10
100	572305	SCL-A1-100/72	2CSG112189R5011		0.010	10
150	572404	SCL-A1-150/72	2CSG112209R5011		0.010	10
200	572503	SCL-A1-200/72	2CSG112229R5011		0.010	10
250	572602	SCL-A1-250/72	2CSG112249R5011		0.010	10
300	572701	SCL-A1-300/72	2CSG112259R5011		0.010	10
400	572800	SCL-A1-400/72	2CSG112279R5011		0.010	10
500	572909	SCL-A1-500/72	2CSG112299R5011		0.010	10
600	573005	SCL-A1-600/72	2CSG112309R5011		0.010	10
800	573104	SCL-A1-800/72	2CSG112329R5011		0.010	10
1000	573203	SCL-A1-1000/72	2CSG112339R5011		0.010	10
1500	573302	SCL-A1-1500/72	2CSG112359R5011		0.010	10
2000	573401	SCL-A1-2000/72	2CSG112379R5011		0.010	10
2500	573500	SCL-A1-2500/72	2CSG112389R5011		0.010	10
3000	573609	SCL-A1-3000/72	2CSG112399R5011		0.010	10
4000	573708	SCL-A1-4000/72	2CSG112409R5011		0.010	10
5000	573807	SCL-A1-5000/72	2CSG112419R5011		0.010	10
6000	573906	SCL-A1-6000/72	2CSG112429R5011		0.010	10
8000	574002	SCL-A1-8000/72	2CSG112439R5011		0.010	10
10000	574101	SCL-A1-10000/72	2CSG112449R5011		0.010	10

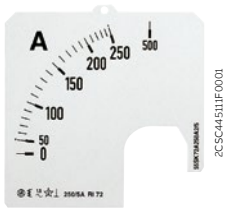
Energy efficiency

Scales for front-panel analogue instrument



SCL

Scales 72 x 72 mm: SCL-A5 for AMT1-A5/72 a.c. ammeters						
Scale	**Bbn 8012542**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
A a.c.	**EAN**	**Type code**	**Order code**	**piece**	**kg**	**pc.**
1	772705	SCL-A5-1/72	2CSG122010R5011		0.010	10
5	772804	SCL-A5-5/72	2CSG122021R5011		0.010	10
10	772903	SCL-A5-10/72	2CSG122032R5011		0.010	10
15	773009	SCL-A5-15/72	2CSG122054R5011		0.010	10
20	773108	SCL-A5-20/72	2CSG122075R5011		0.010	10
25	773207	SCL-A5-25/72	2CSG122096R5011		0.010	10
30	773306	SCL-A5-30/72	2CSG122107R5011		0.010	10
40	773405	SCL-A5-40/72	2CSG122128R5011		0.010	10
50	773504	SCL-A5-50/72	2CSG122149R5011		0.010	10
60	773603	SCL-A5-60/72	2CSG122159R5011		0.010	10
80	773702	SCL-A5-80/72	2CSG122179R5011		0.010	10
100	574200	SCL-A5-100/72	2CSG122189R5011		0.010	10
150	574309	SCL-A5-150/72	2CSG122209R5011		0.010	10
200	574408	SCL-A5-200/72	2CSG122229R5011		0.010	10
250	574507	SCL-A5-250/72	2CSG122249R5011		0.010	10
300	574606	SCL-A5-300/72	2CSG122259R5011		0.010	10
400	574705	SCL-A5-400/72	2CSG122279R5011		0.010	10
500	574804	SCL-A5-500/72	2CSG122299R5011		0.010	10
600	574903	SCL-A5-600/72	2CSG122309R5011		0.010	10
800	575009	SCL-A5-800/72	2CSG122329R5011		0.010	10
1000	575108	SCL-A5-1000/72	2CSG122339R5011		0.010	10
1500	575207	SCL-A5-1500/72	2CSG122359R5011		0.010	10
2000	575306	SCL-A5-2000/72	2CSG122379R5011		0.010	10
2500	575405	SCL-A5-2500/72	2CSG122389R5011		0.010	10
3000	575504	SCL-A5-3000/72	2CSG122399R5011		0.010	10
4000	575603	SCL-A5-4000/72	2CSG122409R5011		0.010	10
5000	575702	SCL-A5-5000/72	2CSG122419R5011		0.010	10
6000	575801	SCL-A5-6000/72	2CSG122429R5011		0.010	10
8000	575900	SCL-A5-8000/72	2CSG122439R5011		0.010	10
10000	576006	SCL-A5-10000/72	2CSG122449R5011		0.010	10



SCL

Scales 96 x 96 mm: SCL-A1 for AMT1-A1/96 a.c. ammeters

Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
A a.c.	EAN	Type code	Order code	piece	kg	pc.
1	773801	SCL-A1-1/96	2CSG113010R5011		0.010	10
5	773900	SCL-A1-5/96	2CSG113021R5011		0.010	10
10	774006	SCL-A1-10/96	2CSG113032R5011		0.010	10
15	774105	SCL-A1-15/96	2CSG113054R5011		0.010	10
20	774204	SCL-A1-20/96	2CSG113075R5011		0.010	10
25	774303	SCL-A1-25/96	2CSG113096R5011		0.010	10
30	774402	SCL-A1-30/96	2CSG113107R5011		0.010	10
40	774501	SCL-A1-40/96	2CSG113128R5011		0.010	10
50	774600	SCL-A1-50/96	2CSG113149R5011		0.010	10
60	774709	SCL-A1-60/96	2CSG113159R5011		0.010	10
80	774808	SCL-A1-80/96	2CSG113179R5011		0.010	10
100	584100	SCL-A1-100/96	2CSG113189R5011		0.010	10
150	584209	SCL-A1-150/96	2CSG113209R5011		0.010	10
200	584308	SCL-A1-200/96	2CSG113229R5011		0.010	10
250	584407	SCL-A1-250/96	2CSG113249R5011		0.010	10
300	584506	SCL-A1-300/96	2CSG113259R5011		0.010	10
400	584605	SCL-A1-400/96	2CSG113279R5011		0.010	10
500	584704	SCL-A1-500/96	2CSG113299R5011		0.010	10
600	584803	SCL-A1-600/96	2CSG113309R5011		0.010	10
800	584902	SCL-A1-800/96	2CSG113329R5011		0.010	10
1000	585008	SCL-A1-1000/96	2CSG113339R5011		0.010	10
1500	585107	SCL-A1-1500/96	2CSG113359R5011		0.010	10
2000	585206	SCL-A1-2000/96	2CSG113379R5011		0.010	10
2500	585305	SCL-A1-2500/96	2CSG113389R5011		0.010	10
3000	585404	SCL-A1-3000/96	2CSG113399R5011		0.010	10
4000	585503	SCL-A1-4000/96	2CSG113409R5011		0.010	10
5000	585602	SCL-A1-5000/96	2CSG113419R5011		0.010	10
6000	585701	SCL-A1-6000/96	2CSG113429R5011		0.010	10
8000	585800	SCL-A1-8000/96	2CSG113439R5011		0.010	10
10000	585909	SCL-A1-10000/96	2CSG113449R5011		0.010	10

Energy efficiency

Scales for front-panel analogue instrument

SCL

Scales 96 x 96 mm: SCL-A5 for AMT1-A5/96 a.c. ammeters

Scale	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
A a.c.	EAN	Type code	Order code	piece	kg	pc.
1	774907	SCL-A5-1/96	2CSG123010R5011		0.010	10
5	775003	SCL-A5-5/96	2CSG123021R5011		0.010	10
10	775102	SCL-A5-10/96	2CSG123032R5011		0.010	10
15	775201	SCL-A5-15/96	2CSG123054R5011		0.010	10
20	775300	SCL-A5-20/96	2CSG123075R5011		0.010	10
25	775409	SCL-A5-25/96	2CSG123096R5011		0.010	10
30	775508	SCL-A5-30/96	2CSG123107R5011		0.010	10
40	775607	SCL-A5-40/96	2CSG123128R5011		0.010	10
50	775706	SCL-A5-50/96	2CSG123149R5011		0.010	10
60	775805	SCL-A5-60/96	2CSG123159R5011		0.010	10
80	775904	SCL-A5-80/96	2CSG123179R5011		0.010	10
100	586005	SCL-A5-100/96	2CSG123189R5011		0.010	10
150	586104	SCL-A5-150/96	2CSG123209R5011		0.010	10
200	586203	SCL-A5-200/96	2CSG123229R5011		0.010	10
250	586302	SCL-A5-250/96	2CSG123249R5011		0.010	10
300	586401	SCL-A5-300/96	2CSG123259R5011		0.010	10
400	586500	SCL-A5-400/96	2CSG123279R5011		0.010	10
500	586609	SCL-A5-500/96	2CSG123299R5011		0.010	10
600	586708	SCL-A5-600/96	2CSG123309R5011		0.010	10
800	586807	SCL-A5-800/96	2CSG123329R5011		0.010	10
1000	586906	SCL-A5-1000/96	2CSG123339R5011		0.010	10
1500	587002	SCL-A5-1500/96	2CSG123359R5011		0.010	10
2000	587101	SCL-A5-2000/96	2CSG123379R5011		0.010	10
2500	587200	SCL-A5-2500/96	2CSG123389R5011		0.010	10
3000	587309	SCL-A5-3000/96	2CSG123399R5011		0.010	10
4000	587408	SCL-A5-4000/96	2CSG123409R5011		0.010	10
5000	587507	SCL-A5-5000/96	2CSG123419R5011		0.010	10
6000	587606	SCL-A5-6000/96	2CSG123429R5011		0.010	10
8000	587705	SCL-A5-8000/96	2CSG123439R5011		0.010	10
10000	587804	SCL-A5-10000/96	2CSG123449R5011		0.010	10

SCL

Scales 48 x 48 mm: SCL-A2 for AMT2-A2/48 d.c. ammeters						
Scale	**Bbn 8012542**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
A d.c.	**EAN**	**Type code**	**Order code**	**piece**	**kg**	**pc.**
20	595908	SCL-A2-20/48	2CSG231075R5011		0.010	10
100	596004	SCL-A2-100/48	2CSG231189R5011		0.010	10
150	596103	SCL-A2-150/48	2CSG231209R5011		0.010	10
200	596202	SCL-A2-200/48	2CSG231229R5011		0.010	10
250	596301	SCL-A2-250/48	2CSG231249R5011		0.010	10
300	596400	SCL-A2-300/48	2CSG231259R5011		0.010	10
400	596509	SCL-A2-400/48	2CSG231279R5011		0.010	10
500	596608	SCL-A2-500/48	2CSG231299R5011		0.010	10
600	596707	SCL-A2-600/48	2CSG231309R5011		0.010	10
800	596806	SCL-A2-800/48	2CSG231329R5011		0.010	10
1000	596905	SCL-A2-1000/48	2CSG231339R5011		0.010	10

Scales 72 x 72 mm: SCL-A2 for AMT2-A2/72 d.c. ammeters						
Scale	**Bbn 8012542**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
A d.c.	**EAN**	**Type code**	**Order code**	**piece**	**kg**	**pc.**
20	597001	SCL-A2-20/72	2CSG232075R5011		0.010	10
100	597100	SCL-A2-100/72	2CSG232189R5011		0.010	10
150	597209	SCL-A2-150/72	2CSG232209R5011		0.010	10
200	597308	SCL-A2-200/72	2CSG232229R5011		0.010	10
250	597407	SCL-A2-250/72	2CSG232249R5011		0.010	10
300	597506	SCL-A2-300/72	2CSG232259R5011		0.010	10
400	597605	SCL-A2-400/72	2CSG232279R5011		0.010	10
500	597704	SCL-A2-500/72	2CSG232299R5011		0.010	10
600	597803	SCL-A2-600/72	2CSG232309R5011		0.010	10
800	597902	SCL-A2-800/72	2CSG232329R5011		0.010	10
1000	598008	SCL-A2-1000/72	2CSG232339R5011		0.010	10

Scales 96 x 96 mm: SCL-A2 for AMT2-A2/96 d.c. ammeters						
Scale	**Bbn 8012542**	**Order details**		**Price 1**	**Weight 1 piece**	**Pack unit**
A d.c.	**EAN**	**Type code**	**Order code**	**piece**	**kg**	**pc.**
20	598107	SCL-A2-20/96	2CSG233075R5011		0.010	10
100	598206	SCL-A2-100/96	2CSG233189R5011		0.010	10
150	598305	SCL-A2-150/96	2CSG233209R5011		0.010	10
200	598404	SCL-A2-200/96	2CSG233229R5011		0.010	10
250	598503	SCL-A2-250/96	2CSG233249R5011		0.010	10
300	598602	SCL-A2-300/96	2CSG233259R5011		0.010	10
400	598701	SCL-A2-400/96	2CSG233279R5011		0.010	10
500	598800	SCL-A2-500/96	2CSG233299R5011		0.010	10
600	598909	SCL-A2-600/96	2CSG233309R5011		0.010	10
800	599005	SCL-A2-800/96	2CSG233329R5011		0.010	10
1000	599104	SCL-A2-1000/96	2CSG233339R5011		0.010	10

Energy efficiency

Voltmetric and current switches

MCV

Technical features		
Insulation voltage	[V]	600
Rated thermal current	[A]	12
Mechanic operations	[No.]	1000000
Power consumption	[VA]	0.23
Modules	[No.]	3

MCV - MCA voltmetric and current switches

Cam rotary switches are suitable for mounting on EN 50022 rail. In three-phase systems they enable the use of a single measurement instrument (single-phase) for viewing the current or voltage value set through the switch itself.

MCA

Voltmeter switches							
Range	Power loss	Bbn 7392696	Order details		Price 1	Weight 1 piece	Pack unit
	W	EAN	Type code	Order code	piece	kg	pc.
L1, L2, L3	0.5	52246 9	MCV 4	1SCA022404R4740		0.095	1
L1, L2, L3, N	0.5	52243 8	MCV 7	1SCA022647R7840		0.110	1

Current switches							
Range	Power loss	Bbn 7392696	Order details		Price 1	Weight 1 piece	Pack unit
	W	EAN	Type code	Order code	piece	kg	pc.
0-1-2-3	0.5	52245 2	MCA 4	1SCA022404R4821		0.110	1

QCA 48

Front panel QCV - QCA voltage and current switches

For use in three-phase systems, to allow a single device to measure the voltage and current settings adjusted by the switches.

QCV 48

Measure	Position	Bbn 7392696	Order details		Price 1	Weight 1 piece	Pack unit
		EAN	Type code	Order code	piece	kg	pc.
Voltage	4	527990	QCV-4/48	1SCA022780R0770		0.150	1
Current	4	528003	QCA-4/48	1SCA022780R0690		0.150	1
Voltage	7	527983	QCV-7/48	1SCA022780R0850		0.150	1

Energy efficiency

E 233 hour counters

E 233

Technical features		
	AC equipment	DC equipment
Rated voltage	50 Hz: 24 V, 230 V 60 Hz: 24 V, 120 V, 240 V	DC 12 V ... 48 V
Voltage tolerance	±15 %	±10 %
Power consumption	1.5 VA	ca. 20 mW (at 12 V DC)
Ambient temperature	–15 °C/5 °F... +50 °C/122 °F	–10 °C/14 °F ... +50 °C/122 °F
Counting capacity	99.999 h	99.999 h
Reading accuracy	0.01 h	0.1 h
Operation display	fast running	LED blinking
Protection against electric shock	according to DIN VDE 0106 Part 100 (BGV A2)	according to DIN VDE 0106 Part 100 (BGV A2)
Terminal size	up to 10 mm^2	up to 10 mm^2

E 233 electro-mechanical hour counters

Hour counters are used to record operating times as well as to determine idle times and off times of industrial machinery and plant, for commercial purposes or in domestic installations. No reset functionality.

Rated voltage	Bbn 4012233	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
AC 230 V/50 Hz	63000 4	E 233-230	2CDE100000R1601		0.05	10
AC 24 V/50 Hz	63010 3	E 233-24	2CDE400000R1601		0.05	10
DC 12 V ... 48 V	63020 2	E 233-12/48	2CDE300010R1601		0.05	10
AC 240 V/60 Hz	36590 1 ①	E 233-240/60 Hz	2CDE100021R1601		0.05	10
AC 120 V/60 Hz	36600 7 ①	E 233-120/60 Hz	2CDE600021R1601		0.05	10
AC 24 V/60 Hz	36610 6 ①	E 233- 24/60 Hz	2CDE400021R1601		0.05	10

① Bbn No. 4016779

Energy efficiency

HMT hour counters

HMT

Technical features		
Rated voltage Un	[V]	a.c. 24 a.c. 110 a.c. 230
Displayed digits (in hours)	[n°]	99,999.9 (for HMT1 and HMT11)
Accuracy class	[%]	0.5
Frequency	[Hz]	50
Power consumption	[W]	1.1...2.2
Modules	[No.]	2

HMT electro-mechanical hour counters

Equipped with 7-digit indicator (99.999,99) and available in two modules.
They cannot be reset.

Rated voltage	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
V AC	EAN	Type code	Order code	piece	kg	pc.
24	030300	HMT 1/24	2CSM111000R1601		0.200	6
110	030409	HMT 1/110	2CSM121000R1601		0.200	6
220	030508	HMT 1/220	2CSM131000R1601		0.200	6
230	030607	HMT 11	2CSM133000R1601		0.200	1

Energy efficiency

TMD temperature control units

TMD

Technical features			
Auxiliary supply	Alternating current	[V]	20÷250 ±15%
	Direct current	[Hz]	115-230-400 50-60
Power consumption		[VA]	4 max
Input	Sensor		PT100 RTD (not included)
	Type		3 wires (2 and 4 wires types are also supported)
	Error		1 degree every 0,39 Ω
	Measure range	[°C]	0...220 ± 2
	Compensation	[Ω]	20 max
	Trip delay/hysteresis	[s/°C]	5/2
Output	Number		4
	Type		NO-CO-NC
	Vmax	[V]	12 d.c.
	Imaxww	[A]	8 (resistive load)
	Functions		Alarm, trip, cooling, auto-test
	Programmable functions		Alarm, tip, hold, fan, temp. max
Display			7 segments LED
Connections	Terminals		removable screw
	Max section	[mm²]	2.5
Insulation voltage		[V]	2500/50 Hz - 1 min
Protection degree	Front		IP52
	Rear		IP20
Operation temperature		[°C]	-10...+55, relative humidity max 90%
Storage temperature		[°C]	-25...+80
Reference			IEC EN 50081-2, IEC EN 50082-2, IEC EN 60255

Temperature control units

TMD are used measure and control the temperature levels and efficiency of electric machines, power transformers, motors, etc.
The temperature is measured by four PT100 type sensors. Each measuring channel has two programmable alarm thresholds which trip two output relays to remotely signal that a critical temperature has been reached.
The measured values and any alarm conditions are shown on the dual 3-digit display on the front of the device, which also has five programming keys for configuring its operation.
The control unit is also able to store in memory maximum values and a log of all trip-events.

Temperature measured	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
	EAN	Type code	Order code	piece	kg	pc.
4	560203	TMD-4/96	2CSG524000R2021		0.8	1

Energy efficiency

Current transformers selection table

Breaker choice							
Modular	S200, S280, S290, S700, S750DR, S800						
Tmax	XT1, XT2, XT3, XT4, T4320					T5	
Emax							

Installation choice							
Fixing system	DIN rail	DIN rail	DIN rail, cable or bus bar		Bus bar	DIN rail, cable or bus bar, base mounted with feet	
Rated current (A)	CTA	TRF M	CT PRO XT		CT30	CT MAX	
			Standard	SELV version		Standard	SELV version
5	2CS-G111020R1141 CTA/5						
10	2CS-G111030R1141 CTA/10						
15	2CS-G111040R1141 CTA/15						
20	2CS-G111050R1141 CTA/20						
25	2CS-G111060R1141 CTA/25						
40	2CS-G111080R1141 CTA/40 (cl. 0.5)	2CS-M100050R1111 TRFM/40	2CSG225745R1101 CT PRO XT 40	2CSG225845R1101 CT PRO XT 40 SELV			
50	2CS-G111090R1141 CTA/50 (cl. 0.5)		2CSG225755R1101 CT PRO XT 50	2CSG225855R1101 CT PRO XT 50 SELV			
60	2CSG111100R1141 CTA/60 (cl. 0.5)	2CS-M100070R1111 TRFM/60 (cl. 1)	2CSG225765R1101 CT PRO XT 60	2CSG225865R1101 CT PRO XT 60 SELV			
80	2CSG111110R1141 CTA/80 (cl. 0.5)		2CSG225775R1101 CT PRO XT 80	2CSG225875R1101 CT PRO XT 80 SELV			
100	2CSG111120R1141 CTA/100 (cl. 0.5)	2CS-M100090R1111 TRFM/100	2CSG225785R1101 CT PRO XT 100	2CSG225885R1101 CT PRO XT 100 SELV	2CS-G101100R1101 CT30/100 (cl. 3)		
150		2CSM100100R1111 TRFM/150	2CSG225795R1101 CT PRO XT 150	2CSG225895R1101 CT PRO XT 150 SELV	2CS-G101110R1101 CT30/150 (cl. 3)		
200			2CSG225805R1101 CT PRO XT 200	2CSG225905R1101 CT PRO XT 200 SELV			
250		2CSM100120R1111 TRFM/250	2CSG225815R1101 CT PRO XT 250	2CSG225915R1101 CT PRO XT 250 SELV	2CS-G101130R1101 CT30/250		
300			2CSG225825R1101 CT PRO XT 300	2CSG225925R1101 CT PRO XT 300 SELV		2CSG225945R1101 CT MAX 300	2CSG226005R1101 CT MAX 300 SELV

	T6,T7		T6,T7					
	E1.2, E2.2, E4.2			E2, E3, E4, E6	E2.2, E4.2, E6.2	E2.2, E4.2	E1.2	
				Bus bar	DIN rail, cable or bus bar, base mounted with feet		Bus bar	
	CT6	CT8	CT8V	CT80	CT12	CT12V	CT120	Class
								0,5
								0,5
								0,5
								0,5
								0,5
								3
								3
								3
								3
								1
								0,5
								0,5
	2CSG421130R1101 CT6/250			2CSG201130R1101 CT80/250				0,5
	2CSG421140R1101 CT6/300	2CSG521140R1101 CT8/300						0,5

Energy efficiency

Current transformers selection table

Breaker choice							
Modular	S200, S280, S290, S700, S750DR, S800						
Tmax	XT1, XT2, XT3, XT4, T4320					T5	
Emax							

Installation choice							
Fixing system	DIN rail	DIN rail	DIN rail, cable or bus bar		Bus bar	DIN rail, cable or bus bar, base mounted with feet	
Rated current (A)	CTA	TRF M	CT PRO XT		CT30	CT MAX	
			Standard	SELV version		Standard	SELV version
400		2CSM100140R1111 TRFM/400	2CSG225835R1101 CT PRO XT 400	2CSG225935R1101 CT PRO XT 400 SELV	2CS-G101150R1101 CT30/400	2CSG225955R1101 CT MAX 400	2CSG226015R1101 CT MAX 400 SELV
500						2CSG225965R1101 CT MAX 500	2CSG226025R1101 CT MAX 500 SELV
600		2CSM100160R1111 TRFM/600				2CSG225975R1101 CT MAX 600	2CSG226035R1101 CT MAX 600 SELV
800						2CSG225985R1101 CT MAX 800	2CSG226045R1101 CT MAX 800 SELV
1000						2CSG225995R1101 CT MAX 1000	2CSG226055R1101 CT MAX 1000 SELV
1200							
1250							
1500							
2000							
2500							
3000							
4000							
5000							
6000							

Primary choice							
	CTA	TRF M	CT PRO XT		CT30	CT MAX	
	Wound primary	Through primary			Split core trough primary	Through primary	
Through	8	29	18	18	–	30	30
primary max	–	–	20x10	20x10	–	30x15; 40x10	30x15; 40x10
section [mm]	–	–	–	–	3x80x10	–	–

T6,T7		T6,T7					
E1.2, E2.2, E4.2			E2, E3, E4, E6	E2.2, E4.2, E6.2	E2.2, E4.2	E1.2	
			Bus bar	DIN rail, cable or bus bar, base mounted with feet		Bus bar	
CT6	CT8	CT8V	CT80	CT12	CT12V	CT120	Class
2CSG421150R1101 CT6/400	2CSG521150R1101 CT8/400	2CSG631150R1101 CT8-V/400	2CSG201150R1101 CT80/400			2CSG401150R1101 CT120/400	0,5
2CSG421160R1101 CT6/500	2CSG521160R1101 CT8/500	2CSG631160R1101 CT8-V/500	2CSG201160R1101 CT80/500	2CSG721160R1101 CT12/500		2CSG401160R1101 CT120/500	0,5
2CSG421170R1101 CT6/600	2CSG521170R1101 CT8/600	2CSG631170R1101 CT8-V/600	2CSG201170R1101 CT80/600	2CSG721170R1101 CT12/600		2CSG401170R1101 CT120/600	0,5
2CSG421180R1101 CT6/800	2CSG521180R1101 CT8/800	2CSG631180R1101 CT8-V/800	2CSG201180R1101 CT80/800	2CSG721180R1101 CT12/800	2CSG831180R1101 CT12-V/800	2CSG401180R1101 CT120/800	0,5
2CSG421190R1101 CT6/1000	2CSG521190R1101 CT8/1000	2CSG631190R1101 CT8-V/1000	2CSG201190R1101 CT80/1000	2CSG721190R1101 CT12/1000	2CSG831190R1101 CT12-V/1000	2CSG401190R1101 CT120/1000	0,5
2CSG421200R1101 CT6/1200	2CSG521200R1101 CT8/1200	2CSG631200R1101 CT8-V/1200		2CSG721200R1101 CT12/1200	2CSG831200R1101 CT12-V/1200	2CSG401200R1101 CT120/1200	0,5
					2CSG831210R1101 CT12-V/1250		0,5
2CSG421220R1101 CT6/1500	2CSG521220R1101 CT8/1500	2CSG631220R1101 CT8-V/1500		2CSG721220R1101 CT12/1500	2CSG831220R1101 CT12-V/1500	2CSG401220R1101 CT120/1500	0,5
2CSG421230R1101 CT6/2000	2CSG521230R1101 CT8/2000	2CSG631230R1101 CT8-V/2000	2CSG301230R1101 CT80/2000	2CSG721230R1101 CT12/2000	2CSG831230R1101 CT12-V/2000		0,5
2CSG421240R1101 CT6/2500	2CSG521240R1101 CT8/2500	2CSG631240R1101 CT8-V/2500	2CSG301240R1101 CT80/2500	2CSG721240R1101 CT12/2500	2CSG831240R1101 CT12-V/2500		0,5
	2CSG521250R1101 CT8/3000			2CSG721250R1101 CT12/3000	2CSG831250R1101 CT12-V/3000		0,5
				2CSG721260R1101 CT12/4000	2CSG831260R1101 CT12-V/4000		0,5
				2CSG721270R1101 CT12/5000			0,5
				2CSG721280R1101 CT12/6000			0,5

CT6	CT8	CT8V	CT80	CT12	CT12V	CT120
Through primary			Split core trough primary	Through primary		Split core trough primary
50	2x30	2x35	–	2x50	3x35	–
60x20	80x30	–	–	80x50; 100x50; 125x50	–	–
–	–	80x30; 3x80x5	2x30x10	–	125x30, 3x100x10, 4x100x5, 4x125x5	4x120x10

Energy efficiency

CT measurement current transformers with through primary

CT

Technical features				
		CT...	CTO	TRFM
Standard secondary current	[A]	5 A		
Max. voltage for operation	[kV]	1,2		
Test voltage	[kV]	3 a 50 Hz/1min		
Residual current voltage at secundary terminals when security circuit intervenes (only SELV versions)		< 25 V rms		
Short circuit rated thermal current	[IpN]	40 per 1 sec.	60 per 1 sec.	40 per 1 sec.
Short circuit rated dynamic current	[Ith]	2,5 per 1 sec.		
Permanent overload	[IpN]	1,2		
Safety factor	[Fs]	from ≤ 2 to ≤ 10 depending on the type and capacity		
Frequency	[Hz]	50-60		
Air insulation class		Class E	B	E
Terminals		primary P1 - P2 (K - L); secondary s1 - s2 (k - l)		
		P1 (K) primary winding input		
		s1 (k) secondary winding input		
		P2 (L) primary winding output		
		s2 (l) secondary winding output		
Housing		Self-extinguishing thermoplastic resin V0		
Protection degree		IP30	IP20	IP20
Operating temperature	[°C]	-5...+50	-5...+50	-25...+50
Max. temperature on bars	[°C]	70°C		
Storage temperature	[°C]	-20...+80	-20...+80	-40...+80
Relative humidity		80%		
Reference standard		IEC EN 60044-1, IEC EN 61010-1		
Secondary protection circuit reference standards (only SELV versions)		IEC60364; IEC473.1.4; IEC556.3; CEI64-8-4;		
		CEI411.1.4.3; CEI411.5.2; CEI411.2; CEI473.1.4; CEI473.2.3		

CT and CTA current transformers

Used to transform primary currents (max. 6000 A) into .../5 A low secondary currents indirectly supplying power to analogue and digital measurement devices. They are available both with wound and through primary. In the first case they are provided along with the bar or the primary terminal; in the second case they have a hole to insert in the bar or the cable which forms the primary.

The rated current to the secondary windings is 5 A, in line with the offer of measuring devices. CT ../1 are not employable with ABB mono-function and multifunction measuring devices. The use of CT ../1 is needed in case of long wirings from CT secondary windings to the measuring device; nowadays, the wide use of communication protocols doesn't require the instrument to be installed far from the line to measure.

The new SELV versions of the CT PRO XT and CT MAX guarantee maximum safety against overvoltage and switchboard internal overheating thanks to the innovative electronic protection circuit which automatically short-circuit the CT secondary winding in case of accidental disconnection of its secondary terminals.

CT PRO XT

Standard type current transformers .../5 A with through primary

CT PRO XT .../5 A series, through primary								
Primary rated current Iprim	Accurancy class	Rated power	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
A		VA	EAN	Type code	Order code	piece	kg	pc.
40	3	2	257455	CT PRO XT 40	2CSG225745R1101		0.32	1
50	3	2	257554	CT PRO XT 50	2CSG225755R1101		0.32	1
60	3	2	257653	CT PRO XT 60	2CSG225765R1101		0.32	1
80	3	2	257752	CT PRO XT 80	2CSG225775R1101		0.32	1
100	1	3	257851	CT PRO XT 100	2CSG225785R1101		0.32	1
150	1	5	257950	CT PRO XT 150	2CSG225795R1101		0.32	1
200	1	5	258056	CT PRO XT 200	2CSG225805R1101		0.32	1
250	0.5	5	258155	CT PRO XT 250	2CSG225815R1101		0.32	1
300	0.5	5	258155	CT PRO XT 300	2CSG225825R1101		0.32	1
400	0.5	5	258353	CT PRO XT 400	2CSG225835R1101		0.32	1

CT PRO XT SELV .../5 A series, through primary								
Primary rated current Iprim	Accurancy class	Rated power	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
A		VA	EAN	Type code	Order code	piece	kg	pc.
40	3	2	258452	CT PRO XT 40 SELV	2CSG225845R1101		0.37	1
50	3	2	258551	CT PRO XT 50 SELV	2CSG225855R1101		0.37	1
60	3	2	258650	CT PRO XT 60 SELV	2CSG225865R1101		0.37	1
80	3	2	258650	CT PRO XT 80 SELV	2CSG225875R1101		0.37	1
100	1	3	258858	CT PRO XT 100 SELV	2CSG225885R1101		0.37	1
150	1	5	258957	CT PRO XT 150 SELV	2CSG225895R1101		0.37	1
200	1	5	259053	CT PRO XT 200 SELV	2CSG225905R1101		0.37	1
250	0.5	5	259152	CT PRO XT 250 SELV	2CSG225915R1101		0.37	1
300	0.5	5	259251	CT PRO XT 300 SELV	2CSG225925R1101		0.37	1
400	0.5	5	259350	CT PRO XT 400 SELV	2CSG225935R1101		0.37	1

CT PRO XT series

Through primary		max section [mm]
cable	○	18
horizontal bar	▭	20x10
vertical bar	▯	-

Energy efficiency

CT measurement current transformers with through primary

CT MAX

CT MAX .../5 A series, through primary

Primary rated current Iprim A	Accuracy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
300	0,5	4	259459	CT MAX 300	2CSG225945R1101		0,32	1
400	0,5	5	259558	CT MAX 400	2CSG225955R1101		0,32	1
500	0,5	6	259558	CT MAX 500	2CSG225965R1101		0,32	1
600	0,5	10	259657	CT MAX 600	2CSG225975R1101		0,32	1
800	0,5	10	259657	CT MAX 800	2CSG225985R1101		0,32	1
1000	0,5	10	259954	CT MAX 1000	2CSG225995R1101		0,32	1

CT MAX SELV .../5 A series, through primary

Primary rated current Iprim A	Accuracy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
300	0,5	4	260059	CT MAX 300 SELV	2CSG226005R1101		0,37	1
400	0,5	5	260158	CT MAX 400 SELV	2CSG226015R1101		0,37	1
500	0,5	6	260257	CT MAX 500 SELV	2CSG226025R1101		0,37	1
600	0,5	10	260356	CT MAX 600 SELV	2CSG226035R1101		0,37	1
800	0,5	10	260455	CT MAX 800 SELV	2CSG226045R1101		0,37	1
1000	0,5	10	260554	CT MAX 1000 SELV	2CSG226055R1101		0,37	1

CT MAX series

Through primary		max section [mm]
cable	◯	30
horizontal bar	▭	30x15, 40x10
vertical bar	▯	-

CT6

CT8

CT8/V

CT6 .../5 A series, through primary

Primary rated current Iprim A	Accurancy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
250	0.5	5	605508	CT6/250	2CSG421130R1101		1.000	1
300	0.5	5	605607	CT6/300	2CSG421140R1101		1.000	1
400	0.5	6	605706	CT6/400	2CSG421150R1101		1.000	1
500	0.5	6	605805	CT6/500	2CSG421160R1101		1.000	1
600	0.5	10	605904	CT6/600	2CSG421170R1101		1.000	1
800	0.5	10	606000	CT6/800	2CSG421180R1101		1.000	1
1000	0.5	20	606109	CT6/1000	2CSG421190R1101		1.000	1
1200	0.5	20	606208	CT6/1200	2CSG421200R1101		1.000	1
1500	0.5	30	606307	CT6/1500	2CSG421220R1101		1.000	1
2000	0.5	30	606406	CT6/2000	2CSG421230R1101		1.000	1
2500	0.5	30	606505	CT6/2500	2CSG421240R1101		1.000	1

CT8 .../5 A series, through primary

Primary rated current Iprim A	Accurancy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
300	0.5	5	606604	CT8/300	2CSG521140R1101		1.000	1
400	0.5	6	606703	CT8/400	2CSG521150R1101		1.000	1
500	0.5	10	606802	CT8/500	2CSG521160R1101		1.000	1
600	0.5	10	606901	CT8/600	2CSG521170R1101		1.000	1
800	0.5	10	607007	CT8/800	2CSG521180R1101		1.000	1
1000	0.5	10	607106	CT8/1000	2CSG521190R1101		1.000	1
1200	0.5	15	607205	CT8/1200	2CSG521200R1101		1.000	1
1500	0.5	20	607304	CT8/1500	2CSG521220R1101		1.000	1
2000	0.5	20	607403	CT8/2000	2CSG521230R1101		1.000	1
2500	0.5	20	607502	CT8/2500	2CSG521240R1101		1.000	1
3000	0.5	20	607601	CT8/3000	2CSG521250R1101		1.000	1

CT8-V .../5 A series, through primary

Primary rated current Iprim A	Accurancy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
400	0.5	6	608707	CT8-V/400	2CSG631150R1101		0.800	1
500	0.5	10	608806	CT8-V/500	2CSG631160R1101		0.800	1
600	0.5	10	608905	CT8-V/600	2CSG631170R1101		0.800	1
800	0.5	10	609001	CT8-V/800	2CSG631180R1101		0.800	1
1000	0.5	10	609100	CT8-V/1000	2CSG631190R1101		0.800	1
1200	0.5	10	609209	CT8-V/1200	2CSG631200R1101		0.800	1
1500	0.5	10	609308	CT8-V/1500	2CSG631220R1101		0.800	1
2000	0.5	20	609407	CT8-V/2000	2CSG631230R1101		0.800	1
2500	0.5	20	609506	CT8-V/2500	2CSG631240R1101		0.800	1

CT6 series

Through primary		max section [mm]
cable	◯	50
horizontal bar	▭	60x20
vertical bar	▯	-

CT8 series

Through primary		max section [mm]
cable	◯	2x30
horizontal bar	▭	80x30
vertical bar	▯	-

CT8-V series

Through primary		max section [mm]
cable	◯	2x35
horizontal bar	▭	-
vertical bar	▯	80x30 3x80x5

Energy efficiency

CT measurement current transformers with through primary

CT12

CT12/V

CT12 .../5 A series, through primary

Primary rated current Iprim A	Accurancy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
500	0.5	10	607700	CT12/500	2CSG721160R1101		1.600	1
600	0.5	10	607809	CT12/600	2CSG721170R1101		1.600	1
800	0.5	15	607908	CT12/800	2CSG721180R1101		1.600	1
1000	0.5	20	608004	CT12/1000	2CSG721190R1101		1.600	1
1200	0.5	20	608103	CT12/1200	2CSG721200R1101		1.600	1
1500	0.5	20	608202	CT12/1500	2CSG721220R1101		1.600	1
2000	0.5	30	608301	CT12/2000	2CSG721230R1101		1.600	1
2500	0.5	40	608400	CT12/2500	2CSG721240R1101		1.600	1
3000	0.5	40	608509	CT12/3000	2CSG721250R1101		1.600	1
4000	0.5	50	608608	CT12/4000	2CSG721260R1101		2.000	1
5000	0.5	50	745600	CT12/5000	2CSG721270R1101		3.000	1
6000	0.5	50	745709	CT12/6000	2CSG721280R1101		3.000	1

CT12-V .../5 A series, through primary

Primary rated current Iprim A	Accurancy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
800	0.5	10	609605	CT12-V/800	2CSG831180R1101		0.700	1
1000	0.5	10	609704	CT12-V/1000	2CSG831190R1101		0.700	1
1200	0.5	10	609803	CT12-V/1200	2CSG831200R1101		0.700	1
1250	0.5	10	609902	CT12-V/1250	2CSG831210R1101		0.700	1
1500	0.5	12	610007	CT12-V/1500	2CSG831220R1101		0.700	1
2000	0.5	15	610106	CT12-V/2000	2CSG831230R1101		1.000	1
2500	0.5	20	610205	CT12-V/2500	2CSG831240R1101		1.000	1
3000	0.5	20	610304	CT12-V/3000	2CSG831250R1101		1.000	1
4000	0.5	20	745808	CT12-V/4000*	2CSG831260R1101		1.000	1

* Air insulation class: Class B

CT12 series

Through primary		max section [mm] up to 4000A	max section [mm] 5000 and 6000 A
cable	○	2x50	-
horizontal bar	▭	125x50	120x10, 2x120x10, 3x120x10
vertical bar	▯	-	200x10, 2x200x10, 3x200x10

CT12-V series

Through primary		max section [mm]
cable	○	3x35
horizontal bar	▭	-
vertical bar	▯	125x30, 3x100x10, 4x125x5

Energy efficiency

CTA measurement current transformers with wound primary

CTA/25

Standard type current transformers .../5 A with wound primary

CTA .../5 A series, wound primary with insertion on Ø8 MA bolt

Primary rated current Iprim A	Accurancy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
5	0.5	5	661306	CTA/5	2CSG111020R1141		0.290	1
10	0.5	5	661405	CTA/10	2CSG111030R1141		0.290	1
15	0.5	5	661504	CTA/15	2CSG111040R1141		0.290	1
20	0.5	5	661603	CTA/20	2CSG111050R1141		0.290	1
25	0.5	5	661702	CTA/25	2CSG111060R1141		0.290	1
40	0.5	5	661801	CTA/40	2CSG111080R1141		0.290	1
50	0.5	5	661900	CTA/50	2CSG111090R1141		0.290	1
60	0.5	5	662006	CTA/60	2CSG111100R1141		0.290	1
80	0.5	5	662105	CTA/80	2CSG111110R1141		0.290	1
100	0.5	5	662204	CTA/100	2CSG111120R1141		0.290	1

CTA series

Wound primary		max section [mm]
cable	○	8
horizontal bar	▭	-
vertical bar	▯	-

Energy efficiency

CTO split core measurement current transformers

CT30

CT80

CT120

Split core measurement current transformers with throug primary

Split core measurement current transformers are used in distribution panels or power c enters for maintenance or system expansion. They can be installed easily and they allows to save a lot of time, avoiding bar disconnection. All transformers are complete with terminal caps and fastening accessories, both on bar and on wall.

CT30/...5 A Split core current transformers

Primary rated current Iprim A	Accurancy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
100	3	1.5	887805	CT30/100	2CSG101100R1101		0.85	1
150	3	2	887904	CT30/150	2CSG101110R1101		0.85	1
250	0.5	1.5	888109	CT30/250	2CSG101130R1101		0.85	1
400	0.5	2.5	888000	CT30/400	2CSG101150R1101		0.85	1

CT80/...5 A Split core current transformers

Primary rated current Iprim A	Accurancy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
250	0.5	1	888208	CT80/250	2CSG201130R1101		1.1	1
400	0.5	1.5	888307	CT80/400	2CSG201150R1101		1.1	1
500	0.5	2.5	888406	CT80/500	2CSG201160R1101		1.1	1
600	0.5	2.5	888505	CT80/600	2CSG201170R1101		1.1	1
800	0.5	3	888604	CT80/800	2CSG201180R1101		1.1	1
1000	0.5	5	888703	CT80/1000	2CSG201190R1101		1.1	1

CT120/...5 A Split core current transformers

Primary rated current Iprim A	Accurancy class	Rated power VA	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
400	0.5	1.5	889007	CT120/400	2CSG401150R1101		1.3	1
500	0.5	2.5	889106	CT120/500	2CSG401160R1101		1.3	1
600	0.5	2.5	889205	CT120/600	2CSG401170R1101		1.3	1
800	0.5	3	889304	CT120/800	2CSG401180R1101		1.3	1
1000	0.5	5	889403	CT120/1000	2CSG401190R1101		1.3	1
1200	0.5	6	889502	CT120/1200	2CSG401200R1101		1.3	1
1500	0.5	8	889601	CT120/1500	2CSG401220R1101		1.3	1

CT30 series

Through primary
○
▭
▯

CT80 series

Through primary
○
▭
▯

CT120 series

Through primary		max section [mm]
cable	○	
horizontal bar	▭	
vertical bar	▯	4x120x10

Energy efficiency

TRF M measurement modular current transformers

TRF M

Modular current transformers with Ø 29 mm through primary, secondary .../5A
TRF M are modular current transformers with through primary for measuring instruments. Their compact size and quick DIN rail plug allow easy installation along with great measurement precision.

Primary rated current Iprim	Accurancy class	Rated power	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
A		VA	EAN	Type code	Order code	piece	kg	pc.
40	3	1	046912	TRFM/40	2CSM100050R1111		0.250	1
60	1	2	047018	TRFM/60	2CSM100070R1111		0.250	1
100	0.5	2	047117	TRFM/100	2CSM100090R1111		0.250	1
150	0.5	3	047216	TRFM/150	2CSM100100R1111		0.250	1
250	0.5	4	047315	TRFM/250	2CSM100120R1111		0.250	1
400	0.5	6	047407	TRFM/400	2CSM100140R1111		0.250	1
600	0.5	8	047506	TRFM/600	2CSM100160R1111		0.250	1

Energy efficiency

SNT current transformer for d.c. applications

SNT

Technical features		
Voltage	[mV]	60
Current rating	[A]	from 5 to 1000
Accuracy class		0.5 (from 10 to 30 °C)
Max. load	[Ω]	0.25
Overload for 5 sec.		from 10 to 500 A : 1xIn
		from 600 to 1000 A: 5xIn

Shunts

Shunts have 60 mV voltage and must be used with a maximum load of 0.25 Ω in combination with measurement instruments in d.c.

For an appropriate operation:

- both horizontal and vertical mounting are possible (the horizontal position enables a greater heat consumption)
- the faying surface must be completely used and clean; cover with specific grease after the connection
- screws and bolts must be perfectly tight
- shunts must be sufficiently ventilated; as they are not insulated, it is a good rule to protect them against accidental contacts.

60 mV shunts						
Rated current	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
A	EAN	Type code	Order code	piece	kg	pc.
5	047605	SNT 1/5	2CSM100010R1121		1.300	1
6	047704	SNT 1/6	2CSM100020R1121		1.800	1
10	047803	SNT 1/10	2CSM100030R1121		1.800	1
15	047902	SNT 1/15	2CSM100040R1121		1.800	1
20	048008	SNT 1/20	2CSM100050R1121		1.800	1
25	048107	SNT 1/25	2CSM100060R1121		1.800	1
30	048206	SNT 1/30	2CSM100070R1121		1.300	1
40	048305	SNT 1/40	2CSM100080R1121		1.300	1
50	048404	SNT 1/50	2CSM100090R1121		2.200	1
60	048503	SNT 1/60	2CSM100100R1121		2.200	1
80	048602	SNT 1/80	2CSM100110R1121		1.300	1
100	048701	SNT 1/100	2CSM100120R1121		1.300	1
150	048800	SNT 1/150	2CSM100130R1121		1.300	1
200	048909	SNT 1/200	2CSM100140R1121		1.300	1
250	049005	SNT 1/250	2CSM100150R1121		1.900	1
400	049104	SNT 1/400	2CSM100160R1121		1.900	1
500	049203	SNT 1/500	2CSM100170R1121		1.900	1
600	049302	SNT 1/600	2CSM100180R1121		1.900	1
800	049401	SNT 1/800	2CSM100190R1121		2.200	1
1000	049500	SNT 1/1000	2CSM100200R1121		2.200	1

Energy efficiency

TV voltage transformers

TV2

Technical features		
Case material		Metallic
Operating frequency	[Hz]	50-60
Insulation reference voltage	[kV]	0.72
Test voltage		3 kV x 1' at 50 Hz
Dry insulation in air		class E
Protection degree		IP 30
Rated voltage factor		1.2 continuous
Thermal power		6 times the rated burden
Operating temperature		from -25 °C to + 50 °C
Storage temperature		from -40 °C to +80°C
Standards		IEC/EN 61869-1, IEC/EN 61869-3

Voltage transformers

They are used for transforming primary voltages up to 500 V into secondary voltages of.../100 V max. for indirect supply of analogue as well as digital measurement instruments. R3 voltage transformers are used in three-phase distribution systems with neutral.

Voltage transformers with metallic housing, precision class 0.5

Primary/ secondary voltage	Power	Bbn 8012542	Order details		Price 1	Weight 1 piece	Pack unit
V/V	VA	EAN	Type code	Order code	piece	kg	pc.
230/100	10	730101	TV2-230/100	2CSG324070R5021		2.100	1
380/100	10	730200	TV2-380/100	2CSG324090R5021		2.100	1
400/100	10	730309	TV2-400/100	2CSG324110R5021		2.100	1
440/100	10	730408	TV2-440/100	2CSG324130R5021		2.100	1
500/100	10	730507	TV2-500/100	2CSG324150R5021		2.100	1
600/100	10	730606	TV2-600/100	2CSG324170R5021		2.100	1
(230/√3)/100	5	731009	TV2-230R3/100	2CSG323080R5021		2.100	1
(380/√3)/100	5	731108	TV2-380R3/100	2CSG323100R5021		2.100	1
(400/√3)/100	5	731207	TV2-400R3/100	2CSG323120R5021		2.100	1
(440/√3)/100	5	731306	TV2-440R3/100	2CSG323140R5021		2.100	1
(500/√3)/100	5	731405	TV2-500R3/100	2CSG323160R5021		2.100	1
(600/√3)/100	5	731504	TV2-600R3/100	2CSG323180R5021		2.100	1

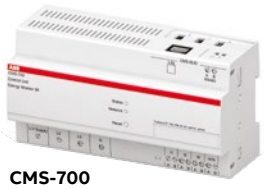
Energy efficiency
CMS – Current Measurement System overview

The quality of a Circuit Monitoring System is dependent on the strengths of the individual components and how well they interact. ABB's CMS sets the bar particularly high. Regardless of whether we're talking compactness, technology, measurement results, user friendliness or flexibility, every component and every feature of this CMS has been fully optimized in terms of practicality and functionality.

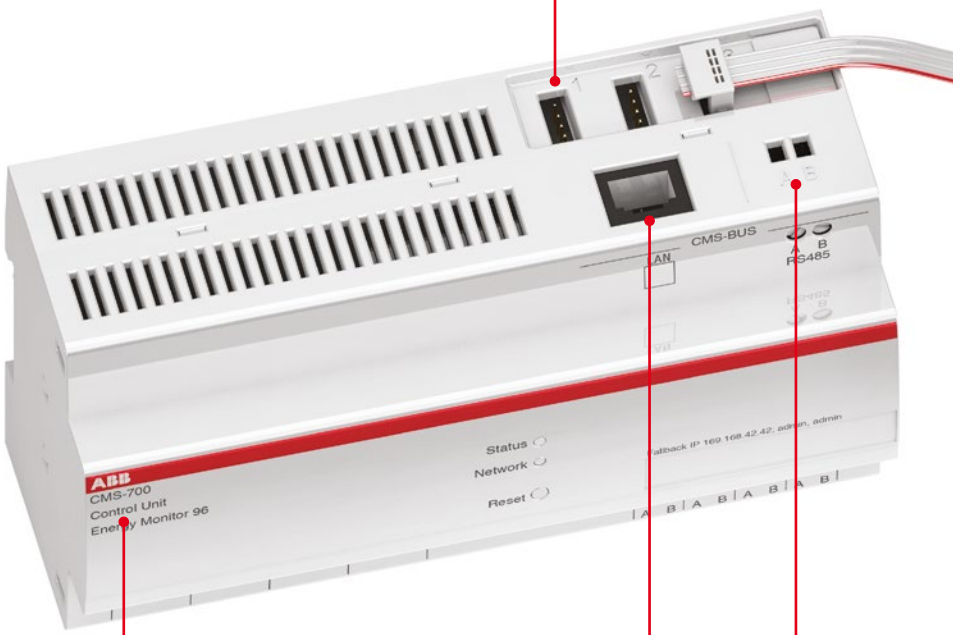
CMS bus interface
A bus interface allows up to 32 sensors to be connected to the Control Unit.

Example illustration:
Control Unit CMS-700 in combination with CMS open-core sensors

CMS-600



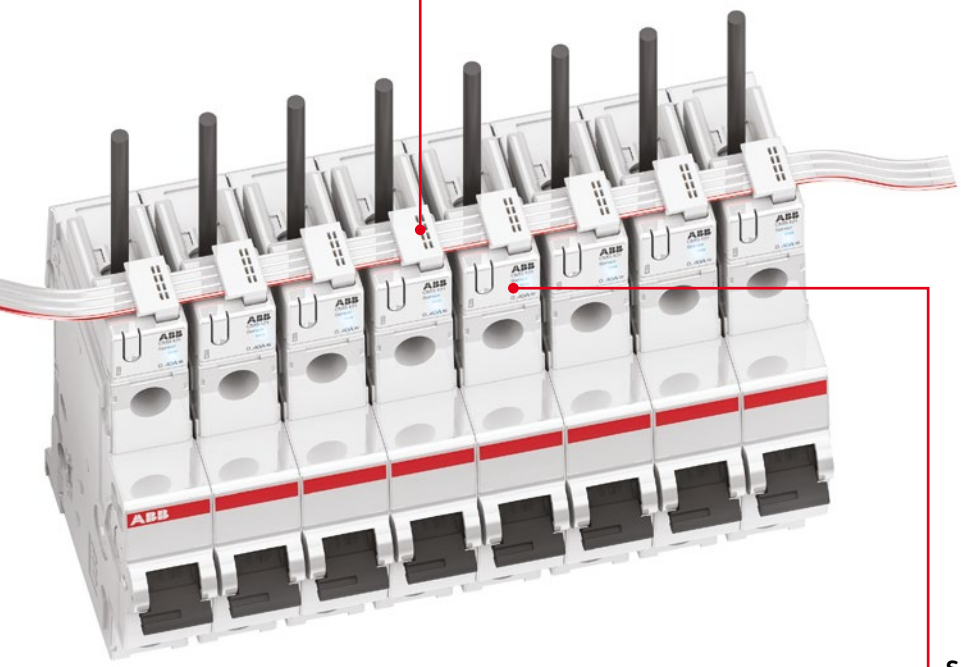
CMS-700



Control Units
The Control Unit is a kind of computing and communication center that, depending on the equipment connected to it, evaluates the different data picked up by the sensors and makes it available via the built-in interfaces.

You have a choice of three different units depending on your applications: CMS-600 and CMS-700.

Connection technology
Connecting the sensors to the Control Unit is extremely simple and requires no special tools. All sensors are connected to the Control Unit by means of a flexible flat cable and insulation displacement connectors. The positioning of sensors is fully customizable so that they sit exactly where a measurement is required.



Sensors
The CMS sensors form the heart of the system and they can be mounted anywhere without any problem. Initializing the sensors is also child's play, with the desired identifier being assigned to each individual sensor via the Control Unit in just a few simple steps. The entire configuration and commissioning procedure takes just a matter of minutes. All measurement functions are available immediately following initialization.

Serial interfaces
Depending on the unit, numerous interfaces and protocols are available to ensure smooth network implementation: RS485 (Modbus RTU), LAN (TCP/IP and Modbus TCP), SNMP v1/v2 and encrypted v3.

Thanks to the built-in web server, an internet browser or a free Android or iOS app can be used to visualize the values measured. What's more, the measured values can also be exported to CSV files.

Energy efficiency
Current Measurement System

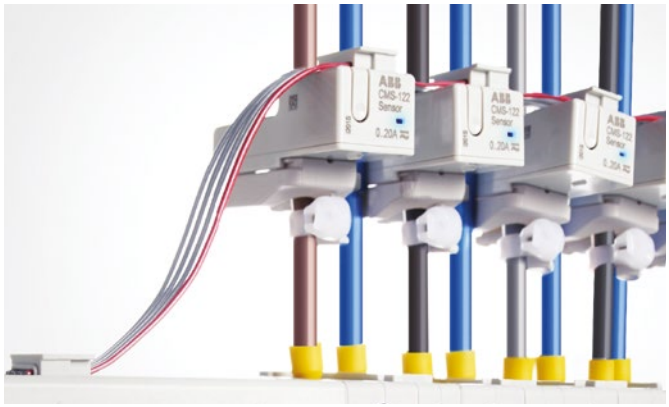
Integrate however you want thanks to multiple mounting options.
Depending on the application, choose between up to four different mounting options to make integrating the CMS sensors in your installation as simple and as uncomplicated as possible.

Special sensors for ABB installation devices

System pro M, SMISSLINE installation
CMS-120PS and CMS-100PS series sensors can be mounted on all ABB installation devices with twin terminals.

Installation on S800 installation devices
CMS-100S8 and CMS-200S8 series sensors can be mounted on all S800 high performance circuit breakers with cage terminals.

Universally usable sensor designs



Mounting on a DIN rail
CMS-120DR, CMS-100DR, and CMS-200DR series sensors can be mounted on all DIN rails with the aid of a DIN rail mounting.

Cable tie mounting
If space is at a real premium, CMS-120CA, CMS-100CA, and CMS-200CA series sensors can be secured directly to the cable(s) to be measured by means of cable ties.

Tangible value added for you
ABB circuit monitoring pays off twofold

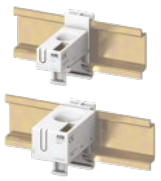
Early warning system (predictive maintenance) for increasing the availability of critical consumers
Continuous monitoring of the current flow at the circuit breaker makes it possible to detect overloaded lines before they lead to a service interruption. Apart from this, monitoring individual circuits indicates whether the loads are in the desired operating mode or not. In this way, system deviations can be ascertained instantaneously. What's more, the CMS can be used to detect unbalanced loads before they result in failure of the neutral conductor and consequently load failure.

Cost analysis to reduce and assign energy costs
The cost of energy will rise continuously. In order to cut costs, you first have to know where they arise. The Control Unit helps illustrate and analyze the instantaneous energy consumption levels. Furthermore, the calculated active energy can be used to roughly allocate the costs at the output level.

Energy efficiency

Current Measurement System

Sensor mounting methods



	System pro M, SMISSLINE	S800	DIN rail	Cable tie
	for all LS, FI & FI-LS with twin terminals	for all S800 devices with cage terminals	universally usable	universally usable
Open-core sensors				
AC accuracy* of ≤ ±1.0 % The laying method influences the accuracy.				
18-mm overall width				
CMS-120xx (80 A) CMS-121xx (40 A) CMS-122xx (20 A)	CMS-120PS CMS-121PS CMS-122PS		CMS-120DR CMS-121DR CMS-122DR	CMS-120CA CMS-121CA CMS-122CA
Solid-core sensors				
AC accuracy* ≤ ±0.5 %				
18-mm overall width				
CMS-100xx (80A) CMS-101xx (40A) CMS-102xx (20A)	CMS-100PS CMS-101PS CMS-102PS	CMS-100S8 CMS-101S8 CMS-102S8	CMS-100DR CMS-101DR CMS-102DR	CMS-100CA CMS-101CA CMS-102CA
25-mm overall width				
CMS-200xx (160A) CMS-201xx (80A) CMS-202xx (40A)		CMS-200S8 CMS-201S8 CMS-202S8	CMS-200DR CMS-201DR CMS-202DR	CMS-200CA CMS-201CA CMS-202CA

* All accuracy specifications refer to the relevant full scale value and apply to 25 °C.

Control units		
Characteristics	**Control Unit CMS-700**	**Control Unit CMS-600**
CMS Sensors		
Sensors	96 (3x32)	64 (2x32)
Control Unit		
Integrated power supply	•	
Voltage measurement	•	
Current (External CTs are required) measurement	•	
Active, reactive and appearent power (External CTs are required) measurement	•	
Calculated values for the branches		
Energy (Using branch currents, mains voltage and power factor over time)	•	
Power (Using branch currents, mains voltage and power factor)	•	
Interfaces		
RS485	•	•
LAN	•	
Protocols		
Modbus RTU	•	•
Modbus TCP	•	
SNMP (v1, v2 and encrypted v3)	•	
Visualization		
Built-in web server	•	
Touch display		•
CSV data export	•	
Approvals		
IEC 61010-1	•	•
UL 508 / CSA C22.2 No. 14	•	•

Energy efficiency

Control units

CMS-700

CMS-700
User Manual

Control Unit CMS-700		
Supply voltage	[VAC]	80 – 277 (L1-N, +5%)
Frequency	[Hz]	50 / 60
Power input (L1-N)	[W]	5 ... 40 (dep. on number of sensors)
Power input, current transformer, secondary side	[VA]	Current circuit <2 (per phase)
Voltage measurement range	[VAC]	80 – 277 (L1, L2, L3-N)
Measurement range, current transformer, secondary side	[A]	nominal: 5 max.: 6
Harmonic component	[Hz]	up to 2000
Data rate of Modbus RTU	[Baud]	RS485 2-wire, 2400 ... 115200
Refresh time		≤1 sec with max. 96 sensors
LAN	[Mbit/s]	100
Conductor cross-section	[mm²]	0.5 ... 2.5
Mounting method		35 mm DIN rail (DIN 50022)
Degree of protection		IP20
Dimensions	[mm]	161.5 x 87.0 x 64.9 (9 WM)
Operating temperature	[°C]	-25 ... +60
Bearing temperature	[°C]	-40 ... +85
Standards		IEC61010-1 UL 508/ CSA C22.2 No. 14
Main circuit accuracy		
Voltage		±1%
Current		±1%
Harmonic component		1%
Active power		±2%
Apparent power		±2%
Reactive power		±2%
Power factor		±0.2%

CMS-600

CMS-600
User Manual

Control Unit CMS-600 – Modbus RTU		
Supply voltage	[VDC]	24 (±10%)
Power input	[W]	4 – 24 (dep. on number of sensors)
Interface		RS485 2-wire
Protocol		Modbus RTU
Data rate	[Baud]	2400 ... 115200
Refresh time		≤1 sec with max. 64 sensors
Insulation strength	[VAC]	400
Screw-type terminals		0.5 ... 2.5 mm², max. 0.6 Nm
Mounting method		35 mm DIN rail (DIN 50022) or SMISSLINE TP plug base
Dimensions	[mm]	71.8 x 87.0 x 64.9 (4 WM)
Operating temperature	[°C]	-25 ... +70
Bearing temperature	[°C]	-40 ... +85
Standards		IEC 61010-1 UL 508/ CSA C22.2 No. 14

CMS-700

2CCC481194F0001

CMS-700
User Manual

CMS-700

The CMS-700 measures the AC and DC currents in the outgoing circuits via up to 3 x 32 sensors and calculates the energy and output data (line-side active and reactive power) of up to 96 sensors simultaneously.

Remotely monitoring of the system is made possible by a digital communication that supports different protocols: Modbus RTU, TCP or SNMP v1 and v2 and the encrypted v3. The Control Unit CMS-700 stands out thanks to its built-in web server that offers easy access not only to the measured data but also to the system parameters. The two interfaces – LAN (TCP/IP or Modbus TCP) and RS485 (Modbus RTU) – guarantee straight¬forward integration into any IT infrastructure. What's more, the data can be read out by means of an encrypted SNMP protocol.

The Control Unit CMS-700 has been developed specifically to meet the requirements of critical power applications, such as tho¬se of computing centers. In addition, however, professional energy monitoring is becoming ever more important when it comes to identifying savings potentials in functional buildings such as office buildings.

CMS-600

2CCC481070F0001

CMS-600
User Manual

CMS-600

The CMS-600 system enables you to measure AC and DC currents in up to 64 branches. For simple and fast operation, the Control Unit is equipped with an illuminated touch display that makes not only initialization but also control of the sensors extremely simple.

A 2-wire RS485 Modbus RTU interface enables users to remotely query and process the measurement data. As such, the CMS-600 Control Unit can be very easily integrated into an existing Modbus architecture. As an option, the measured values can also be visualized and processed by me¬ans of a programmable logic control (PLC).

CMS-600 is equipped with an integrated CMS software for which great care has been taken to ensure that the navigation concept is highly intuitive

The Control Unit CMS-600 are put to use in the critical power systems of hospitals and in similar industrial applica¬tions, too. Furthermore, these devices can also be found in functio¬nal buildings such as airports, hotels, office buildings, universities/ colleges and museums or in industrial photovoltaics.

Description	GTIN 7612271 EAN	Ordering details		Unit price	Weight of 1 unit (kg)	Packaging unit (pce.)
		Brief description	Product no.			
Control units						
Control Unit CMS-700	453138	CMS-700	2CCA880700R0001		0.329	1
Control Unit CMS-600	418700	CMS-600	2CCA880000R0001		0.153	1

Energy efficiency

Sensors and Accessories

CMS-120PS

2CCC481154F0001

CMS-120DR

2CCC481142F0001

CMS-120CA

2CCC481141F0001

CMS-100PS

2CCC481030F0001

CMS-100S8

2CCC481032F0001

CMS-100DR

2CCC481036F0001

CMS-100CA

2CCC481040F0001

CMS-200S8

2CCC481034F0001

CMS-200DR

2CCC481038F0001

CMS-200CA

2CCC481042F0001

Open-core sensors 18 mm					
Sensor typ			**CMS-120xx**	**CMS-121xx**	**CMS-122xx**
Measurement range		[A]	80	40	20
Measuring method				TRMS, AC 50 / 60 Hz, DC	
Peak factor, distorted waveform			≤ 1.5	≤ 3	≤ 6
AC accuracy (TA = +25 °C)*				≤ ±1 %	
AC temperature coefficient*				≤ ±0.04 %	
DC accuracy (TA = +25 °C)*			≤ ±1.2 %	≤ ±1.4 %	≤ ±1.8 %
DC temperature coefficient*			≤ ±0.14 %	≤ ±0.24 %	≤ ±0.44 %
Resolution		[A]		0.01	
Sampling rate, internal		[Hz]		5000	
Response time (±1 %)		[sec]		typ. 0.34	
Conductor penetration		[mm]		9,6	
Insulation strength				690 AC / 1500 DC	
Operating/storage temperature		[°C]		-25 ... +70 / -40 ... +85	
Dimensions	CMS-120PS Serie	[mm]		17.4 x 41.0 x 26.5	
	CMS-120CA Serie	[mm]		17.4 x 41.0 x 29.0	
	CMS-120DR Serie	[mm]		17.4 x 51.5 x 43.2	
Standards				IEC 61010-1 | UL508 / CSA C22.2 No 14	

Solid-core sensors 18 mm					
Sensor typ			**CMS-100xx**	**CMS-101xx**	**CMS-102xx**
Measurement range		[A]	80	40	20
Measuring method				TRMS, AC 50 / 60 Hz, DC	
Peak factor, distorted waveform			≤ 1.5	≤ 3	≤ 6
AC accuracy (TA = +25 °C)*				≤ ±0.5 %	
AC temperature coefficient*				≤ ±0.036 %	
DC accuracy (TA = +25 °C)*			≤ ±0.7 %	≤ ±1.0 %	≤ ±1.7 %
DC temperature coefficient*			≤ ±0.047 %	≤ ±0.059 %	≤ ±0.084 %
Resolution		[A]		0.01	
Sampling rate, internal		[Hz]		5000	
Response time (±1 %)		[sec]		typ. 0.25	
Conductor penetration		[mm]		10	
Insulation strength		[V]		690 VAC / 1500 VDC	
Operating/storage temperature		[°C]		-25 ... +70 / -40 ... +85	
Dimensions	CMS-100PS Serie	[mm]		17.4 x 41.0 x 26.5	
	CMS-100S8 Serie	[mm]		26.5 x 45.5 x 31.8	
	CMS-100DR Serie	[mm]		17.4 x 51.5 x 43.2	
	CMS-100CA Serie	[mm]		17.4 x 41.0 x 29.0	
Standards				IEC 61010-1 | UL508 / CSA C22.2 No 14	

Solid-core sensors 25 mm					
Sensor typ			**CMS-200xx**	**CMS-201xx**	**CMS-202xx**
Measurement range		[A]	160	80	40
Measuring method				TRMS, AC 50 / 60 Hz, DC	
Peak factor, distorted waveform			≤ 1.5	≤ 3	≤ 6
AC accuracy (TA = +25°C)*				≤ ±0.5 %	
AC temperature coefficient*				≤ ±0.036 %	
DC accuracy (TA = +25°C)*			≤ ±0.7 %	≤ ±1.0 %	≤ ±1.7 %
DC temperature coefficient*			≤ ±0.047 %	≤ ±0.059 %	≤ ±0.084 %
Resolution		[A]		0.01	
Sampling rate, internal		[Hz]		5000	
Response time (±1%)		[sec]		typ. 0.25	
Conductor penetration		[mm]		15	
Insulation strength		[V]		690 VA / 1500 VDC	
Operating/storage temperature		[°C]		-25 ... +70 / -40 ... +85	
Dimensions	CMS-200S8 Serie	[mm]		26.5 x 43.0 x 38.5	
	CMS-200DR Serie	[mm]		25.4 x 43.0 x 43.2	
	CMS-200CA Serie	[mm]		25.4 x 43.0 x 35.7	
Standards				IEC 61010-1 | UL508 / CSA C22.2 No 14	

* All accuracy specifications refer to the relevant full scale value and apply to 25 °C.
In the case of open-core sensors, the position of the cable influences the precision.

Open-core sensors
Installation manual

Open-core sensors
The open-core sensors are able to measure all types of current, whether AC, DC or mixed, up to 80 A in TRMS, enabling exact and effective measurements. As each sensor is equipped with its own microprocessor for processing the signal, the measurement data is transmitted digitally to the Control Unit via bus interface, maximizing data reliability. Disturbances like those experienced with analog data now most definitely belong to the past.

With this solution a faster cabling is guaranteed, since wiring cables are directly inserted in the sensors without the aid of a screwdriver. No special tools are needed for the entire connection process.

With AC accuracy* of ≤ ±1.0 %, they can be used in a multitude of applications without any problem: System pro M, DIN rail and Cable tie.

Solid-core sensors
Installation manual

Thanks to their U shape, the open-core sensors can be retrofitted to existing installations, without the need to discon¬nect the cabling or shut down the equipment, being the key for brownfield extension.

Solid-core sensors
Alternating (AC), direct (DC) or mixed (TRMS) currents – the CMS sensors monitor and measure all types of current over a measurement range of up to 160 A (TRMS). They even measure harmonic components in the signal curve. The measurements are digitally transmitted through bus interface, enabling reliability of data and removing disturbance effects.

Maximum secure insertion of wiring cables is guaranteed by this sensors solution.

Everything is built into an 18 or 25 mm wide unit to enable precise and effective measurements. This makes these CMS sensors the most compact and most powerful on the market.

Depending on the application, solid-core sensors are chosen between up to four different mounting options to making this solution as flexible as possible.

The solid-core units feature an enclosed structure and AC measurement accuracy* of ≤ ± 0.5 %, and are therefore suitable for all applications in which maximum-precision measurement is crucial.

* All accuracy specifications refer to the relevant full-scale value and apply to 25 °C.

Accessories
The Control Unit of the circuit monitoring system need a flat cable for receive branches measurements from sensors. The flat cable should be a 4-pin cable, flexible in length. Flat cable are available in several lengths in order to cover the most kind of application. Cables with the greater length are designed with the purpose of being adapted, through cutting, to the various lengths required by the applications.

Energy efficiency

Sensors and Accessories

Description	GTIN 7612271 EAN	Ordering details Brief description	Product no.	Unit price	Weight of 1 unit (kg)	Packaging unit (pce.)
Open-core sensors						
Open-core sensors 18 mm for pro M & SMISSLINE installation devices with twin terminals						
80 A	452957	CMS-120PS	2CCA880210R0001		0.012	1
40 A	452971	CMS-121PS	2CCA880211R0001		0.012	1
20 A	452995	CMS-122PS	2CCA880212R0001		0.012	1
Open-core sensors 18 mm for DIN rail mounting (universally usable)						
80 A	453077	CMS-120DR	2CCA880240R0001		0.015	1
40 A	453091	CMS-121DR	2CCA880241R0001		0.015	1
20 A	453114	CMS-122DR	2CCA880242R0001		0.015	1
Open-core sensors 18 mm for cable tie mounting (universally usable)						
80 A	453015	CMS-120CA	2CCA880220R0001		0.011	1
40 A	453039	CMS-121CA	2CCA880221R0001		0.011	1
20 A	453053	CMS-122CA	2CCA880222R0001		0.011	1
Solid-core sensors						
Solid-core sensors 18 mm for pro M & SMISSLINE installation devices with twin terminals						
80 A	419202	CMS-100PS	2CCA880100R0001		0.012	1
40 A	419219	CMS-101PS	2CCA880101R0001		0.012	1
20 A	419226	CMS-102PS	2CCA880102R0001		0.012	1
Solid-core sensors 18 mm for S800 installation devices with cage terminals						
80 A	426552	CMS-100S8	2CCA880124R0001		0.014	1
40 A	426569	CMS-101S8	2CCA880125R0001		0.014	1
20 A	426576	CMS-102S8	2CCA880126R0001		0.014	1
Solid-core sensors 18 mm for DIN rail mounting (universally usable)						
80 A	426583	CMS-100DR	2CCA880128R0001		0.015	1
40 A	426590	CMS-101DR	2CCA880129R0001		0.015	1
20 A	426606	CMS-102DR	2CCA880130R0001		0.015	1
Solid-core sensors 18 mm for cable tie mounting (universally usable)						
80 A	426613	CMS-100CA	2CCA880107R0001		0.011	1
40 A	426620	CMS-101CA	2CCA880108R0001		0.011	1
20 A	426637	CMS-102CA	2CCA880109R0001		0.011	1
Solid-core sensors 25 mm for S800 installation devices with cage terminals						
160 A	426644	CMS-200S8	2CCA880136R0001		0.028	1
80 A	426651	CMS-201S8	2CCA880137R0001		0.028	1
40 A	426668	CMS-202S8	2CCA880138R0001		0.028	1
Solid-core sensors 25 mm for DIN rail mounting (universally usable)						
160 A	426675	CMS-200DR	2CCA880132R0001		0.030	1
80 A	426682	CMS-201DR	2CCA880133R0001		0.030	1
40 A	426699	CMS-202DR	2CCA880134R0001		0.030	1
Solid-core sensors 25 mm for cable tie mounting (universally usable)						
160 A	426705	CMS-200CA	2CCA880117R0001		0.026	1
80 A	426712	CMS-201CA	2CCA880118R0001		0.026	1
40 A	426729	CMS-202CA	2CCA880119R0001		0.026	1
Accessories						
Flat cable 2 m	419233	CMS-800	2CCA880148R0001		0.017	1
Flat cable 5 m	474225	CMS-802	2CCA880331R0001		0.045	1
Flat cable 10 m	475758	CMS-803	2CCA880332R0001		0.090	1
Flat cable 30 m	468880	CMS-805	2CCA880333R0001		0.270	1
Connector set (35 pcs.)	419240	CMS-820	2CCA880145R0001		0.024	35

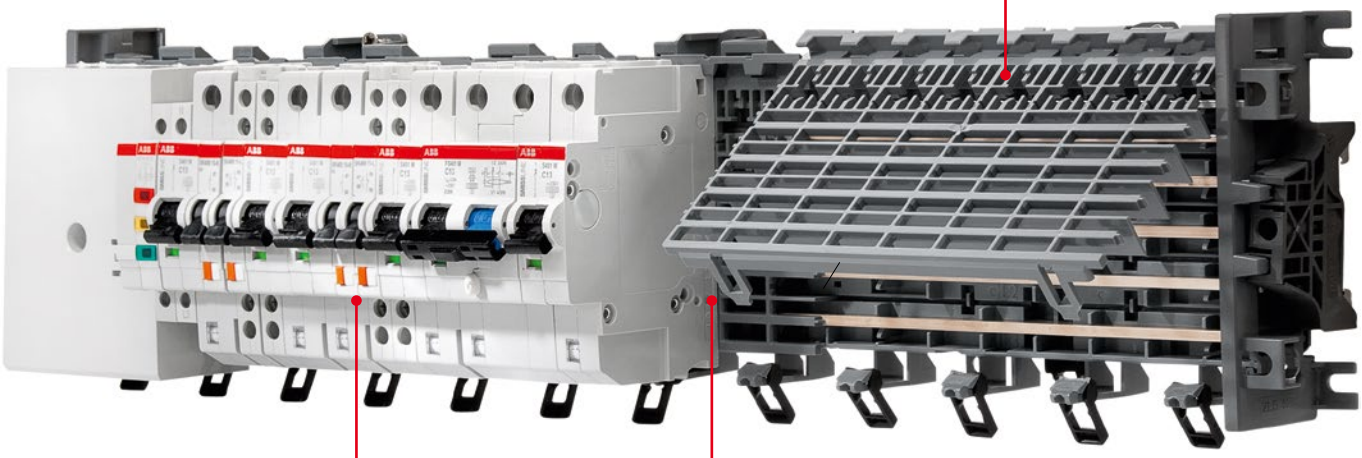
Electrical installation solutions for buildings
SMISSLINE TP plug-in system

Index

MCBs S 400 M	9/5
MCBs S 400 M-UC	9/14
RCCBs F400	9/16
RCCBs F400 K and S	9/18
RCBOs FS401	9/20
RCBOs FS401 K	9/22
RCBOs FS403	9/23
Surge arrester	9/26
Switch disconnector	9/29
Auxiliary elements and accessories	9/31
F4C-CM motor operating and F4C-ARI auto-reclosing devices	9/36
Busbar system	9/37
CombiLine modules	9/63

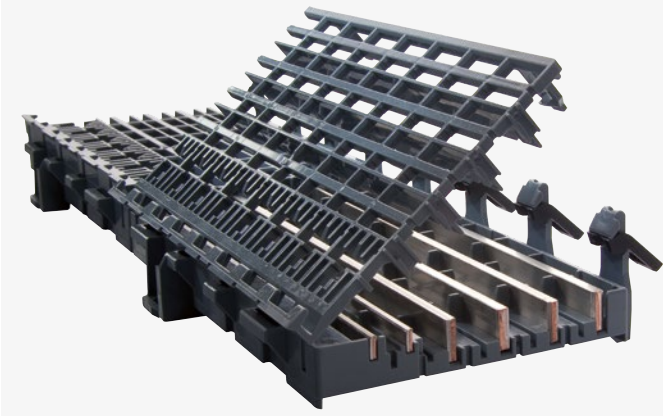
SMISSLINE TP plug-in system
Changes are never been easyer

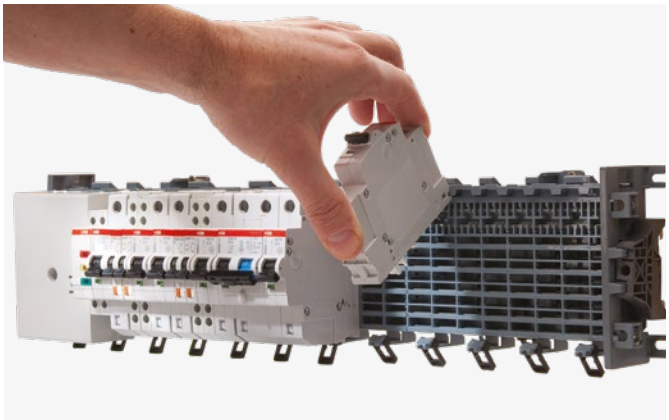
SMISSLINE TP ensures that load-free devices and components can be snapped on and off under voltage without the need for additional personal protective equipment to guard against electrical hazards.



It opens up to a completely new prospects for you when it comes to installation, operation and flexibility.

The world's first pluggable socket system.



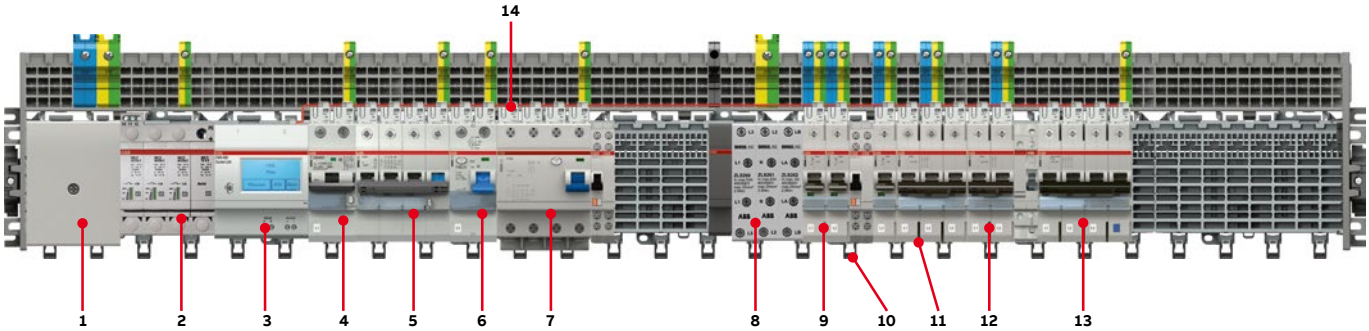


Even safer: Protection against electrical hazards
We have upgraded our unique SMISSLINE socket system even further through the addition of a pioneering innovation. With the new SMISSLINE TP system, components can now be plugged in or unplugged load-free without any risk from electrical current running through the body.

The SMISSLINE TP pluggable socket system is completely finger-safe (IP2XB) – when devices are plugged in and unplugged, the system is always touch-proof. This means that SMISSLINE TP prevents any danger to personnel from switching arcs or accidental arcing.

Even more flexible: make additions and changes during ongoing operation
Pluggable devices can be added and changed quickly, safely and simply during ongoing operation. And this can be done without any need for personal protective equipment.

This means that you benefit from more flexibility, savings on installation and maintenance – and improved safety. SMISSLINE TP provides greater availability and operating safety than conven-tional systems.



1 Incoming block 100/160 A
2 Surge arrester
3 Control unit for Current measurement system
4 2-pole residual current operated circuit breaker with overcurrent protection
5 4-pole residual current operated circuit breaker with overcurrent protection
6 2-pole residual current operated circuit breaker
7 4-pole residual current operated circuit breaker
8 Incoming block 63 A
9 Miniature circuit breaker 1 pole
10 Device latch
11 Miniature circuit breaker 3 poles
12 Miniature circuit breaker 2 poles
13 4-pole residual current operated circuit breaker with overcurrent protection
14 Current measurement sensor

Power behind bars
The world’s safest socket system

Small cause, large effect: as the world’s first pluggable socket system, SMISSLINE TP ensures that load-free devices and components can be snapped on and off under voltage without the need for additional personal protective equipment to guard against electrical hazards. That opens up completely new prospects for you when it comes to installation, operation and flexibility.

New Power Bar System 250 A
The new 250 A system is now available in the shape of the SMISSLINE TP. The busbars have a rated amperage of 250 A and therefore allow a end feed of 250 A. This extends the spectrum of potential applications.

SMISSLINE TP plug-in system

MCBs S 400 series

			S400M and S400 UC
General Data			IEC/EN 60898-1 S400 B,C,D,K°, IEC/EN 60947-2 S400 C,K,UCC, UCK
	Poles		1P, 1P+NP, 2P, 3P, 3P+NP
	Tripping characteristics		B,C,D,K, UCC, UCZ
	Rated current In	A	0.5 … 63
	Rated frequency f	Hz	50/60 Hz (162/3 on request)
	Rated insulation voltage Ui acc. to DIN EN 60664-1	V	400 VAC
	Rated impulse withstand voltage Uimp. (1.2/50 µs)	kV	4 kV
	Overvoltage category		III
	Pollution degree		2
Data acc. to IEC/ EN 60898-1	Rated operational voltage Ue	V	1P: 230/400 V AC; 1P+N: 230 V AC ; 2...4P: 400 V AC; 3P+N: 400 V AC
	Max. power frequency recovery voltage (Umax)	V	1P: 253 V AC; 1P+N: 253 V AC; 2P: 440 V AC; 3...4P: 440 V AC; 3P+N: 440 V AC; 1P: 72 V DC; 2P: 125 V DC
	Rated short-circuit capacity Icn	kA	6 kA S400E 10 kA S400M
	Energy limiting class		3
	Reference temperature for tripping characteristics	°C	C, D: 30 °C
	Electrical and Mechanical Endurance	ops.	10 000 ops.
Data acc. to IEC/ EN 60947-2	Max. power frequency recovery voltage (Umax)	V	254/440 V AC 1P: 60 V DC 2P: 125 V DC for S400M 1P: 125 V DC 2P: 250 V DC for S400 UCC and UCZ
	Rated ultimate short-circuit capacity Icu	kA	25 kA (0,5 up to 16 A, 240/415 V)0,5 to 2 A 50 kA on request 15 kA (20 up to 63 A, 240/415 V) 15 kA (0,5 up to 16 A, 254/440 V) 6 kA (20 up to 63 A, 254/440 V) S400UC: 10 kA (0,5.63A, 220 V d.c. 1pole) S400UC: 20 kA (0,5.63A, 110 V d.c. 1pole) S400UC: 25 kA (0,5.63A, 220 V d.c. 2pole) S400UC: 10 kA (0,5.63A, 440 V d.c. 2pole) S400UC: 10 kA (0,5.63A, 230/400 V)
	Rated service short-circuit capacity Ics	kA	15 kA (0,5 up to 16 A, 240/415 V) 7,5 kA (20 up to 63 A, 240/415 V) 6 kA (0,5 up to 16 A, 254/440 V) 3 kA (20 up to 63 A, 254/440 V S400UC: 10 kA (0,5.63A, 220 V d.c. 1pole) S400UC: 10 kA (0,5.63A, 110 V d.c. 1pole) S400UC: 20 kA (0,5.63A, 220 V d.c. 2pole) S400UC: 10 kA (0,5.63A, 440 V d.c. 2pole) S400UC: 6 kA (0,5.63A, 230/400 V)
	Dielectric test voltage	kV	
	Reference temperature for tripping characteristics	°C	C: 30 °C K: 40 °C
	Electrical and Mechanical Endurance	ops.	In < 32 A: 20 000 operating cycles In ≥ 32 A: 10 000 operating cycles
Mechanical Data	Housing		Insulation group I, RAL 7035
	Toggle		Insulation group II, black, sealable
	Classification acc. To NF F 126-101, NF F 16-102		
	Protection degree acc. to EN 60529		IP20*, IP40 in enclosure with cover
	Mechanical endurance	ops.	20 000 ops.
	Shock resistance acc. to IEC/EN 60068-2-30		
	Vibration resistance acc. to IEC/EN 60068-2-6		5 g – 20 cycles at 5 … 150 … 5 Hz with load 0.8 In
	Environmental conditions (damp heat)		
	acc. to IEC/EN 60068-2-30	°C/RH	28 cycles with 55 °C/90–96 % and 25 °C/95–100 %
	Ambient temperature	°C	–25 … +55 °C
	Storage temperature	°C	–40 … +70 °C
Installation	Standed Cross-section of conductors (top/ bottom)	mm^2	top 0.75–25 mm2/bottom no terminal pluggable MCB
	Flexible Cross-section of conductors (top/ bottom)	mm^2	
	Tightening torque	Nm in-lbs.	2.8 Nm
	Screwdriver		No. 2 Pozidrive
	Mounting		plug in on bus bar system SMISSLINE
	Mounting position		any
	Supply		any
Dimensions and weight	Mounting dimensions acc. to DIN 43880		
	Pole dimensions (H x D x W)	mm	91x18x82
	Pole weight	g	110

SMISSLINE TP plug-in system

MCBs S 400 M series 10 000 B characteristic

S 401 M

S 402 M

S 403 M

S400M Characteristic B

Function: protection and control of the circuits against overloads and short-circuits; protection for people and big length cables in TN and IT systems.

Applications: residential, commercial and industrial.

Standard: IEC/EN 60898

Icn=10 kA

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	4	0101214	S401 M-B 4	2CCS571001R0045		0.110	10
	6	0101221	S401 M-B 6	2CCS571001R0065		0.110	10
	8	0108411	S401 M-B 8	2CCS571001R0085		0.110	10
	10	0101238	S401 M-B 10	2CCS571001R0105		0.110	10
	13	0101245	S401 M-B 13	2CCS571001R0135		0.110	10
	16	0101252	S401 M-B 16	2CCS571001R0165		0.110	10
	20	0101269	S401 M-B 20	2CCS571001R0205		0.110	10
	25	0101276	S401 M-B 25	2CCS571001R0255		0.110	10
	32	0101283	S401 M-B 32	2CCS571001R0325		0.110	10
	40	0101290	S401 M-B 40	2CCS571001R0405		0.110	10
	50	0101306	S401 M-B 50	2CCS571001R0505		0.110	10
	63	0101313	S401 M-B 63	2CCS571001R0635		0.110	10
2	4	0101986	S402 M-B 4	2CCS572001R0045		0.221	5
	6	0101993	S402 M-B 6	2CCS572001R0065		0.221	5
	8	0108428	S402 M-B 8	2CCS572001R0085		0.221	5
	10	0102006	S402 M-B 10	2CCS572001R0105		0.221	5
	13	0102013	S402 M-B 13	2CCS572001R0135		0.221	5
	16	0102020	S402 M-B 16	2CCS572001R0165		0.221	5
	20	0102037	S402 M-B 20	2CCS572001R0205		0.221	5
	25	0102044	S402 M-B 25	2CCS572001R0255		0.221	5
	32	0102051	S402 M-B 32	2CCS572001R0325		0.221	5
	40	0102068	S402 M-B 40	2CCS572001R0405		0.221	5
	50	0102075	S402 M-B 50	2CCS572001R0505		0.221	5
	63	0102082	S402 M-B 63	2CCS572001R0635		0.221	5
3	4	0102754	S403 M-B 4	2CCS573001R0045		0.322	3
	6	0102761	S403 M-B 6	2CCS573001R0065		0.322	3
	8	0108435	S403 M-B 8	2CCS573001R0085		0.322	3
	10	0102778	S403 M-B 10	2CCS573001R0105		0.322	3
	13	0102785	S403 M-B 13	2CCS573001R0135		0.322	3
	16	0102792	S403 M-B 16	2CCS573001R0165		0.322	3
	20	0102808	S403 M-B 20	2CCS573001R0205		0.322	3
	25	0102815	S403 M-B 25	2CCS573001R0255		0.322	3
	32	0102822	S403 M-B 32	2CCS573001R0325		0.322	3
	40	0102839	S403 M-B 40	2CCS573001R0405		0.322	3
	50	0102846	S403 M-B 50	2CCS573001R0505		0.322	3
	63	0102853	S403 M-B 63	2CCS573001R0635		0.322	3

SMISSLINE TP plug-in system

MCBs S 400 M series 10000 C characteristic

S 401 M

S 402 M

S 403 M

S400M Characteristic C

Function: protection and control of the circuits against overloads and short-circuits; protection for resistive and inductive loads with low inrush current.

Applications: residential, commercial and industrial.

Standard: IEC/EN 60898, IEC/EN 60947-2

Icn=10 kA

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	0101320	S401 M-C 0.5	2CCS571001R0984		0.110	10
	1	0101337	S401 M-C 1	2CCS571001R0014		0.110	10
	1.6	0101344	S401 M-C 1.6	2CCS571001R0974		0.110	10
	2	0101351	S401 M-C 2	2CCS571001R0024		0.110	10
	3	0101368	S401 M-C 3	2CCS571001R0034		0.110	10
	4	0101375	S401 M-C 4	2CCS571001R0044		0.110	10
	6	0101382	S401 M-C 6	2CCS571001R0064		0.110	10
	8	0101399	S401 M-C 8	2CCS571001R0084		0.110	10
	10	0101405	S401 M-C 10	2CCS571001R0104		0.110	10
	13	0101412	S401 M-C 13	2CCS571001R0134		0.110	10
	16	0101429	S401 M-C 16	2CCS571001R0164		0.110	10
	20	0101436	S401 M-C 20	2CCS571001R0204		0.110	10
	25	0101443	S401 M-C 25	2CCS571001R0254		0.110	10
	32	0101450	S401 M-C 32	2CCS571001R0324		0.110	10
	40	0101467	S401 M-C 40	2CCS571001R0404		0.110	10
	50	0101474	S401 M-C 50	2CCS571001R0504		0.110	10
	63	0101481	S401 M-C 63	2CCS571001R0634		0.110	10
2	0.5	0102099	S402 M-C 0.5	2CCS572001R0984		0.221	5
	1	0102105	S402 M-C 1	2CCS572001R0014		0.221	5
	1.6	0102112	S402 M-C 1.6	2CCS572001R0974		0.221	5
	2	0102129	S402 M-C 2	2CCS572001R0024		0.221	5
	3	0102136	S402 M-C 3	2CCS572001R0034		0.221	5
	4	0102143	S402 M-C 4	2CCS572001R0044		0.221	5
	6	0102150	S402 M-C 6	2CCS572001R0064		0.221	5
	8	0102167	S402 M-C 8	2CCS572001R0084		0.221	5
	10	0102174	S402 M-C 10	2CCS572001R0104		0.221	5
	13	0102181	S402 M-C 13	2CCS572001R0134		0.221	5
	16	0102198	S402 M-C 16	2CCS572001R0164		0.221	5
	20	0102204	S402 M-C 20	2CCS572001R0204		0.221	5
	25	0102211	S402 M-C 25	2CCS572001R0254		0.221	5
	32	0102228	S402 M-C 32	2CCS572001R0324		0.221	5
	40	0102235	S402 M-C 40	2CCS572001R0404		0.221	5
	50	0102242	S402 M-C 50	2CCS572001R0504		0.221	5
	63	0102259	S402 M-C 63	2CCS572001R0634		0.221	5
3	0.5	0102860	S403 M-C 0.5	2CCS573001R0984		0.322	3
	1	0102877	S403 M-C 1	2CCS573001R0014		0.322	3
	1.6	0102884	S403 M-C 1.6	2CCS573001R0974		0.322	3
	2	0102891	S403 M-C 2	2CCS573001R0024		0.322	3
	3	0102907	S403 M-C 3	2CCS573001R0034		0.322	3
	4	0102914	S403 M-C 4	2CCS573001R0044		0.322	3
	6	0102921	S403 M-C 6	2CCS573001R0064		0.322	3
	8	0102938	S403 M-C 8	2CCS573001R0084		0.322	3
	10	0102945	S403 M-C 10	2CCS573001R0104		0.322	3
	13	0102952	S403 M-C 13	2CCS573001R0134		0.322	3
	16	0102969	S403 M-C 16	2CCS573001R0164		0.322	3
	20	0102976	S403 M-C 20	2CCS573001R0204		0.322	3
	25	0102983	S403 M-C 25	2CCS573001R0254		0.322	3
	32	0102990	S403 M-C 32	2CCS573001R0324		0.322	3
	40	0103003	S403 M-C 40	2CCS573001R0404		0.322	3
	50	0103010	S403 M-C 50	2CCS573001R0504		0.322	3
	63	0103027	S403 M-C 63	2CCS573001R0634		0.322	3

SMISSLINE TP plug-in system

MCBs S 400 M series 10 000 D characteristic

S 401 M

S 402 M

S 403 M

S400M Characteristic D

Function: protection and control of the circuits against overloads and short-circuits; protection for circuits which supply loads with high inrush current at the circuit closing (LV/LV transformers, breakdown lamps).

Applications: residential, commercial and industrial.

Standard: IEC/EN 60898

Icn = 10 kA

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	6	0101498	S401 M-D 6	2CCS571001R0061		0.110	10
	8	0101504	S401 M-D 8	2CCS571001R0081		0.110	10
	10	0101511	S401 M-D 10	2CCS571001R0101		0.110	10
	13	0101528	S401 M-D 13	2CCS571001R0131		0.110	10
	16	0101535	S401 M-D 16	2CCS571001R0161		0.110	10
	20	0101542	S401 M-D 20	2CCS571001R0201		0.110	10
	25	0101559	S401 M-D 25	2CCS571001R0251		0.110	10
	32	0101566	S401 M-D 32	2CCS571001R0321		0.110	10
	40	0101573	S401 M-D 40	2CCS571001R0401		0.110	10
	50	0101580	S401 M-D 50	2CCS571001R0501		0.110	10
	63	0101597	S401 M-D 63	2CCS571001R0631		0.110	10
2	6	0102266	S402 M-D 6	2CCS572001R0061		0.221	5
	8	0102273	S402 M-D 8	2CCS572001R0081		0.221	5
	10	0102280	S402 M-D 10	2CCS572001R0101		0.221	5
	13	0102297	S402 M-D 13	2CCS572001R0131		0.221	5
	16	0102303	S402 M-D 16	2CCS572001R0161		0.221	5
	20	0102310	S402 M-D 20	2CCS572001R0201		0.221	5
	25	0102327	S402 M-D 25	2CCS572001R0251		0.221	5
	32	0102334	S402 M-D 32	2CCS572001R0321		0.221	5
	40	0102341	S402 M-D 40	2CCS572001R0401		0.221	5
	50	0102358	S402 M-D 50	2CCS572001R0501		0.221	5
	63	0102365	S402 M-D 63	2CCS572001R0631		0.221	5
3	6	0103034	S403 M-D 6	2CCS573001R0061		0.322	3
	8	0103041	S403 M-D 8	2CCS573001R0081		0.322	3
	10	0103058	S403 M-D 10	2CCS573001R0101		0.322	3
	13	0103065	S403 M-D 13	2CCS573001R0131		0.322	3
	16	0103072	S403 M-D 16	2CCS573001R0161		0.322	3
	20	0103089	S403 M-D 20	2CCS573001R0201		0.322	3
	25	0103096	S403 M-D 25	2CCS573001R0251		0.322	3
	32	0103102	S403 M-D 32	2CCS573001R0321		0.322	3
	40	0103119	S403 M-D 40	2CCS573001R0401		0.322	3
	50	0103126	S403 M-D 50	2CCS573001R0501		0.322	3
	63	0103133	S403 M-D 63	2CCS573001R0631		0.322	3

SMISSLINE TP plug-in system

MCBs S 400 M series 5000-15000 K characteristic

S 401

S 402 M

S 403 M

S400M Characteristic K

Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits. Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2

Icu = 50 kA ≤ 2A, 25 kA for 3 A ≤ 16A, 15 kA for 32 A ≤ 63 A

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	0101603	S401 M-K 0.5	2CCS571001R0157		0.110	10
	1	0101610	S401 M-K 1	2CCS571001R0217		0.110	10
	1.6	0101627	S401 M-K 1.6	2CCS571001R0257		0.110	10
	2	0101634	S401 M-K 2	2CCS571001R0277		0.110	10
	3	0101641	S401 M-K 3	2CCS571001R0317		0.110	10
	4	0101658	S401 M-K 4	2CCS571001R0337		0.110	10
	6	0101665	S401 M-K 6	2CCS571001R0377		0.110	10
	8	0101672	S401 M-K 8	2CCS571001R0407		0.110	10
	10	0101689	S401 M-K 10	2CCS571001R0427		0.110	10
	13	0101696	S401 M-K 13	2CCS571001R0447		0.110	10
	16	0101702	S401 M-K 16	2CCS571001R0467		0.110	10
	20	0101719	S401 M-K 20	2CCS571001R0487		0.110	10
	25	0101726	S401 M-K 25	2CCS571001R0517		0.110	10
	32	0101733	S401 M-K 32	2CCS571001R0537		0.110	10
	40	0101740	S401 M-K 40	2CCS571001R0557		0.110	10
	50	0101757	S401 M-K 50	2CCS571001R0577		0.110	10
	63	0101764	S401 M-K 63	2CCS571001R0597		0.110	10
2	0.5	0102372	S402 M-K 0.5	2CCS572001R0157		0.221	5
	1	0102389	S402 M-K 1	2CCS572001R0217		0.221	5
	1.6	0102396	S402 M-K 1.6	2CCS572001R0257		0.221	5
	2	0102402	S402 M-K 2	2CCS572001R0277		0.221	5
	3	0102419	S402 M-K 3	2CCS572001R0317		0.221	5
	4	0102426	S402 M-K 4	2CCS572001R0337		0.221	5
	6	0102433	S402 M-K 6	2CCS572001R0377		0.221	5
	8	0102440	S402 M-K 8	2CCS572001R0407		0.221	5
	10	0102457	S402 M-K 10	2CCS572001R0427		0.221	5
	13	0102464	S402 M-K 13	2CCS572001R0447		0.221	5
	16	0102471	S402 M-K 16	2CCS572001R0467		0.221	5
	20	0102488	S402 M-K 20	2CCS572001R0487		0.221	5
	25	0102495	S402 M-K 25	2CCS572001R0517		0.221	5
	32	0102501	S402 M-K 32	2CCS572001R0537		0.221	5
	40	0102518	S402 M-K 40	2CCS572001R0557		0.221	5
	50	0102525	S402 M-K 50	2CCS572001R0577		0.221	5
	63	0102532	S402 M-K 63	2CCS572001R0597		0.221	5
3	0.5	0103140	S403 M-K 0.5	2CCS573001R0157		0.322	3
	1	0103157	S403 M-K 1	2CCS573001R0217		0.322	3
	1.6	0103164	S403 M-K 1.6	2CCS573001R0257		0.322	3
	2	0103171	S403 M-K 2	2CCS573001R0277		0.322	3
	3	0103188	S403 M-K 3	2CCS573001R0317		0.322	3
	4	0103195	S403 M-K 4	2CCS573001R0337		0.322	3
	6	0103201	S403 M-K 6	2CCS573001R0377		0.322	3
	8	0103218	S403 M-K 8	2CCS573001R0407		0.322	3
	10	0103225	S403 M-K 10	2CCS573001R0427		0.322	3
	13	0103232	S403 M-K 13	2CCS573001R0447		0.322	3
	16	0103249	S403 M-K 16	2CCS573001R0467		0.322	3
	20	0103256	S403 M-K 20	2CCS573001R0487		0.322	3
	25	0103263	S403 M-K 25	2CCS573001R0517		0.322	3
	32	0103270	S403 M-K 32	2CCS573001R0537		0.322	3
	40	0103287	S403 M-K 40	2CCS573001R0557		0.322	3
	50	0103294	S403 M-K 50	2CCS573001R0577		0.322	3
	63	0103300	S403 M-K 63	2CCS573001R0597		0.322	3

SMISSLINE TP plug-in system

MCBs S 400 M series 10 000 B characteristic

S 402 M

S 403 M

S400M Characteristic B-NP

Function: protection and control of the circuits against overloads and short-circuits; protection for people and big length cables in TN and IT systems. The neutral is full protected.

Applications: residential, commercial and industrial.

Standard: IEC/EN 60898

Icn = 10 kA

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	6	0103317	S401 M-B 6NP	2CCS571103R8065		0.221	5
	8	0108473	S401 M-B 8NP	2CCS571103R8085		0.221	5
	10	0103324	S401 M-B 10NP	2CCS571103R8105		0.221	5
	13	0103331	S401 M-B 13NP	2CCS571103R8135		0.221	5
	16	0103348	S401 M-B 16NP	2CCS571103R8165		0.221	5
	20	0103355	S401 M-B 20NP	2CCS571103R8205		0.221	5
	25	0103362	S401 M-B 25NP	2CCS571103R8255		0.221	5
	32	0103379	S401 M-B 32NP	2CCS571103R8325		0.221	5
	40	0103386	S401 M-B 40NP	2CCS571103R8405		0.221	5
	50	0103393	S401 M-B 50NP	2CCS571103R8505		0.221	5
	63	0103409	S401 M-B 63NP	2CCS571103R8635		0.221	5
4	6	0103782	S403 M-B 6NP	2CCS573103R8065		0.428	2
	8	0108510	S403 M-B 8NP	2CCS573103R8085		0.428	2
	10	0103799	S403 M-B 10NP	2CCS573103R8105		0.428	2
	13	0103805	S403 M-B 13NP	2CCS573103R8135		0.428	2
	16	0103812	S403 M-B 16NP	2CCS573103R8165		0.428	2
	20	0103829	S403 M-B 20NP	2CCS573103R8205		0.428	2
	25	0103836	S403 M-B 25NP	2CCS573103R8255		0.428	2
	32	0103843	S403 M-B 32NP	2CCS573103R8325		0.428	2
	40	0103850	S403 M-B 40NP	2CCS573103R8405		0.428	2
	50	0103867	S403 M-B 50NP	2CCS573103R8505		0.428	2
	63	0103874	S403 M-B 63NP	2CCS573103R8635		0.428	2

SMISSLINE TP plug-in system

MCBs S 400 M series 10 000 C characteristic

S 402 M

S 403 M

S400M Characteristic C-NP

Function: protection and control of the circuits against overloads and short-circuits; protection for resistive and inductive loads with low inrush current. The neutral is full protected.

Applications: residential, commercial and industrial.

Standard: IEC/EN 60898, IEC/EN 60947-2

Icn = 10 kA

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	2	0108480	S401 M-C 2NP	2CCS571103R8024		0.221	5
	3	0108497	S401 M-C 3NP	2CCS571103R8034		0.221	5
	4	0108503	S401 M-C 4NP	2CCS571103R8044		0.221	5
	6	0103416	S401 M-C 6NP	2CCS571103R8064		0.221	5
	8	0103423	S401 M-C 8NP	2CCS571103R8084		0.221	5
	10	0103430	S401 M-C 10NP	2CCS571103R8104		0.221	5
	13	0103447	S401 M-C 13NP	2CCS571103R8134		0.221	5
	16	0103454	S401 M-C 16NP	2CCS571103R8164		0.221	5
	20	0103461	S401 M-C 20NP	2CCS571103R8204		0.221	5
	25	0103478	S401 M-C 25NP	2CCS571103R8254		0.221	5
	32	0103485	S401 M-C 32NP	2CCS571103R8324		0.221	5
	40	0103492	S401 M-C 40NP	2CCS571103R8404		0.221	5
	50	0103508	S401 M-C 50NP	2CCS571103R8504		0.221	5
	63	0103515	S401 M-C 63NP	2CCS571103R8634		0.221	5
4	2	0108527	S403 M-C 2NP	2CCS573103R8024		0.428	2
	3	0108534	S403 M-C 3NP	2CCS573103R8034		0.428	2
	4	0108541	S403 M-C 4NP	2CCS573103R8044		0.428	2
	6	0103881	S403 M-C 6NP	2CCS573103R8064		0.428	2
	8	0103898	S403 M-C 8NP	2CCS573103R8084		0.428	2
	10	0103904	S403 M-C 10NP	2CCS573103R8104		0.428	2
	13	0103911	S403 M-C 13NP	2CCS573103R8134		0.428	2
	16	0103928	S403 M-C 16NP	2CCS573103R8164		0.428	2
	20	0103935	S403 M-C 20NP	2CCS573103R8204		0.428	2
	25	0103942	S403 M-C 25NP	2CCS573103R8254		0.428	2
	32	0103959	S403 M-C 32NP	2CCS573103R8324		0.428	2
	40	0103966	S403 M-C 40NP	2CCS573103R8404		0.428	2
	50	0103973	S403 M-C 50NP	2CCS573103R8504		0.428	2
	63	0103980	S403 M-C 63NP	2CCS573103R8634		0.428	2

SMISSLINE TP plug-in system

MCBs S 400 M series 10 000 D characteristic

S 402 M

S 403 M

S400M Characteristic D-NP

Function: protection and control of the circuits against overloads and short-circuits; protection for circuits which supply loads with high inrush current at the circuit closing (LV/LV transformers, breakdown lamps). The neutral is full protected.

Applications: residential, commercial and industrial.

Standard: IEC/EN 60898

Icn = 10 kA

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	0103522	S401 M-D 10NP	2CCS571103R8101		0.221	5
	13	0103539	S401 M-D 13NP	2CCS571103R8131		0.221	5
	16	0103546	S401 M-D 16NP	2CCS571103R8161		0.221	5
	20	0103553	S401 M-D 20NP	2CCS571103R8201		0.221	5
	25	0103560	S401 M-D 25NP	2CCS571103R8251		0.221	5
	32	0103577	S401 M-D 32NP	2CCS571103R8321		0.221	5
	40	0103584	S401 M-D 40NP	2CCS571103R8401		0.221	5
	50	0103591	S401 M-D 50NP	2CCS571103R8501		0.221	5
	63	0103607	S401 M-D 63NP	2CCS571103R8631		0.221	5
4	10	0103997	S403 M-D 10NP	2CCS573103R8101		0.428	2
	13	0104000	S403 M-D 13NP	2CCS573103R8131		0.428	2
	16	0104017	S403 M-D 16NP	2CCS573103R8161		0.428	2
	20	0104024	S403 M-D 20NP	2CCS573103R8201		0.428	2
	25	0104031	S403 M-D 25NP	2CCS573103R8251		0.428	2
	32	0104048	S403 M-D 32NP	2CCS573103R8321		0.428	2
	40	0104055	S403 M-D 40NP	2CCS573103R8401		0.428	2
	50	0104062	S403 M-D 50NP	2CCS573103R8501		0.428	2
	63	0104079	S403 M-D 63NP	2CCS573103R8631		0.428	2

SMISSLINE TP plug-in system

MCBs S 400 M series 5 000-15 000 K characteristic

S 402 M

S 403 M

S400M Characteristic K-NP

Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits.

Advantages: no nuisance tripping in the case of functional peak currents up to 10 x In, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines. The neutral is full protected.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2

Icu = 50 kA ≤ 2A, 25 kA for 3 A ≤ 16A, 15 kA for 32 A ≤ 63 A

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	0.5	0103614	S401 M-K 0.5NP	2CCS571103R8157		0.221	5
	1	0103621	S401 M-K 1NP	2CCS571103R8217		0.221	5
	1.6	0103638	S401 M-K 1.6NP	2CCS571103R8257		0.221	5
	2	0103645	S401 M-K 2NP	2CCS571103R8277		0.221	5
	3	0103652	S401 M-K 3NP	2CCS571103R8317		0.221	5
	4	0103669	S401 M-K 4NP	2CCS571103R8337		0.221	5
	6	0103676	S401 M-K 6NP	2CCS571103R8377		0.221	5
	8	0103683	S401 M-K 8NP	2CCS571103R8407		0.221	5
	10	0103690	S401 M-K 10NP	2CCS571103R8427		0.221	5
	13	0103706	S401 M-K 13NP	2CCS571103R8447		0.221	5
	16	0103713	S401 M-K 16NP	2CCS571103R8467		0.221	5
	20	0103720	S401 M-K 20NP	2CCS571103R8487		0.221	5
	25	0103737	S401 M-K 25NP	2CCS571103R8517		0.221	5
	32	0103744	S401 M-K 32NP	2CCS571103R8537		0.221	5
	40	0103751	S401 M-K 40NP	2CCS571103R8557		0.221	5
	50	0103768	S401 M-K 50NP	2CCS571103R8577		0.221	5
	63	0103775	S401 M-K 63NP	2CCS571103R8597		0.221	5
4	0.5	0104086	S403 M-K 0.5NP	2CCS573103R8157		0.428	2
	1	0104093	S403 M-K 1NP	2CCS573103R8217		0.428	2
	1.6	0104109	S403 M-K 1.6NP	2CCS573103R8257		0.428	2
	2	0104116	S403 M-K 2NP	2CCS573103R8277		0.428	2
	3	0104123	S403 M-K 3NP	2CCS573103R8317		0.428	2
	4	0104130	S403 M-K 4NP	2CCS573103R8337		0.428	2
	6	0104147	S403 M-K 6NP	2CCS573103R8377		0.428	2
	8	0104154	S403 M-K 8NP	2CCS573103R8407		0.428	2
	10	0104161	S403 M-K 10NP	2CCS573103R8427		0.428	2
	13	0104178	S403 M-K 13NP	2CCS573103R8447		0.428	2
	16	0104185	S403 M-K 16NP	2CCS573103R8467		0.428	2
	20	0104192	S403 M-K 20NP	2CCS573103R8487		0.428	2
	25	0104208	S403 M-K 25NP	2CCS573103R8517		0.428	2
	32	0104215	S403 M-K 32NP	2CCS573103R8537		0.428	2
	40	0104222	S403 M-K 40NP	2CCS573103R8557		0.428	2
	50	0104239	S403 M-K 50NP	2CCS573103R8577		0.428	2
	63	0104246	S403 M-K 63NP	2CCS573103R8597		0.428	2

SMISSLINE TP plug-in system

MCBs S 400 M-UC series 10000-25000 C characteristic, DC application

1 P 220V d.c.

2 P 440V d.c.

S400UC Characteristic C

Function: protection and control of the circuits against overloads and short-circuits; protection for resistive and inductive loads with low inrush current.

Applications: residential, commercial and industrial.

Standard: IEC/EN 60947-2

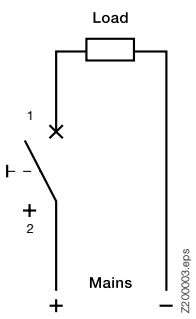
10 kA (0,5 up to 63 A, 220 V d.c. 1pole), 20 kA (0,5 up to 63 A, 110 V d.c. 1pole)

25 kA (0,5 up to 63 A, 220 V d.c. 2pole), 10 kA (0,5 up to 63 A, 440 V d.c. 2pole)

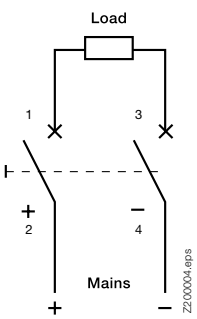
10 kA (0,5 up to 63 A, 230/400 V) a.c.

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	0109746	S401M-UCC0.5	2CCS561001R1984		0.110	10
	1	0109753	S401M-UCC1	2CCS561001R1014		0.110	10
	1.6	0109760	S401M-UCC1.6	2CCS561001R1974		0.110	10
	2	0109777	S401M-UCC2	2CCS561001R1024		0.110	10
	3	0109784	S401M-UCC3	2CCS571001R1034		0.110	10
	4	0109791	S401M-UCC4	2CCS571001R1044		0.110	10
	6	0109807	S401M-UCC6	2CCS571001R1064		0.110	10
	8	0109814	S401M-UCC8	2CCS571001R1084		0.110	10
	10	0109821	S401M-UCC10	2CCS571001R1104		0.110	10
	13	0109838	S401M-UCC13	2CCS571001R1134		0.110	10
	16	0109845	S401M-UCC16	2CCS571001R1164		0.110	10
	20	0109852	S401M-UCC20	2CCS571001R1204		0.110	10
	25	0109869	S401M-UCC25	2CCS571001R1254		0.110	10
	32	0109876	S401M-UCC32	2CCS571001R1324		0.110	10
	40	0109883	S401M-UCC40	2CCS571001R1404		0.110	10
	50	0109890	S401M-UCC50	2CCS571001R1504		0.110	10
	63	0109906	S401M-UCC63	2CCS571001R1634		0.110	10
2	0.5	0109913	S402M-UCC0.5	2CCS562001R1984		0.221	5
	1	0109920	S402M-UCC1	2CCS562001R1014		0.221	5
	1.6	0109937	S402M-UCC1.6	2CCS562001R1974		0.221	5
	2	0109944	S402M-UCC2	2CCS562001R1024		0.221	5
	3	0109951	S402M-UCC3	2CCS572001R1034		0.221	5
	4	0109968	S402M-UCC4	2CCS572001R1044		0.221	5
	6	0109975	S402M-UCC6	2CCS572001R1064		0.221	5
	8	0109982	S402M-UCC8	2CCS572001R1084		0.221	5
	10	0109999	S402M-UCC10	2CCS572001R1104		0.221	5
	13	0110001	S402M-UCC13	2CCS572001R1134		0.221	5
	16	0110018	S402M-UCC16	2CCS572001R1164		0.221	5
	20	0110025	S402M-UCC20	2CCS572001R1204		0.221	5
	25	0110032	S402M-UCC25	2CCS572001R1254		0.221	5
	32	0110049	S402M-UCC32	2CCS572001R1324		0.221	5
	40	0110056	S402M-UCC40	2CCS572001R1404		0.221	5
	50	0110063	S402M-UCC50	2CCS572001R1504		0.221	5
	63	0110070	S402M-UCC63	2CCS572001R1634		0.221	5

Connection diagram, single-pole (max. 220V d.c.) S401M-UCC



Connection diagram, two-pole (max. 440V d.c.) S402M-UCC



SMISSLINE TP plug-in system

MCBs S 400 M-UC series 10000-25000 Z characteristic, DC application

1 P 220V d.c.

2 P 440V d.c.

S400UC Characteristic Z

Function: protection and control of the electronic circuits against weak and long duration overloads and short-circuits.

Applications: commercial and industrial.

Standard: IEC/EN 60947-2

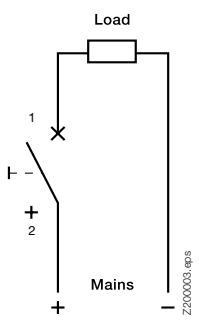
10 kA (0,5 up to 63 A, 220 V d.c. 1pole), 20 kA (0,5 up to 63 A, 110 V d.c. 1pole)

25 kA (0,5 up to 63 A, 220 V d.c. 2pole), 10 kA (0,5 up to 63 A, 440 V d.c. 2pole)

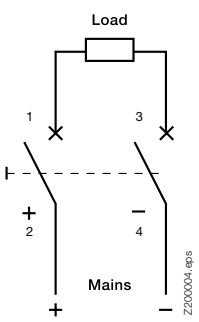
10 kA (0,5 up to 63 A, 230/400 V) a.c.

Number of poles	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	0.5	0110087	S401M-UCZ0.5	2CCS561001R1988		0.110	10
	1	0110094	S401M-UCZ1	2CCS561001R1018		0.110	10
	1.6	0110100	S401M-UCZ1.6	2CCS561001R1978		0.110	10
	2	0110117	S401M-UCZ2	2CCS561001R1028		0.110	10
	3	0110124	S401M-UCZ3	2CCS571001R1038		0.110	10
	4	0110131	S401M-UCZ4	2CCS571001R1048		0.110	10
	6	0110148	S401M-UCZ6	2CCS571001R1068		0.110	10
	8	0110155	S401M-UCZ8	2CCS571001R1088		0.110	10
	10	0110162	S401M-UCZ10	2CCS571001R1108		0.110	10
	13	0110179	S401M-UCZ13	2CCS571001R1138		0.110	10
	16	0110186	S401M-UCZ16	2CCS571001R1168		0.110	10
	20	0110193	S401M-UCZ20	2CCS571001R1208		0.110	10
	25	0110209	S401M-UCZ25	2CCS571001R1258		0.110	10
	32	0110216	S401M-UCZ32	2CCS571001R1328		0.110	10
	40	0110223	S401M-UCZ40	2CCS571001R1408		0.110	10
	50	0110230	S401M-UCZ50	2CCS571001R1508		0.110	10
	63	0110247	S401M-UCZ63	2CCS571001R1638		0.110	10
2	0.5	0110254	S402M-UCZ0.5	2CCS562001R1988		0.221	10
	1	0110261	S402M-UCZ1	2CCS562001R1018		0.221	10
	1.6	0110278	S402M-UCZ1.6	2CCS562001R1978		0.221	10
	2	0110285	S402M-UCZ2	2CCS562001R1028		0.221	10
	3	0110292	S402M-UCZ3	2CCS572001R1038		0.221	10
	4	0110308	S402M-UCZ4	2CCS572001R1048		0.221	10
	6	0110315	S402M-UCZ6	2CCS572001R1068		0.221	10
	8	0110322	S402M-UCZ8	2CCS572001R1088		0.221	10
	10	0110339	S402M-UCZ10	2CCS572001R1108		0.221	10
	13	0110346	S402M-UCZ13	2CCS572001R1138		0.221	10
	16	0110353	S402M-UCZ16	2CCS572001R1168		0.221	10
	20	0110360	S402M-UCZ20	2CCS572001R1208		0.221	10
	25	0110377	S402M-UCZ25	2CCS572001R1258		0.221	10
	32	0110384	S402M-UCZ32	2CCS572001R1328		0.221	10
	40	0110391	S402M-UCZ40	2CCS572001R1408		0.221	10
	50	0110407	S402M-UCZ50	2CCS572001R1508		0.221	10
	63	0110414	S402M-UCZ63	2CCS572001R1638		0.221	10

Connection diagram, single-pole (max. 220V d.c.) S401M-UCZ



Connection diagram, two-pole (max. 440V d.c.) S402M-UCZ



SMISSLINE TP plug-in system

RCCBs F400 series, A type

F402

	F402	F404
Rated voltage Un:	230 V	230/400 V
Number of poles:	2	4
Rated frequency fn:	50/60 Hz	50/60 Hz (for Type LF $16^2/_3$ Hz)
Rated breaking capacity Im:		1000 A
Total trip time (average value)		
– at IΔn	≤ 300 ms	≤ 300 ms
– at 5 IΔn	≤ 40 ms	≤ 40 ms
Delay time at 5 IΔn:	–	–
Resistance to short circuits (kA):	10 kA in conjunction with an upstream fuse gL / gG 100 A or a high performance MCB S800, 100 A	10 kA in conjunction with an upstream fuse gL / gG 100 A or a high performance MCB S800, 100 A
Connection load side terminal	Double lift terminal touch finger-proof, suitable for connecting single-, multi- and fine-wire conductors of up to 25 mm^2	
Degree of protection:	IP20 inside panel IP40	IP20 inside panel IP40
Endurance:	> 5000 operating cycles	> 5000 operating cycles
Resistance to climate acc. to:	EN 61008	EN 61008
Mounting position:	any	any
Ambient temperature:	–25 °C ... +40 °C	–25 °C ... +55 °C acc. to EN 61009
Vibration resistance:	5 g 5 ... 150 ... 5 Hz	5 g 5 ... 150 ... 5 Hz
Plastic parts:	halogen-free	halogen-free
Contacts:	cadmium-free	cadmium-free

F402

F404

F402 A type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct (with IΔn = 30 mA) contacts.

Application: residential, commercial, industrial.

Standard: IEC/EN 61008

Marking: according to EN 61008

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 801254 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	10	25	2037033	F402 A 25/0.01	2CSF502110R0250		0.250	1
	30	25	2034339	F402 A 25/0.03	2CSF502110R1250		0.250	1
	30	40	2036937	F402 A 40/0.03	2CSF502110R1400		0.250	1
	100	40	2034230	F402 A 40/0.1	2CSF502110R2400		0.250	1

F404 A type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct (with IΔn = 30 mA) contacts. Product helpful where for installation habits, for wiring with busbars or cables, for special needs neutral on the left is needed.

Application: residential, commercial, industrial.

Standard: IEC/EN 61008

Marking: according to EN 61008

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 761227 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	25	0104253	F404 A 25/0.03	2CCF544110E0250		0.430	1
	30	40	0104260	F404 A 40/0.03	2CCF544110E0400		0.430	1
	100	40	0104277	F404 A 40/0.1	2CCF544120E0400		0.430	1
	300	40	0104284	F404 A 40/0.3	2CCF544130E0400		0.430	1
	30	63	0104291	F404 A 63/0.03	2CCF544110E0630		0.430	1
	100	63	0104307	F404 A 63/0.1	2CCF544120E0630		0.430	1
	300	63	0104314	F404 A 63/0.3	2CCF544130E0630		0.430	1

F404 A type $16^2/_3$ Hz

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct (with IΔn = 30 mA) contacts.

The RCCB F200 $16^2/_3$ Hz can work at rated frequency of $16^2/_3$ Hz which is common in railways applications

Application: railways

Standard: IEC/ EN 61008

Marking: according to EN 61008

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 761227 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	63	0104376	F404 A-LF 63/0.03	2CCF544110E0631		0.430	1
	300	63	0104383	F404 A-LF 63/0.3	2CCF544130E0631		0.430	1

SMISSLINE TP plug-in system

RCCBs F400 series, A APR type

F402

	F402...K	F404...K	F404...S
Rated voltage Un:	230V	230/400V	230/400V
Number of poles:	2	4	4
Rated frequency fn:	45 ... 60Hz	45 ... 60Hz	45 ... 60Hz
Resistance to surge current:	3kA 8/20µs	3kA 8/20µs	5kA 8/20µs
Total trip time (average value)			
– at IΔn	240ms	120 ... 300ms	150 ... 500ms
– at 5 IΔn	≤ 40ms		40 ...150ms
Delay time at 5 IΔn:	10ms	10ms	90 ms
Resistance to short circuits (kA):	10kA in conjunction with an upstream fuse gL / gG 100A or or a high performance MCB S800 100A	10kA	10kA
Connection load side terminal	Double lift terminal touch finger-proof, suitable for connecting single-, multi- and fine-wire conductors of up to 25mm²		
Degree of protection:	IP20 in panel IP40	IP20 in panel IP40	IP20 in panel IP40
Endurance:	> 5000 operating cycles	> 5000 operating cycles	> 5000 operating cycles
Resistance to climate acc. to:	EN 61008	EN 61008	EN 61008
Mounting position:	any	any	any
Ambient temperature:	–25°C ... +40°C	–25°C ... +55°C	–25°C ... +40°C
Vibration resistance:	5g 5 ... 150 ... 5Hz	5g 5 ... 150 ... 5Hz	5g 5 ... 150 ... 5Hz
Plastic parts:	halogen-free	halogen-free	halogen-free
Contacts:	cadmium-free	cadmium-free	cadmium-free

SMISSLINE TP plug-in system

RCCBs F400 series, A K type

F402

F402 A K type, short-time delayed

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct (IΔn = 30 mA) contacts.

Application: residential, commercial, industrial.

Standard: IEC/EN 61008

Surge current resistance (wave 8/20) = 3000 A

Marking: according to EN 61008

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 761227 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	40	0104482	F402 A-K 40/0.03	2CCF552310E0400		0.250	1

FS 404 K and S

F404 A K type, short-time delayed

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct (IΔn = 30 mA) contacts.

Application: residential, commercial, industrial.

Standard: IEC/EN 61008

Surge current resistance (wave 8/20) = 3000 A

Marking: according to EN 61008

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 761227 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	30	40	0104321	F404 A-K 40/0.03	2CCF544310E0400		0.430	1
	100	40	0104338	F404 A-K 40/0.1	2CCF544320E0400		0.430	1
	30	63	0104345	F404 A-K 63/0.03	2CCF544310E0630		0.430	1

F404 A selective type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents with an intentional tripping delay, which permits to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide); protection against indirect contacts.

Application: commercial, industrial.

Standard: IEC/EN 61008

Surge current resistance (wave 8/20)=5000 A

Marking: according to EN 61008

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 761227 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
4	100	63	0104352	F404 A-S 63/0.1	2CCF544220E0630		0.430	1
	300	63	0104369	F404 A-S 63/0.3	2CCF544230E0630		0.430	1

SMISSLINE TP plug-in system

RCBOs FS401 series 10 000-6000 A and F type

FS 401 M

	FS401	FS401 Type A and F, short delay ARP
Rated voltage Un:	240 V~	
Number of poles:	2-pole (1PN)	
Rated frequency fn:	50/60 Hz	
Rated breaking capacity Icn:	10 kA – 240 V~	
	6 kA – 240 V~	
Current limitation class:	3	
Total cut-off time (average value) acc. to	EN 61009-1 EN 61009 max. 300 ms; 10 – 300 ms Type F max. 40 ms; 10 – 400 ms Type F	EN 61009-1 EN 61009 max. 300 ms; 10 – 300 ms Type F max. 40 ms; 10 – 400 ms Type F
Connection cross-sections	Opposing action stroke clamp on cylinder, touch finger-proof. Suitable for connecting	
Terminal at load end	single, multi- and fine-wire conductors of up to 25 mm^2	
Degree of protection:	IP20 inside panel IP40	
Endurance:	> 5000 operating cycles	
Resistance to climate, acc. to:	EN 61009	
Mounting position:	any	
Ambient temperature:	–25 °C ... +40 °C	
Vibration resistance:	5 g 5 ... 150 ... 5 Hz	
Plastic parts: Contacts:	halogen-free cadmium-free	
Standard	EN61009-1, SEV, VDE	

Please notice:
For the influence of the ambient temperature and the thermal influences of row mounted RCBO's it is necessary to calculate with the same correction factors like with MCB's.

Residual current operated circuit breakers with overcurrent protection (RCBO)
The SMISSLINE residual current operated circuit breakers with overcurrent protection (RCBO) are ideal for protecting people and property in all new and existing distribution systems. The combination of standby current and cable protection in one single device greatly simplifies planning and offers cost benefits. Using a RCBO can e.g. satisfy the minimum level of protection required by regulations in an apartment or in a particular distribution system. Should a residual current arise, only the circuit directly affected is switched off while all other circuits remain in operation.
The short time-delayed residual current operated circuit breaker with overcurrent protection FS401 K is a version particularly suited to unfavourable distribution and load situations. Without limiting the personal protection function in any way, the electronic short time delay prevents nuisance tripping which may arise as a result of capacitive discharge currents.

SMISSLINE TP plug-in system

RCBOs FS401 series 10 000-6000 A type

FS 401 M

FS401E A type, B and C characteristic

Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn=30 mA).

Application: residential, commercial, industrial.

Standard: IEC/EN 61009, Icn = 6 kA, Icn =10 kA

B, 6 kA according to EN 61009-1

	$I_{\Delta n}$	I_n	I_{cn}	Bbn 761227	Order details		Module	Weight 1 piece	Pack unit
	[mA]	[A]	[kA]	EAN	Type code	Order code		kg	pc.
	30	10	6	1472825	FS401 E-B 10/0.03	2CCL562111E1105	2	0.2	1
new	30	13	6	0108558	FS401 E-B 13/0.03	2CCL562111E0135	2	0.2	1
	30	16	6	0108565	FS401 E-B 16/0.03	2CCL562111E0165	2	0.2	1
	30	20	6	0109692	FS401 E-B 20/0.03	2CCL562111E0205	2	0.2	1
	30	25	6	0109708	FS401 E-B 25/0.03	2CCL562111E0255	2	0.2	1
	30	32	6	0109715	FS401 E-B 32/0.03	2CCL562111E0325	2	0.2	1

C, 6 kA according to EN 61009-1

new	30	6	6	1472788	FS401 E-C 6/0.03	2CCL562111E1064	2	0.2	1
new	30	10	6	1472801	FS401 E-C 10/0.03	2CCL562111E1104	2	0.2	1
	30	13	6	0108572	FS401 E-C 13/0.03	2CCL562111E0134	2	0.2	1
	30	16	6	0108589	FS401 E-C 16/0.03	2CCL562111E0164	2	0.2	1
	30	20	6	0104574	FS401 E-C 20/0.03	2CCL562110E0204	2	0.2	1
	30	25	6	0104581	FS401 E-C 25/0.03	2CCL562110E0254	2	0.2	1
	30	32	6	0104598	FS401 E-C 32/0.03	2CCL562110E0324	2	0.2	1

B, 10 kA according to EN 61009-1

	30	6	10	1472641	FS401 M-B 6/0.03	2CCL562110E1065	2	0.2	1
	30	10	10	0109685	FS401 M-B 10/0.03	2CCL562110E0105	2	0.2	1
	30	13	10	0104505	FS401 M-B 13/0.03	2CCL562110E0135	2	0.2	1
	30	16	10	0104512	FS401 M-B 16/0.03	2CCL562110E0165	2	0.2	1
new	30	20	10	1472689	FS401 M-B 20/0.03	2CCL562110E1205	2	0.2	1
new	30	25	10	1472726	FS401 M-B 25/0.03	2CCL562110E1255	2	0.2	1
new	30	32	10	1472764	FS401 M-B 32/0.03	2CCL562110E1325	2	0.2	1

C, 10 kA according to EN 61009-1

	30	6	10	1406905	FS401 M-C 6/0.03	2CCL562010E0064	2	0.2	1
	30	10	10	0104543	FS401 M-C 10/0.03	2CCL562110E0104	2	0.2	1
	30	13	10	0104550	FS401 M-C 13/0.03	2CCL562110E0134	2	0.2	1
	30	16	10	0104567	FS401 M-C 16/0.03	2CCL562110E0164	2	0.2	1
new	30	20	10	1472665	FS401 M-C 20/0.03	2CCL562110E1204	2	0.2	1
new	30	25	10	1472702	FS401 M-C 25/0.03	2CCL562110E1254	2	0.2	1
new	30	32	10	1472740	FS401 M-C 32/0.03	2CCL562110E1324	2	0.2	1
new	100	6	10	142 4534	FS401M-C6/0.1	2CCL562120E0064	2	0.2	1
new	100	10	10	1413217	FS401M-C10/0.1	2CCL562120E0104	2	0.2	1
new	100	13	10	1490706	FS401M-C13/0.1	2CCL562120E0134	2	0.2	1
new	100	16	10	1421618	FS401M-C16/0.1	2CCL562120E0164	2	0.2	1
new	100	20	10	1490720	FS401M-C20/0.1	2CCL562122E0204	2	0.2	1
new	100	25	10	1490744	FS401M-C25/0.1	2CCL562122E0254	2	0.2	1
new	100	32	10	1490768	FS401M-C32/0.1	2CCL562122E0324	2	0.2	1

SMISSLINE TP plug-in system

RCBOs FS401 series 10 000 A K Type F

F401 M A K type, short-time delayed
Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal compromise between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct (IΔn = 30 mA) contact; protection and isolation of resistive and inductive loads.
Application: residential, commercial, industrial.
Standard: IEC/EN 61009
Icn = 10 kA

B, 10 kA according to EN 61009-1

	$I_{\Delta n}$	I_n	I_{cn}	Bbn 761227	Order details		Module	Weight 1 piece	Pack unit
	[mA]	[A]	[kA]	EAN	Type code	Order code		kg	pc.
new	30	6	10	1472849	FS401 M K-B 6/0.03	2CCL562130E1035	2	0.2	1
new	30	10	10	1472887	FS401 M K-B 10/0.03	2CCL562310E1105	2	0.2	1
new	30	13	10	1472900	FS401 M K-B 13/0.03	2CCL562310E1135	2	0.2	1
new	30	16	10	1472924	FS401 M K-B 16/0.03	2CCL562310E1165	2	0.2	1
new	30	20	6	1472962	FS401 M K-B 20/0.03	2CCL562310E1205	2	0.2	1
new	30	25	6	1473006	FS401 M K-B 25/0.03	2CCL562310E1255	2	0.2	
new	30	32	6	1473044	FS401 M K-B 32/0.03	2CCL562310E1325	2	0.2	1

C, 10 kA according to EN 61009-1

new	30	6	10	1404031	FS401 M K-C 6/0.03	2CCL562330E1064	2	0.2	1
new	30	10	10	1404031	FS401 M K-C 10/0.03	2CCL562310E0104	2	0.2	1
new	30	13	10	0104604	FS401 M K-C 13/0.03	2CCL562310E0134	2	0.2	1
new	30	16	10	0104611	FS401 M K-C 16/0.03	2CCL562310E0164	2	0.2	1
new	30	20	6	0104642	FS401 M K-C 20/0.03	2CCL562310E1204	2	0.2	1
new	30	25	6	0104642	FS401 M K-C 25/0.03	2CCL562310E1254	2	0.2	1
new	30	32	6	0104642	FS401 M K-C 32/0.03	2CCL562310E1324	2	0.2	1

C, 10 kA according to EN 61009-1

new	300	6	10	1473068	FS401 M K-C 6/0.3	2CCL562130E3034	2	0.2	1
new	300	10	10	1473082	FS401 M K-C 10/0.3	2CCL562330E1104	2	0.2	1
new	300	13	10	1473105	FS401 M K-C 13/0.3	2CCL562330E1134	2	0.2	1
new	300	16	10	1473143	FS401 M K-C 16/0.3	2CCL562330E1164	2	0.2	1
new	300	20	10	1473181	FS401 M K-C 20/0.3	2CCL562330E1204	2	0.2	1
new	300	25	10	1473228	FS401 M K-C 25/0.3	2CCL562330E1254	2	0.2	1
new	300	32	10	1473266	FS401 M K-C 32/0.3	2CCL562330E1324	2	0.2	1

SMISSLINE TP plug-in system

RCBOs FS403 series 10000-6000 A type and short time delay Type F

FS 403 M

	FS403
Rated voltage Un	240/415V
Number of poles	4
Rated frequency fn	50/60Hz
Rated breaking capacity Icn	10kA (10A to 16A) 6kA (20A to 32A)
Current limitation class	3
Total cut-off time acc. to EN 61009	
at In	40ms
at 5x In	25ms
Connection cross-section	max. 25 mm² flexible wire with wire end sleeve
Terminal at load side	Possible to connect 2 wires in one chamber. Both chambers could be used with two different cross-sections.
Tightening torque	2.8Nm
Degree of protection	IP20
Endurance	>5000
Resistance to climate	EN 61009
Ambient temperature	–25°C ... +40°C
Mounting position	any
Vibration resistance	EN 61009
Plastic parts	halogen-free
Contacts	cadmium-free
Standard	EN61009-1, SEV, VDE

Accessory:
Auxiliary- and signal contacts are to attach on to the left of the device through the customer.

Please notice:
For the influence of the ambient temperature and the thermal influences of row mounted RCBO's it is necessary to calculate with the same correction factors like with MCBs.

Please see in Chapter 2 of Electrical installation solutions for buildings - Technical details.

4-pole RCBO from the ABB SMISSLINE protective devices range

The combination of circuit protection and a residual current protection in one device as 4-pole RCBO simplifies both – planning and installation. It enables you to provide perfect protection in one device. This protection consists of:

- Short circuit protection
- Overload protection
- Residual current protection
- Preventive fire protection

High rated short-circuit breaking capacity of 10kA, conforming to EN 61009-1

The I_{cn} 10kA short-circuit breaking capacity of the RCBO complies with standard EN 61009-1. This standard specifies testing and usage of RCBO's for household and similar uses.

The devices can also be used by non-professionals.

Features and benefits of the new devices:

- Overall width of 72mm (4 modules)
- Rated sensitivity 30mA
- Current rating 10A to 32A
- B and C tripping characteristics
- Easy Drive double deck terminals on the output side for connecting two conductors in one chamber. The two chambers can accommodate conductors with different cross sections.

SMISSLINE TP plug-in system

RCBOs FS403 series 10 000-6000 A A type and short time delay Type F

FS 403 M

FS403 M A type, B and C characteristic

Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: residential, commercial, industrial.

Standard: IEC/EN 61009, Icn = 6 kA, Icn =10 kA

B, 10 kA according to EN 61009-1

Poles	Sensitivity	Rated current	Rated breaking capacity	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	IΔn mA	In A	Icn kA	EAN	Type code	Order code		kg	pc.
4	30	6	10	1434434	FS403M-B6/0.03	2CCL564110E0065		0.410	1
		10	10	1407612	FS403M-B10/0.03	2CCL564110E0105		0.410	1
		13	10	1407629	FS403M-B13/0.03	2CCL564110E0135		0.410	1
		16	10	1407636	FS403M-B16/0.03	2CCL564110E0165		0.410	1
		20	10	1442576	FS403M-B20/0.03	2CCL563110E0205		0.410	1
		25	10	1442590	FS403M-B25/0.03	2CCL563110E0255		0.410	1
		32	10	1442613	FS403M-B32/0.03	2CCL563110E0325		0.410	1

C, 6 kA according to EN 61009-1

Poles	Sensitivity	Rated current	Rated breaking capacity	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	IΔn mA	In A	Icn kA	EAN	Type code	Order code		kg	pc.
4	30	6	6	1419141	FS403E-C6/0.03	2CCL564111E0064		0.410	1
		10	6	1434489	FS403E-C10/0.03	2CCL564111E0104		0.410	1
		13	6	1434519	FS403E-C13/0.03	2CCL564111E0134		0.410	1
		16	6	1434601	FS403E-C16/0.03	2CCL564111E0164		0.410	1
		20	6	1409609	FS403E-C20/0.03	2CCL564111E0203		0.410	1
		25	6	1408770	FS403E-C25/0.03	2CCL564111E0254		0.410	1
		32	6	1408787	FS403E-C32/0.03	2CCL564111E0324		0.410	1

C, 10 kA according to EN 61009-1

Poles	Sensitivity	Rated current	Rated breaking capacity	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	IΔn mA	In A	Icn kA	EAN	Type code	Order code		kg	pc.
4	30	6	10	1419127	FS403M-C6/0.03	2CCL564110E0064		0.410	1
		10	10	1407674	FS403M-C10/0.03	2CCL564110E0104		0.410	1
		13	10	1407681	FS403M-C13/0.03	2CCL564110E0134		0.410	1
		16	10	1407698	FS403M-C16/0.03	2CCL564110E0164		0.410	1
		20	10	1442569	FS403M-C20/0.03	2CCL563110E0204		0.410	1
		25	10	1442583	FS403M-C25/0.03	2CCL563110E0254		0.410	1
		32	10	1442606	FS403M-C32/0.03	2CCL563110E0324		0.410	1

C, 10 kA according to EN 61009-1

Poles	Sensitivity	Rated current	Rated breaking capacity	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	IΔn mA	In A	Icn kA	EAN	Type code	Order code		kg	pc.
4	100	6	6	1424527	FS403M-C6/0.1	2CCL564121E0064		0.410	1
		10	10	1424510	FS403M-C10/0.1	2CCL564121E0104		0.410	1
		13	10	1442620	FS403M-C13/0.1	2CCL563120E0134		0.410	1
		16	10	1420109	FS403M-C16/0.1	2CCL564120E0164		0.410	1
		20	10	1442637	FS403M-C20/0.1	2CCL563120E0204		0.410	1
		25	10	1442644	FS403M-C25/0.1	2CCL563120E0254		0.410	1
		32	10	1442651	FS403M-C32/0.1	2CCL563120E0324		0.410	1

FS 403 M

B, 10 kA according to EN61009-1 short time delayed (APR) Type F

Poles	Sensitivity	Rated current	Rated breaking capacity	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	IΔn mA	In A	Icn kA	EAN	Type code	Order code		kg	pc.
4	30	6	10	1470951	FS403MK-B6/0.03	2CCL564310E0065		0.410	1
		10	10	1470999	FS403MK-B10/0.03	2CCL564310E0105		0.410	1
		13	10	1471033	FS403MK-B13/0.03	2CCL564310E0135		0.410	1
		16	10	1471071	FS403MK-B16/0.03	2CCL564310E0165		0.410	1
		20	10	1470777	FS403MK-B20/0.03	2CCL564310E0205		0.410	1
		25	10	1470814	FS403MK-B25/0.03	2CCL564310E0255		0.410	1
		32	10	1470852	FS403MK-B32/0.03	2CCL564310E0325		0.410	1

C, 10 kA according to EN61009-1 short time delayed (APR) Type F

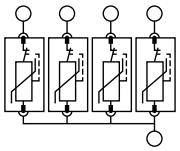
Poles	Sensitivity	Rated current	Rated breaking capacity	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	IΔn mA	In A	Icn kA	EAN	Type code	Order code		kg	pc.
4	30	6	10	1470937	FS403MK-C6/0.03	2CCL564310E0064		0.410	1
		10	10	1470975	FS403MK-C10/0.03	2CCL564310E0104		0.410	1
		13	10	1471019	FS403MK-C13/0.03	2CCL564310E0134		0.410	1
		16	10	1471057	FS403MK-C16/0.03	2CCL564310E0164		0.410	1
		20	10	1470753	FS403MK-C20/0.03	2CCL564310E0204		0.410	1
		25	10	1470791	FS403MK-C25/0.03	2CCL564310E0254		0.410	1
		32	10	1470838	FS403MK-C32/0.03	2CCL564310E0324		0.410	1

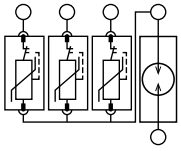
C, 10 kA according to EN 61009-1

Poles	Sensitivity	Rated current	Rated breaking capacity	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	IΔn mA	In A	Icn kA	EAN	Type code	Order code		kg	pc.
4	300	6	10	1471095	FS403MK-C6/0.3	2CCL564330E0064		0.410	1
		10	10	1471118	FS403MK-C10/0.3	2CCL564330E0104		0.410	1
		13	10	1471132	FS403MK-C13/0.3	2CCL564330E0134		0.410	1
		16	10	1471156	FS403MK-C16/0.3	2CCL564330E0164		0.410	1
		20	10	1470876	FS403MK-C20/0.3	2CCL563330E0204		0.410	1
		25	10	1470890	FS403MK-C25/0.3	2CCL563330E0254		0.410	1
		32	10	1470913	FS403MK-C32/0.3	2CCL563330E0324		0.410	1

SMISSLINE TP plug-in system

Surge arrester





The type 2 surge arresters in the QuickSafe product range are suitable for protecting electrical low voltage systems and terminals in the 240/415 V system. The devices can be used as type 2 surge arresters within the scope of the lightning protection zone concept at zone transition 0B–1 and higher. The high nominal discharge capability of 20 kA makes it possible for the equipment to have a longer service life in comparison to the minimum requirements of the standard. The devices consist of a basic unit and pluggable protection modules, which can be removed extremely easily to carry out insulation measurement. They are fully compatible with SMISSLINE installation devices and the surge arresters in the ABB System pro M model series. The surge arresters are tested as type 2 arresters in accordance with the EN/IEC 61643-11 test standard.

Mounting

Installation and electrical connection

The over voltage protection device “OVR” will be installed near the front of the protected consumers conditioning.

The surge arrester is to be mounted right after the Incoming block of the socket system.

The OVR404 is snapped directly onto the SMISSLINE bus bar system.

Type	**OVR404 4L 40-275 P TS QS**	**OVR404 3N 40-275 P TS QS**
Technologie	varistor	Varistor/gaz tube (N)
System network	TNS	TT–TNS

Electrical features

Standard	IEC 61643-11/EN 61643-11	IEC 61643-11/EN 61643-11
Type / test class	Type 2	Type 2
Number of pole	4	4
Nominal voltage UN (L-N, L-L)	240/415 V	240/415 V
Type of voltage	a.c. 45–65 Hz	a.c. 45–65 Hz
Max. cont. operating voltage U_c	275 V AC	275 V AC
Nominal discharge current I_n (8/20)	20 kA	20 kA
Maximum discharge current I_{max} (8/20)	40 kA	40 kA
Maximum impulse current I_{imp} (10/350)	2 kV	2 kA
Voltage protection level U_p at I_n (L-N / N-PE / L-PE)	1.5 kV	1.25/1.4/1.5 kV
Voltage protection level U_p at 3 kA (L-N / N-PE / L-PE)	0.5 kV	0.8/1.4/0.85 kV
Voltage protection level U_p at 5 kA (L-N / N-PE / L-PE)	0.7 kV	0.85/1.4/0.95 kV
Voltage protection level U_p at 10 kA (L-N / N-PE / L-PE)	0.9 kV	1/1.4/1.15 kV
TOV (Temporary overvoltage) withstand U_t (L-N: 5s./N-PE: 200 ms)	337/- V	337/1200 V
Response time Response time	≤ 25 ns	≤ 25 ns
Short-circuit withstand capability Isccr	100 kA	100 kA
Back up prootection circuit breaker	≤ 125 A; S800S B	≤ 125 A; S800S B
Pluggable cartridge	Yes	Yes
Integrated QuickSafe® technology	Yes	Yes
State indicator	Yes	Yes
Auxiliary contact (TS)	Yes	Yes

Installation

Wire range (L, N, PE)	2.5...25 mm²	2.5...25 mm²
	cable or rope	cable or rope
Connection cross-section	2.5...16 mm² litz wire with ferrule	2.5...16 mm² litz wire with ferrule
Tightening torque	2.8 Nm	2.8 Nm

Auxiliary contact (TS)

Contacts information	1 NO – 1 NC	1 NO – 1 NC
Max. load/current	12 V DC – 10 mA	12 V DC – 10 mA
Min. load/current	250 V AC – 1 A	250 V AC – 1 A
	1.5 mm²	1.5 mm²

Operating temperature	–25 °C – +60 °C	–25 °C – +60 °C
Stocking temperature	–25 °C – +80 °C	–25 °C – +80 °C

Back up protection

Typ 2 QuickSafe® Surge Protective Devices	**Prospective short circuit current at SPD location (Ip)**	**Circuit breaker maximum ratings 1) curve B or C**	**Fuse 2) (gL - gG)**
Maximum ratings			
I_n: 5, 20, 30 kA	0,625 kA < I_p < 100 kA	S800S B or C – 125 A [2)]	125 A fuse
U_c: 275, 350, 440, 600 V			

1) Maximum ratings, must be in accordance with the installation to follow coordination rules with main or upstream short circuit protection(s).

2) up to Ip ≤ 50 kA

SMISSLINE TP plug-in system

Surge arrester

OVR404

Surge arrester OVR404

Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
Isn (8/20 µs) kA	EAN	Type code	Order code		kg	pc.
20	1455491	OVR404 4L 40-275 P TS QS	2CCF606000R0001		0.470	1
20	1455507	OVR404 3N 40-275 P TS QS	2CCF606002R0001		0.450	1

SMISSLINE TP plug-in system

Switch disconnector

IS404 63

Technical data for switch disconnector IS404

Rated voltage Un	230/400 V~
Rated current In	63 A
Rated frequency fn	50 Hz
Number of poles	4
Rated impulse withstand voltage	6 kV
Connection cross-sections Cu	At top, touch finger-proof. Suitable for connecting up single-, multi- and fine-wire conductors of up to 25 mm²
Degree of protection	IP40
Endurance, mechanical/electrical	5000 operating cycles
Mounting position	any
Ambient temperature	–25 °C ... +40 °C
Specifications	EN/IEC 60947-3
Approvals	SEV
Weight (approx.)	250 g
Switching duty	AC-22A
Plastic parts	halogen-free
Contacts	cadmium-free

General switch disconnector

When used in a smissline socket system, the switch disconnector can be used instead of the incoming terminal block for up to 63 A.

With the smissline IS404 switch disconnector, individual loads, groups of loads or entire system parts can be separated or connected to the input supply.

The key features of the switch disconnector

- Input supply switch
- On-Off function
- Clear indication of switching position
- Snap-on auxiliary switch available
- Uniform smissline design

SMISSLINE TP plug-in system

Switch disconnector

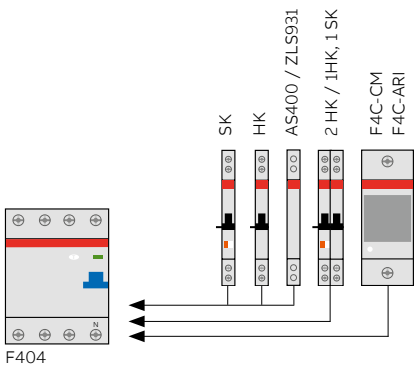
IS404 63

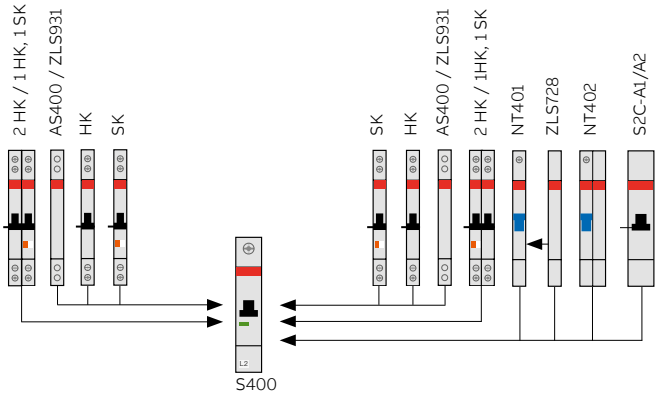
Switch disconnector IS404

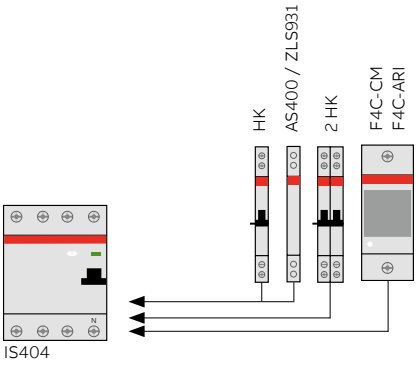
	Rated current	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In kA	EAN	Type code	Order code		kg	pc.
	63	0104390	IS404 63	2CCF544160E0630		0.380	1

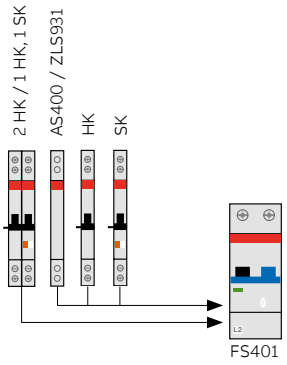
SMISSLINE TP plug-in system

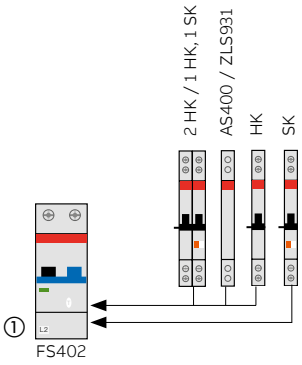
Auxiliary elements and accessories





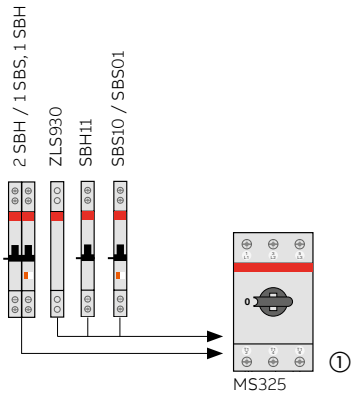


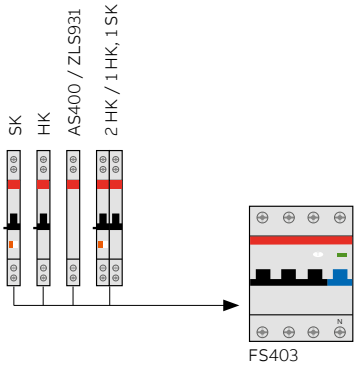




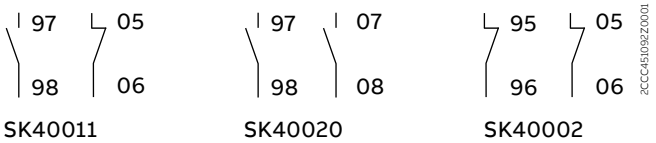
On each protective device can be mounted:

1 auxiliary switch
or 1 signal contact
or 2 auxiliary contact switches
or 1 auxiliary switch and 1 signal contact

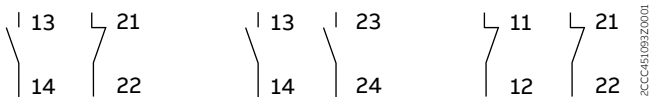




Contact description signal contact



Contact description auxiliary switch



① If you use an auxiliary switch and a signal contact you must connect first the signal contact on the MS325

SMISSLINE TP plug-in system

Adapter for motor starter MS116, MS132, MS325

Adapter for MS116, MS132

Designation	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Adapter MS116/132 L123 wire bottom feed	1414597	ZMS930	2CCA182520R0001		0.030	1
Adapter MS116/132 L123LALB wire bottom feed	1414580	ZMS931	2CCA182522R0001		0.062	1
Adapter MS116/132 L123 wire top feed	1414573	ZMS932	2CCA182524R0001		0.030	1
Adapter MS116/132 L123LALB wire top feed	1414566	ZMS933	2CCA182526R0001		0.062	1
Adapter MS116/132 empty	1414559	ZMS934	2CCA182512R0001		0.034	1
Intermediate piece 9 mm	1414412	ZMS935	2CCA182616R0001		0.007	1
Adapter MS116/132 L123LA wire top feed	1424626	ZMS937	2CCA182525R0001		0.058	1
Adapter MS116/132 L123LA wire bottom feed	1424619	ZMS936	2CCA182521R0001		0.058	1

Adapter plate for MS325 contact to busbars with plug contacts

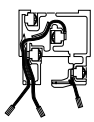
	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
3L	0021215	ZMS915	2CCF002817R0001		0.030	1
L1, N(20 A)	0021222	ZMS916	2CCF002818R0001		0.030	1
L2, N(20 A)	0021239	ZMS917	2CCF002819R0001		0.030	1
L3, N(20 A)	0021246	ZMS918	2CCF002820R0001		0.030	1
2L (reversible)	0021253	ZMS919	2CCF010620R0001		0.030	1

Auxiliary switch and signal contacts, connection support

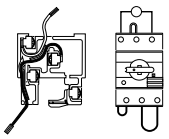
Contact pin, short

	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
for power supply via auxiliary busbars	0019526		2CCF002794R0001		0.002	1

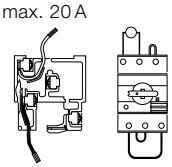
ZMS 915 → MS325 / ZLS 5.., I_n max. 32 A



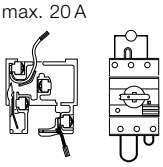
ZMS 916 → MS325, I_n max. 20 A



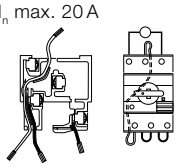
ZMS 917 → MS325, I_n max. 20 A



ZMS 918 → MS325, I_n max. 20 A



ZMS 919 → MS325, I_n max. 20 A



SMISSLINE TP plug-in system

Auxiliary switch and signal contacts

MCB S400, RCCB F404, RCCB F402, RCBO FS401

Technical data for auxiliary switch and signal contact

	Signal contact	**Auxiliary switch**
	SK400	**HK400**
Rated voltage Un	400 V	400 V
Rated impulse withstand voltage	4 kV	4 kV
Rated current – Ith – AC15 – DC13 – DC13	 6 A 2 A/230 V / 1 A/400 V 0.55 A/125 V= 0.27 A/250 V=	 6 A 2 A/230 V / 1 A/400 V 0.55 A/125 V= 0.27 A/250 V=
Minimum current/voltage (to ensure reliable electrical operation)	10 mA 12 V=	10 mA 12 V=
Connection cross-sections	2 x 1.5 mm^2 strand with sleeve	2 x 1.5 mm^2 strand with sleeve
Plastic parts	Free of halogen und cadmium	Free of halogen und cadmium
Internal resistance Ri	0.0065 Ω	0.0065 Ω
Power loss at rated current Pv	0.24 W	0.24 W
Ambient temperature	Tmax. +55 °C Tmin –25 °C	Tmax. +55 °C Tmin –25 °C
Tightening torque	1 Nm	1 Nm

SMISSLINE TP plug-in system

Auxiliary switch and signal contacts
MCB S400, RCCB F404, RCCB F402, RCBO FS401

HK400..L

HK400..R

Auxiliary switch

The auxiliary switch and signal contacts are supplied with one contacting piece. The signal contact collective alarm are supplied with two contacting pieces.

for left side mounting on MCB S400, RCCB F402, RCBO FS401, FS403

	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
1NO and 1NC	0100910	HK40011-L	2CCS500900R0081		0.045	10
2NO	0111183	HK40020-L	2CCF201112R0001		0.040	10
2NC	0111190	HK40002-L	2CCF201114R0001		0.040	10

for right side mounting on RCCB F404, MCB S400 and IS404

1NO and 1NC	0108619	HK40011-R	2CCS500900R0214	0.045	10
2NO	0111206	HK40020-R	2CCF201113R0001	0.040	10
2NC	0111213	HK40002-R	2CCF201115R0001	0.040	10

SK400..L

Signal contacts

for left side mounting on MCB S400, RCCB F402, RCBO FS401, FS403

	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
1NO and 1NC	0100934	SK40011-L	2CCS500900R0101		0.045	10
2NO	0111107	SK40020-L	2CCF201162R0001		0.040	10
2NC	0111114	SK40002-L	2CCF201164R0001		0.040	10

for right side mounting on RCCB F404 and MCB S400

1NO and 1NC	0108626	SK40011-R	2CCS500900R0215	0.045	10
2NO	0111121	SK40020-R	2CCF201163R0001	0.040	10
2NC	0111138	SK40002-R	2CCF201165R0001	0.040	10

SK400..R

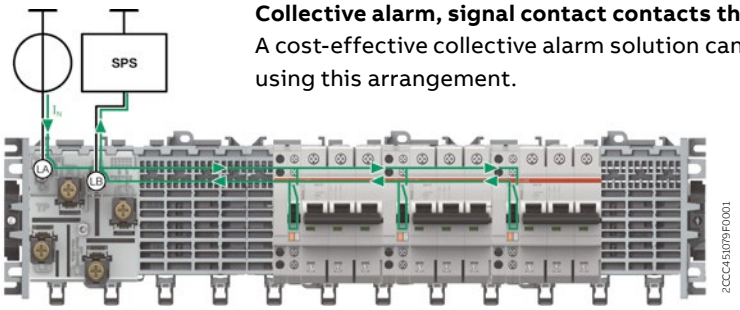
Signal contact collective alarm and auxiliary contact

for left side mounting

	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
1NO	0107964	SK40010-L SA	2CCS500900R0141		0.045	10
1NO	1407902	HK40010-L SA	2CCF201212R0001		0.045	10

for right side mounting

1NO	0108633	SK40010-R SA	2CCS500900R0216	0.045	10
1NO	1407919	HK40010-R SA	2CCF201213R0001	0.045	10



Collective alarm, signal contact contacts the auxiliary busbars LA, LB

A cost-effective collective alarm solution can be implemented without additional wiring by using this arrangement.

SMISSLINE TP plug-in system

Dummy, housing, Neutral disconnector, shunt trip

Connection support dummy housing
for left or right side mounting on MCB S400, RCCB F402, RCCB F404, RCBO FS401

Connection support	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	100958	AS400	2CCS500900R0151		0.045	10
Dummy housing						
Compensation to 18 mm	0100965	ZLS931	2CCS500900R0161		0.035	10

Contacting pieces for auxiliary switch and signal contacts

Connection support	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Contacting piece for HK/SK LA, LB Pack contains 100 items	0100972	ZLS632	2CCS500900R0171		0.200	Pack contains 100 items
Contacting piece for HK/SK LA, LB Pack contains 10 items	0109265	ZLS635	2CC5201307R0171		0.020	Pack contains 10 items
Contact Pin	0108640	ZLS633	2CCS500900R0201			Pack contains 10 items

Neutral disconnector
On the load side terminal two separate conductors can be clamped

Connection support	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Neutral disconnector 9 mm	0100859	NT401 63	2CCS500900R0021		0.045	10
Neutral disconnector 18 mm	0100842	NT402 63	2CCS500900R0011		0.058	10
Compensation to 18 mm for NT401 63	0104710	ZLS728	2CCS400900R0101		0.015	1 Bag contains 5 items

S2C-A

Shunt trip

Function: remote opening of the device when a voltage is applied.
Suitable for MCBs S400 series.

Rated voltage	Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
12–60 VAC/DC	2570992	S 2C-A1	2CDS200909R0001		0.150	1
110–415 VAC/DC, 110–250 VDC	2571005	S 2C-A2	2CDS200908R0002		0.150	1

Orders for this two types can be done over DESTO

SMISSLINE TP plug-in system

F4C-CM motor operating and F4C-ARI auto-reclosing devices

F4C-CM

Motor operating devices for residual current circuit breakers F404 25 ... 63 A
Supply voltage 12 ... 30 V AC; 12 ... 48 V DC
1 integrated auxiliary contact

Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
EAN	Type code	Order code		kg	pc.
2998730	F4C-CM	2CSF204986R0013		0.166	1

For Supply voltage 230 V it is needed to use a safety transformer TS16/12 (2CSM161401R401R0811).

Motor operating auto-reclosing unit for residual current circuit breakers F404 25 ... 63 A
Supply voltage 12 ... 30 V AC; 12 ... 48 V DC
1 integrated auxiliary contact

Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
	Type code	Order code			
EAN				kg	pc.
2998631	F4C-ARI	2CSF204987R0013		0.166	1

For Supply voltage 230 V it is needed to use a safety transformer TS16/12 (2CSM161401R401R0811).

Safety transformer

Bbn 801254	Order details		Price 1 piece	Weight 1 piece	Pack unit
	Type code	Order code			
EAN				kg	pc.
2368908	TS16/12	2CSM161401R0811		0.355	1

SMISSLINE TP plug-in system

Approvals according to IEC/EN 61439-6. Busbar system 125 A.

Power bar system touch proof:
Use only for wall mounted application (horizontal or vertical).
When installed correctly the requirements of EN/IEC 61439-2 are met.

Number of poles	max. 6 to 110 3p+N / 2 additional bars PE+N
Rated operational voltage (U_e)	690 VAC, 1000 VDC (400 VAC, 250 VDC when used for load-free snap on and off under power)
Rated insulation voltage (U_i)	690 VAC, 1000 VDC
IP Code	IP20B
Mounting position	horizontal or vertical, direct mounting or mounting on DIN rail acc. to EN 60715 35 mm
Pollution degree	3 (690 V a.c.) 2 (1000 V d.c.)
Rated impulse voltage (U_{imp})	8 kV (all cicuits)
Rated current of the assembly (I_nA)	Max. 100 A (side feeding), max. 125 A (max. 35 °C Ambient air temperature for 125 A continuously) Max. 200 A (center feeding) Max. 250 A (max. 35 °C Ambient air temperature for 250 A continuously)
Auxiliary circuit	max. 40 A
Rated current of a circuit (I_{nc})	Main circuit: Max. 125 A (max. 35 °C Ambient air temperature for 125 A continuously)
Rated current of Auxiliary circuit	40 A
Rated short-time withstand current (I_{cw})	10 kA / 300 ms
Auxiliary circuit	4 kA / 50 ms
Rated peak withstand current (I_{pk})	Main circuit: 35 kA
Auxiliary circuit	6 kA
Rated diversity factor (RDF)	1
Rated frequency (f)	50/60 Hz
Rated conditional short-circuit current (I_{cc})	50 kA
Ambient air temperature	max. 60°C
Size of CU bars 3P+N+PE	3 x 10 mm (30 mm²)
Size of CU auxiliary bars La Lb	2 x 5 mm (10 mm²)

Rated conditional short-circuit current (I_{cc})	**Incoming current of main busbars (L1, L2, L3, N)**	**Short circuit protection device (SCPD)**	
		Fuse	**MCCB**
50 kA	250 A		ABB T_{max} 250 A
	200 A	NH1 gG 690 V/200 A	ABB T_{max} 250 A
	160 A	NH1 gG 690 V/160 A	ABB T_{max} 250 A
	63 A	NH00 gG 690 V/63 A	ABB Type S803S in combination with Type S803S-SCL63-SR
	Incoming current of auxiliary busbars (LA LB)		
	40 A	NH00 gG 690 V/40 A	ABB Type S800 with 240 V/415 V

SMISSLINE TP plug-in system

Technical data IEC and technical data UL508A

Busbar system 125 A

	Maximum rated voltage	Maximum rated current	Cross-section of conductors
Incoming terminal block ZLS224/225/228/229	690 VAC 1000 VDC	160 A 3LN, 40 A LA, LB	6 mm²–50 mm², 2 x 25 mm² 3LN, 10 mm² LA, LB
Incoming terminal block ZLS250–253	690 VAC 1000 VDC	200 A	35 mm²–95 mm² max. 1 wire, 10–25 mm² 1 or 2 wires
Incoming terminal block ZLS260–262	690 VAC 1000 VDC	63 A 3LN, 6 A LA, LB	2 mm²–25 mm² 3LN, LA, LB max. 1 wire
Busbar ZLS200	690 VAC 1000 VDC	100 A	
Busbar ZLS202	690 VAC 600 VDC	40 A	
Universal adapters 32 A	690 VAC 600 VDC	32 A Line or neutral	
Universal adapters 63 A	690 VAC 600 VDC	63 A Line or neutral	
Combi module	690 VAC 600 VDC	32 A Line or neutral 6A LA, LB	
The SMISSLINE system and components are tested for vibration according to IEC 60068-2-6 (2–13.2 Hz/1 mm displacement, 13.2–100 Hz/0.7 g) and for Miniature circuit breakers (5 g, 20 frequency cycles 5 …150 … 5 Hz at 0.8 rated current)			
Governing standard: IEC 60068-2-6 Environmental testing – Part 2–6: Test Fc. Vibration (sinusoidal)			

SMISSLINE TP system for UL 508 – Industrial Control Equipment,
CSA C22.2 No. 14-13 – Industrial Control Equipment File 20170427-E22211

Technical data UL508 Industrial Control Equipment SMISSLINE TP busbar system
Rated Voltage: 600 V AC
Rated Current (End Feed, left and right): 125 A left, 125 A right
Rated Current (Center Feed): 250 A max. if used with two feeder blocks.
Short Circuit Ratings: 50 kA, max. 480 V AC and 480 Y/277 V and 240 V AC or 35 kA, max. 600 V AC and 600 Y/347 V

Technical data UL508 Industrial Control Equipment

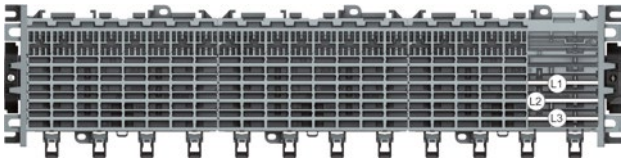
	Busbar ZLS200	socket addtional socket	Feeder blockZLS22X, ZLS95X	Combimodule ZLS840X, 842X	Universal-adpter ZLS97X	Terminals ZLS95XUL, 91XUL	Combi modul ZMS132X	Adapter moter strater ZMS93X
Maximum nominal voltage	600 VAAC	600 VAAC	600 VAAC	600 VAAC	600 VAAC	600 VAAC	600 VAAC	600 VAAC
Maximum nominal current	125 A		125 A, 250 A	30 A	32 A, 63 A	32 A, 100 A, 150 A	32 A	32 A

Circuit breaker accessories UL489

	970UL, 971UL, 972UL or 973UL
Maximum nominal voltage	600 V
Maximum nominal current	25 A, 45 A

SMISSLINE TP plug-in system

Starter pack Touch proof 3L – 125 A system

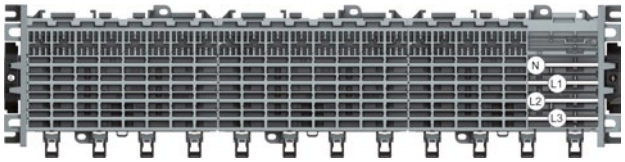


Starter Pack 3L: L1, L2, L3 inclusive socket end piece

Solutions available	Busbars length incl. Socket end piece mm	Busbars length mm	Bbn 761227 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
18 PLE 3L	364	320	1426514	ZLS905E18-3L	2CCA183232R0001		0.530	1
20 PLE 3L	401	355	1413231	ZLS905E20-3L	2CCA183100R0001		0.637	1
22 PLE 3L	437	391	1413255	ZLS905E22-3L	2CCA183102R0001		0.693	1
24 PLE 3L	473	427	1413279	ZLS905E24-3L	2CCA183104R0001		0.749	1
26 PLE 3L	509	463	1413293	ZLS905E26-3L	2CCA183106R0001		0.813	1
28 PLE 3L	545	499	1413415	ZLS905E28-3L	2CCA183108R0001		0.848	1
30 PLE 3L	581	535	1413439	ZLS905E30-3L	2CCA183110R0001		0.933	1
32 PLE 3L	617	571	1413453	ZLS905E32-3L	2CCA183112R0001		0.981	1
34 PLE 3L	653	607	1413477	ZLS905E34-3L	2CCA183114R0001		1.044	1
36 PLE 3L	689	643	1413491	ZLS905E36-3L	2CCA183116R0001		1.100	1
38 PLE 3L	725	679	1413514	ZLS905E38-3L	2CCA183118R0001		1.156	1
40 PLE 3L	761	715	1413538	ZLS905E40-3L	2CCA183120R0001		1.212	1
42 PLE 3L	797	751	1413552	ZLS905E42-3L	2CCA183122R0001		1.276	1
44 PLE 3L	833	787	1413576	ZLS905E44-3L	2CCA183124R0001		1.332	1
46 PLE 3L	869	823	1413590	ZLS905E46-3L	2CCA183126R0001		1.388	1
48 PLE 3L	905	859	1413613	ZLS905E48-3L	2CCA183128R0001		1.444	1
50 PLE 3L	941	896	1413637	ZLS905E50-3L	2CCA183130R0001		1.508	1
52 PLE 3L	977	932	1413651	ZLS905E52-3L	2CCA183132R0001		1.564	1
54 PLE 3L	1013	968	1413675	ZLS905E54-3L	2CCA183134R0001		1.620	1
56 PLE 3L	1049	1004	1413699	ZLS905E56-3L	2CCA183136R0001		1.675	1
58 PLE 3L	1058	1040	1413712	ZLS905E58-3L	2CCA183138R0001		1.739	1
60 PLE 3L	1122	1076	1413736	ZLS905E60-3L	2CCA183140R0001		1.795	1
62 PLE 3L	1158	1112	1413750	ZLS905E62-3L	2CCA183142R0001		1.851	1
64 PLE 3L	1194	1148	1413774	ZLS905E64-3L	2CCA183144R0001		1.907	1
66 PLE 3L	1230	1184	1413798	ZLS905E66-3L	2CCA183146R0001		1.971	1
68 PLE 3L	1266	1220	1413811	ZLS905E68-3L	2CCA183148R0001		2.027	1
70 PLE 3L	1302	1256	1413835	ZLS905E70-3L	2CCA183150R0001		2.083	1
72 PLE 3L	1338	1292	1413859	ZLS905E72-3L	2CCA183152R0001		2.139	1
74 PLE 3L	1374	1328	1413873	ZLS905E74-3L	2CCA183154R0001		2.203	1
76 PLE 3L	1410	1364	1413897	ZLS905E76-3L	2CCA183156R0001		2.269	1
78 PLE 3L	1446	1400	1413910	ZLS905E78-3L	2CCA183158R0001		2.314	1
80 PLE 3L	1482	1436	1413934	ZLS905E80-3L	2CCA183160R0001		2.370	1

SMISSLINE TP plug-in system

Starter pack Touch proof 3LN – 125 A system



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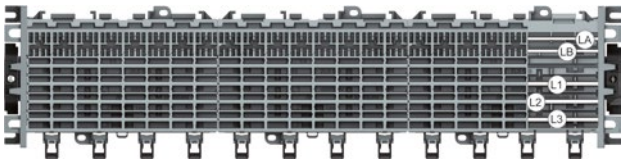
Starter Pack 3LN: L1, L2, L3, N inclusive socket end piece

Solutions available	Busbars length incl. Socket end piece	Busbars length	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	mm	mm	EAN	Type code	Order code		kg	pc.
18 PLE 3LN	364	320	1426521	ZLS905E18-3LN	2CCA183234R0001		0.615	1
20 PLE 3LN	401	355	1413248	ZLS905E20-3LN	2CCA183101R0001		0.724	1
22 PLE 3LN	437	391	1413262	ZLS905E22-3LN	2CCA183103R0001		0.789	1
24 PLE 3LN	473	427	1413286	ZLS905E24-3LN	2CCA183105R0001		0.800	1
26 PLE 3LN	509	463	1413408	ZLS905E26-3LN	2CCA183107R0001		0.926	1
28 PLE 3LN	545	499	1413422	ZLS905E28-3LN	2CCA183109R0001		0.970	1
30 PLE 3LN	581	535	1413446	ZLS905E30-3LN	2CCA183111R0001		1.046	1
32 PLE 3LN	617	571	1413460	ZLS905E32-3LN	2CCA183113R0001		1.120	1
34 PLE 3LN	653	607	1413484	ZLS905E34-3LN	2CCA183115R0001		1.193	1
36 PLE 3LN	689	643	1413507	ZLS905E36-3LN	2CCA183117R0001		1.2.57	1
38 PLE 3LN	725	679	1413521	ZLS905E38-3LN	2CCA183119R0001		1.322	1
40 PLE 3LN	761	715	1413545	ZLS905E40-3LN	2CCA183121R0001		1.387	1
42 PLE 3LN	797	751	1413569	ZLS905E42-3LN	2CCA183123R0001		1.459	1
44 PLE 3LN	833	787	1413583	ZLS905E44-3LN	2CCA183125R0001		1.524	1
46 PLE 3LN	869	823	1413606	ZLS905E46-3LN	2CCA183127R0001		1.589	1
48 PLE 3LN	905	859	1413620	ZLS905E48-3LN	2CCA183129R0001		1.653	1
50 PLE 3LN	941	896	1413644	ZLS905E50-3LN	2CCA183131R0001		1.726	1
52 PLE 3LN	977	932	1413668	ZLS905E52-3LN	2CCA183133R0001		1.791	1
54 PLE 3LN	1013	968	1413682	ZLS905E54-3LN	2CCA183135R0001		1.855	1
56 PLE 3LN	1049	1004	1413705	ZLS905E56-3LN	2CCA183137R0001		1.920	1
58 PLE 3LN	1058	1040	1413729	ZLS905E58-3LN	2CCA183139R0001		1.992	1
60 PLE 3LN	1122	1076	1413743	ZLS905E60-3LN	2CCA183141R0001		2.057	1
62 PLE 3LN	1158	1112	1413767	ZLS905E62-3LN	2CCA183143R0001		2.122	1
64 PLE 3LN	1194	1148	1413781	ZLS905E64-3LN	2CCA183145R0001		2.186	1
66 PLE 3LN	1230	1184	1413804	ZLS905E66-3LN	2CCA183147R0001		2.259	1
68 PLE 3LN	1266	1220	1413828	ZLS905E68-3LN	2CCA183149R0001		2.324	1
70 PLE 3LN	1302	1256	1413842	ZLS905E70-3LN	2CCA183151R0001		2.388	1
72 PLE 3LN	1338	1292	1413866	ZLS905E72-3LN	2CCA183153R0001		2.453	1
74 PLE 3LN	1374	1328	1413880	ZLS905E74-3LN	2CCA183155R0001		2.526	1
76 PLE 3LN	1410	1364	1413903	ZLS905E76-3LN	2CCA183157R0001		2.590	1
78 PLE 3LN	1446	1400	1413927	ZLS905E78-3LN	2CCA183159R0001		2.655	1
80 PLE 3LN	1482	1436	1413941	ZLS905E80-3LN	2CCA183161R0001		2.719	1

SMISSLINE TP plug-in system

Starter pack Touch proof 3L LA LB – 125 A system



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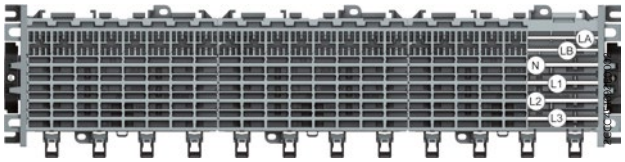
Starter Pack 3LLALB: L1, L2, L3, LA, LB inclusive socket end piece

Solutions available	Busbars length incl. Socket end piece	Busbars length	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	mm	mm	EAN	Type code	Order code		kg	pc.
18 PLE 3L LA LB	364	320	1426538	ZLS905E18-3LLALB	2CCA183233R0001		0.586	1
20 PLE 3L LA LB	401	355	1416904	ZLS905E20-3LLALB	2CCA183162R0001		0.753	1
22 PLE 3L LA LB	437	391	1416911	ZLS905E22-3LLALB	2CCA183164R0001		0.821	1
24PLE 3L LA LB	473	427	1416928	ZLS905E24-3LLALB	2CCA183166R0001		0.835	1
26PLE 3L LA LB	509	463	1416935	ZLS905E26-3LLALB	2CCA183168R0001		0.964	1
28PLE 3L LA LB	545	499	1416942	ZLS905E28-3LLALB	2CCA183170R0001		1.011	1
30PLE 3L LA LB	581	535	1416959	ZLS905E30-3LLALB	2CCA183172R0001		1.107	1
32PLE 3L LA LB	617	571	1416966	ZLS905E32-3LLALB	2CCA183174R0001		1.167	1
34PLE 3L LA LB	653	607	1416973	ZLS905E34-3LLALB	2CCA183176R0001		1.242	1
36PLE 3L LA LB	689	643	1416980	ZLS905E36-3LLALB	2CCA183178R0001		1.310	1
38PLE 3L LA LB	725	679	1416997	ZLS905E38-3LLALB	2CCA183180R0001		1.377	1
40PLE 3L LA LB	761	715	1417000	ZLS905E40-3LLALB	2CCA183182R0001		1.445	1
42PLE 3L LA LB	797	751	1417017	ZLS905E42-3LLALB	2CCA183184R0001		1.520	1
44PLE 3L LA LB	833	787	1417024	ZLS905E44-3LLALB	2CCA183186R0001		1.588	1
46PLE 3L LA LB	869	823	1417031	ZLS905E46-3LLALB	2CCA183188R0001		1.656	1
48PLE 3L LA LB	905	859	1417048	ZLS905E48-3LLALB	2CCA183190R0001		1.723	1
50PLE 3L LA LB	941	896	1417055	ZLS905E50-3LLALB	2CCA183192R0001		1.799	1
52PLE 3L LA LB	977	932	1417062	ZLS905E52-3LLALB	2CCA183194R0001		1.866	1
54PLE 3L LA LB	1013	968	1417079	ZLS905E54-3LLALB	2CCA183196R0001		1.934	1
56PLE 3L LA LB	1049	1004	1417086	ZLS905E56-3LLALB	2CCA183198R0001		2.001	1
58PLE 3L LA LB	1058	1040	1417093	ZLS905E58-3LLALB	2CCA183200R0001		2.077	1
60PLE 3L LA LB	1122	1076	1417109	ZLS905E60-3LLALB	2CCA183202R0001		2.144	1
62PLE 3L LA LB	1158	1112	1417116	ZLS905E62-3LLALB	2CCA183204R0001		2.212	1
64PLE 3L LA LB	1194	1148	1417123	ZLS905E64-3LLALB	2CCA183206R0001		2.279	1
66PLE 3L LA LB	1230	1184	1417130	ZLS905E66-3LLALB	2CCA183208R0001		2.355	1
68PLE 3L LA LB	1266	1220	1417147	ZLS905E68-3LLALB	2CCA183210R0001		2.423	1
70 PLE 3L LA LB	1302	1256	1417154	ZLS905E70-3LLALB	2CCA183212R0001		2.490	1
72PLE 3L LA LB	1338	1292	1417161	ZLS905E72-3LLALB	2CCA183214R0001		2.558	1
74PLE 3L LA LB	1374	1328	1417178	ZLS905E74-3LLALB	2CCA183216R0001		2.633	1
76PLE 3L LA LB	1410	1364	1417185	ZLS905E76-3LLALB	2CCA183218R0001		2.701	1
78PLE 3L LA LB	1446	1400	1417192	ZLS905E78-3LLALB	2CCA183220R0001		2.768	1
80PLE 3L LA LB	1482	1436	1417208	ZLS905E80-3LLALB	2CCA183222R0001		2.836	1

SMISSLINE TP plug-in system

Starter pack Touch proof 3LN LA LB – 125 A system



Starter Pack 3LNLALB: L1, L2, L3, N, LA, LB inclusive socket end piece

Solutions available	Busbars length incl. Socket end piece mm	Busbars length mm	Bbn 761227 EAN	Order details Type code	Order details Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
18 PLE 3LN LA LB	364	320	1426545	ZLS905E18-3LNLALB	2CCA183235R0001		0.671	1
20 PLE 3LN LA LB	401	355	1417215	ZLS905E20-3LNLALB	2CCA183163R0001		0.841	1
22 PLE 3LN LA LB	437	391	1417222	ZLS905E22-3LNLALB	2CCA183165R0001		0.917	1
24PLE 3LN LA LB	473	427	1417239	ZLS905E24-3LNLALB	2CCA183167R0001		0.939	1
26PLE 3LN LA LB	509	463	1417246	ZLS905E26-3LNLALB	2CCA183169R0001		1.078	1
28PLE 3LN LA LB	545	499	1417253	ZLS905E28-3LNLALB	2CCA183171R0001		1.133	1
30PLE 3LN LA LB	581	535	1417260	ZLS905E30-3LNLALB	2CCA183173R0001		1.238	1
32PLE 3LN LA LB	617	571	1417277	ZLS905E32-3LNLALB	2CCA183175R0001		1.306	1
34PLE 3LN LA LB	653	607	1417284	ZLS905E34-3LNLALB	2CCA183177R0001		1.391	1
36PLE 3LN LA LB	689	643	1417291	ZLS905E36-3LNLALB	2CCA183179R0001		1.467	1
38PLE 3LN LA LB	725	679	1417307	ZLS905E38-3LNLALB	2CCA183181R0001		1.543	1
40PLE 3LN LA LB	761	715	1417314	ZLS905E40-3LNLALB	2CCA183183R0001		1.619	1
42PLE 3LN LA LB	797	751	1417321	ZLS905E42-3LNLALB	2CCA183185R0001		1.704	1
44PLE 3LN LA LB	833	787	1417338	ZLS905E44-3LNLALB	2CCA183187R0001		1.780	1
46PLE 3LN LA LB	869	823	1417345	ZLS905E46-3LNLALB	2CCA183189R0001		1.856	1
48PLE 3LN LA LB	905	859	1417352	ZLS905E48-3LNLALB	2CCA183191R0001		1.933	1
50PLE 3LN LA LB	941	896	1417369	ZLS905E50-3LNLALB	2CCA183193R0001		2.017	1
52PLE 3LN LA LB	977	932	1417376	ZLS905E52-3LNLALB	2CCA183195R0001		2.093	1
54PLE 3LN LA LB	1013	968	1417383	ZLS905E54-3LNLALB	2CCA183197R0001		2.169	1
56PLE 3LN LA LB	1049	1004	1417390	ZLS905E56-3LNLALB	2CCA183199R0001		2.246	1
58PLE 3LN LA LB	1058	1040	1417406	ZLS905E58-3LNLALB	2CCA183201R0001		2.330	1
60PLE 3LN LA LB	1122	1076	1417413	ZLS905E60-3LNLALB	2CCA183203R0001		2.406	1
62PLE 3LN LA LB	1158	1112	1417505	ZLS905E62-3LNLALB	2CCA183205R0001		2.482	1
64PLE 3LN LA LB	1194	1148	1419172	ZLS905E64-3LNLALB	2CCA183207R0001		2.559	1
66PLE 3LN LA LB	1230	1184	1417420	ZLS905E66-3LNLALB	2CCA183209R0001		2.643	1
68PLE 3LN LA LB	1266	1220	1417437	ZLS905E68-3LNLALB	2CCA183211R0001		2.719	1
70 PLE 3LN LA LB	1302	1256	1417444	ZLS905E70-3LNLALB	2CCA183213R0001		2.796	1
72PLE 3LN LA LB	1338	1292	1417451	ZLS905E72-3LNLALB	2CCA183215R0001		2.872	1
74PLE 3LN LA LB	1374	1328	1417468	ZLS905E74-3LNLALB	2CCA183217R0001		2.956	1
76PLE 3LN LA LB	1410	1364	1417475	ZLS905E76-3LNLALB	2CCA183219R0001		3.032	1
78PLE 3LN LA LB	1446	1400	1417482	ZLS905E78-3LNLALB	2CCA183221R0001		3.109	1
80PLE 3LN LA LB	1482	1436	1417499	ZLS905E80-3LNLALB	2CCA183223R0001		3.185	1

SMISSLINE TP plug-in system

Socket

ZLS90

Socket bases ZLS906, ZLS908

The SMISSLINE socket system is a totally new kind of assembly and connection technology for the construction of distributions. Besides the classic method of snapping the devices onto 35-mm mounting rails, the new family of devices can be directly attached to the socket bases with integrated busbars. The time-consuming process of connecting up the supply is thereby no longer needed. In addition, in the event of rearrangement or expansion, the replacement of devices in existing systems is made significantly easier.

The socket sections and the wide range of accessories make it possible to plan with the capability for expansion and to construct distribution systems of any desired size in a short period of time.

6- and 8-module sockets are installed either by screwing them onto any flat surface or by snapping them onto a 35 mm DIN mounting rail. Lateral movement or detachment of the sockets again is possible before final fixing.

In order to determine the required socket length, the space necessary for

- the devices required
- the incoming terminal block and
- any reserve spaces needed must be determined.

Snap mounting

Pull down the slide with a screwdriver until it latches (socket can be moved).
Press on front of slid:
Fixed position
(Sockets fixed)

The key features

- System of any desired length (even number of poles)
- Integrated busbars
- Simple device change
- Long-term planning and problem free extension possible
- Significant time savings during assembly and connection

Socket base

Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
8-module socket Length 144 mm (includes base and cover)	1413965	ZLS908	2CCA183030R0001		0.092	10
6-module socket Length 108 mm (includes base and cover)	1413958	ZLS906	2CCA183035R0001		0.071	10

Busbars for the sockets and additional socket ZLS200

The busbars of size 10 x 3 mm can be loaded with currents up to 125 A. They are plated for perfect contact wiith the devices plug-in contacts. The maximum available busbar length is

SMISSLINE TP plug-in system

Busbars, Socket end piece – 125 A system

ZLS20

1979 mm. The same busbar type is used, regardless whether it is fitted in the socket (L1, L2, L3, N) or in the additional socket (N, PE). The busbars are inserted in to the socket from the front.

Auxiliary busbars for the socket ZLS202

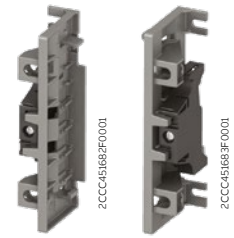
The 5 x 2 mm auxiliary busbars are intended for a common power supply of auxiliary switches and signal contacts. They are also plated and their max. delivery length is 1979 mm.
Like the main busbars, the auxiliary busbars are inserted in holders LA and LB from the front. Of course, only on auxiliary busbar can be fitted.

Busbars for the sockets

Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
125 A busbar plated, 10 x 3 mm, for L1, L2, L3, N and PE – Delivery length 1979 mm	0015702	ZLS200	2CCF002772R0001		0.640	10
40 A auxiliary busbar plated, 5 x 2 mm, for LA und LB – Delivery length 1979 mm	0015719	ZLS202	2CCF002773R0001		0.240	10

Socket end piece ZLS920

To prevent displacement of sockets and busbars (particulary when installed vertically) end pieces can be fitted at the start and finish of each row of sockets. These simultaneously ensure electrically protected covering of the busbar end faces and mechanical fixing of the sockets oh the mounting rail.



ZLS920

Socket end piece

Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
To prevent displacement of sockets and busbars	1415617	ZLS920	2CCA183017R0001			1

SMISSLINE TP plug-in system

Incoming terminal block and components – 125 A system

ZLS26

ZLS25

ZLS95

Incoming terminal blocks ZLS260 to 262

Compact terminal block with the construction width of 18 mm for 2 poles. The maximum rated current is 63 A for L1, L2, L3N and 6 A for LA, LB.

Incoming terminal block 18 mm, 63 A 2,5 mm² to 25 mm² max. 1 wire

1 contact above 1 contact bottom

Version	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
L1, L3 63 A	0111572	ZLS260	2CCA205305R0001		0.090	1
L2, N 63 A	0111589	ZLS261	2CCA205306R0001		0.090	1
LA, LB 6 A	0111596	ZLS262	2CCA205307R0001		0.090	1

Incoming terminal component ZLS250-253; 954, 955

The incoming terminal component, with an installation width of 36 mm is available as a single-pole component for the line conductors L1, L2, L3 and as neutral. The terminals act directly on the busbars and thereby fix the incoming terminal component. The incoming terminal component, L1, L2, L3 and N can be combined to meet specific needs. A maximum cable cross-section of 95 mm² can be connected to the incoming terminal component.

Incoming terminal component 10 mm² to 95 mm² max. 1 wire

Version	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Feeder component L1	0505319	ZLS251	2CCV672501R0001		0.120	1
Feeder component L2	0505326	ZLS252	2CCV672502R0001		0.120	1
Feeder component L3	0505333	ZLS253	2CCV672503R0001		0.120	1
Feeder component N	0505340	ZLS250	2CCV672500R0001		0.120	1
Feeder component N additional socket	1424404	ZLS954	2CCV672508R0001		0.100	1
Feeder component PE additional socket	1487164	ZLS959	2CCA672510R0001		0.100	1

General

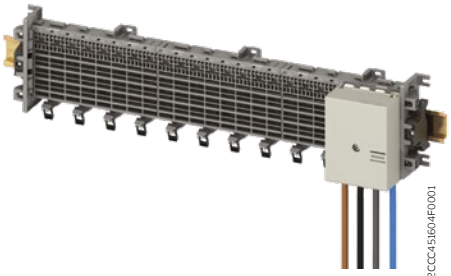
The incoming terminal block is used to connect cables directly to the busbars. The terminals act

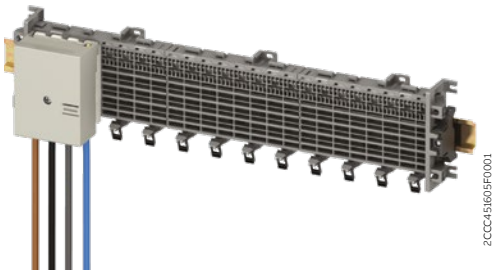
SMISSLINE TP plug-in system

Incoming terminal block and components – 125 A system

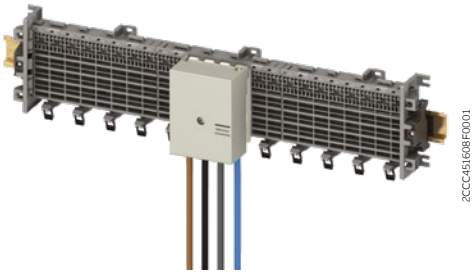
directly on the busbars and therefore fix the incoming terminal block. Removable terminal tops permit the connection of continous conductrors (risers) white horizontal or vertical cable entry is also possible.
Instead of using the incoming terminal block, the power supply can also be realized via a device (e.g. residual current operated circuit breaker, miniature circuit breaker or switch disconnector).

Power supply left or right, maximum 125 A.





Power supply in centre, maximum 160 A.
A maximum of 125 A is permitted on either side. A total of 160 A must not be exceeded.



Incoming terminal blocks ZLS224, 225
A standard incoming terminal block whose cover provides protection against accidental contact. Construction height 50 mm. The base plate can be fitted with a maximum of 4 main terminals L1, L2, L3 and N for the busbars, and 2 auxiliary termiinals LA and LB for the auxiliary busbars.

right

left

Incoming terminal blocks 6 mm² to 50 mm² (2 x 25 mm²) + 2 x 10 mm² (LA, LB)

Standard incoming terminal block, complete with main terminals and cover, construction height 50 mm

Version	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
50 mm² (2 x 25 mm²) 3LN left	0019816	ZLS224	2CCF015196R0001		0.180	1
50 mm² (2 x 25 mm²) 3LN right	0510726	ZLS224R	2CCA180152R0001		0.180	1
50 mm² (2 x 25 mm²) + 2 x 10 mm² 3LNAB (auxiliary busbars)	0054251	ZLS224LAB	2CCA180154R0001		0.200	1
50 mm² (2 x 25 mm²) 3L left	0019823	ZLS225	2CCF015197R0001		0.150	1
50 mm² (2 x 25 mm²) 3L right	0510733	ZLS225R	2CCA180153R0001		0.150	1
50 mm² (2 x 25 mm²) + 2 x 10 mm² 3LAB (auxiliary busbars)	0054220	ZLS225LAB	2CCA180155R0001		0.170	1

Cover for standard incoming terminal block

	0021543	ZLS235	2CCA180069R0001	0.037	1

Additional parts for standard incoming terminal block

Auxiliary terminal max. 2 items 10 mm² (for auxiliary bus bars LA, LB)	0019151	ZLS233	2CCF002786R0001	0.010	2
N terminal for incoming terminal block	0019144	ZLS232	2CCF002785R0001	0.030	

Incoming terminal blocks, low ZLS228, 229

Incoming terminal block with construction height of 36 mm.

Incoming terminal block, low, complete with main terminals, construction height 36 mm

50 mm² (2 x 25 mm²), 3LN	0019854	ZLS228	2CCF015200R0001	0.180	1
50 mm² (2 x 25 mm²), 3L	0019861	ZLS229	2CCF015201R0001	0.150	1
50 mm² (2 x 25 mm²), 3LN right	1465254	ZLS228R	2CCF180157R0001	0.180	1
50 mm² (2 x 25 mm²), 3L right	1465261	ZLS229R	2CCF180158R0001	0.150	1

SMISSLINE TP plug-in system

Terminals for additional socket – 125 A system

ZLS928

ZLS926

Additional socket

The additional socket can easily be fitted onto the socket base to accomodate the external N and/or PE busbars. This enables neutral connections to be made where single-pole miniature circuit breakers are used with unswitched neutral. Neutral terminals are clipped onto the additional socket and can be used as detachable neutral connections. One N busbar and/or one PE busbar can be fitted. Each socket base can be equipped with an additional socket. Because it contains an integrated 35 mm DIN-rail snap-on feature, the external N or PE busbars can be fitted anywhere in the distribution panel, even separatly from the system. The additional sockets can be covered to prevent accidental contact with live parts.

Additional socket for external N and PE busbars

Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
8-module socket (suitable for 8-module socket)	1420444	ZLS928	2CCA183630R0001		0.034	10
6-module socket (suitable for 6-module socket)	1420437	ZLS926	2CCA183635R0001		0.026	10

SMISSLINE TP plug-in system

Terminals TP, additional socket

N terminals and PE terminals

Corresponding N terminals (blue) or PE terminals (yellow-green) are available for the power supply and the outgoing conduetors of the external N and PE busbars for cross sections. The terminals are fitted with label holders whitch can be used wiht the marking adapter or the self-adhesive marking label (Phoenix Contact type Clipline UC-TM):

Connection for the terminals

ZLS912, 915	0,75 mm² up to 10 mm² litz wire with ferrule 1 mm² up to 10 mm² strand 2 x 1,5 mm² or 2 x 2,5 mm² allowed, all other combinatins it is only allowed with one wire
ZLS913, 916	16 mm² up to 35 mm² wire with ferrule, max. 1 wire
ZLS954, 955	50 mm² up to 95 mm² wire with ferrule, max. 1 wire

N terminal for additional socket light blue, for external busbars

Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
N 10 mm²	1487027	ZLS918	2CCA183440R0001		0.012	Set à 10
N 35 mm²	1421304	ZLS913	2CCA183470R0001		0.030	10
N 95 mm²	1424404	ZLS954	2CCV672508R0001		0.100	1

PE terminal for additional socket yellow-green, for external busbars

Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
PE 10 mm²	1487041	ZLS919	2CCA183441R0001		0.012	Set à 10
PE 35 mm²	1486921	ZLS929	2CCA183387R0001		0.030	10
PE 95 mm²	1487164	ZLS959	2CCA672510R0001		0.100	1

Red/orange terminals for additional socket

Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
10 mm²	1487089	ZLS918/Red	2CCA183443R0001		0.012	10
10 mm²	1487102	ZLS919/Orange	2CCA183444R0001		0.012	10
35 mm²	1421342	ZLS913/Red	2CCA183465R0001		0.030	10
35 mm²	1421366	ZLS916/Orange	2CCA183466R0001		0.030	10

Insulator block

The dark grey insulator block isolates the interrupted bus bar ends from one another and simultaneously marks the disconnection point externally.

Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	1487065	ZLS927	2CCA183442R0001		0.006	10

SMISSLINE TP plug-in system

Socket accessories

Intermediate piece ZLS725

The light grey intermediate piece matches the device profile and fills empty module spaces. The busbars are safely covered, so that they cannot be touched and at the same time the corresponding openings in the cover are closed up.

Intermediate piece

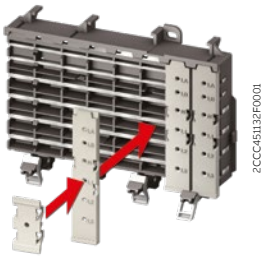
Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
light grey, fills shock-proof empty module spaces 18 mm – bag containing 5 items	0100989	ZLS725	2CCS500900R0181		0.100	1
Compensation piece to 18 mm for NT 9 mm – bag containing 5 items	0104710	ZLS728	2CCS400900R0101		0.070	1

Busbar insulator ZLS938

The dark grey busbar insulator electrically isolates the separated busbar ends from each other (e.g. when using several RCD protected groups) and also identifies the isolation point from outside. It conforms with the device profile and its space requirement is 1 module.

Busbar insulator

dark grey, for isolation and spacing of separate busbar sections, 18 mm	1418205	ZLS938	2CCA205611R0001		0.001	1



Busbar cover ZLS100

If component modules or spare modules are not requiered, the busbar cover ensures electrically protected covering of the main and auxiliary busbars. The cover (4 modules) can be divided anywhere. The openings allow voltage measurements on the busbars without removing the cover.

Busbar cover

electrically protected covering of main and auxiliary busbars. The 4 modules cover can be divided. Suitable to accept extension adapter ZLS 101 4x18 mm – bag containing 5 items	0015603	ZLS100	2CCF002762R0001		0.095	1

Extension adapter ZLS101

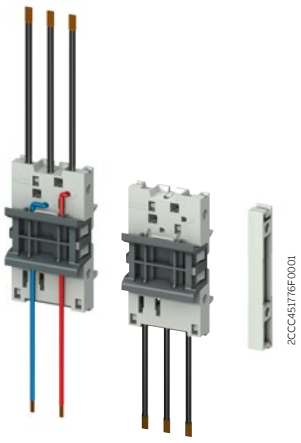
The extension adapter, single or several side by side, can be plugged into the busbar cover via the built-in holding device. This enables conventional DIN devices with 45 mm cap size to be snapped onto the SMISSLINE socket. By plugging in several extension adapters one on top of the other, heights can be adjusted in multiples of 7 mm

Add-on adapter

18 mm wide, can be plugged on busbar cover ZLS100. To mount conventional DIN devices with 45 m cap size. – bag containing 10 items	0015610	ZLS101	2CCF002763R0001		0.002	10

SMISSLINE TP plug-in system

Combi module 32 A (IN), 6 A (IA, IB)
MS116/132 + AF contactor



Top feed **Bottom feed**

Combi module for MS116/MS132 and AF contactor

Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Combi module L1,L2,L3 top feed	1414641	ZMS132-3L	2CCA182500R0001		0.095	1
Combi module L1,L2,L3 top feed	1414634	ZMS132-3LA	2CCA182502R0001		0.098	1
Combi module L1,L2,L3 top feed	1414627	ZMS132-3LB	2CCA182504R0001		0.098	1
Combi module L1,L2,L3 top feed	1414610	ZMS132-3LAB	2CCA182506R0001		0.102	1
Combi module without plug-in contacts	1414603	ZMS137	2CCA182508R0001		0.075	1
Connection pin to mont 2 combi moduls together	1414801	E210-SPV	2CCC703715R0001		0.010	Set à 30
Intermediate piece 9 mm	1414412	ZMS935	2CCA182616R0001		0.006	1

Adapter for manual motor starter MS116 and MS132

Description/ application	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Adapter MS116/132 L123 wire bottom feed	1414597	ZMS930	2CCA182520R0001		0.030	1
Adapter MS116/132 L123LALB wire bottom feed	1414580	ZMS931	2CCA182522R0001		0.062	1
Adapter MS116/132 L123 wire top feed	1414573	ZMS932	2CCA182524R0001		0.030	1
Adapter MS116/132 L123LALB wire top feed	1414566	ZMS933	2CCA182526R0001		0.062	1
Adapter MS116/132 empty	1414559	ZMS934	2CCA182512R0001		0.034	1
Intermediate piece 9 mm	1414412	ZMS935	2CCA182616R0001		0.006	1
Adapter MS116/132 L123LA wire bottom feed	1424619	ZMS936	2CCA182521R0001		0.058	1
Adapter MS116/132 L123LA wire top feed	1424626	ZMS937	2CCA182525R0001		0.058	1

The 9 mm wide additional housing is need to use when an unequal number (1, 3, 5, …) of combi modules or adapter are plugged on the socket. This is needed to fill the space into a full module (18 mm).
The 9 mm wide additional housing can be also use when on one side of the manual motor starter an auxiliary contact is mounted.
The order codes of manual motor starter and the contactors auf in the ABB catalogue DOC 1SBC100155C0202 or in the local ABB catalogue.

SMISSLINE TP plug-in system

Universal adapters 32 A and 63 A

32 A and 63 A universal adapters

Adapter 32A

Designation	Module	Bbn 761227	Order details		Price 1 piece	Weight 1 piece	Pack unit
		EAN	Type code	Order code		kg	pc.
L1/L2/L3 wire top	1	144 4563	ZLS970	2CCA180551R0001		0.020	1
L1/L2/L3 wire bottom ZLS971	1	144 4570	ZLS971	2CCA180552R0001		0.020	1
N wire top ZLS970N	1	144 4587	ZLS970N	2CCA180553R0001		0.020	1
N wire bottom ZLS971N	1	144 4570	ZLS971N	2CCA180554R0001		0.020	1

Adapter 63A

L1/L2/L3 wire top ZLS972	1	144 4709	ZLS972	2CCA180555R0001		0.024	1
L1/L2/L3 wire bottom ZLS973	1	144 4716	ZLS973	2CCA180556R0001		0.024	1
N wire top ZLS972N	1	144 4808	ZLS972N	2CCA180557R0001		0.024	1
N wire bottom ZLS973N	1	144 4730	ZLS973N	2CCA180558R0001		0.024	1

Adapter 32A with 300mm wire

L1/L2/L3 wire top ZLS970	1	144 4747	ZLS970300	2CCA180559R0001		0.026	1
L1/L2/L3 wire bottom ZLS971	1	144 4754	ZLS971300	2CCA180560R0001		0.026	1
N wire top ZLS970N	1	144 4761	ZLS970N300	2CCA180561R0001		0.026	1
N wire bottom ZLS971N	1	144 4778	ZLS971N300	2CCA180562R0001		0.026	1

Adapter 63A with 300mm wire

L1/L2/L3 Litze o ZLS972	1	144 4785	ZLS972300	2CCA180563R0001		0.037	1
L1/L2/L3 Litze u ZLS973	1	144 4792	ZLS973300	2CCA180564R0001		0.037	1
N wire top ZLS972N	1	144 4808	ZLS972N300	2CCA180565R0001		0.037	1
N wire bottom ZLS973N	1	144 4815	ZLS973N300	2CCA180566R0001		0.037	1

Adapter 25A UL489, adapter can be only used together with ABB Pro M MCB S200 UL489

L1/L2/L3 Litze o. ZLS970 UL	1	144 4822	ZLS970UL	2CCA337020R0001		0.021	1
L1/L2/L3 Litze u. ZLS971 UL	1	144 4839	ZLS971UL	2CCA337021R0001		0.021	1

Adapter 45A UL489, adapter can be only used together with ABB Pro M MCB S200 UL489

L1/L2/L3 Litze o. ZLS972 UL	1	144 4860	ZLS972UL	2CCA337024R0001		0.025	1
L1/L2/L3 Litze u. ZLS973 UL	1	144 4877	ZLS973UL	2CCA337025R0001		0.025	1

Dummy housing

	1	144 4556	ZLS964	2CCA180550R0001		0.011	1

Connector for multi- pole adapter

Bag with 30 pcs. 10		1414801	E210-SPV	2CCC703715R0001		0.050	Set of 30 pcs.

SMISSLINE TP plug-in system

Locking device

SA

Locking device

Padlock adapter 3 mm – Bag containing 10 items	0104833	SA 1	GJF1101903R0001	0.023	1
Padlock	0104857	SA 2	GJF1101903R0002	0.020	1

SMISSLINE TP plug-in system

Busbars 40 A and 125 A

40 A and 125 A busbars / selection table for sockets

Bbn 761227 EAN	Order details busbar 125 A Type code	Order code	Price 1 piece	ZL S908	ZL S906	Module	Length incl. end piece	Busbar length mm	Bbn 761227 EAN	Order details busbar 40 A Type code	Order code	Price 1 piece
006778	ZLS201E6	2CCF800158R0001		–	1	6	148	103	007966	ZLS203E6	2CCF800218R0001	
006983	ZLS201E8	2CCF800159R0001		1	–	8	186	139	008178	ZLS203E8	2CCF800219R0001	
006211	ZLS201E12	2CCF800160R0001		–	2	12	256	211	007409	ZLS203E12	2CCF800220R0001	
006310	ZLS201E14	2CCF800161R0001		1	1	14	292	247	007508	ZLS203E14	2CCF800221R0001	
006334	ZLS201E16	2CCF800162R0001		2	–	16	328	283	007522	ZLS203E16	2CCF800222R0001	
006358	ZLS201E18	2CCF800163R0001		–	3	18	364	319	007546	ZLS203E18	2CCF800223R0001	
006372	ZLS201E20	2CCF800164R0001		1	2	20	401	355	007560	ZLS203E20	2CCF800224R0001	
006396	ZLS201E22	2CCF800165R0001		2	1	22	437	391	007584	ZLS203E22	2CCF800225R0001	
006419	ZLS201E24	2CCF800166R0001		3	–	24	473	427	007607	ZLS203E24	2CCF800226R0001	
006433	ZLS201E26	2CCF800167R0001		1	3	26	509	463	007621	ZLS203E26	2CCF800227R0001	
006457	ZLS201E28	2CCF800168R0001		2	2	28	545	499	007645	ZLS203E28	2CCF800228R0001	
006471	ZLS201E30	2CCF800169R0001		3	1	30	581	535	007669	ZLS203E30	2CCF800229R0001	
006495	ZLS201E32	2CCF800170R0001		4	–	32	617	571	007683	ZLS203E32	2CCF800230R0001	
006518	ZLS201E34	2CCF800171R0001		2	3	34	653	607	007706	ZLS203E34	2CCF800231R0001	
006532	ZLS201E36	2CCF800172R0001		3	2	36	689	643	007720	ZLS203E36	2CCF800232R0001	
006556	ZLS201E38	2CCF800173R0001		4	1	38	725	679	007744	ZLS203E38	2CCF800233R0001	
006570	ZLS201E40	2CCF800174R0001		5	–	40	761	715	007768	ZLS203E40	2CCF800234R0001	
006594	ZLS201E42	2CCF800175R0001		3	3	42	797	751	007782	ZLS203E42	2CCF800235R0001	
006617	ZLS201E44	2CCF800176R0001		4	2	44	833	787	007805	ZLS203E44	2CCF800236R0001	
006631	ZLS201E46	2CCF800177R0001		5	1	46	869	823	007829	ZLS203E46	2CCF800237R0001	
006655	ZLS201E48	2CCF800178R0001		6	–	48	905	859	007843	ZLS203E48	2CCF800238R0001	
006679	ZLS201E50	2CCF800179R0001		4	3	50	941	895	007867	ZLS203E50	2CCF800239R0001	
006693	ZLS201E52	2CCF800180R0001		5	2	52	977	932	007881	ZLS203E52	2CCF800240R0001	
006716	ZLS201E54	2CCF800181R0001		6	1	54	1013	968	007904	ZLS203E54	2CCF800241R0001	
006730	ZLS201E56	2CCF800182R0001		7	–	56	1049	1004	007928	ZLS203E56	2CCF800242R0001	
006754	ZLS201E58	2CCF800183R0001		5	3	58	1085	1040	007942	ZLS203E58	2CCF800243R0001	
006785	ZLS201E60	2CCF800184R0001		6	2	60	1122	1076	007973	ZLS203E60	2CCF800244R0001	
006808	ZLS201E62	2CCF800185R0001		7	1	62	1158	1112	007997	ZLS203E62	2CCF800245R0001	
006822	ZLS201E64	2CCF800186R0001		8	–	64	1194	1148	008017	ZLS203E64	2CCF800246R0001	
006846	ZLS201E66	2CCF800187R0001		6	3	66	1230	1184	008031	ZLS203E66	2CCF800247R0001	
006860	ZLS201E68	2CCF800188R0001		7	2	68	1266	1220	008055	ZLS203E68	2CCF800248R0001	
006884	ZLS201E70	2CCF800189R0001		8	1	70	1302	1256	008079	ZLS203E70	2CCF800249R0001	
006907	ZLS201E72	2CCF800190R0001		9	–	72	1338	1292	008093	ZLS203E72	2CCF800250R0001	
006921	ZLS201E74	2CCF800191R0001		7	3	74	1374	1328	008116	ZLS203E74	2CCF800251R0001	
006945	ZLS201E76	2CCF800192R0001		8	2	76	1410	1364	008130	ZLS203E76	2CCF800252R0001	
006969	ZLS201E78	2CCF800193R0001		9	1	78	1446	1400	008154	ZLS203E78	2CCF800253R0001	
006990	ZLS201E80	2CCF800194R0001		10	–	80	1482	1436	008185	ZLS203E80	2CCF800254R0001	
007010	ZLS201E82	2CCF800195R0001		8	3	82	1518	1472	008208	ZLS203E82	2CCF800255R0001	
007034	ZLS201E84	2CCF800196R0001		9	2	84	1554	1508	008222	ZLS203E84	2CCF800256R0001	
007058	ZLS201E86	2CCF800197R0001		10	1	86	1590	1544	008246	ZLS203E86	2CCF800257R0001	
007072	ZLS201E88	2CCF800198R0001		11	–	88	1626	1580	008260	ZLS203E88	2CCF800258R0001	
007096	ZLS201E90	2CCF800199R0001		9	3	90	1662	1616	008284	ZLS203E90	2CCF800259R0001	
007119	ZLS201E92	2CCF800200R0001		10	2	92	1698	1652	008307	ZLS203E92	2CCF800260R0001	
007133	ZLS201E94	2CCF800201R0001		11	1	94	1734	1688	008321	ZLS203E94	2CCF800261R0001	
007157	ZLS201E96	2CCF800202R0001		12	–	96	1770	1724	008345	ZLS203E96	2CCF800262R0001	
007171	ZLS201E98	2CCF800203R0001		10	3	98	1806	1760	008369	ZLS203E98	2CCF800263R0001	
006006	ZLS201E100	2CCF800204R0001		11	2	100	1843	1796	007195	ZLS203E100	2CCF800264R0001	
006020	ZLS201E102	2CCF800205R0001		12	1	102	1879	1832	007218	ZLS203E102	2CCF800265R0001	
006044	ZLS201E104	2CCF800206R0001		13	–	104	1915	1868	007232	ZLS203E104	2CCF800266R0001	
006068	ZLS201E106	2CCF800207R0001		11	3	106	1951	1904	007256	ZLS203E106	2CCF800267R0001	
006082	ZLS201E108	2CCF800208R0001		12	2	108	1987	1940	007270	ZLS203E108	2CCF800268R0001	

Planning for the incorporation of feeder block and spare places should be taken into account.
The total lengths given above were calculated taking socket spacings and tolerances into account.
For this reason, the indicated busbar length is not necessarily a multiple of 18 mm (1 Module).

SMISSLINE TP plug-in system

Technical data according to IEC/EN 61439-6

Power Bar System 250 A

Busbar system touch proof:
Use only for wall mounted application (horizontal or vertical).
When installed correctly the requirements of EN/IEC 61439-2 are met.

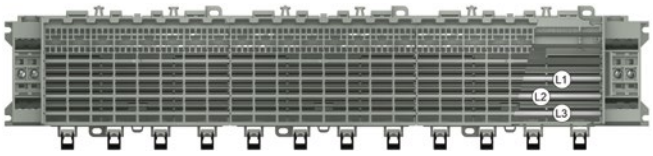
Number of poles:	max. 6 to 110 3p+N / 2 additional bars PE+N
Rated operational voltage (U_e):	690 VAC, 1000 VDC (400 VAC, 250 VDC when used for load-free snap on and off under power)
Rated insulation voltage (U_i) Main circuit:	690 VAC, 1000 VDC
Rated insulation voltage (U_i) Auxilary circuit:	415 VAC
IP Code:	IP20B
Mounting position:	horizontal or vertical, direct mounting or mounting on DIN rail acc. to EN 60715 35 mm
Pollution degree:	3 (690 V a.c.) 2 (1000 V d.c.)
Rated impulse voltage (U_{imp}):	8 kV mainbusbars; 6 KV auxillary busbars
Rated current of the assembly (I_nA) :	max. 250 A side feeding; max. 400A double side feed, or double center feed
Auxiliary circuit:	max. 40 A
Rated current of a circuit (I_{nc}) :	Main circuit: Max. 100 A
Rated current of Auxiliary circuit:	40 A
Rated short-time withstand current (I_{cw}):	15 kA/100 ms System on Din rail 1979 mm long 17 kA/100 mS System screwed on plate 1400 mm long
Auxiliary circuit:	4 kA / 50 ms
Rated peak withstand current Main circuit (I_{pk}):	Main circuit: 30 kA
Rated peak withstand current Auxilary circuit (I_{pk}):	6 kA
Rated frequency (f):	50/60 Hz
Rated conditional short-circuit current (I_{cc}):	see table below
Ambient air temperature:	max. 60°C
Size of CU bars 3P+N+PE:	3 x 25 mm (75 mm²)
Size of CU auxiliary bars La Lb:	2 x 5 mm (10 mm²)

Rated conditional short-circuit current (I_{cc}) at 415 VAC	Incoming current of main busbars (L1, L2, L3, N)	Short circuit protection device (SCPD)	
		Fuse	MCCB
40 kA	400 A	NH3 gG 690 V/400 A	ABB T_{max} 400 A
100 kA	250 A	NH2 gG 690 V/250 A	ABB T_{max} T/XT 250 A
	Incoming current of auxiliary busbars (LA LB)		
	40 A	NH00 gG 500 V/40 A	ABB Type S800 in combination with (240 V/415 VAC)

SMISSLINE TP plug-in system

Starter 3L

Power Bar System 250 A



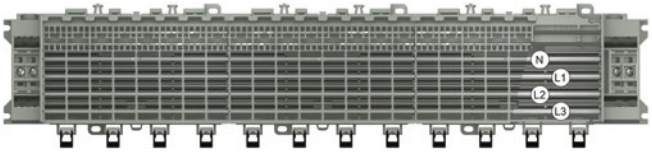
Starter Pack 3L: L1, L2, L3 included socket end piece

Solutions available	Type name	ABB IT number	EAN number 761 227	Pack unit	Moduls (1 PLE 18mm)	Weight in grams
Starter Pack 3L PLE 30	ZLSP950E30-3L	2CCF212200A0001	148 8246	1	30PLE-3L	1755
Starter Pack 3L PLE 32	ZLSP950E32-3L	2CCF212201A0001	148 8260	1	32PLE-3L	1863
Starter Pack 3L PLE 34	ZLSP950E34-3L	2CCF212202A0001	148 8284	1	34PLE-3L	1981
Starter Pack 3L PLE 36	ZLSP950E36-3L	2CCF212203A0001	148 8307	1	36PLE-3L	2088
Starter Pack 3L PLE 38	ZLSP950E38-3L	2CCF212204A0001	148 8321	1	38PLE-3L	2195
Starter Pack 3L PLE 40	ZLSP950E40-3L	2CCF212205A0001	148 8345	1	40PLE-3L	2303
Starter Pack 3L PLE 42	ZLSP950E42-3L	2CCF212206A0001	148 8369	1	42PLE-3L	2421
Starter Pack 3L PLE 44	ZLSP950E44-3L	2CCF212207A0001	148 8383	1	44PLE-3L	2528
Starter Pack 3L PLE 46	ZLSP950E46-3L	2CCF212208A0001	148 8406	1	46PLE-3L	2635
Starter Pack 3L PLE 48	ZLSP950E48-3L	2CCF212209A0001	148 8420	1	48PLE-3L	2742
Starter Pack 3L PLE 50	ZLSP950E50-3L	2CCF212210A0001	148 8444	1	50PLE-3L	2861
Starter Pack 3L PLE 52	ZLSP950E52-3L	2CCF212211A0001	148 8468	1	52PLE-3L	2968
Starter Pack 3L PLE 54	ZLSP950E54-3L	2CCF212212A0001	148 8482	1	54PLE-3L	3075
Starter Pack 3L PLE 56	ZLSP950E56-3L	2CCF212213A0001	148 8505	1	56PLE-3L	3182
Starter Pack 3L PLE 58	ZLSP950E58-3L	2CCF212214A0001	148 8529	1	58PLE-3L	3301
Starter Pack 3L PLE 60	ZLSP950E60-3L	2CCF212215A0001	148 8543	1	60PLE-3L	3408
Starter Pack 3L PLE 62	ZLSP950E62-3L	2CCF212216A0001	148 8567	1	62PLE-3L	3515
Starter Pack 3L PLE 64	ZLSP950E64-3L	2CCF212217A0001	148 8581	1	64PLE-3L	3622
Starter Pack 3L PLE 66	ZLSP950E66-3L	2CCF212218A0001	148 8604	1	66PLE-3L	3741
Starter Pack 3L PLE 68	ZLSP950E68-3L	2CCF212219A0001	148 8628	1	68PLE-3L	3848
Starter Pack 3L PLE 70	ZLSP950E70-3L	2CCF212220A0001	148 8642	1	70PLE-3L	3955
Starter Pack 3L PLE 72	ZLSP950E72-3L	2CCF212221A0001	148 8666	1	72PLE-3L	4062
Starter Pack 3L PLE 74	ZLSP950E74-3L	2CCF212222A0001	148 8680	1	74PLE-3L	4180
Starter Pack 3L PLE 76	ZLSP950E76-3L	2CCF212223A0001	148 8703	1	76PLE-3L	4288
Starter Pack 3L PLE 78	ZLSP950E78-3L	2CCF212224A0001	148 8727	1	78PLE-3L	4395
Starter Pack 3L PLE 80	ZLSP950E80-3L	2CCF212225A0001	148 8741	1	80PLE-3L	4502
Starter Pack 3L PLE 82	ZLSP950E82-3L	2CCF212226A0001	148 8765	1	82PLE-3L	4620
Starter Pack 3L PLE 84	ZLSP950E84-3L	2CCF212227A0001	148 8789	1	84PLE-3L	4728
Starter Pack 3L PLE 86	ZLSP950E86-3L	2CCF212228A0001	148 8802	1	86PLE-3L	4835
Starter Pack 3L PLE 88	ZLSP950E88-3L	2CCF212229A0001	148 8826	1	88PLE-3L	4942
Starter Pack 3L PLE 90	ZLSP950E90-3L	2CCF212230A0001	148 8840	1	90PLE-3L	5060
Starter Pack 3L PLE 92	ZLSP950E92-3L	2CCF212231A0001	148 8864	1	92PLE-3L	5167
Starter Pack 3L PLE 94	ZLSP950E94-3L	2CCF212232A0001	148 8888	1	94PLE-3L	5275
Starter Pack 3L PLE 96	ZLSP950E96-3L	2CCF212233A0001	148 8901	1	96PLE-3L	5382
Starter Pack 3L PLE 98	ZLSP950E98-3L	2CCF212234A0001	148 8925	1	98PLE-3L	5500
Starter Pack 3L PLE 100	ZLSP950E100-3L	2CCF212235A0001	148 8949	1	100PLE-3L	5607
Starter Pack 3L PLE 102	ZLSP950E102-3L	2CCF212236A0001	148 8963	1	102PLE-3L	5715
Starter Pack 3L PLE 104	ZLSP950E104-3L	2CCF212237A0001	148 8987	1	104PLE-3L	5822
Starter Pack 3L PLE 106	ZLSP950E106-3L	2CCF212238A0001	148 9007	1	106PLE-3L	5940
Starter Pack 3L PLE 108	ZLSP950E108-3L	2CCF212239A0001	148 9021	1	108PLE-3L	6047
Starter Pack 3L PLE 110	ZLSP950E110-3L	2CCF212240A0001	148 9045	1	110PLE-3L	6121

SMISSLINE TP plug-in system

Starter 3LN

Power Bar System 250 A



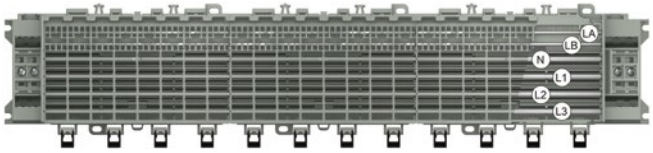
Starter Pack 3L: L1, L2, L3, N included socket end piece

Solutions available	Type name	ABB IT number	EAN number 761 227	Pack unit	Moduls (1 PLE 18mm)	Weight in grams
Starter Pack 3LN PLE 30	ZLSP950E30-3LN	2CCF212300A0001	148 9069	1	30PLE-3LN	2122
Starter Pack 3LN PLE 32	ZLSP950E32-3LN	2CCF212301A0001	148 9083	1	32PLE-3LN	2253
Starter Pack 3LN PLE 34	ZLSP950E34-3LN	2CCF212302A0001	148 9106	1	34PLE-3LN	2396
Starter Pack 3LN PLE 36	ZLSP950E36-3LN	2CCF212303A0001	148 9120	1	36PLE-3LN	2527
Starter Pack 3LN PLE 38	ZLSP950E38-3LN	2CCF212304A0001	148 9144	1	38PLE-3LN	2659
Starter Pack 3LN PLE 40	ZLSP950E40-3LN	2CCF212305A0001	148 9168	1	40PLE-3LN	2791
Starter Pack 3LN PLE 42	ZLSP950E42-3LN	2CCF212306A0001	148 9182	1	42PLE-3LN	2933
Starter Pack 3LN PLE 44	ZLSP950E44-3LN	2CCF212307A0001	148 9205	1	44PLE-3LN	3065
Starter Pack 3LN PLE 46	ZLSP950E46-3LN	2CCF212308A0001	148 9229	1	46PLE-3LN	3197
Starter Pack 3LN PLE 48	ZLSP950E48-3LN	2CCF212309A0001	148 9243	1	48PLE-3LN	3328
Starter Pack 3LN PLE 50	ZLSP950E50-3LN	2CCF212310A0001	148 9267	1	50PLE-3LN	3471
Starter Pack 3LN PLE 52	ZLSP950E52-3LN	2CCF212311A0001	148 9281	1	52PLE-3LN	3603
Starter Pack 3LN PLE 54	ZLSP950E54-3LN	2CCF212312A0001	148 9304	1	54PLE-3LN	3734
Starter Pack 3LN PLE 56	ZLSP950E56-3LN	2CCF212313A0001	148 9328	1	56PLE-3LN	3866
Starter Pack 3LN PLE 58	ZLSP950E58-3LN	2CCF212314A0001	148 9342	1	58PLE-3LN	4008
Starter Pack 3LN PLE 60	ZLSP950E60-3LN	2CCF212315A0001	148 9366	1	60PLE-3LN	4140
Starter Pack 3LN PLE 62	ZLSP950E62-3LN	2CCF212316A0001	148 9380	1	62PLE-3LN	4272
Starter Pack 3LN PLE 64	ZLSP950E64-3LN	2CCF212317A0001	148 9403	1	64PLE-3LN	4403
Starter Pack 3LN PLE 66	ZLSP950E66-3LN	2CCF212318A0001	148 9427	1	66PLE-3LN	4546
Starter Pack 3LN PLE 68	ZLSP950E68-3LN	2CCF212319A0001	148 9441	1	68PLE-3LN	4678
Starter Pack 3LN PLE 70	ZLSP950E70-3LN	2CCF212320A0001	148 9465	1	70PLE-3LN	4809
Starter Pack 3LN PLE 72	ZLSP950E72-3LN	2CCF212321A0001	148 9489	1	72PLE-3LN	4941
Starter Pack 3LN PLE 74	ZLSP950E74-3LN	2CCF212322A0001	148 9502	1	74PLE-3LN	5084
Starter Pack 3LN PLE 76	ZLSP950E76-3LN	2CCF212323A0001	148 9526	1	76PLE-3LN	5215
Starter Pack 3LN PLE 78	ZLSP950E78-3LN	2CCF212324A0001	148 9540	1	78PLE-3LN	5347
Starter Pack 3LN PLE 80	ZLSP950E80-3LN	2CCF212325A0001	148 9564	1	80PLE-3LN	5478
Starter Pack 3LN PLE 82	ZLSP950E82-3LN	2CCF212326A0001	148 9588	1	82PLE-3LN	5621
Starter Pack 3LN PLE 84	ZLSP950E84-3LN	2CCF212327A0001	148 9601	1	84PLE-3LN	5753
Starter Pack 3LN PLE 86	ZLSP950E86-3LN	2CCF212328A0001	148 9625	1	86PLE-3LN	5884
Starter Pack 3LN PLE 88	ZLSP950E88-3LN	2CCF212329A0001	148 9649	1	88PLE-3LN	6016
Starter Pack 3LN PLE 90	ZLSP950E90-3LN	2CCF212330A0001	148 9663	1	90PLE-3LN	6159
Starter Pack 3LN PLE 92	ZLSP950E92-3LN	2CCF212331A0001	148 9687	1	92PLE-3LN	6290
Starter Pack 3LN PLE 94	ZLSP950E94-3LN	2CCF212332A0001	148 9700	1	94PLE-3LN	6422
Starter Pack 3LN PLE 96	ZLSP950E96-3LN	2CCF212333A0001	148 9724	1	96PLE-3LN	6554
Starter Pack 3LN PLE 98	ZLSP950E98-3LN	2CCF212334A0001	148 9748	1	98PLE-3LN	6696
Starter Pack 3LN PLE 100	ZLSP950E100-3LN	2CCF212335A0001	148 9762	1	100PLE-3LN	6828
Starter Pack 3LN PLE 102	ZLSP950E102-3LN	2CCF212336A0001	148 9786	1	102PLE-3LN	6959
Starter Pack 3LN PLE 104	ZLSP950E104-3LN	2CCF212337A0001	148 9809	1	104PLE-3LN	7091
Starter Pack 3LN PLE 106	ZLSP950E106-3LN	2CCF212338A0001	148 9823	1	106PLE-3LN	7234
Starter Pack 3LN PLE 108	ZLSP950E108-3LN	2CCF212339A0001	148 9847	1	108PLE-3LN	7365
Starter Pack 3LN PLE 110	ZLSP950E110-3LN	2CCF212340A0001	148 9861	1	110PLE-3LN	7463

SMISSLINE TP plug-in system

Starter 3LN LA LB

Power Bar System 250 A



Starter Pack 3L: L1, L2, L3,N, LA, LB included socket end piece

Solutions available	Type name	ABB IT number	EAN number 761 227	Pack unit	Moduls (1 PLE 18mm)	Weight in grams
Starter Pack 3LN LA LB PLE 30	ZLSP950E30-3LNLALB	2CCF212400A0001	148 9885	1	30PLE-3LNLALB	2480
Starter Pack 3LN LA LB PLE 32	ZLSP950E32-3LNLALB	2CCF212401A0001	148 9908	1	32PLE-3LNLALB	2611
Starter Pack 3LN LA LB PLE 34	ZLSP950E34-3LNLALB	2CCF212402A0001	148 9922	1	34PLE-3LNLALB	2754
Starter Pack 3LN LA LB PLE 36	ZLSP950E36-3LNLALB	2CCF212403A0001	148 9946	1	36PLE-3LNLALB	2885
Starter Pack 3LN LA LB PLE 38	ZLSP950E38-3LNLALB	2CCF212404A0001	148 9960	1	38PLE-3LNLALB	3017
Starter Pack 3LN LA LB PLE 40	ZLSP950E40-3LNLALB	2CCF212405A0001	148 9984	1	40PLE-3LNLALB	3149
Starter Pack 3LN LA LB PLE 42	ZLSP950E42-3LNLALB	2CCF212406A0001	149 0003	1	42PLE-3LNLALB	3291
Starter Pack 3LN LA LB PLE 44	ZLSP950E44-3LNLALB	2CCF212407A0001	149 0027	1	44PLE-3LNLALB	3423
Starter Pack 3LN LA LB PLE 46	ZLSP950E46-3LNLALB	2CCF212408A0001	149 0041	1	46PLE-3LNLALB	3555
Starter Pack 3LN LA LB PLE 48	ZLSP950E48-3LNLALB	2CCF212409A0001	149 0065	1	48PLE-3LNLALB	3686
Starter Pack 3LN LA LB PLE 50	ZLSP950E50-3LNLALB	2CCF212410A0001	149 0089	1	50PLE-3LNLALB	3829
Starter Pack 3LN LA LB PLE 52	ZLSP950E52-3LNLALB	2CCF212411A0001	149 0102	1	52PLE-3LNLALB	3961
Starter Pack 3LN LA LB PLE 54	ZLSP950E54-3LNLALB	2CCF212412A0001	149 0126	1	54PLE-3LNLALB	4092
Starter Pack 3LN LA LB PLE 56	ZLSP950E56-3LNLALB	2CCF212413A0001	149 0140	1	56PLE-3LNLALB	4224
Starter Pack 3LN LA LB PLE 58	ZLSP950E58-3LNLALB	2CCF212414A0001	149 0164	1	58PLE-3LNLALB	4366
Starter Pack 3LN LA LB PLE 60	ZLSP950E60-3LNLALB	2CCF212415A0001	149 0188	1	60PLE-3LNLALB	4498
Starter Pack 3LN LA LB PLE 62	ZLSP950E62-3LNLALB	2CCF212416A0001	149 0201	1	62PLE-3LNLALB	4630
Starter Pack 3LN LA LB PLE 64	ZLSP950E64-3LNLALB	2CCF212417A0001	149 0225	1	64PLE-3LNLALB	4761
Starter Pack 3LN LA LB PLE 66	ZLSP950E66-3LNLALB	2CCF212418A0001	149 0249	1	66PLE-3LNLALB	4904
Starter Pack 3LN LA LB PLE 68	ZLSP950E68-3LNLALB	2CCF212419A0001	149 0263	1	68PLE-3LNLALB	5036
Starter Pack 3LN LA LB PLE 70	ZLSP950E70-3LNLALB	2CCF212420A0001	149 0287	1	70PLE-3LNLALB	5167
Starter Pack 3LN LA LB PLE 72	ZLSP950E72-3LNLALB	2CCF212421A0001	149 0300	1	72PLE-3LNLALB	5299
Starter Pack 3LN LA LB PLE 74	ZLSP950E74-3LNLALB	2CCF212422A0001	149 0324	1	74PLE-3LNLALB	5442
Starter Pack 3LN LA LB PLE 76	ZLSP950E76-3LNLALB	2CCF212423A0001	149 0348	1	76PLE-3LNLALB	5573
Starter Pack 3LN LA LB PLE 78	ZLSP950E78-3LNLALB	2CCF212424A0001	149 0362	1	78PLE-3LNLALB	5705
Starter Pack 3LN LA LB PLE 80	ZLSP950E80-3LNLALB	2CCF212425A0001	149 0386	1	80PLE-3LNLALB	5836
Starter Pack 3LN LA LB PLE 82	ZLSP950E82-3LNLALB	2CCF212426A0001	149 0409	1	82PLE-3LNLALB	5979
Starter Pack 3LN LA LB PLE 84	ZLSP950E84-3LNLALB	2CCF212427A0001	149 0423	1	84PLE-3LNLALB	6111
Starter Pack 3LN LA LB PLE 86	ZLSP950E86-3LNLALB	2CCF212428A0001	149 0447	1	86PLE-3LNLALB	6242
Starter Pack 3LN LA LB PLE 88	ZLSP950E88-3LNLALB	2CCF212429A0001	149 0461	1	88PLE-3LNLALB	6374
Starter Pack 3LN LA LB PLE 90	ZLSP950E90-3LNLALB	2CCF212430A0001	149 0485	1	90PLE-3LNLALB	6517
Starter Pack 3LN LA LB PLE 92	ZLSP950E92-3LNLALB	2CCF212431A0001	149 0508	1	92PLE-3LNLALB	6648
Starter Pack 3LN LA LB PLE 94	ZLSP950E94-3LNLALB	2CCF212432A0001	149 0522	1	94PLE-3LNLALB	6780
Starter Pack 3LN LA LB PLE 96	ZLSP950E96-3LNLALB	2CCF212433A0001	149 0546	1	96PLE-3LNLALB	6912
Starter Pack 3LN LA LB PLE 98	ZLSP950E98-3LNLALB	2CCF212434A0001	149 0560	1	98PLE-3LNLALB	7054
Starter Pack 3LN LA LB PLE 100	ZLSP950E100-3LNLALB	2CCF212435A0001	149 0584	1	100PLE-3LNLALB	7186
Starter Pack 3LN LA LB PLE 102	ZLSP950E102-3LNLALB	2CCF212436A0001	149 0607	1	102PLE-3LNLALB	7317
Starter Pack 3LN LA LB PLE 104	ZLSP950E104-3LNLALB	2CCF212437A0001	149 0621	1	104PLE-3LNLALB	7449
Starter Pack 3LN LA LB PLE 106	ZLSP950E106-3LNLALB	2CCF212438A0001	149 0645	1	106PLE-3LNLALB	7592
Starter Pack 3LN LA LB PLE 108	ZLSP950E108-3LNLALB	2CCF212439A0001	149 0669	1	108PLE-3LNLALB	7723
Starter Pack 3LN LA LB PLE 110	ZLSP950E110-3LNLALB	2CCF212440A0001	149 0683	1	110PLE-3LNLALB	7821

SMISSLINE TP plug-in system

Sockets and Incoming components
Power Bar System 250 A

Socket base

Description	Type name	ABB IT number	EAN number 761 227	Pack unit	Moduls (1 PLE 18mm)	Weight in grams
6-module socket Length 108 mm (includes base and cover)	ZLSP906	2CCF212053A0001	148 7324	10	6	113
8-module socket Length 144 mm (includes base and cover)	ZLSP908	2CCF212052A0001	148 7300	10	8	147

Busbars for the sockets

Description	Type name	ABB IT number	EAN number 761 227	Pack-aging unit	Module	Weight in grams
250 A busbar plated, 25 x 3 mm, for L1, L2, L3, N and PE – Delivery length 1979 mm	ZLSP1250	2CCF212100M0110	148 8222	1	110	1343
40 A auxiliary busbar plated, 5 x 2 mm, for LA und LB – Delivery length 1979 mm	ZLS202	2CCF002773R0001	001 5719	10	110	240

Socket end piece

Description	Type name	ABB IT number	EAN number 761 227	Pack-aging unit	Module	Weight in grams
To prevent displacement of main sockets and busbars for the main socket	ZLSP920	2CCF212082A0001	148 7386	1	2	103
To prevent displacement of addtional sockets and busbars addtional socket	ZLSP921	2CCF212085A0001	148 7409	1	2	54

Incoming terminal component

50 mm² up to 120 mm² flex wire with ferrule, max. 1 wire
10 mm²–25 mm² 2 wires with ferrule

Version	Type name	ABB IT number	EAN number 761 227	Pack-aging unit	Module	Weight in grams
Feeder component N	ZLSP250	2CCV672600R0001	149 0782	1	2	112
Feeder component L1	ZLSP251	2CCV672601R0001	149 0805	1	2	112
Feeder component L2	ZLSP252	2CCV672602R0001	149 0829	1	2	112
Feeder component L3	ZLSP253	2CCV672603R0001	149 0843	1	2	112
Feeder component N additional socket	ZLSP954	2CCV672608R0001	149 0867	1	2	100
Feeder component PE additional socket	ZLSP959	2CCV672609R0001	149 0881	1	2	100

SMISSLINE TP plug-in system

Additonal socket

Power Bar System 250 A

Additional socket

The additional socket can easily be fitted onto the socket base to accomodate the external N and/or PE busbars. This enables neutral connections to be made where single-pole miniature circuit breakers are used with unswitched neutral. Neutral terminals are clipped onto the additional socket and can be used as detachable neutral connections. One N busbar and/or one PE busbar can be fitted. Each socket base can be equipped with an additional socket.

Additional socket for external N and PE busbars

	Type name	ABB IT number	EAN number 761 227	Packaging unit	Module	Weight in grams
– 8-module socket (suitable for 8-module socket)	ZLSP928	2CCF212060A0001	148 7348	10	8	67
– 6-module socket (suitable for 6-module socket)	ZLSP926	2CCF212061A0001	148 7362	10	6	53

Busbar insulator

	Type name	ABB IT number	EAN number 761 227	Packaging unit	Module	Weight in grams
dark grey, 20 for isolation and spacing of separate busbar sections, 18 mm	ZLS938	2CCA205611R0001	141 8205	1	1	1

Busbar cover

	Type name	ABB IT number	EAN number 761 227	Packaging unit	Module	Weight in grams
electrically protected covering of main and auxiliary busbars. The 4 modules cover can be divided. Suitable to accept extension adapter ZLS 101 4x18 mm – bag containing 5 items	ZLS100	2CCF002762R0001	001 5603	1	1	95

Busbars Power Bar System 250 A and 40 A

250 A and 40 A busbars / selection table for sockets

Order data busbar 250A	ABB IT number	EAN number 761227	ZLSP908	ZLSP906	Pack unit	Moduls (1 PLE 18mm)	Weight in grams	Busbar length in mm	Order data busbar 40A	ABB IT number	EAN number 761 227
ZLSP1250E30	2CCF212100M0030	148 7423	3	1	1	30	366	535	ZLS203E30	2CCF800229R0001	001 7669
ZLSP1250E32	2CCF212100M0032	148 7447	4	–	1	32	391	571	ZLS203E32	2CCF800230R0001	001 7683
ZLSP1250E34	2CCF212100M0034	148 7461	2	3	1	34	415	607	ZLS203E34	2CCF800231R0001	001 7706
ZLSP1250E36	2CCF212100M0036	148 7485	3	2	1	36	439	643	ZLS203E36	2CCF800232R0001	001 7720
ZLSP1250E38	2CCF212100M0038	148 7508	4	1	1	38	464	679	ZLS203E38	2CCF800233R0001	001 7744
ZLSP1250E40	2CCF212100M0040	148 7522	5	–	1	40	488	715	ZLS203E40	2CCF800234R0001	001 7768
ZLSP1250E42	2CCF212100M0042	148 7546	3	3	1	42	513	751	ZLS203E42	2CCF800235R0001	001 7782
ZLSP1250E44	2CCF212100M0044	148 7560	4	2	1	44	537	787	ZLS203E44	2CCF800236R0001	001 7805
ZLSP1250E46	2CCF212100M0046	148 7584	5	1	1	46	561	823	ZLS203E46	2CCF800237R0001	001 7829
ZLSP1250E48	2CCF212100M0048	148 7607	6	–	1	48	586	859	ZLS203E48	2CCF800238R0001	001 7843
ZLSP1250E50	2CCF212100M0050	148 7621	4	3	1	50	610	895	ZLS203E50	2CCF800239R0001	001 7867
ZLSP1250E52	2CCF212100M0052	148 7645	5	2	1	52	635	932	ZLS203E52	2CCF800240R0001	001 7881
ZLSP1250E54	2CCF212100M0054	148 7669	6	1	1	54	659	968	ZLS203E54	2CCF800241R0001	001 7904
ZLSP1250E56	2CCF212100M0056	148 7683	7	–	1	56	683	1004	ZLS203E56	2CCF800242R0001	001 7928
ZLSP1250E58	2CCF212100M0058	148 7706	5	3	1	58	708	1040	ZLS203E58	2CCF800243R0001	001 7942
ZLSP1250E60	2CCF212100M0060	148 7720	6	2	1	60	732	1076	ZLS203E60	2CCF800244R0001	001 7973
ZLSP1250E62	2CCF212100M0062	148 7744	7	1	1	62	757	1112	ZLS203E62	2CCF800245R0001	001 7997
ZLSP1250E64	2CCF212100M0064	148 7768	8	–	1	64	781	1148	ZLS203E64	2CCF800246R0001	001 8017
ZLSP1250E66	2CCF212100M0066	148 7782	6	3	1	66	806	1184	ZLS203E66	2CCF800247R0001	001 8031
ZLSP1250E68	2CCF212100M0068	148 7805	7	2	1	68	830	1220	ZLS203E68	2CCF800248R0001	001 8055
ZLSP1250E70	2CCF212100M0070	148 7829	8	1	1	70	854	1256	ZLS203E70	2CCF800249R0001	001 8079
ZLSP1250E72	2CCF212100M0072	148 7843	9	–	1	72	879	1292	ZLS203E72	2CCF800250R0001	001 8093
ZLSP1250E74	2CCF212100M0074	148 7867	7	3	1	74	903	1328	ZLS203E74	2CCF800251R0001	001 8116
ZLSP1250E76	2CCF212100M0076	148 7881	8	2	1	76	928	1364	ZLS203E76	2CCF800252R0001	001 8130
ZLSP1250E78	2CCF212100M0078	148 7904	9	1	1	78	952	1400	ZLS203E78	2CCF800253R0001	001 8154
ZLSP1250E80	2CCF212100M0080	148 7928	10	–	1	80	976	1436	ZLS203E80	2CCF800254R0001	001 8185
ZLSP1250E82	2CCF212100M0082	148 7942	8	3	1	82	1001	1472	ZLS203E82	2CCF800255R0001	001 8208
ZLSP1250E84	2CCF212100M0084	148 7966	9	2	1	84	1025	1508	ZLS203E84	2CCF800256R0001	001 8222
ZLSP1250E86	2CCF212100M0086	148 7980	10	1	1	86	1050	1544	ZLS203E86	2CCF800257R0001	001 8246
ZLSP1250E88	2CCF212100M0088	148 8000	11	–	1	88	1074	1580	ZLS203E88	2CCF800258R0001	001 8260
ZLSP1250E90	2CCF212100M0090	148 8024	9	3	1	90	1098	1616	ZLS203E90	2CCF800259R0001	001 8284
ZLSP1250E92	2CCF212100M0092	148 8048	10	2	1	92	1123	1652	ZLS203E92	2CCF800260R0001	001 8307
ZLSP1250E94	2CCF212100M0094	148 8062	11	1	1	94	1147	1688	ZLS203E94	2CCF800261R0001	001 8321
ZLSP1250E96	2CCF212100M0096	148 8086	12	–	1	96	1172	1724	ZLS203E96	2CCF800262R0001	001 8345
ZLSP1250E98	2CCF212100M0098	148 8109	10	3	1	98	1196	1760	ZLS203E98	2CCF800263R0001	001 8369
ZLSP1250E100	2CCF212100M0100	148 8123	11	2	1	100	1220	1796	ZLS203E100	2CCF800264R0001	001 7195
ZLSP1250E102	2CCF212100M0102	148 8147	12	1	1	102	1245	1832	ZLS203E102	2CCF800265R0001	001 7218
ZLSP1250E104	2CCF212100M0104	148 8161	13	–	1	104	1269	1868	ZLS203E104	2CCF800266R0001	001 7232
ZLSP1250E106	2CCF212100M0106	148 8185	11	3	1	106	1294	1904	ZLS203E106	2CCF800267R0001	001 7256
ZLSP1250E108	2CCF212100M0108	148 8208	12	2	1	108	1318	1940	ZLS203E108	2CCF800268R0001	001 7270

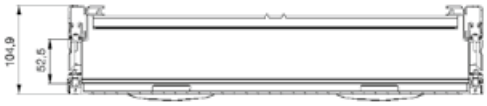
Planning for the incorporation of feeder block and spare places should be taken into account.
The total lengths given above were calculated taking socket spacings and tolerances into account.
For this reason, the indicated busbar length is not necessarily a multiple of 18 mm (1 Module).

SMISSLINE TP plug-in system

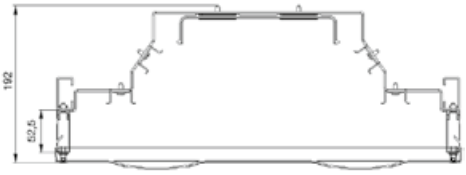
View of the CombiLine modules

Horizontal modules are suitable for mounting on WR or EDF profiles. Minimum cabinet depth 215 mm.
The WR or EDF mounting frames must be ordered separately.

Vertical modules are suitable for mounting in cabinets with a minimum depth of 275 mm. The mounting frame must be ordered separately. Cable laying grid is included for cable fixing. With DIN rail for PE/N disconnection terminals.



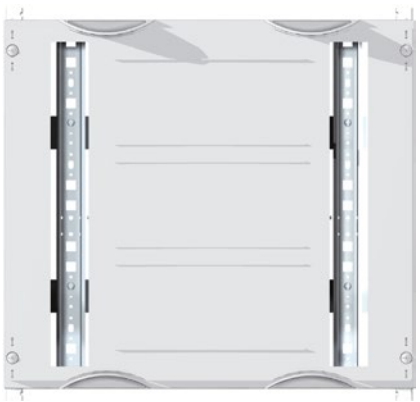
Sectional view from above, example MC203HS

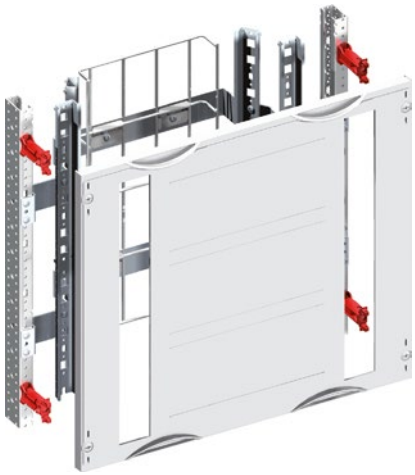


Sectional view from above, example MC203VS

Front view

Front view





SMISSLINE TP plug-in system

Modular distribution panel system CombiLine

A single distribution panel system for all cabinet types

Fire protection enclosures

Switchgear cabinets

Floor-standing cabinets

Wall-mounting cabinets

SMISSLINE TP plug-in system

Options for assembly in an enclosure

With horizontal device arrangement in conjunction with mounting adapters, it is possible to assemble the DIN rail further back. The busbar systems cannot be connected through from one panel to the next. The DIN rail is mounted to a 2-level bracket (in front upon delivery). The front position is for mounting the socket base to which the SMISSLINE TP devices will directly be mounted.
The back position is for mounting the socket bases for devices with universal adapters.

With vertical device arrangement in conjunction with mounting adapters, the standard cover holders have to be replaced by the cover holders ED137P4 with the spacer ED135P4. A cover raising frame is also required, so that there is more space under the cover. Devices using mounting adapters must always be mounted under a separate cover in this way. Modules for a vertical device arrangement have cable laying grids for fastening the cables. The DIN rails are designed to be equipped with the SMISSLINE TP socket base rows; it is also possible to connect the SMISSLINE TP additional sockets (N/PE terminals).

Horizontal device arrangement

Vertical device arrangement

Important: We recommend that you plan at least a 150 mm high terminal or wiring space on the cable entry side.

> For cover raising frames, see page 9/61

SMISSLINE TP plug-in system

For horizontal and vertical device arrangement

MC203HS

MC303HS

- SMISSLINE TP modules for horizontal device arrangement
- Extension with DIN rails 35 x 15 mm
- Distance between DIN rails 150 mm
- From 3 panels on the DIN rails are equipped with an additional stabilization rail
- Important: The SMISSLINE TP busbar system cannot be connected through from one module to the next.
- Planning aid for SMISSLINE TP socket bases
- The mounting frame must be ordered separately

Height		Width		Stecksock-ellänge			From cabi-net depth	FLATPACK Unmounted			MOUNTED Installed in the cabinet		
RE	mm	FB	mm	PLE	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	2	500	2 x 22	■	■	215	MBC202HS	2CPX042155R9999		MC202HS	2CPX042132R9999	
	300	3	750	2 x 36	■	■	215	MBC302HS	2CPX042156R9999		MC302HS	2CPX042133R9999	
3	450	2	500	3 x 22	■	■	215	MBC203HS	2CPX042157R9999		MC203HS	2CPX042134R9999	
	450	3	750	3 x 36	■	■	215	MBC303HS	2CPX042158R9999		MC303HS	2CPX042135R9999	
4	600	2	500	4 x 22	■	■	215	MBC204HS	2CPX042159R9999		MC204HS	2CPX042136R9999	
	600	3	750	4 x 36	■	■	215	MBC304HS	2CPX042160R9999		MC304HS	2CPX042137R9999	
5	750	2	500	5 x 22	■	■	215	MBC205HS	2CPX042161R9999		MC205HS	2CPX042138R9999	
	750	3	750	5 x 36	■	■	215	MBC305HS	2CPX042162R9999		MC305HS	2CPX042139R9999	

MC103VS

MC203VS

MC305VS

- SMISSLINE TP modules for vertical device arrangement
- Extension with DIN rails 35 x 15 mm
- The DIN rails in the back are designed for standard N (N disconnection terminals) and PE terminals
- A cable laying grid is included for cable fixing
- The DIN rails and cable laying grids are flush with the module
- Important: Vertical modules cannot be mounted directly adjacent to horizontal cross members or centre support rails
- Planning aid for SMISSLINE TP socket bases
- The mounting frame must be ordered separately

3	450	1	250	1 x 22		■	275	MBC103VS	2CPX042163R9999		MC103VS	2CPX042140R9999	
	450	2	500	2 x 22		■	275	MBC203VS	2CPX042164R9999		MC203VS	2CPX042141R9999	
4	600	1	250	1 x 30		■	275	MBC104VS	2CPX042165R9999		MC104VS	2CPX042142R9999	
	600	2	500	2 x 30		■	275	MBC204VS	2CPX042166R9999		MC204VS	2CPX042143R9999	
5	750	1	250	1 x 38		■	275	MBC105VS	2CPX042167R9999		MC105VS	2CPX042144R9999	
	750	2	500	2 x 38		■	275	MBC205VS	2CPX042168R9999		MC205VS	2CPX042145R9999	
	750	3	750	2 x 38		■	275	MBC305VS	2CPX042911R9999		MC305VS	2CPX042910R9999	

*1 Module for EDF mounting frame *2 Module for WR mounting frame

SMISSLINE TP plug-in system

Cable laying grids, DIN rails, fixing brackets

ZW430

Article	To be used for ...	PU/pcs.	Type	Ord. no.	Price
Cable laying grids width 100 mm Length					
450 mm	M(B)C103VS	1	ZW430	2CPX042170R9999	
600 mm	M(B)C104VS	1	ZW431	2CPX042171R9999	
750 mm	M(B)C105VS	1	ZW432	2CPX042172R9999	
900 mm	-	1	ZW433	2CPX042173R9999	
1050 mm	-	1	ZW434	2CPX042174R9999	
2000 mm	-	1	ZW435	2CPX042175R9999	

ZW436

Cable laying grids width 200 mm Length					
450 mm	M(B)C203VS	1	ZW436	2CPX042176R9999	
600 mm	M(B)C204VS	1	ZW437	2CPX042177R9999	
750 mm	M(B)C205VS	1	ZW438	2CPX042178R9999	
900 mm	-	1	ZW439	2CPX042179R9999	
1050 mm	-	1	ZW440	2CPX042180R9999	
2000 mm	-	1	ZW441	2CPX042181R9999	
3000 mm	-	1	ZW460	2CPX073256R9999	

ZW470

Cable laying grids width 300 mm Length					
3000 mm	-	1	ZW470	2CPX073257R9999	

ZW257

ZW359

Mounting brackets for cable laying grids For min. cabinet depths of 275 mm					
1 panel wide	M(B)C1...VS	1	ZW257	2CPX042182R9999	
2 panel wide	M(B)C2...VS	1	ZW258	2CPX042183R9999	
3 panel wide	M(B)C3...VS	1	ZW359	2CPX042912R9999	

SMISSLINE TP plug-in system

Cable laying grids, DIN rails, fixing brackets

ED73

ED52

ZX399

DIN rails vertical For a module height of				
450 mm	M(B)C...03VS	1	ED73	2CPX042184R9999
600 mm	M(B)C...04VS	1	ED74	2CPX042185R9999
750 mm	M(B)C...05VS	1	ED75	2CPX042186R9999

DIN rail, horizontal mounting				
2 panel wide	M(B)C2...HS	1	ED52	2CPX039252R9999
3 panel wide	M(B)C3...HS	1	ED53	2CPX039253R9999

Fixing brackets for horizontal DIN rails 1 set left / right	M(B)C...HS	1	ZX399	2CPX062669R9999

SMISSLINE TP plug-in system

Cover holders, panel connectors, raising frames

ED137P4

ED138P12

ED135P4

ED50P12

ED30P2

ED213

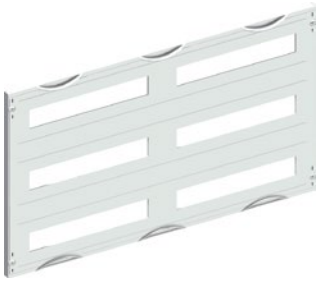
Article	PU/pcs.	Type	Ord. no.	Price
Cover holder 45 mm high, required to alter the height of the cover when using mounting adapters in vertical modules	4	ED137P4	2CPX062600R9999	
Cover holder 52.5 mm high	12	ED138P12	2CPX062602R9999	
	40	ED138P40	2CPX062603R9999	
Space Used to extend the cover holder by 25 mm	4	ED135P4	2CPX062610R9999	
90° press and turn closure	12	ED50P12	2CPX062337R9999	
Panel connector Used to join distribution panels or combination sets with each other. Maximum total panel size must not exceed OH 5 (9 GU)	2	ED30P2	2CPX062302R9999	
Raising frames for covers 45 mm high, required to alter the height of the cover when using mounting adapters in vertical modules External dimension				
450 x 250 mm	1	ED213	2CPX062783R9999	
600 x 250 mm	1	ED214	2CPX062784R9999	
750 x 250 mm	1	ED215	2CPX062785R9999	
450 x 500 mm	1	ED223	2CPX062788R9999	
600 x 500 mm	1	ED224	2CPX062789R9999	
750 x 500 mm	1	ED225	2CPX062790R9999	
450 x 750 mm	1	ED233	2CPX062793R9999	
600 x 750 mm	1	ED234	2CPX062794R9999	
750 x 750 mm	1	ED235	2CPX062795R9999	

SMISSLINE TP plug-in system

Plastic cover horizontal

AS22H

Article	To be used for ...	PU/pcs.	Type	Ord. no.	Price
Plastic cover horizontal with device slot, 2 panel wide					
300 x 500 mm	M(B)C202HS	1	AS22H	2CPX062764R9999	
450 x 500 mm	M(B)C203HS	1	AS23H	2CPX062765R9999	
600 x 500 mm	M(B)C204HS	1	AS24H	2CPX062766R9999	
750 x 500 mm	M(B)C205HS	1	AS25H	2CPX062767R9999	



AS32H

Article	To be used for ...	PU/pcs.	Type	Ord. no.	Price
Plastic cover horizontal with device slot, 3 panel wide					
300 x 750 mm	M(B)C302HS	1	AS32H	2CPX062768R9999	
450 x 750 mm	M(B)C303HS	1	AS33H	2CPX062769R9999	
600 x 750 mm	M(B)C304HS	1	AS34H	2CPX062770R9999	
750 x 750 mm	M(B)C305HS	1	AS35H	2CPX062771R9999	

SMISSLINE TP plug-in system

Plastic cover vertical

AS13V

Article	To be used for ...	PU/pcs.	Type	Ord. no.	Price
Plastic cover vertical with device slot, 1 panel wide					
450 x 250 mm	M(B)C103VS	1	AS13V	2CPX062772R9999	
600 x 250 mm	M(B)C104VS	1	AS14V	2CPX062773R9999	
750 x 250 mm	M(B)C105VS	1	AS15V	2CPX062774R9999	

AS23V

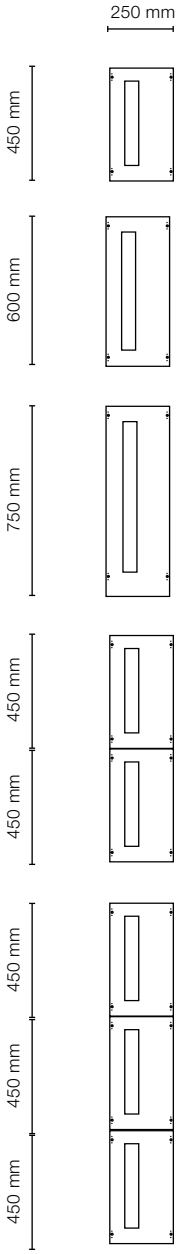
Plastic cover vertical with device slot, 2 panel wide					
450 x 500 mm	M(B)C203VS	1	AS23V	2CPX062775R9999	
600 x 500 mm	M(B)C204VS	1	AS24V	2CPX062776R9999	
750 x 500 mm	M(B)C205VS	1	AS25V	2CPX062777R9999	

AS35V

Plastic cover vertical with device slot, 3 panel wide					
750 x 750 mm	M(B)C305VS	1	AS35V	2CPX062796R9999	

SMISSLINE TP plug-in system

Assignment of CombiLine modules / Combination sets



Modules for cabinets min. cabinet depth 215 mm	Modules for cabinets min. cabinet depth 275 mm		Grid units	Socket base length
Combination set type	CombiLine mounted	CombiLine flatpack	GU	SU
1 x ED103VS	1 x MC103VS	1 x MBC103VS	3	22
1 x ED104VS	1 x MC104VS	1 x MBC104VS	4	30
1 x ED105VS	1 x MC105VS	1 x MBC105VS	5	38
2 x ED103VS	2 x MC103VS	2 x MBC103VS	6	46
3 x ED103VS	3 x MC103VS	3 x MBC103VS	9	72

Planning note

When positioning incoming terminal blocks under cover joints, use the lower terminal blocks ZLS228 or ZLS229.

Vertical modules cannot be mounted directly adjacent to horizontal cross members or centre support rails.

SMISSLINE TP plug-in system

Starter kit or socket base in individual parts

Socket base starter kit			Socket base in individual parts			
Pieces	**Type**	**Article no.**	**Pieces**	**Space units**	**Type**	**Article no.**
1	ZLS905E22-3L	2CCA183102R0001	2	8	ZLS908	2CCA183030R0001
			1	6	ZLS906	2CCA183035R0001
			1	-	ZLS920 (End part))	2CCA183017R0001
1	ZLS905E22-3LN*	2CCA183103R0001	3 / 4*	-	ZLS201E22 (Cu bus bar))	2CCF800169R0001
1	ZLS905E30-3L	2CCA183110R0001	3	8	ZLS908	2CCA183030R0001
			1	6	ZLS906	2CCA183035R0001
			1	-	ZLS920 (End part))	2CCA183017R0001
1	ZLS905E30-3LN*	2CCA183111R0001	3 / 4*	-	ZLS201E38 (Cu bus bar))	2CCF800173R0001
1	ZLS905E38-3L	2CCA183118R0001	4	8	ZLS908	2CCA183030R0001
			1	6	ZLS906	2CCA183035R0001
			1	-	ZLS920 (End part))	2CCA183017R0001
1	ZLS905E38-3LN*	2CCA183119R0001	3 / 4*	-	ZLS201E46 (Cu bus bar))	2CCF800177R0001
1	ZLS905E46-3L	2CCA183126R0001	5	8	ZLS908	2CCA183030R0001
			1	6	ZLS906	2CCA183035R0001
	ZLS905E46-3LN*	2CCA183127R0001	1	-	ZLS920 (End part))	2CCA183017R0001
1	ZLS905E72-3L	2CCA183152R0001	9	8	ZLS908	2CCA183030R0001
			1	-	ZLS920 (End part))	2CCA183017R0001
1	ZLS905E72-3LN*	2CCA183153R0001	3 / 4*	-	ZLS201E72 (Cu bus bar))	2CCF800190R0001

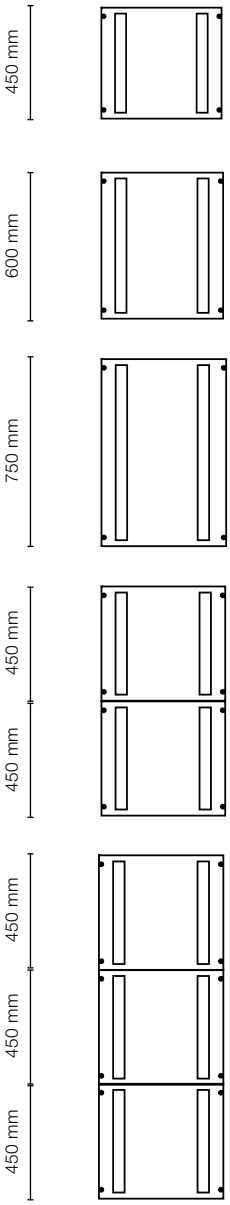
* For version with N (4-pole)

Planning note

Additional starter kit with AB-bus bar on demand.

SMISSLINE TP plug-in system

Assignment of CombiLine modules / Combination sets



Modules for cabinets min. cabinet depth 215 mm	Modules for cabinets min. cabinet depth 275 mm		Grid units	Socket base length
Combination set type	CombiLine mounted	CombiLine flatpack	GU	SU
1 x ED203VS	1 x MC203VS	1 x MBC203VS	3	2 x 22
1 x ED204VS	1 x MC204VS	1 x MBC204VS	4	2 x 30
1 x ED205VS	1 x MC205VS 1 x MC305VS	1 x MBC205VS 1 x MBC305VS	5	2 x 38
2 x ED203VS	2 x MC203VS	2 x MBC203VS	6	2 x 46
3 x ED203VS	3 x MC203VS	3 x MBC203VS	9	2 x 72

Planning note

When positioning incoming terminal blocks under cover joints, use the lower terminal blocks ZLS228 or ZLS229.

Vertical modules cannot be mounted directly adjacent to horizontal cross members or centre support rails.

SMISSLINE TP plug-in system

Starter kit or socket base in individual parts

Socket base starter kit			Socket base in individual parts			
Pieces	**Type**	**Article no.**	**Pieces**	**Space units**	**Type**	**Article no.**
2	ZLS905E22-3L	2CCA183102R0001	4	8	ZLS908	2CCA183030R0001
			2	6	ZLS906	2CCA183035R0001
			2	-	ZLS920 (End part)	2CCA183017R0001
2	ZLS905E22-3LN*	2CCA183103R0001	6 / 8*	-	ZLS201E22 (Cu bus bar)	2CCF800165R0001
2	ZLS905E30-3L	2CCA183110R0001	6	8	ZLS908	2CCA183030R0001
			2	6	ZLS906	2CCA183035R0001
			2	-	ZLS920 (End part)	2CCA183017R0001
2	ZLS905E30-3LN*	2CCA183111R0001	6 / 8*	-	ZLS201E30 (Cu bus bar	2CCF800169R0001
2	ZLS905E38-3L	2CCA183118R0001	8	8	ZLS908	2CCA183030R0001
			2	6	ZLS906	2CCA183035R0001
			2	-	ZLS920 (End part)	2CCA183017R0001
2	ZLS905E38-3LN*	2CCA183119R0001	6 / 8*	-	ZLS201E38 (Cu bus bar)	2CCF800173R0001
2	ZLS905E46-3L	2CCA183126R0001	10	8	ZLS908	2CCA183030R0001
			2	6	ZLS906	2CCA183035R0001
			2	-	ZLS920 (End part)	2CCA183017R0001
2	ZLS905E46-3LN*	2CCA183127R0001	6 / 8*	-	ZLS201E46 (Cu bus bar)	2CCF800177R0001
2	ZLS905E72-3L	2CCA183152R0001	18	8	ZLS908	2CCA183030R0001
			2	-	ZLS920 (End part)	2CCA183017R0001
2	ZLS905E72-3LN*	2CCA183153R0001	6 / 8*	-	ZLS201E72 (Cu bus bar)	2CCF800190R0001

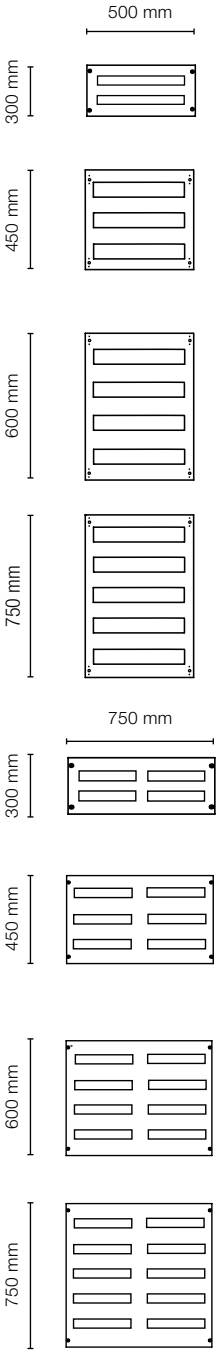
* For version with N (4-pole)

Planning note

Additional starter kit with AB-bus bar on demand.

SMISSLINE TP plug-in system

Assignment of CombiLine modules / Combination sets



Modules for cabinets min. cabinet depth 215 mm	Modules for cabinets min. cabinet depth 215 mm		Grid units	Socket base length
Combination set type	CombiLine mounted	CombiLine flatpack	GU	SU
–	1 x MC202HS	1 x MBC202HS	2	2 x 22
1 x ED203HS	1 x MC203HS	1 x MBC203HS	3	3 x 22
1 x ED204HS	1 x MC204HS	1 x MBC204HS	4	4 x 22
1 x ED205HS	1 x MC205HS	1 x MBC205HS	5	5 x 22
–	1 x MC302HS	1 x MBC302HS	2	2 x 36
1 x ED303HS	1 x MC3032HS	1 x MBC303HS	3	3 x 36
1 x ED304HS	1 x MC304HS	1 x MBC304HS	4	4 x 36
1 x ED305HS	1 x MC305HS	1 x MBC305HS	5	5 x 36

Planning note

For modules of 3 panel width the incoming terminal block serves as centre supply.

SMISSLINE TP plug-in system

Starter kit or socket base in individual parts

Socket base starter kit			Stecksockel in Einzelteilen			
Pieces	**Type**	**Article no.**	**Pieces**	**Space units**	**Type**	**Article no.**
2	ZLS905E22-3L	2CCA183102R0001	4	8	ZLS908	2CCA183030R0001
			2	6	ZLS906	2CCA183035R0001
			2	-	ZLS920 (End part)	2CCA183017R0001
2	ZLS905E22-3LN*	2CCA183103R0001	6 / 8*	-	ZLS201E22 (Cu bus bar)	2CCF800165R0001
3	ZLS905E22-3L	2CCA183102R0001	6	8	ZLS908	2CCA183030R0001
			3	6	ZLS906	2CCA183035R0001
			3	-	ZLS920 (End part)	2CCA183017R0001
3	ZLS905E22-3LN*	2CCA183103R0001	9 / 12*	-	ZLS201E22 (Cu bus bar)	2CCF800165R0001
4	ZLS905E22-3L	2CCA183102R0001	8	8	ZLS908	2CCA183030R0001
			4	6	ZLS906	2CCA183035R0001
			4		ZLS920 (End part)	2CCA183017R0001
4	ZLS905E22-3LN*	2CCA183103R0001	12 / 16*		ZLS201E22 (Cu bus bar)	2CCF800165R0001
5	ZLS905E22-3L	2CCA183102R0001	10	8	ZLS908	2CCA183030R0001
			5	6	ZLS906	2CCA183035R0001
			5	-	ZLS920 (End part)	2CCA183017R0001
5	ZLS905E22-3LN*	2CCA183103R0001	15 / 20*	-	ZLS201E22 (Cu bus bar)	2CCF800165R0001
2	ZLS905E36-3L	2CCA183116R0001	6	8	ZLS908	2CCA183030R0001
			4	6	ZLS906	2CCA183035R0001
			2	-	ZLS920 (End part)	2CCA183017R0001
2	ZLS905E36-3LN*	2CCA183117R0001	6 / 8*	-	ZLS201E36 (Cu bus bar)	2CCF800172R0001
3	ZLS905E36-3L	2CCA183116R000	9	8	ZLS908	2CCA183030R0001
			6	6	ZLS906	2CCA183035R0001
			3	-	ZLS920 (End part)	2CCA183017R0001
3	ZLS905E36-3LN*	2CCA183117R0001	9 / 12*	-	ZLS201E36 (Cu bus bar)	2CCF800172R0001
4	ZLS905E36-3L	2CCA183116R000	12	8	ZLS908	2CCA183030R0001
			8	6	ZLS906	2CCA183035R0001
			4	-	ZLS920 (End part)	2CCA183017R0001
4	ZLS905E36-3LN*	2CCA183117R0001	12 / 16*	-	ZLS201E36 (Cu bus bar)	2CCF800172R0001
5	ZLS905E36-3L	2CCA183116R000	15	8	ZLS908	2CCA183030R0001
			10	6	ZLS906	2CCA183035R0001
			5	-	ZLS920 (End part)	2CCA183017R0001
5	ZLS905E36-3LN*	2CCA183117R0001	15 / 20*	-	ZLS201E36 (Cu bus bar)	2CCF800172R0001

* For version with N (4-pole)

Planning note

Additional starter kit with AB-bus bar on demand.

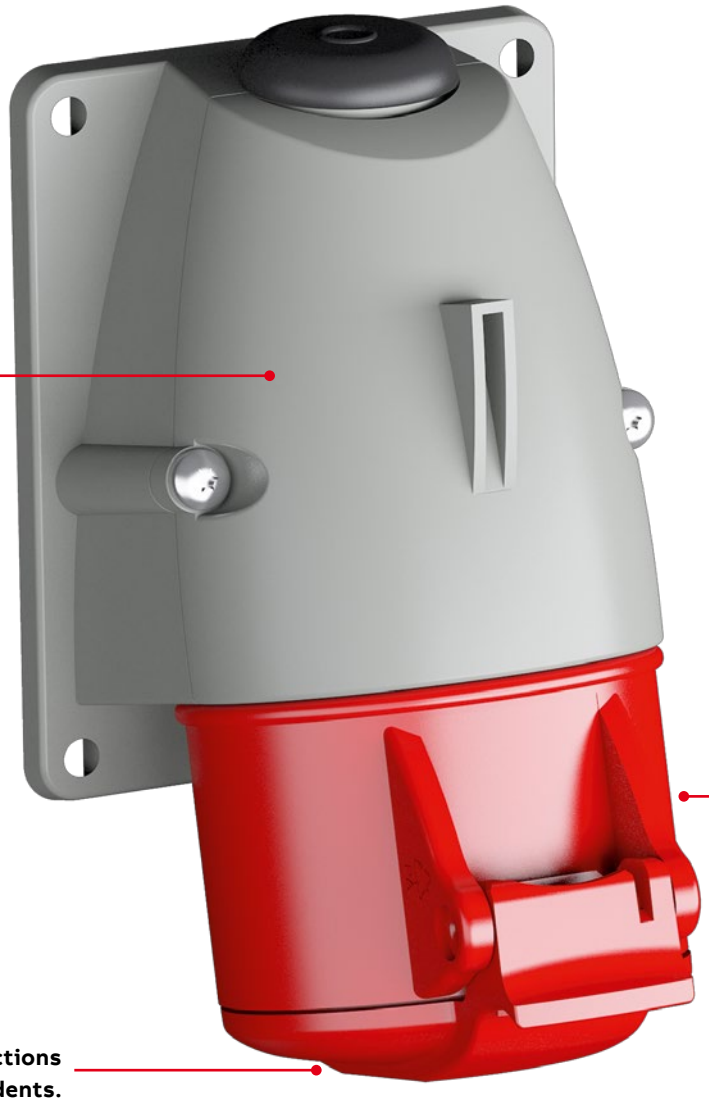
Electrical installation solutions for buildings
Industrial plugs and sockets

Index	
Introduction Industrial plugs and sockets	10/2
Easy & Safe	**10/6**
Plugs IP44	10/8
Connectors IP44	10/10
Inlets IP44	10/12
Outlets IP44	10/16
Plugs IP67	10/30
Connectors IP67	10/32
Inlets IP67	10/34
Outlets IP67	10/38
Phase inverter	10/46
For entertainment applications	
Plugs and sockets	10/50
Fast & Safe	**10/58**
Plugs IP44	10/60
Connectors IP44	10/61
Inlets IP44	10/62
Outlets IP44	10/67
Plugs IP67	10/71
Connectors IP67	10/72
Inlets IP67	10/73
Outlets IP67	10/76
Critical & Safe	**10/80**
Switched interlocket socket outlet	10/82
Surface socket outlets	10/104
Accessories	10/110
Tough & Safe	**10/112**
Plugs	10/114
Connectors	10/119
Surface socket outlets	10/124
Surface intlets	10/132
Panel mounted socket outlets	10/137
Panel mounted socket inlets	10/146

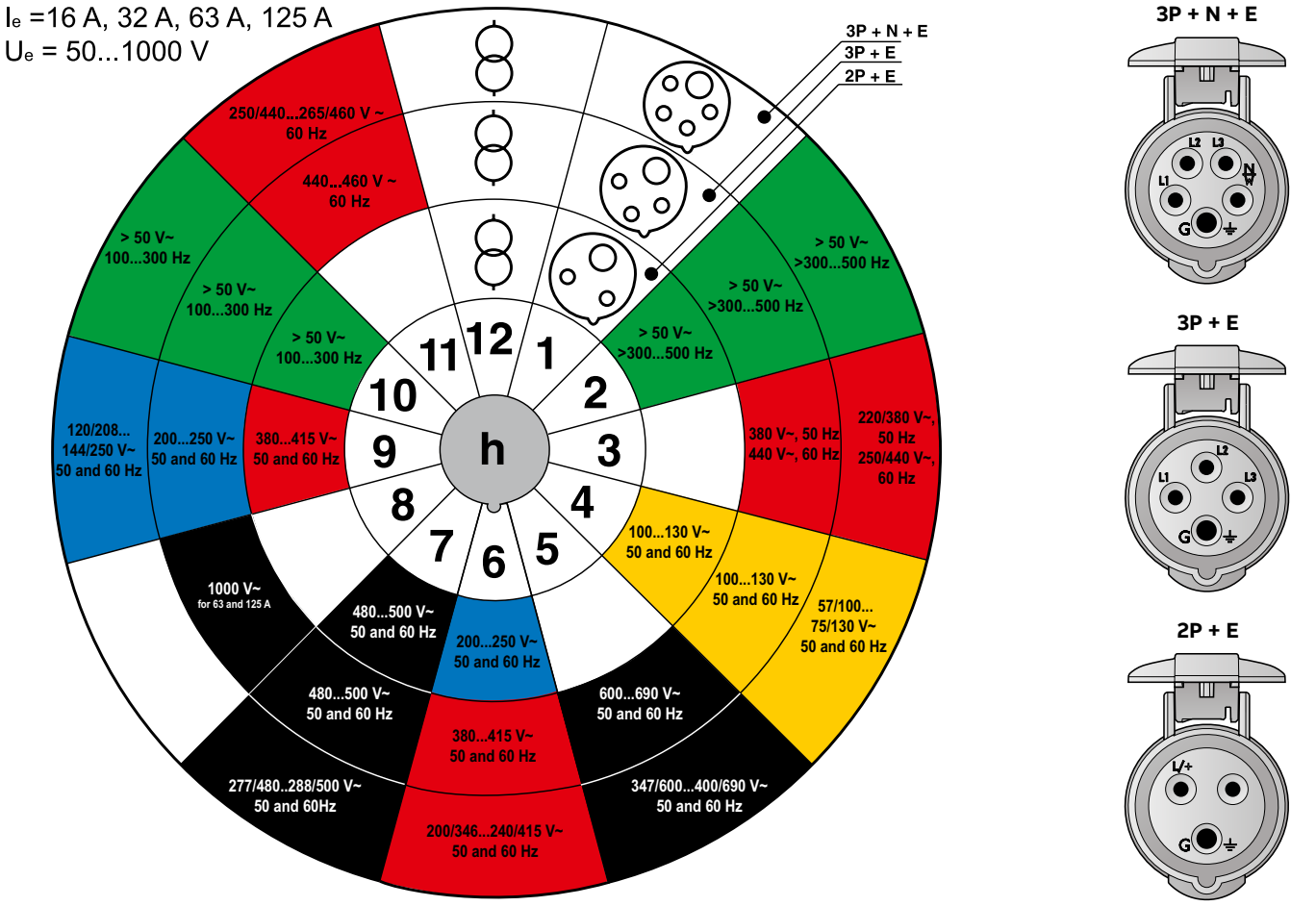
Modular Combi	**10/151**
Extra low voltage	**10/164**
Hight current connectors	
Product portfolio	10/170
Introduction High current connectors	10/171
C-line	**10/172**
Plugs	10/173
Sockets	10/174
Inlets for wall mounting	10/175
Inlets for panel mounting	10/176
Socket outlet for wall mounting	10/178
Socket outlets for panel mounting	10/180
B-line	**10/181**
Plugs	10/182
Sockets	10/183
Inlets for wall mounting	10/184
Inlets for panel mounting	10/185
Socket outlet for wall mounting	10/187
Socket outlets for panel mounting	10/189
Connector unit	**10/190**
with mechanical interlock	10/191
with block contactor	10/193
with circuit breaker	10/195

Industrial plugs and sockets
Reliable, durable and safe. Perfect for your application

These products are used for connection of equipment in all kind of applications where it needs to be possible to connect and disconnect. ABB industrial plugs and sockets are chosen when safety, reliability and durability is requested.



Industrial plugs and sockets
IEC 60309-2 “clock”



Standard voltages - Color codes according to IEC60309-1, -2

Position of earthing sleeve according to IEC 60309-2 (clock)	2P+E	3P+E	3P+N+E
1	☐ Optional voltage (not stated below)	☐ Optional voltage (not stated below)	☐ Optional voltage (not stated below)
2	■ >300...500 V~ >50 Hz	■ >300...500 V~ >50 Hz	■ >300...500 V~ >50 Hz
3	☐ Not used	■ 380 V~ 50 Hz, 440 V 60 Hz	■ 220/380 V~ 50 Hz, 250/440 V 60 Hz
4	■ 100...130 V~ 50 and 60 Hz	■ 100...130 V~ 50 and 60 Hz	■ 57/100...75/130 V~ 50 and 60 Hz
5	☐ Not used	■ 600...690 V~ 50 and 60 Hz	■ 347/600...400/690 V~ 50 and 60 Hz
6	■ 200...250 V~ 50 and 60 Hz	■ 380...415 V~ 50 and 60 Hz	■ 200/346...240/415 V~ 50 and 60 Hz
7	■ 480...500 V~ 50 and 60 Hz	■ 480...500 V~ 50 and 60 Hz	■ 277/480...288/500 V~ 50 and 60 Hz
8	☐ Not used	■ 1000 V~ (for 63 A and 125 A)	☐ Not used
9	■ 380...415 V~ 50 and 60 Hz	■ 200...250 V~ 50 and 60 Hz	■ 120/208...144/250 V~ 50 and 60 Hz
10	■ 100...300 V~ >50 Hz	■ 100...300 V~ >50 Hz	■ 100...300 V~ >50 Hz
11 Mainly for marine installations	☐ Not used	■ 440...460 V~ 60 Hz	■ 250/440...265/460 V~ 60 Hz
12 Supply from isolating transformer	☐ Supply from isolating transformer	☐ Supply from isolating transformer	☐ Supply from isolating transformer

Industrial plugs and sockets
A perfect choice

Industrial plugs and sockets are a part of the comprehensive ABB program of high quality low voltages products for industries, buildings and OEM´s.

ABB has manufactured industrial plugs and sockets for over 60 years in the factory located in Nyköping, Sweden.
Long experience of developing and manufacturing plugs and sockets within ABB has resulted in a wide product range of high quality and a robust ergonomic design. Covering products up to 125 A and 690 V, all tested and approved for IEC standards.

The design and material used have continuously been improved to meet the customer's requirements, and to take the environmental aspects into consideration.

ABB´s industrial plugs and sockets have the solution for products in industrial environments with high demands on safety, durability, reliability and cost saving for the end user.

- Safety - tested and approved by third party testing laboratories.
- Durability - materials used give a high durability in tough conditions and environments.
- Reliability - high quality contacts ensure reliability.
- Cost saving - designed for quick and easy installation.

You will find all you need in ABB´s industrial plugs and sockets product range. One supplier for all your needs and worldwide availability.

Perfect performance
ABB´s plugs and sockets comply with the high quality standards requested when there is a demand for reliability and safety. Some are made of heavy-duty plastics (PBT), others of metal. Some have advanced features while others have a straight forward functionality. Perfect for demanding customers.

Perfect productivity
The reliability of our plugs and sockets will help you maintain high up-time in operations. No unscheduled or unwanted interruptions, allowing you a high degree of flexibility.

Perfect safety
Safety is also very important. By choosing ABB´s plugs and sockets you minimize the risk of short circuits. You also ensure maximum personal safety for anyone nearby or around your equipment.

Perfect for the job
Different applications and environments require different products. To make your choice of products easier, we have categorized our range into three groups. All groups have however one feature in common - Safety

CRITICAL & SAFE
- Select Critical & Safe products for the highest safety in fixed installations.

TOUGH & SAFE
- Select Tough & Safe products for best performance in demanding and heavy-duty applications.

EASY & SAFE
- Select Easy & Safe products for adequate functionality and ergonomic design.

FAST & SAFE
- Select Fast & Safe products for the fastest installation.

The structure of our main catalog is based on these three groups. Look for the three different symbols to make your choice.

ABB´s industrial plugs and sockets – a complete offer

- Approved according to IEC 60 309-1, -2, -4
- Range from 16 A up to 125 A.
- IP44 (splashproof) and IP67 (watertight).
- All contacts are self cleaning and calibrated, to maintain the accurate contact pressure, quality and performance over time.
- Plugs and sockets for 63 A and 125 A have pins and sleeves carriers in glass fiber reinforced polyamide.
- For devices in the Critical & Safe and Tough & Safe range, all external screws are made of stainless steel.
- Clear terminal markings inside and at the front of the devices.
- Switched interlocked socket-outlets for vertical or horizontal mounting.

Pilot contact

All male and female plugs and sockets with a rated current of 63 A and all males and interlocked socket outlets with a rated current of 125 A are equipped with a pilot contact. Connectors and panel mounted socket outlets with a rated current of 125 A and with ”LP” at the end of the type designation, e.g. 4125C6W LP, are equipped with pilot contacts. In all products with pilot contacts according to IEC 60 309-1 and -2, the pilot pin and sleeve are shorter than the other connecting pins and sleeves. This means that the ”pilot circuit” breaks before and connects after the main circuit giving optimum safety. The maximum connection area is 4 mm^2.

Industrial plugs and sockets
New Easy & Safe

reddot design award winner 2017

Plugs

Type EP...
16 A...32A, IP44

Type EP...W
16A...32 A, IP67

Connectors

Type EC...
16 A...32 A, IP44

Type EC...W
16 A...32 A, IP67

Inlets

For wall mounting, Type BS...
16 A...32 A, IP44

For wall mounting, Type EBS...W
16 A...32 A, IP67

For panel mounting with unified straight flange, Type ...BU...
16A...32 A, IP44

For panel mounting with unified straight flange, Type EBU...W
16 A...32 A, IP67

Socket outlet

For wall mounting, Type RS...
16A...32 A, IP44

For wall mounting, Type ERS...W
16 A...32A, IP67

For panel mounting with unified straight flange, Type RU...
16 A...32 A, IP44

For panel mounting with unified angled flange, Type RAU...
16 A...32A, IP44

For panel mounting with minimized straight flange, Type R...
16 A...32 A, IP44

For panel mounting with minimized angled flange, Type RAM...
16 A...32A, IP44

For panel mounting with unified straight flange, Type ERU...W
16 A...32A, IP67

Industrial plugs and sockets
New Easy & Safe

Our new industrial plugs and sockets complements ABB's strong low-voltage offer. These plugs and sockets are part of Easy & Safe. Easy & Safe is a product range suitable for general use in most applications.

In most installations, industrial plugs and sockets are part of the exterior, for that reason it was important to have an attractive design. The modern design and the strong ABB brand adds value to each installation or OEM equipment.

Protect your contacts with new Easy & Safe IP67
The biggest addition in this series is the new designed products with IP67 ingress protection. IP67 is a protection class that guarantees water and dust tightness. Although water or dust rarely occurs in some applications, the liquids or dirt may get into the contacting surfaces during the products lifetime, which will affect the contacts performance. This in turn can lead to overheating, burnt contacts and need of replacing plugs and sockets.
Worst case scenario is that fluids or dust reaches the contact parts, which in turn can lead to accidents with injuries and damage the connected equipment.

Electrical contacts protected against liquids and dirt retains its performance over time. High contact performance means reliability, reducing downtime and lowers maintenance costs. Contact parts of ABB's connectors are manufactured with high precision from solid brass. The innovative design means that the contacts seem self-cleaning during connection and disconnection while keeping the contact area free from arcing.

Next generation of IP44 plugs and connectors
Some features of the new IP67 products are also implemented in the IP44 plugs and connectors. With the new cable gland we get improved sealing and strain relief, it also functions with a wider span of cables. We have also implemented the new family design of ABB Industrial plugs and sockets.

Applications
New Easy & Safe series is an excellent choice in most applications where high reliability and safety are required. For example

- Industrial applications
- Food and beverage industries
- Infrastructure applications
- Construction sites
- Mines
- Marine applications connection of reefer containers

For tough applications with specific requirements for UV resistance, chemical resistance, mechanical resistance, our Tough & Safe series is still the best option.

Plugs

IP44

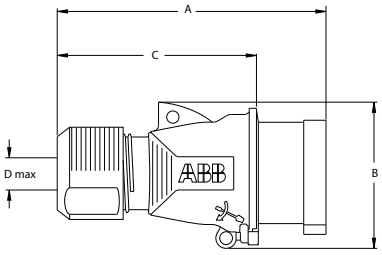
EASY & SAFE

216EP6

16 A. Splashproof

Housing in plastic (PA). Cable entry with compression gland. Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	216EP1	2CMA101943R1000	10	0.11
	Green	>300...500	>50	216EP2	2CMA101944R1000		
	Yellow	100...130	50 and 60	216EP4	2CMA101946R1000		
	Blue	200...250		216EP6	2CMA101947R1000		
	Red	380...415		216EP9	2CMA101948R1000		
	Grey	transf		216EP12	2CMA101950R1000		
3P+E							
4	Grey		AC	316EP1	2CMA101951R1000	10	0.16
	Green	>300...500	>50	316EP2	2CMA101952R1000		
	Red	380/440	50/60	316EP3	2CMA101953R1000		
	Yellow	100...130	50 and 60	316EP4	2CMA101954R1000		
	Black	600...690		316EP5	2CMA101955R1000		
	Red	380...415		316EP6	2CMA101956R1000		
	Black	480...500		316EP7	2CMA101957R1000		
	Blue	200...250		316EP9	2CMA101958R1000		
	Green	100...300	>50	316EP10	2CMA101959R1000		
	Red	440...460	60	316EP11	2CMA101960R1000		
	Grey	transf	50 and 60	316EP12	2CMA101961R1000		
3P+N+E							
5	Grey		AC	416EP1	2CMA101962R1000	10	0.18
	Green	>300...500	>50	416EP2	2CMA101963R1000		
	Red	380...440	50/60	416EP3	2CMA101964R1000		
	Yellow	100...130	50 and 60	416EP4	2CMA101965R1000		
	Black	600...690		416EP5	2CMA101966R1000		
	Red	346...415		416EP6	2CMA101967R1000		
	Black	480...500		416EP7	2CMA101968R1000		
	Blue	208...250		416EP9	2CMA101969R1000		
	Red	440...460	60	416EP11	2CMA101970R1000		



Dimensions (mm)

Type	A	B	C	Dmax
216EP...	127	62.5	88.5	14
316EP...	144	74.5	106	17
416EP...	144	78	106	17

Plugs

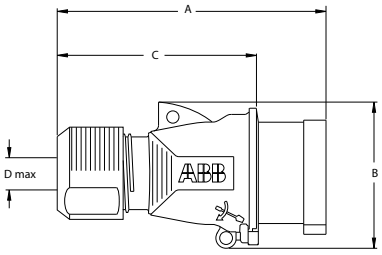
IP44

432EP6

32 A. Splashproof

Housing in plastic (PA). Cable entry with compression gland. Cable area 2.5...6 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232EP1	2CMA101971R1000	10	0.21
		Green	>300...500	>50	232EP2	2CMA101972R1000		
		Yellow	100...130	50 and 60	232EP4	2CMA101974R1000		
		Blue	200...250		232EP6	2CMA101975R1000		
		Red	380...415		232EP9	2CMA101976R1000		
		Grey	transf		232EP12	2CMA101978R1000		
3P+E								
4		Grey		AC	332EP1	2CMA101979R1000	10	0.23
		Green	>300...500	>50	332EP2	2CMA101980R1000		
		Red	380/440	50/60	332EP3	2CMA101981R1000		
		Yellow	100...130	50 and 60	332EP4	2CMA101982R1000		
		Black	600...690		332EP5	2CMA101983R1000		
		Red	380...415		332EP6	2CMA101984R1000		
		Black	480...500		332EP7	2CMA101985R1000		
		Blue	200...250		332EP9	2CMA101986R1000		
		Green	100...300	>50	332EP10	2CMA101987R1000		
		Red	440...460	60	332EP11	2CMA101988R1000		
		Grey	transf	50 and 60	332EP12	2CMA101989R1000		
3P+N+E								
5		Grey		AC	432EP1	2CMA101990R1000	10	0.24
		Green	>300...500	>50	432EP2	2CMA101991R1000		
		Red	380...440	50/60	432EP3	2CMA101992R1000		
		Yellow	100...130	50 and 60	432EP4	2CMA101993R1000		
		Black	600...690		432EP5	2CMA101994R1000		
		Red	346...415		432EP6	2CMA101995R1000		
		Black	480...500		432EP7	2CMA101996R1000		
		Blue	208...250		432EP9	2CMA101997R1000		
		Red	440...460	60	432EP11	2CMA101998R1000		



Dimensions (mm)

Type	A	B	C	Dmax
232EP...	167	82.5	121	22
332EP...	167	82.5	121	22
432EP...	167	87.5	121	22

Connectors

IP44

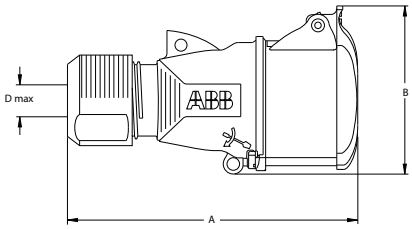
EASY & SAFE

216EC6

16 A. Splashproof

Housing in plastic (PA). Cable entry with compression gland. Cable area 1...2.5 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216EC1	2CMA101999R1000	10	0.16
		Green	>300...500	>50	216EC2	2CMA102000R1000		
		Yellow	100...130	50 and 60	216EC4	2CMA102002R1000		
		Blue	200...250		216EC6	2CMA102003R1000		
		Red	380...415		216EC9	2CMA102004R1000		
		Grey	transf		216EC12	2CMA102006R1000		
3P+E								
4		Grey		AC	316EC1	2CMA102007R1000	10	0.21
		Green	>300...500	>50	316EC2	2CMA102008R1000		
		Red	380/440	50/60	316EC3	2CMA102009R1000		
		Yellow	100...130	50 and 60	316EC4	2CMA102010R1000		
		Black	600...690		316EC5	2CMA102011R1000		
		Red	380...415		316EC6	2CMA102012R1000		
		Black	480...500		316EC7	2CMA102013R1000		
		Blue	200...250		316EC9	2CMA102014R1000		
		Green	100...300	>50	316EC10	2CMA102015R1000		
		Red	440...460	60	316EC11	2CMA102016R1000		
		Grey	transf	50 and 60	316EC12	2CMA102017R1000		
3P+N+E								
5		Grey		AC	416EC1	2CMA102018R1000	10	0.23
		Green	>300...500	>50	416EC2	2CMA102019R1000		
		Red	380...440	50/60	416EC3	2CMA102020R1000		
		Yellow	100...130	50 and 60	416EC4	2CMA102021R1000		
		Black	600...690		416EC5	2CMA102022R1000		
		Red	346...415		416EC6	2CMA102023R1000		
		Black	480...500		416EC7	2CMA102024R1000		
		Blue	208...250		416EC9	2CMA102025R1000		
		Red	440...460	60	416EC11	2CMA102026R1000		



Dimensions (mm)

Type	A	B	Dmax
216EC...	135.5	74.5	14
316EC...	155	87	17
416EC...	156	90.5	17

Connectors

IP44

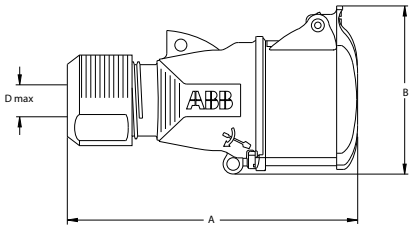
EASY & SAFE

232EC9

32 A. Splashproof

Housing in plastic (PA). Cable entry with compression gland. Cable area 2.5...6 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232EC1	2CMA102027R1000	10	0.26
		Green	>300...500	>50	232EC2	2CMA102028R1000		
		Yellow	100...130	50 and 60	232EC4	2CMA102030R1000		
		Blue	200...250		232EC6	2CMA102031R1000		
		Red	380...415		232EC9	2CMA102032R1000		
		Grey	transf		232EC12	2CMA102034R1000		
3P+E								
4		Grey		AC	332EC1	2CMA102035R1000	10	0.28
		Green	>300...500	>50	332EC2	2CMA102036R1000		
		Red	380/440	50/60	332EC3	2CMA102037R1000		
		Yellow	100...130	50 and 60	332EC4	2CMA102038R1000		
		Black	600...690		332EC5	2CMA102039R1000		
		Red	380...415		332EC6	2CMA102040R1000		
		Black	480...500		332EC7	2CMA102041R1000		
		Blue	200...250		332EC9	2CMA102042R1000		
		Green	100...300	>50	332EC10	2CMA102043R1000		
		Red	440...460	60	332EC11	2CMA102044R1000		
		Grey	transf	50 and 60	332EC12	2CMA102045R1000		
3P+N+E								
5		Grey		AC	432EC1	2CMA102046R1000	10	0.30
		Green	>300...500	>50	432EC2	2CMA102047R1000		
		Red	380...440	50/60	432EC3	2CMA102048R1000		
		Yellow	100...130	50 and 60	432EC4	2CMA102049R1000		
		Black	600...690		432EC5	2CMA102050R1000		
		Red	346...415		432EC6	2CMA102051R1000		
		Black	480...500		432EC7	2CMA102052R1000		
		Blue	208...250		432EC9	2CMA102053R1000		
		Red	440...460	60	432EC11	2CMA102054R1000		



Dimensions (mm)

Type	A	B	Dmax
232EC...	182	93.5	22
332EC...	182	93.5	22
432EC...	182.5	99	22

Inlets

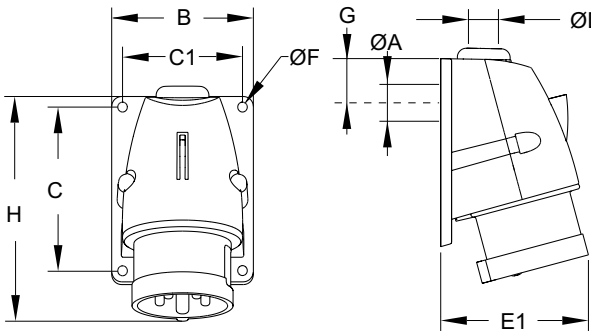
for wall mounting, IP44

EASY & SAFE

416BS9

16 A. Splashproof
Housing in plastic (PA). Flexible membrane and metric threaded M20 insert for cop cable entry.
Rear knock-out cable entry. Cable area 1...2.5 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216BS1	2CMA193293R1000	10	0.15
		Yellow	100...130	50 and 60	216BS4	2CMA193289R1000		
		Blue	200...250		216BS6	2CMA193290R1000		
		Red	380...415		216BS9	2CMA193291R1000		
		Grey	transf.		216BS12	2CMA193292R1000		
3P+E								
4		Grey		AC	316BS1	2CMA193303R1000	10	0.19
		Yellow	100...130	50 and 60	316BS4	2CMA193296R1000		
		Black	600...690		316BS5	2CMA193297R1000		
		Red	380...415		316BS6	2CMA193298R1000		
		Black	480...500		316BS7	2CMA193299R1000		
		Blue	200...250		316BS9	2CMA193300R1000		
		Green	100...300	>50	316BS10	2CMA193301R1000		
		Red	440...460	60	316BS11	2CMA193302R1000		
3P+N+E								
5		Grey		AC	416BS1	2CMA193311R1000	10	0.20
		Green	>300...500	>50	416BS2	2CMA193304R1000		
		Black	600...690	50 and 60	416BS5	2CMA126699R1000		
		Red	346...415		416BS6	2CMA193307R1000		
		Blue	208...250		416BS9	2CMA193309R1000		
		Red	440...460	60	416BS11	2CMA193310R1000		



Dimensions (mm)

Type	A	B	C	C1	Dmax	E1	F	G	H
216BS..	23	66	75	54	18/M20	72	5.5	27	110
316BS..	23	79	91	67	18/M20	78	5.5	30	124
416BS..	23	79	91	67	18/M20	81	5.5	30	125

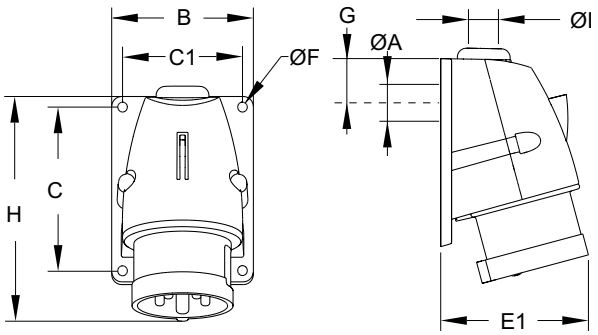
Inlets

for wall mounting, IP44

EASY & SAFE

32 A. IP44. Splashproof
Housing in plastic (PA). Flexible membrane and metric threaded M25 insert for cop cable entry.
Rear knock-out cable entry. Cable area 2.5...6 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
		Grey		AC	232BS1	2CMA193317R1000	10	0.25
		Yellow	100...130	50 and 60	232BS4	2CMA193313R1000		
		Blue	200...250		232BS6	2CMA193314R1000		
3		Red	380...415		232BS9	2CMA193315R1000		
3P+E								
4		Grey		AC	332BS1	2CMA193327R1000	10	0.27
		Red	380/440	50/60	332BS3	2CMA193319R1000		
		Yellow	100...130	50 and 60	332BS4	2CMA193320R1000		
		Black	600...690		332BS5	2CMA193321R1000		
		Red	380...415		332BS6	2CMA193322R1000		
		Black	480...500		332BS7	2CMA193323R1000		
		Blue	200...250		332BS9	2CMA193324R1000		
		Green	100...300	>50	332BS10	2CMA193325R1000		
		Red	440...460	60	332BS11	2CMA193326R1000		
3P+N+E								
5		Grey		AC	432BS1	2CMA193335R1000	10	0.29
		Black	600...690	50 and 60	432BS5	2CMA126700R1000		
		Red	346...415		432BS6	2CMA193331R1000		
		Black	480...500		432BS7	2CMA193332R1000		
		Blue	208...250		432BS9	2CMA193333R1000		



Dimensions (mm)

Type	A	B	C	C1	Dmax	E1	F	G	H
232BS..	29	85	111	72	22/M25	94	5.5	34	153
332BS..	29	85	111	72	22/M25	94	5.5	34	153
432BS..	29	85	111	72	22/M25	96	5.5	34	154

Inlets

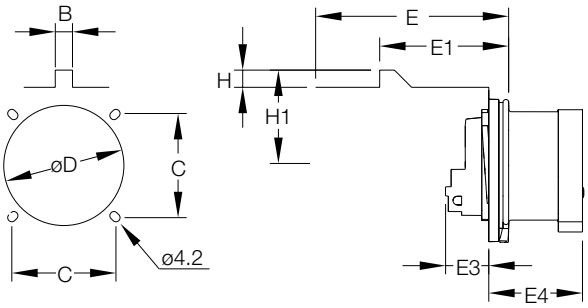
for panel mounting with minimized or unified straight flange, IP44

EASY & SAFE

216B6

16 A. Splashproof
Housing in plastic (PA). Minimized flange, Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	216B1	2CMA193341R1000	10	0.10
	Blue	200...250	50 and 60	216B6	2CMA193338R1000		
3P+E							
4	Grey		AC	316B1	2CMA193351R1000	10	0.13
	Yellow	100...130	50 and 60	316B4	2CMA100187R1000		
	Black	600...690		316B5	2CMA193345R1000		
	Red	380...415		316B6	2CMA193346R1000		
	Blue	200...250		316B9	2CMA193348R1000		
3P+N+E							
5	Grey		AC	416B1	2CMA193359R1000	10	0.14
	Red	346...415	50 and 60	416B6	2CMA193355R1000		
	Blue	208...250		416B9	2CMA193357R1000		



Dimensions (mm)

Type	B	C	D	E	E1	E3	E4	H	H1
216B...	9	44-47	49	75	40.5	21.5	46.5	4	30.0
316B...	9	50-52	59	80	46.8	21.0	47.0	5	34.0
416B...	9	50-52	59	90	52.5	21.0	46.5	7	38.0

Inlets

for panel mounting with minimized or unified straight flange, IP44

EASY & SAFE

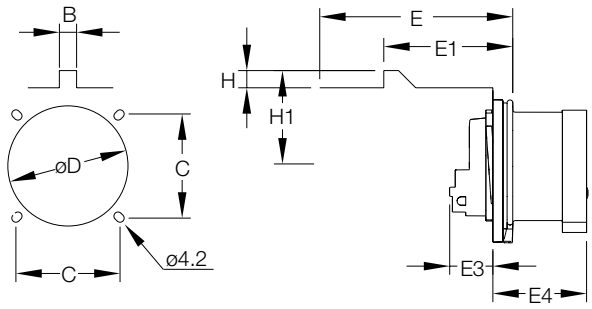
432BU6

16 A. IP44. Splashproof
Housing in plastic (PA). Unified flange, Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+E							
4	Blue	200...250	50 and 60	316BU9	2CMA163824R1000	10	0.13
3P+N+E							
5	Black	600...690	50 and 60	416BU5	2CMA100235R1000	10	0.14
	Red	346...415		416BU6	2CMA193468R1000		

32 A. IP44. Splashproof
Housing in plastic (PA). Unified flange, Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	232BU1	2CMA193437R1000	10	0.15
	Blue	200...250	50 and 60	232BU6	2CMA193434R1000		
3P+E							
4	Grey		AC	332BU1	2CMA193447R1000	10	0.17
	Black	600...690	50 and 60	332BU5	2CMA193441R1000		
	Red	380...415		332BU6	2CMA193442R1000		
	Blue	200...250		332BU9	2CMA193444R1000		
3P+N+E							
5	Grey		AC	432BU1	2CMA193455R1000	10	0.19
	Red	346...415	50 and 60	432BU6	2CMA193451R1000		



Dimensions (mm)

Type	B	C	D	E	E1	E3	E4	H	H1
316BU...	9	60-61	59	90	52.5	21.0	46.5	7	38.0
416BU...	9	60-61	59	90	52.5	21.0	46.5	7	38.0
232BU...	9	60-61	66	90	53.5	24.5	55.5	7	40.0
332BU...	9	60-61	66	90	53.5	24.5	55.5	7	40.0
432BU...	9	60-61	66	105	59.5	25.0	55.5	8	45.0

Socket outlet

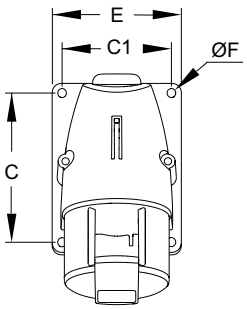
for wall mounting, IP44

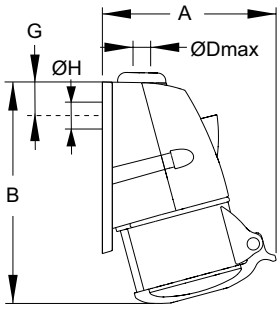
EASY & SAFE

216RS6

16 A. Splashproof
Housing in plastic (PA). Flexible membrane and metric threaded M20 insert for cop cable entry.
Rear knock-out cable entry. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
	Grey		AC	216RS1	2CMA193101R1000	10	0.22
	Yellow	100...130	50 and 60	216RS4	2CMA193097R1000		
	Blue	200...250		216RS6	2CMA193098R1000		
	Red	380...415		216RS9	2CMA193099R1000		
3	Grey	transf.		216RS12	2CMA193100R1000		
3P+E							
4	Grey		AC	316RS1	2CMA193111R1000	10	0.24
	Yellow	100...130	50 and 60	316RS4	2CMA193104R1000		
	Black	600...690		316RS5	2CMA193105R1000		
	Red	380...415		316RS6	2CMA193106R1000		
	Black	480...500		316RS7	2CMA193107R1000		
	Blue	200...250		316RS9	2CMA193108R1000		
	Green	100...300	>50	316RS10	2CMA193109R1000		
	Red	440...460	60	316RS11	2CMA193110R1000		
	Grey	transf.	50 and 60	316RS12	2CMA170181R1000		
3P+N+E							
5	Grey		AC	416RS1	2CMA193119R1000	10	0.26
	Green	>300...500	>50	416RS2	2CMA193112R1000		
	Black	600..690	50 and 60	416RS5	2CMA126666R1000		
	Red	346...415		416RS6	2CMA193115R1000		
	Blue	208...250		416RS9	2CMA193117R1000		
	Red	440...460	60	416RS11	2CMA193118R1000		





Dimensions (mm)

Type	A	B	C	C1	Dmax	E	F	G	H
216RS..	91	117	75	54	18/M20	66	5.5	27	23
316RS..	100	132	91	67	18/M20	79	5.5	30	23
416RS..	104	134	91	67	18/M20	79	5.5	30	23

Socket outlet

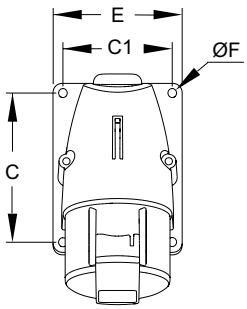
for wall mounting, IP44

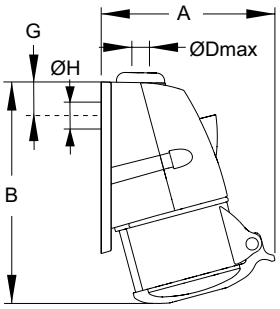
EASY & SAFE

432RS6

32 A. Splashproof
Housing in plastic (PA). Flexible membrane and metric threaded M25 insert for cop cable entry.
Rear knock-out cable entry. Cable area 2.5...10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232RS1	2CMA193125R1000	10	0.30
		Yellow	100...130	50 and 60	232RS4	2CMA193121R1000		
		Blue	200...250		232RS6	2CMA193122R1000		
		Red	380...415		232RS9	2CMA193123R1000		
3P+E								
4		Grey		AC	332RS1	2CMA193135R1000	10	0.32
		Red	380/440	50/60	332RS3	2CMA193127R1000		
		Yellow	100...130	50 and 60	332RS4	2CMA193128R1000		
		Black	600...690		332RS5	2CMA193129R1000		
		Red	380...415		332RS6	2CMA193130R1000		
		Black	480...500		332RS7	2CMA193131R1000		
		Blue	200...250		332RS9	2CMA193132R1000		
		Green	100...300	>50	332RS10	2CMA193133R1000		
		Red	440...460	60	332RS11	2CMA193134R1000		
3P+N+E								
5		Grey		AC	432RS1	2CMA193143R1000	10	0.34
		Black	600...690	50 and 60	432RS5	2CMA126667R1000		
		Red	346...415		432RS6	2CMA193139R1000		
		Black	480...500		432RS7	2CMA193140R1000		
		Blue	208...250		432RS9	2CMA193141R1000		





Dimensions (mm)

Type	A	B	C	C1	Dmax	E	F	G	H
232RS..	118	163	111	72	22/M25	85	5.5	34	29
332RS..	116	163	111	72	22/M25	85	5.5	34	29
432RS..	121	164	111	72	22/M25	85	5.5	34	29

Additional products and accessories

Surface socket outlet with schuko

CUE416-6+R/UJP

16A, IP44. Splashproof
Housing in plastic (PA). Socket outlet with 2 pole schuko. Cable area 1.5...4 mm²

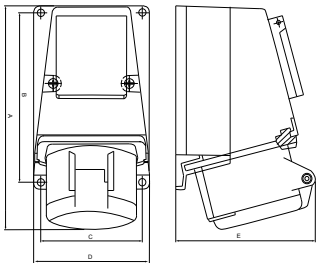
Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+E							
5	Blue	200...250	50 and 60	CUE316-9+R/UJP	2CMA178363R1000	**10**	**0.34**
3P+N+E							
5	Red	400/230	50 and 60	CUE416-6+R/UJP	2CMA178301R1000	**10**	**0.34**

16A, IP44. Splashproof
Housing in plastic (PA). Socket outlet with 2 pole schuko. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	400/230	50 and 60	CUE416-6+R/FR16	2CMA101642R1000	**10**	**0.34**

16A, IP44. Splashproof
Housing in plastic (PA). Socket outlet with 2 pole schuko. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	400/230	50 and 60	CUE416-6+R/BS13	2CMA101635R1000	**10**	**0.34**



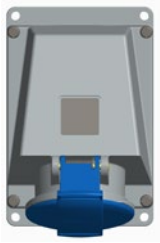
Dimensions (mm)

Type	A	B	C	D	E
CUE416-6+R/UJP	160	120	72	82	110

Socket outlet

for wall mounting, IP44

EASY & SAFE

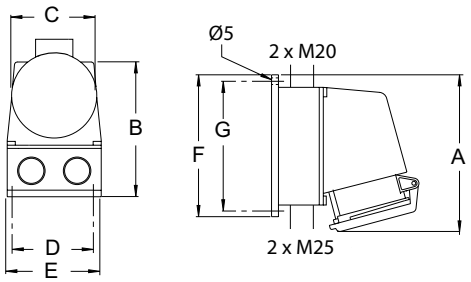


216ERT6

16 A. Watertight

Housing in plastic (PBT). Cable entry with knock-outs 2xM20 on top and 2xM25 on bottom. Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216ERT1	2CMA101739R1000	1	0.36
		Green	>300...500	>50	216ERT2	2CMA101740R1000		
		Yellow	100...130	50 and 60	216ERT4	2CMA101719R1000		
		Blue	200...250		216ERT6	2CMA101742R1000		
		Grey	transf.		216ERT12	2CMA101743R1000		
3P+E								
4		Grey		AC	316ERT1	2CMA101744R1000	1	0.39
		Green	>300...500	>50	316ERT2	2CMA101745R1000		
		Yellow	100...130	50 and 60	316ERT4	2CMA101746R1000		
		Black	600...690		316ERT5	2CMA101747R1000		
		Red	380...415		316ERT6	2CMA101720R1000		
		Black	480...500		316ERT7	2CMA101748R1000		
		Blue	200...250		316ERT9	2CMA101721R1000		
		Green	100...300	>50	316ERT10	2CMA101749R1000		
		Red	440...460	60	316ERT11	2CMA101722R1000		
		Grey	transf.		316ERT12	2CMA101750R1000		
3P+N+E								
5		Grey		AC	416ERT1	2CMA101751R1000	10	0.41
		Green	>300...500	>50	416ERT2	2CMA101752R1000		
		Yellow	100...130	50 and 60	416ERT4	2CMA101753R1000		
		Red	346...415		416ERT6	2CMA101723R1000		
		Black	480...500		416ERT7	2CMA101754R1000		
		Blue	208...250		416ERT9	2CMA101755R1000		
		Red	440...460	60	416ERT11	2CMA101756R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	6
216ERT...416ERT...	134	139	**82**	**71**	**80**	**120**	111

Socket outlet

for wall mounting, IP44

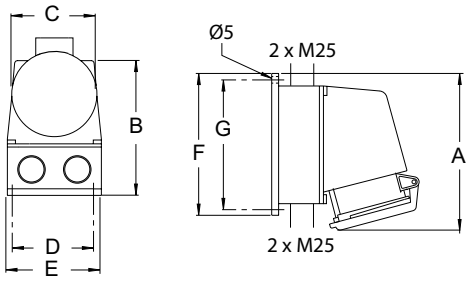
EASY & SAFE

432ERT6

32 A. Watertight

Housing in plastic (PBT). Cable entry with knock-outs 2xM25 on top and 2xM25 on bottom. Cable area 2.5...10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Green	>300...500	>50	232ERT2	2CMA101757R1000	1	0.42
		Yellow	100...130	50 and 60	232ERT4	2CMA101759R1000		
		Blue	200...250		232ERT6	2CMA101724R1000		
		Red	380...415		232ERT9	2CMA101760R1000		
		Grey	transf.		232ERT12	2CMA101761R1000		
3P+E								
4		Green	>300...500	>50	332ERT2	2CMA101762R1000	1	0.44
		Red	380/440	50/60	332ERT3	2CMA101763R1000		
		Yellow	100...130	50 and 60	332ERT4	2CMA101764R1000		
		Black	600...690		332ERT5	2CMA101765R1000		
		Red	380...415		332ERT6	2CMA101725R1000		
		Black	480...500		332ERT7	2CMA101766R1000		
		Blue	200...250		332ERT9	2CMA101726R1000		
		Green	100...300	>50	332ERT10	2CMA101767R1000		
		Red	440...460	60	332ERT11	2CMA101768R1000		
		Grey	transf.		332ERT12	2CMA101769R1000		
3P+N+E								
		Green	>300...500	>50	432ERT2	2CMA101770R1000	1	0.50
		Yellow	100...130	50 and 60	432ERT4	2CMA101771R1000		
		Red	346...415		432ERT6	2CMA101727R1000		
		Black	480...500		432ERT7	2CMA101772R1000		
		Blue	208...250		432ERT9	2CMA101773R1000		
		Red	440...460	60	432ERT11	2CMA101774R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	G
232ERT...332ERT...	140	143	**88**	**71**	**80**	**120**	111
432ERT...	142	146	95	71	80	120	111

Socket outlet

for wall mounting, IP44

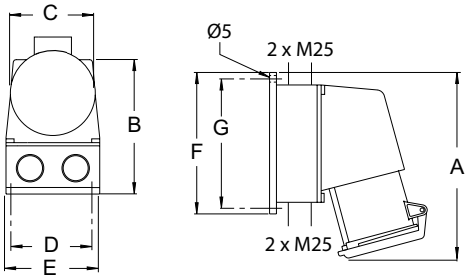
EASY & SAFE

263ERT6

63 A. Watertight

Housing in plastic (PBT). Cable entry with knock-outs 2 x Ø29/37 + 1 x Ø23 on top. 1 x Ø29 + 1 x Ø 23 from bottom. Cable area 6...25 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
	Yellow	100...130	50 and 60	263ERT4	2CMA101894R1000	1	1.40
	Blue	200...250		263ERT6	2CMA101895R1000		
3P+E							
	Yellow	100...130	50 and 60	363ERT4	2CMA101888R1000	1	1.40
	Black	600...690		363ERT5	2CMA101889R1000		
	Red	380...415		363ERT6	2CMA101890R1000		
	Black	480...500		363ERT7	2CMA101891R1000		
	Blue	200...250		363ERT9	2CMA101892R1000		
	Red	440...460	60	363ERT11	2CMA101893R1000		
3P+N+E							
	Yellow	100...130	50 and 60	463ERT4	2CMA101884R1000	1	1.45
	Red	346...415		463ERT6	2CMA101885R1000		
	Blue	208...250		463ERT9	2CMA101886R1000		
	Red	440...460	60	463ERT11	2CMA101887R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	6
263ERT...463ERT...	255	215	**108**	**129**	**150**	**187**	124

Socket outlet

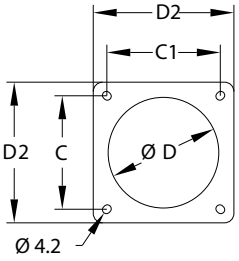
for panel mounting with unified straight flange, IP44

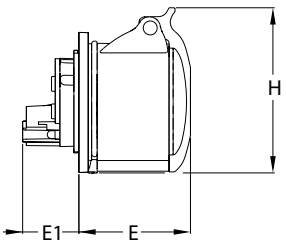
EASY & SAFE

216RU6

16 A. Splashproof
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216RU1	2CMA193173R1000	10	0.15
		Yellow	100...130	50 and 60	216RU4	2CMA193169R1000		
		Blue	200...250		216RU6	2CMA193170R1000		
		Red	380...415		216RU9	2CMA193171R1000		
		Grey	transf.		216RU12	2CMA193172R1000		
3P+E								
4		Grey		AC	316RU1	2CMA193183R1000	10	0.18
		Yellow	100...130	50 and 60	316RU4	2CMA193176R1000		
		Black	600...690		316RU5	2CMA193177R1000		
		Red	380...415		316RU6	2CMA193178R1000		
		Black	480...500		316RU7	2CMA193179R1000		
		Blue	200...250		316RU9	2CMA193180R1000		
		Green	100...300	>50	316RU10	2CMA193181R1000		
		Red	440...460	60	316RU11	2CMA193182R1000		
3P+N+E								
5		Grey		AC	416RU1	2CMA193191R1000	10	0.20
		Green	>300...500	>50	416RU2	2CMA193184R1000		
		Black	600...690	50 and 60	416RU5	2CMA126673R1000		
		Red	346...415		416RU6	2CMA193187R1000		
		Blue	208...250		416RU9	2CMA193189R1000		





Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
216RU..	60-61	60-61	49	75	56	29	79
316RU..	60-61	60-61	59	75	58	30	87
416RU..	60-61	60-61	59	75	60	31	89

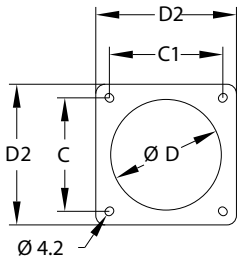
Socket outlet

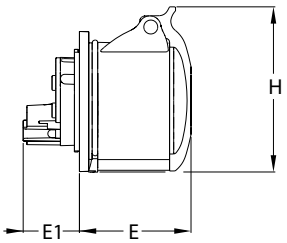
for panel mounting with unified straight flange, IP44

432RU6

32 A. Splashproof
Housing in plastic (PA). Cable area 2.5...10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232RU1	2CMA193245R1000	10	0.21
		Yellow	100...130	50 and 60	232RU4	2CMA193241R1000		
		Blue	200...250		232RU6	2CMA193242R1000		
3P+E								
4		Grey		AC	332RU1	2CMA193255R1000	10	0.22
		Black	600...690	50 and 60	332RU5	2CMA193249R1000		
		Red	380...415		332RU6	2CMA193250R1000		
		Black	480...500		332RU7	2CMA193251R1000		
		Blue	200...250		332RU9	2CMA193252R1000		
3P+N+E								
5		Grey		AC	432RU1	2CMA193263R1000	10	0.24
		Black	600...690	50 and 60	432RU5	2CMA126674R1000		
		Red	346...415		432RU6	2CMA193259R1000		
		Blue	208...250		432RU9	2CMA101699R1000		





Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
232RU..	60-61	60-61	66	75	70	34	93
332RU..	60-61	60-61	66	75	70	34	93
432RU..	60-61	60-61	66	75	71	34	99

Socket outlet

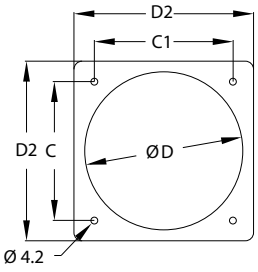
for panel mounting with unified angled flange, IP44

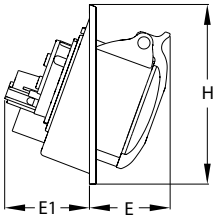
EASY & SAFE

216RAU6

16 A. Splashproof
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216RAU1	2CMA193221R1000	10	0.19
		Green	300...500	>50	216RAU2	2CMA101342R1000		
		Yellow	100...130	50 and 60	216RAU4	2CMA193217R1000		
		Blue	200...250		216RAU6	2CMA193218R1000		
		Red	380...415		216RAU9	2CMA193219R1000		
		Grey	transf.		216RAU12	2CMA193220R1000		
3P+E								
4		Grey		AC	316RAU1	2CMA193231R1000	10	0.22
		Yellow	100...130	50 and 60	316RAU4	2CMA193224R1000		
		Black	600...690		316RAU5	2CMA193225R1000		
		Red	380...415		316RAU6	2CMA193226R1000		
		Black	480...500		316RAU7	2CMA193227R1000		
		Blue	200...250		316RAU9	2CMA193228R1000		
		Green	>300...500	>50	316RAU10	2CMA193229R1000		
		Red	440...460	60	316RAU11	2CMA193230R1000		
3P+N+E								
5		Grey		AC	416RAU1	2CMA193239R1000	10	0.24
		Green	300...500	>50	416RAU2	2CMA193232R1000		
		Yellow	100...130	50 and 60	416RAU4	2CMA101343R1000		
		Black	600...690		416RAU5	2CMA126678R1000		
		Red	346...415		416RAU6	2CMA193235R1000		
		Blue	208...250		416RAU9	2CMA193237R1000		





Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
216RAU..	85	85	98	110	48	48	110
316RAU..	85	85	98	110	50	48	110
416RAU..	85	85	98	110	51	50	110

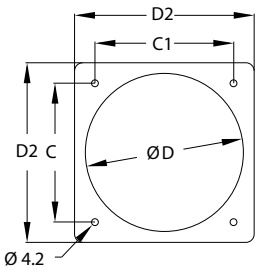
Socket outlet

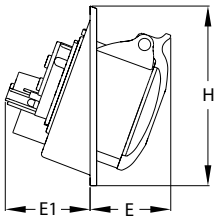
for panel mounting with unified angled flange, IP44

432RAU6

32 A. Splashproof
Housing in plastic (PA). Cable area 2.5...10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232RAU1	2CMA193269R1000	10	0.25
		Yellow	100...130	50 and 60	232RAU4	2CMA193265R1000		
		Blue	200...250		232RAU6	2CMA193266R1000		
3P+E								
4		Grey		AC	332RAU1	2CMA193279R1000	10	0.26
		Black	600...690	50 and 60	332RAU5	2CMA193273R1000		
		Red	380...415		332RAU6	2CMA193274R1000		
		Black	480...500		332RAU7	2CMA193275R1000		
		Blue	200...250		332RAU9	2CMA193276R1000		
3P+N+E								
5		Grey		AC	432RAU1	2CMA193287R1000	10	0.28
		Black	600...690	50 and 60	432RAU5	2CMA126679R1000		
		Red	346...415		432RAU6	2CMA193283R1000		





Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
232RAU...	85	85	98	110	61	53	110
332RAU...	85	85	98	110	61	53	110
432RAU...	85	85	98	110	63	54	110

Socket outlet

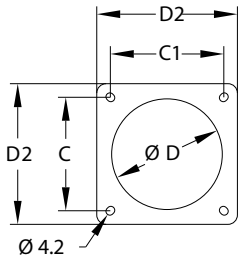
for panel mounting with minimized straight flange, IP44

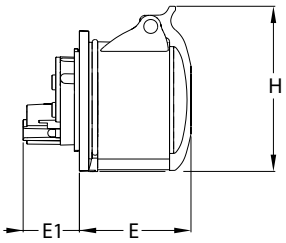
EASY & SAFE

216R6

16 A. Splashproof
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216R4	2CMA193145R1000	10	0.14
	Blue	200...250		216R6	2CMA193146R1000		
	Red	380...415		216R9	2CMA193147R1000		
	Grey	transf.		216R12	2CMA193148R1000		
3P+E							
4	Grey		AC	316R1	2CMA193159R1000	10	0.17
	Yellow	100...130	50 and 60	316R4	2CMA193152R1000		
	Black	600...690		316R5	2CMA193153R1000		
	Red	380...415		316R6	2CMA193154R1000		
	Black	480...500		316R7	2CMA193155R1000		
	Blue	200...250		316R9	2CMA193156R1000		
	Green	100...300	>50	316R10	2CMA193157R1000		
	Red	440...460	60	316R11	2CMA193158R1000		
3P+N+E							
5	Grey		AC	416R1	2CMA193167R1000	10	0.19
	Green	>300...500	>50	416R2	2CMA193160R1000		
	Red	346...415		416R6	2CMA193163R1000		
	Blue	208...250	50 and 60	416R9	2CMA193165R1000		





Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
216R..	44-47	44-47	49	56	56	29	73
316R..	50-52	50-52	59	66	58	30	87
416R..	50-52	50-52	59	66	60	31	89

Socket outlet

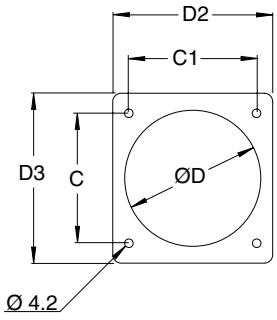
for panel mounting with minimized angled flange, IP44

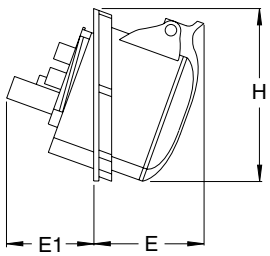
EASY & SAFE

216RAM6

16 A. Splashproof
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216RAM1	2CMA170007R1000	10	0.21
		Yellow	100...130	50 and 60	216RAM4	2CMA170003R1000		
		Blue	200...250		216RAM6	2CMA170004R1000		
		Red	380...415		216RAM9	2CMA170005R1000		
		Grey	transf.		216RAM12	2CMA170006R1000		
3P+E								
4		Grey		AC	316RAM1	2CMA170017R1000	10	0.22
		Yellow	100...130	50 and 60	316RAM4	2CMA170010R1000		
		Black	600...690		316RAM5	2CMA170011R1000		
		Red	380...415		316RAM6	2CMA170012R1000		
		Black	480...500		316RAM7	2CMA170013R1000		
		Blue	200...250		316RAM9	2CMA170014R1000		
		Green	100...300	> 50	316RAM10	2CMA170015R1000		
		Red	440...460	60	316RAM11	2CMA170016R1000		
3P+N+E								
5		Grey		AC	416RAM1	2CMA170025R1000	10	0.24
		Green	>300...500	> 50	416RAM2	2CMA170018R1000		
		Red	346...415	50 and 60	416RAM6	2CMA170021R1000		
		Blue	208...250		416RAM9	2CMA170023R1000		





Dimensions (mm)

Type	C	C1	D	D2	D3	E	E1	H
216RAM..	55	55	63	70	78	53	42	76
316RAM..	66	66	78	83	89	53	46	85
416RAM..	66	66	78	83	89	55	48	89

Socket outlet

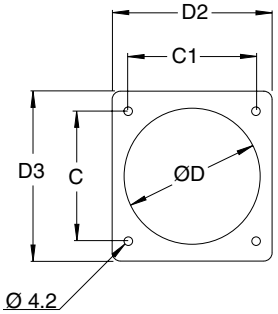
for panel mounting with minimized angled flange, IP44

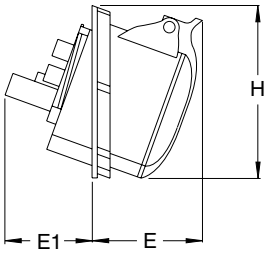
EASY & SAFE

332RAM6

32 A. Splashproof
Housing in plastic (PA). Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	232RAM1	2CMA170030R1000	10	0.21
	Grey	> 50...250	DC	232RAM3	2CMA100856R1000		
	Yellow	100...130	50 and 60	232RAM4	2CMA170026R1000		
	Blue	200...250		232RAM6	2CMA170027R1000		
3P+E							
4	Grey		AC	332RAM1	2CMA170040R1000	10	0.22
	Black	600...690	50 and 60	332RAM5	2CMA170034R1000		
	Red	380...415		332RAM6	2CMA170035R1000		
	Black	480...500		332RAM7	2CMA170036R1000		
	Blue	200...250		332RAM9	2CMA170037R1000		
3P+N+E							
5	Grey		AC	432RAM1	2CMA170048R1000	10	0.24
	Red	346...415	50 and 60	432RAM6	2CMA170044R1000		





Dimensions (mm)

Type	C	C1	D	D2	D3	E	E1	H
232RAM...	75	75	87	93	99	61	52	98
332RAM...	75	75	87	93	99	61	52	98
432RAM...	75	75	87	93	99	64	52	101

New watertight Easy & Safe

Our new IP67 Easy & Safe is a perfect choice in most applications where water and dirt can occur. They combine easy access to contact parts during installation with high protection degree while the products are in use. Electrical contacts protected against liquids and dirt retains its performance over time. High contact performance means reliability, reducing downtime and lowers maintenance costs.

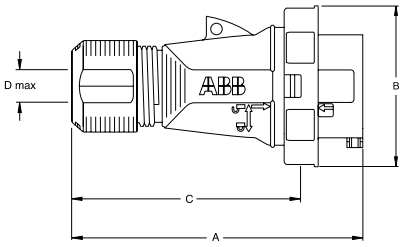
Plugs
IP67

EASY & SAFE

216EP6W

16 A. Watertight
Housing in plastic (PA). Cable entry with compression gland. Cable area 1...2.5 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216EP1W	2CMA101069R1000	10	0.13
		Yellow	100...130	50 and 60	216EP4W	2CMA101071R1000		
		Blue	200...250		216EP6W	2CMA101072R1000		
		Red	380...415		216EP9W	2CMA101073R1000		
		Grey	transf		216EP12W	2CMA101074R1000		
3P+E								
4		Grey		AC	316EP1W	2CMA101075R1000	10	0.19
		Green	>300...500	>50	316EP2W	2CMA101076R1000		
		Red	380/440	50/60	316EP3W	2CMA101077R1000		
		Yellow	100...130	50 and 60	316EP4W	2CMA101078R1000		
		Black	600...690		316EP5W	2CMA101079R1000		
		Red	380...415		316EP6W	2CMA101080R1000		
		Black	480...500		316EP7W	2CMA101081R1000		
		Blue	200...250		316EP9W	2CMA101082R1000		
		Green	100...300	>50	316EP10W	2CMA101083R1000		
		Red	440...460	60	316EP11W	2CMA101084R1000		
3P+N+E								
5		Grey		AC	416EP1W	2CMA101085R1000	10	0.21
		Green	>300...500	>50	416EP2W	2CMA101086R1000		
		Red	380...440	50/60	416EP3W	2CMA101087R1000		
		Yellow	100...130	50 and 60	416EP4W	2CMA101088R1000		
		Red	346...415		416EP6W	2CMA101089R1000		
		Black	480...500		416EP7W	2CMA101090R1000		
		Blue	208...250		416EP9W	2CMA101091R1000		
		Red	440...460	60	416EP11W	2CMA101092R1000		



Dimensions (mm)

Type	A	B	C	Dmax
216EP...W	134	73	100	14
316EP...W	161	81	127	17
416EP...W	158	87	125	17

Plugs

IP67

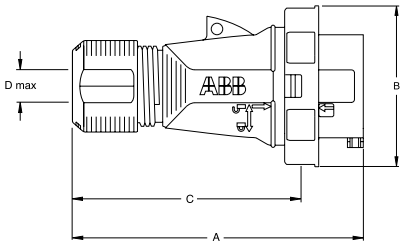
EASY & SAFE

432EP6W

32 A. Watertight

Housing in plastic (PA). Cable entry with compression gland. Cable area 2.5...6 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232EP1W	2CMA101093R1000	10	0.23
		Yellow	100...130	50 and 60	232EP4W	2CMA101094R1000		
		Blue	200...250		232EP6W	2CMA101095R1000		
		Red	380...415		232EP9W	2CMA101096R1000		
		Grey	transf		232EP12W	2CMA101097R1000		
3P+E								
4		Grey		AC	332EP1W	2CMA101098R1000	10	0.25
		Green	>300...500	>50	332EP2W	2CMA101099R1000		
		Red	380/440	50/60	332EP3W	2CMA101100R1000		
		Yellow	100...130	50 and 60	332EP4W	2CMA101101R1000		
		Black	600...690		332EP5W	2CMA101102R1000		
		Red	380...415		332EP6W	2CMA101103R1000		
		Black	480...500		332EP7W	2CMA101104R1000		
		Blue	200...250		332EP9W	2CMA101105R1000		
		Green	100...300	>50	332EP10W	2CMA101106R1000		
		Red	440...460	60	332EP11W	2CMA101107R1000		
3P+N+E								
5		Grey		AC	432EP1W	2CMA101108R1000	10	0.25
		Green	>300...500	>50	432EP2W	2CMA101109R1000		
		Red	380...440	50/60	432EP3W	2CMA101110R1000		
		Yellow	100...130	50 and 60	432EP4W	2CMA101111R1000		
		Red	346...415		432EP6W	2CMA101112R1000		
		Black	480...500		432EP7W	2CMA101113R1000		
		Blue	208...250		432EP9W	2CMA101114R1000		
		Red	440...460	60	432EP11W	2CMA101115R1000		



Dimensions (mm)

Type	A	B	C	Dmax
232EP...W	183	91	141	22
332EP...W	183	91	141	22
432EP...W	183	99	141	22

Connectors

IP67

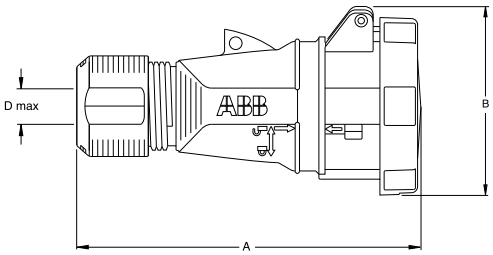
EASY & SAFE

216EC6W

16 A. Watertight

Housing in plastic (PA). Cable entry with compression gland. Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	216EC1W	2CMA101116R1000	10	0.17
	Yellow	100...130	50 and 60	216EC4W	2CMA101118R1000		
	Blue	200...250		216EC6W	2CMA101119R1000		
	Red	380...415		216EC9W	2CMA101120R1000		
	Grey	transf		216EC12W	2CMA101121R1000		
3P+E							
4	Grey		AC	316EC1W	2CMA101122R1000	10	0.23
	Green	>300...500	>50	316EC2W	2CMA101123R1000		
	Red	380/440	50/60	316EC3W	2CMA101124R1000		
	Yellow	100...130	50 and 60	316EC4W	2CMA101125R1000		
	Black	600...690		316EC5W	2CMA101126R1000		
	Red	380...415		316EC6W	2CMA101127R1000		
	Black	480...500		316EC7W	2CMA101128R1000		
	Blue	200...250		316EC9W	2CMA101129R1000		
	Green	100...300	>50	316EC10W	2CMA101130R1000		
	Red	440...460	60	316EC11W	2CMA101131R1000		
3P+N+E							
5	Grey		AC	416EC1W	2CMA101132R1000	10	0.26
	Green	>300...500	>50	416EC2W	2CMA101133R1000		
	Red	380...440	50/60	416EC3W	2CMA101134R1000		
	Yellow	100...130	50 and 60	416EC4W	2CMA101135R1000		
	Red	346...415		416EC6W	2CMA101136R1000		
	Black	480...500		416EC7W	2CMA101137R1000		
	Blue	208...250		416EC9W	2CMA101138R1000		
	Red	440...460	60	416EC11W	2CMA101139R1000		



Dimensions (mm)

Type	A	B	Dmax
216EC...W	146	81	14
316EC...W	169	88	17
416EC...W	169	92	17

Connectors

IP67

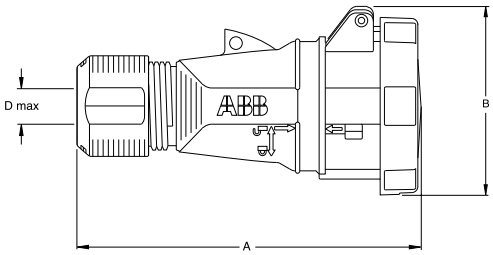
EASY & SAFE

432EC6W

32 A. Watertight

Housing in plastic (PA). Cable entry with compression gland. Cable area 2.5...6 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232EC1W	2CMA101140R1000	10	0.28
		Yellow	100...130	50 and 60	232EC4W	2CMA101141R1000		
		Blue	200...250		232EC6W	2CMA101142R1000		
		Red	380...415		232EC9W	2CMA101143R1000		
		Grey	transf		232EC12W	2CMA101144R1000		
3P+E								
4		Grey		AC	332EC1W	2CMA101145R1000	10	0.30
		Green	>300...500	>50	332EC2W	2CMA101146R1000		
		Red	380/440	50/60	332EC3W	2CMA101147R1000		
		Yellow	100...130	50 and 60	332EC4W	2CMA101148R1000		
		Black	600...690		332EC5W	2CMA101149R1000		
		Red	380...415		332EC6W	2CMA101150R1000		
		Black	480...500		332EC7W	2CMA101151R1000		
		Blue	200...250		332EC9W	2CMA101152R1000		
		Green	100...300	>50	332EC10W	2CMA101153R1000		
		Red	440...460	60	332EC11W	2CMA101154R1000		
3P+N+E								
5		Grey		AC	432EC1W	2CMA101155R1000	10	0.30
		Green	>300...500	>50	432EC2W	2CMA101156R1000		
		Red	380...440	50/60	432EC3W	2CMA101157R1000		
		Yellow	100...130	50 and 60	432EC4W	2CMA101158R1000		
		Red	346...415		432EC6W	2CMA101159R1000		
		Black	480...500		432EC7W	2CMA101160R1000		
		Blue	208...250		432EC9W	2CMA101161R1000		
		Red	440...460	60	432EC11W	2CMA101162R1000		



Dimensions (mm)

Type	A	B	Dmax
232EC...W	195	98	22
332EC...W	195	98	22
432EC...W	195	104	22

Inlets

for wall mounting, IP67

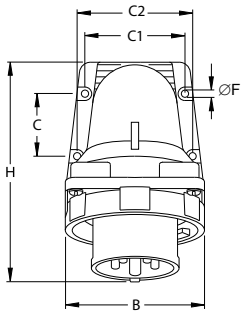
EASY & SAFE

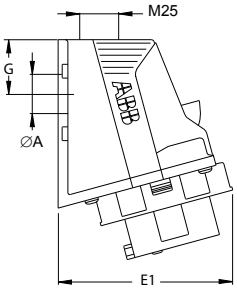
216EBS6W

16 A. Watertight

Housing in plastic (PA). Cable gland included. Cable area 1...2.5 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216EBS1W	2CMA101163R1000	10	0.20
		Yellow	100...130	50 and 60	216EBS4W	2CMA101165R1000		
		Blue	200...250		216EBS6W	2CMA101166R1000		
		Red	380...415		216EBS9W	2CMA101167R1000		
		Grey	transf		216EBS12W	2CMA101168R1000		
3P+E								
4		Grey		AC	316EBS1W	2CMA101169R1000	10	0.23
		Green	>300...500	>50	316ESB2W	2CMA101170R1000		
		Red	380/440	50/60	316EBS3W	2CMA101171R1000		
		Yellow	100...130	50 and 60	316EBS4W	2CMA101172R1000		
		Black	600...690		316EBS5W	2CMA101173R1000		
		Red	380...415		316EBS6W	2CMA101174R1000		
		Black	480...500		316EBS7W	2CMA101175R1000		
		Blue	200...250		316EBS9W	2CMA101176R1000		
		Green	100...300	>50	316EBS10W	2CMA101177R1000		
		Red	440...460	60	316EBS11W	2CMA101178R1000		
3P+N+E								
5		Grey		AC	416EBS1W	2CMA101179R1000	10	0.25
		Green	>300...500	>50	416EBS2W	2CMA101180R1000		
		Red	380...440	50/60	416EBS3W	2CMA101181R1000		
		Yellow	100...130	50 and 60	416EBS4W	2CMA101182R1000		
		Red	346...415		416EBS6W	2CMA101183R1000		
		Black	480...500		416EBS7W	2CMA101184R1000		
		Blue	208...250		416EBS9W	2CMA101185R1000		
		Red	440...460	60	416EBS11W	2CMA101186R1000		





Dimensions (mm)

Type	A	B	C	C1	C2	E1	ØF	G	H
216EBS...W	25	88.5	40	63.5	73.5	112	4.5	34.75	135
316EBS...W	25	88.5	40	63.5	73.5	108	4.5	34.75	138
416EBS...W	25	88.5	40	63.5	73.5	112	4.5	34.75	140

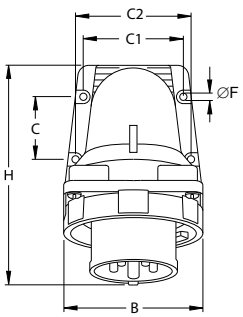
Inlets

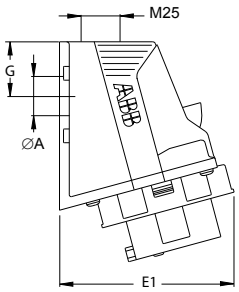
for wall mounting, IP67

432EBS6W

32 A. Watertight
Housing in plastic (PA). Cable gland included. Cable area 2.5...6 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232EBS1W	2CMA101187R1000	10	0.26
		Yellow	100...130	50 and 60	232EBS4W	2CMA101188R1000		
		Blue	200...250		232EBS6W	2CMA101189R1000		
		Red	380...415		232EBS9W	2CMA101190R1000		
		Grey	transf		232EBS12W	2CMA101191R1000		
3P+E								
4		Grey		AC	332EBS1W	2CMA101192R1000	10	0.27
		Green	>300...500	>50	332EBS2W	2CMA101193R1000		
		Red	380/440	50/60	332EBS3W	2CMA101194R1000		
		Yellow	100...130	50 and 60	332EBS4W	2CMA101195R1000		
		Black	600...690		332EBS5W	2CMA101196R1000		
		Red	380...415		332EBS6W	2CMA101197R1000		
		Black	480...500		332EBS7W	2CMA101198R1000		
		Blue	200...250		332EBS9W	2CMA101199R1000		
		Green	100...300	>50	332EBS10W	2CMA101200R1000		
		Red	440...460	60	332EBS11W	2CMA101201R1000		
3P+N+E								
5		Grey		AC	432EBS1W	2CMA101202R1000	10	0.28
		Green	>300...500	>50	432EBS2W	2CMA101203R1000		
		Red	380...440	50/60	432EBS3W	2CMA101204R1000		
		Yellow	100...130	50 and 60	432EBS4W	2CMA101205R1000		
		Red	346...415		432EBS6W	2CMA101206R1000		
		Black	480...500		432EBS7W	2CMA101207R1000		
		Blue	208...250		432EBS9W	2CMA101208R1000		
		Red	440...460	60	432EBS11W	2CMA101209R1000		





Dimensions (mm)

Type	A	B	C	C1	C2	E1	ØF	G	H
232EBS...W	25	91	40	63.5	73.5	106	4.5	34.75	150
332EBS...W	25	91	40	63.5	73.5	106	4.5	34.75	150
432EBS...W	25	99	40	63.5	73.5	110	4.5	34.75	152

Inlets

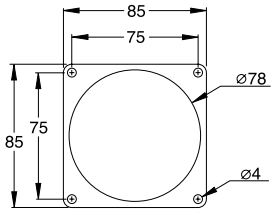
for panel mounting with unified straight flange, IP67

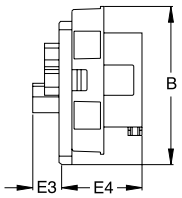
EASY & SAFE

216EBU6W

16 A. Watertight
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216EBU1W	2CMA101257R1000	10	0.11
		Yellow	100...130	50 and 60	216EBU4W	2CMA101258R1000		
		Blue	200...250		216EBU6W	2CMA101259R1000		
		Red	380...415		216EBU9W	2CMA101260R1000		
3P+E								
4		Grey		AC	316EBU1W	2CMA101261R1000	10	0.14
		Yellow	100...130	50 and 60	316EBU4W	2CMA101262R1000		
		Black	600...690		316EBU5W	2CMA101263R1000		
		Red	380...415		316EBU6W	2CMA101264R1000		
		Black	480...500		316EBU7W	2CMA101265R1000		
		Blue	200...250		316EBU9W	2CMA101266R1000		
		Red	440...460	60	316EBU11W	2CMA101267R1000		
3P+N+E								
5		Grey		AC	416EBU1W	2CMA101268R1000	10	0.16
		Yellow	100...130	50 and 60	416EBU4W	2CMA101269R1000		
		Red	346...415		416EBU6W	2CMA101270R1000		
		Black	480...500		416EBU7W	2CMA101271R1000		
		Blue	208...250		416EBU9W	2CMA101812R1000		
		Red	440...460	60	416EBU11W	2CMA101272R1000		





Dimensions (mm)

Type	B	E3	E4
216EBU...W	94	17	48.5
316EBU...W	90	17	48.5
416EBU...W	93.5	17	48.5

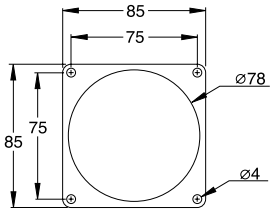
Inlets

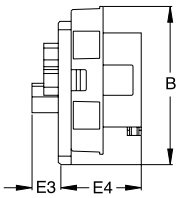
for panel mounting with unified straight flange, IP67

432EBU6W

32 A. Watertight
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	232EBU1W	2CMA101273R1000	10	0.17
	Yellow	100...130	50 and 60	232EBU4W	2CMA101274R1000		
	Blue	200...250		232EBU6W	2CMA101275R1000		
	Red	380...415		232EBU9W	2CMA101813R1000		
3P+E							
4	Grey		AC	332EBU1W	2CMA101276R1000	10	0.18
	Red	380/440	50/60	332EBU3W	2CMA101277R1000		
	Yellow	100...130	50 and 60	332EBU4W	2CMA101278R1000		
	Red	380...415		332EBU6W	2CMA101279R1000		
	Black	480...500		332EBU7W	2CMA101280R1000		
	Blue	200...250		332EBU9W	2CMA101281R1000		
	Red	440...460	60	332EBU11W	2CMA101282R1000		
3P+N+E							
5	Grey		AC	432EBU1W	2CMA101283R1000	10	0.19
	Yellow	100...130	50 and 60	432EBU4W	2CMA101284R1000		
	Red	346...415		432EBU6W	2CMA101285R1000		
	Black	480...500		432EBU7W	2CMA101286R1000		
	Blue	208...250		432EBU9W	2CMA101287R1000		
	Red	440...460	60	432EBU11W	2CMA101288R1000		





Dimensions (mm)

Type	B	E3	E4
232EBU...W	91	16	58
332EBU...W	91	16	58
432EBU...W	99	16	58

Socket outlet

for wall mounting, IP67

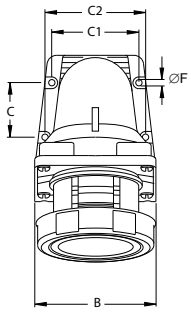
EASY & SAFE

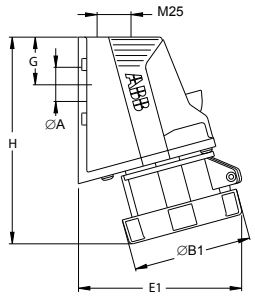
216ERS6W

16 A. Watertight

Housing in plastic (PA). Cable gland included. Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216ERS1W	2CMA101210R1000	10	0.24
		Yellow	100...130	50 and 60	216ERS4W	2CMA101212R1000		
		Blue	200...250		216ERS6W	2CMA101213R1000		
		Red	380...415		216ERS9W	2CMA101214R1000		
		Grey	transf		216ERS12W	2CMA101215R1000		
3P+E								
4		Grey		AC	316ERS1W	2CMA101216R1000	10	0.27
		Green	>300...500	>50	316ERB2W	2CMA101217R1000		
		Red	380/440	50/60	316ERS3W	2CMA101218R1000		
		Yellow	100...130	50 and 60	316ERS4W	2CMA101219R1000		
		Black	600...690		316ERS5W	2CMA101220R1000		
		Red	380...415		316ERS6W	2CMA101221R1000		
		Black	480...500		316ERS7W	2CMA101222R1000		
		Blue	200...250		316ERS9W	2CMA101223R1000		
		Green	100...300	>50	316ERS10W	2CMA101224R1000		
		Red	440...460	60	316ERS11W	2CMA101225R1000		
3P+N+E								
5		Grey		AC	416ERS1W	2CMA101226R1000	10	0.30
		Green	>300...500	>50	416ERS2W	2CMA101227R1000		
		Red	380...440	50/60	416ERS3W	2CMA101228R1000		
		Yellow	100...130	50 and 60	416ERS4W	2CMA101229R1000		
		Red	346...415		416ERS6W	2CMA101230R1000		
		Black	480...500		416ERS7W	2CMA101231R1000		
		Blue	208...250		416ERS9W	2CMA101232R1000		
		Red	440...460	60	416ERS11W	2CMA101233R1000		





Dimensions (mm)

Type	A	B	ØB1	C	C1	C2	E1	ØF	G	H
216ERS...W	25	88.5	73	40	63.5	73.5	112	4.5	34.75	147
316ERS...W	25	88.5	81	40	63.5	73.5	117	4.5	34.75	150
416ERS...W	25	88.5	87	40	63.5	73.5	119	4.5	34.75	151

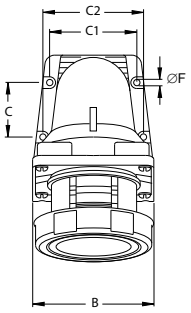
Socket outlet

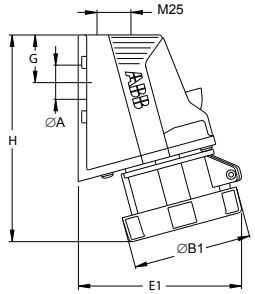
for wall mounting, IP67

432ERS6W

32 A. Watertight
Housing in plastic (PA). Cable gland included. Cable area 2.5...10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232ERS1W	2CMA101234R1000	10	0.31
		Yellow	100...130	50 and 60	232ERS4W	2CMA101235R1000		
		Blue	200...250		232ERS6W	2CMA101236R1000		
		Red	380...415		232ERS9W	2CMA101237R1000		
		Grey	transf		232ERS12W	2CMA101238R1000		
3P+E								
4		Grey		AC	332ERS1W	2CMA101239R1000	10	0.32
		Green	>300...500	>50	332ERS2W	2CMA101240R1000		
		Red	380/440	50/60	332ERS3W	2CMA101241R1000		
		Yellow	100...130	50 and 60	332ERS4W	2CMA101242R1000		
		Black	600...690		332ERS5W	2CMA101243R1000		
		Red	380...415		332ERS6W	2CMA101244R1000		
		Black	480...500		332ERS7W	2CMA101245R1000		
		Blue	200...250		332ERS9W	2CMA101246R1000		
		Green	100...300	>50	332ERS10W	2CMA101248R1000		
		Red	440...460	60	332ERS11W	2CMA101247R1000		
3P+N+E								
5		Grey		AC	432ERS1W	2CMA101249R1000	10	0.32
		Green	>300...500	>50	432ERS2W	2CMA101250R1000		
		Red	380...440	50/60	432ERS3W	2CMA101251R1000		
		Yellow	100...130	50 and 60	432ERS4W	2CMA101252R1000		
		Red	346...415		432ERS6W	2CMA101253R1000		
		Black	480...500		432ERS7W	2CMA101254R1000		
		Blue	208...250		432ERS9W	2CMA101255R1000		
		Red	440...460	60	432ERS11W	2CMA101256R1000		





Dimensions (mm)

Type	A	B	ØB1	C	C1	C2	E1	ØF	G	H
232ERS...W	25	88.5	91	40	63.5	73.5	117	4.5	**34.75**	163
332ERS...W	25	88.5	91	40	63.5	73.5	117	4.5	**34.75**	163
432ERS...W	25	88.5	99	40	63.5	73.5	120	4.5	**34.75**	164

Socket outlet

for wall mounting, IP67

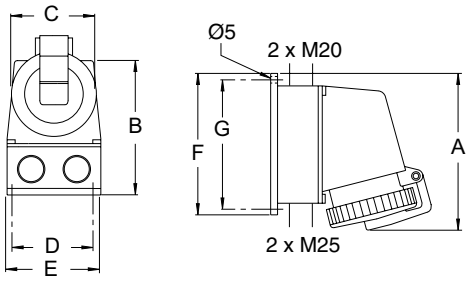
EASY & SAFE

216ERT6W

16 A. Watertight

Housing in plastic (PBT). Cable entry with knock-outs 2xM20 on top and 2xM25 on bottom. Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Yellow	100...130	50 and 60	216ERT4W	2CMA101728R1000	1	0.33
		Blue	200...250		216ERT6W	2CMA101729R1000		
		Red	380...415		216ERT9W	2CMA101776R1000		
		Grey	transf.		216ERT12W	2CMA101777R1000		
3P+E								
4		Green	>300...500	>50	316ERT2W	2CMA101778R1000	1	0.35
		Yellow	100...130	50 and 60	316ERT4W	2CMA101779R1000		
		Black	600...690		316ERT5W	2CMA101780R1000		
		Red	380...415		316ERT6W	2CMA101730R1000		
		Black	480...500		316ERT7W	2CMA101781R1000		
		Blue	200...250		316ERT9W	2CMA101731R1000		
		Green	100...300	>50	316ERT10W	2CMA101782R1000		
		Red	440...460	60	316ERT11W	2CMA101732R1000		
		Grey	transf.		316ERT12W	2CMA101783R1000		
3P+N+E								
5		Yellow	100...130	50 and 60	416ERT4W	2CMA101784R1000	1	0.39
		Red	346...415		416ERT6W	2CMA101733R1000		
		Black	480...500		416ERT7W	2CMA101785R1000		
		Blue	208...250		416ERT9W	2CMA101786R1000		
		Green	100...300	>50	416ERT10W	2CMA101787R1000		
		Red	440...460	60	416ERT11W	2CMA101788R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	6
216ERT...W...416ERT...W	134	139	**82**	**71**	**80**	**120**	111

Socket outlet

for wall mounting, IP67

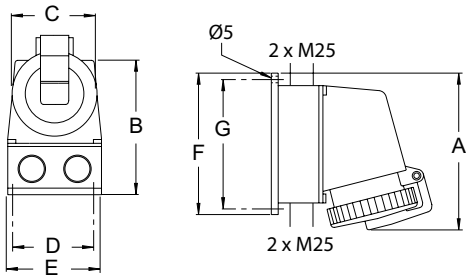
EASY & SAFE

432ERT6W

32 A. Watertight

Housing in plastic (PBT). Cable entry with knock-outs 2xM25 on top and 2xM25 on bottom. Cable area 2.5...10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Yellow	100...130	50 and 60	232ERT4W	2CMA101790R1000	1	0.37
		Blue	200...250		232ERT6W	2CMA101791R1000		
		Red	380...415		232ERT9W	2CMA101792R1000		
		Grey	transf.		232ERT12W	2CMA101793R1000		
3P+E								
4		Green	>300...500	>50	332ERT2W	2CMA101794R1000	1	0.42
		Red	380/440	50/60	332ERT3W	2CMA101734R1000		
		Yellow	100...130	50 and 60	332ERT4W	2CMA101795R1000		
		Black	600...690		332ERT5W	2CMA101796R1000		
		Red	380...415		332ERT6W	2CMA101735R1000		
		Black	480...500		332ERT7W	2CMA101797R1000		
		Blue	200...250		332ERT9W	2CMA101736R1000		
		Green	100...300	>50	332ERT10W	2CMA101798R1000		
		Red	440...460	60	332ERT11W	2CMA101737R1000		
		Grey	transf.		332ERT12W	2CMA101799R1000		
3P+N+E								
		Green	>300...500	>50	432ERT2W	2CMA101800R1000	1	0.47
		Yellow	100...130	50 and 60	432ERT4W	2CMA101801R1000		
		Red	346...415		432ERT6W	2CMA101738R1000		
		Black	480...500		432ERT7W	2CMA101802R1000		
		Blue	208...250		432ERT9W	2CMA101803R1000		
		Red	440...460	60	432ERT11W	2CMA101804R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	6
232ERT...W...332ERT...W	140	143	**88**	**71**	**80**	**120**	111
432ERT...W	142	146	95	71	80	120	111

Socket outlet

for wall mounting, IP67

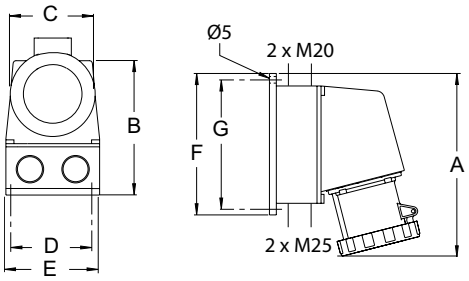
EASY & SAFE

463ERT6W

63 A. Watertight

Housing in plastic (PBT). Cable entry with knock-outs 2 x Ø29/37 + 1 x Ø23 on top. 1 x Ø29 + 1 x Ø 23 from bottom. Cable area 6...25 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+E							
4	Black	600...690	50 and 60	363ERT5W	2CMA101898R1000	1	1.45
	Red	380...415		363ERT6W	2CMA101899R1000		
	Black	480...500		363ERT7W	2CMA101900R1000		
	Blue	200...250		363ERT9W	2CMA101901R1000		
	Red	440...460	60	363ERT11W	2CMA101902R1000		
3P+N+E							
5	Red	346...415	50 and 60	463ERT6W	2CMA101896R1000	1	1.55
	Blue	208...250		463ERT9W	2CMA101897R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	6
263ERT...W...463ERT...W	255	215	**108**	**129**	**150**	**187**	124

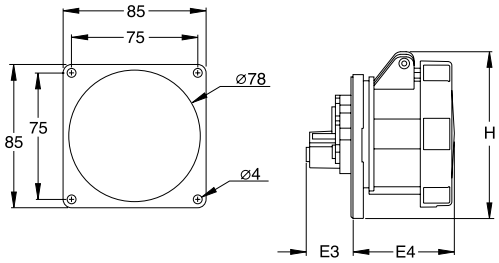
Socket outlet

for panel mounting with unified straight flange, IP67

216ERU6W

16 A. Watertight
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216ERU1W	2CMA101289R1000	10	0.15
		Yellow	100...130	50 and 60	216ERU4W	2CMA101290R1000		
		Blue	200...250		216ERU6W	2CMA101291R1000		
		Red	380...415		216ERU9W	2CMA101292R1000		
3P+E								
4		Grey		AC	316ERU1W	2CMA101293R1000	10	0.18
		Yellow	100...130	50 and 60	316ERU4W	2CMA101294R1000		
		Black	600...690		316ERU5W	2CMA101295R1000		
		Red	380...415		316ERU6W	2CMA101296R1000		
		Black	480...500		316ERU7W	2CMA101297R1000		
		Blue	200...250		316ERU9W	2CMA101298R1000		
		Red	440...460	60	316ERU11W	2CMA101299R1000		
3P+N+E								
5		Grey		AC	416ERU1W	2CMA101300R1000	10	0.21
		Yellow	100...130	50 and 60	416ERU4W	2CMA101301R1000		
		Red	346...415		416ERU6W	2CMA101302R1000		
		Black	480...500		416ERU7W	2CMA101303R1000		
		Blue	208...250		416ERU9W	2CMA101304R1000		
		Red	440...460	60	416ERU11W	2CMA101305R1000		



Dimensions (mm)

Type	B	E3	E4
216ERU...W	103	27	60
316ERU...W	98	28	60
416ERU...W	99	28	60

Socket outlet

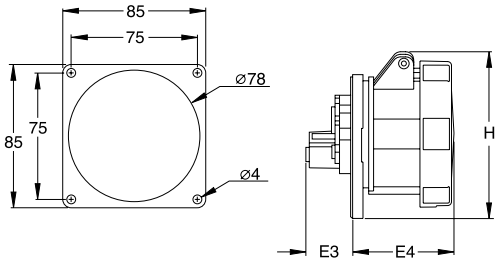
for panel mounting with unified straight flange, IP67

EASY & SAFE

432ERU6W

32 A. Watertight
Housing in plastic (PA). Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	232ERU1W	2CMA101306R1000	10	0.22
	Yellow	100...130	50 and 60	232ERU4W	2CMA101307R1000		
	Blue	200...250		232ERU6W	2CMA101308R1000		
	Red	380...415		232ERU9W	2CMA101309R1000		
3P+E							
4	Grey		AC	332ERU1W	2CMA101310R1000	10	0.23
	Red	380/440	50/60	332ERU3W	2CMA101311R1000		
	Yellow	100...130	50 and 60	332ERU4W	2CMA101312R1000		
	Red	380...415		332ERU6W	2CMA101313R1000		
	Black	480...500		332ERU7W	2CMA101314R1000		
	Blue	200...250		332ERU9W	2CMA101315R1000		
	Red	440...460	60	332ERU11W	2CMA101316R1000		
3P+N+E							
5	Grey		AC	432ERU1W	2CMA101317R1000	10	0.23
	Yellow	100...130	50 and 60	432ERU4W	2CMA101318R1000		
	Red	346...415		432ERU6W	2CMA101319R1000		
	Black	480...500		432ERU7W	2CMA101320R1000		
	Blue	208...250		432ERU9W	2CMA101321R1000		
	Red	440...460	60	432ERU11W	2CMA101322R1000		



Dimensions (mm)

Type	B	E3	E4
232ERU...W	98	31	70
332ERU...W	98	31	70
432ERU...W	104	32	69

Modular Combi parts

Socket outlet with angled flange, IP67

EASY & SAFE

216ERAU6W

16 A. Watertight
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Blue	200...250	**50 and 60**	216ERAU6W	2CMA104398R1000	**10**	**0.15**
3P+E								
4		Red	380...415	**50 and 60**	316ERAU6W	2CMA104399R1000	**10**	**0.18**
3P+N+E								
5		Red	346...415	**50 and 60**	416ERAU6W	2CMA104400R1000	**10**	**0.21**

416ERAU6W

32 A. Watertight
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Blue	200...250	**50 and 60**	232ERAU6W	2CMA104401R1000	**10**	**0.22**
3P+E								
4		Red	380...415	**50 and 60**	332ERAU6W	2CMA104402R1000	**10**	**0.23**
3P+N+E								
5		Red	346...415	**50 and 60**	432ERAU6W	2CMA104403R1000	**10**	**0.23**

Additional products and accessories

Phase inverter, IP44

416BPI6

Phase Inverter Plug. 16A, IP44. Splashproof
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	346...415	**50 and 60**	416BPI6	2CMA102261R1000	**10**	**0.16**

Phase Inverter Plug. 32A, IP44. Splashproof
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	346...415	**50 and 60**	432BPI6	2CMA102268R1000	**10**	**0.23**

416BBI6

Phase Inverter Panel mounted inlet with unified straight flange. 16A, IP44. Splashproof
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	346...415	50 and 60	416BBI6	2CMA102262R1000	**10**	**0.12**

Phase Inverter Panel mounted inlet with unified straight flange. 32A, IP44. Splashproof
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	346...415	50 and 60	432BBI6	2CMA102269R1000	**10**	**0.16**

Additional products and accessories

Phase inverter, IP44

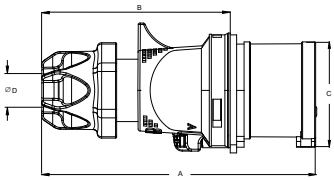
432BBSI6

Phase Inverter surface inlets for wall mounting. 16A, IP44. Splashproof
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	346...415	50 and 60	416BBSI6	2CMA102263R1000	**5**	**0.13**
				416BBSI6C	2CMA102264R1000		

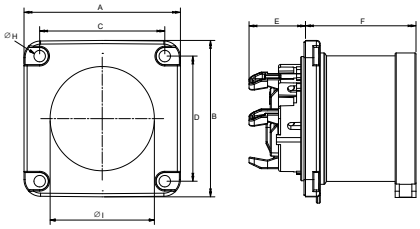
Phase Inverter surface inlet for wall mounting. 32A, IP44. Splashproof
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	346...415	50 and 60	432BBSI6	2CMA102270R1000	**5**	**0.13**
				432BBSI6C	2CMA102271R1000		0.14



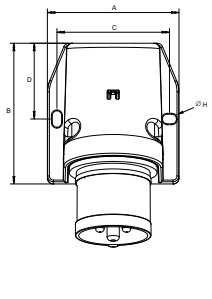
Dimensions (mm)

Type	A	B	C	Ø D
416BPI...	136	96	61	6-16
432BPI...	156	107	70	11-20.5



Dimensions (mm)

Type	A	B	C	D	E	F	ØH	ØI
416BBI...	75	75	60	60	23	44	5.5	56
432BBI...	75	75	60	60	27	53	5.5	60



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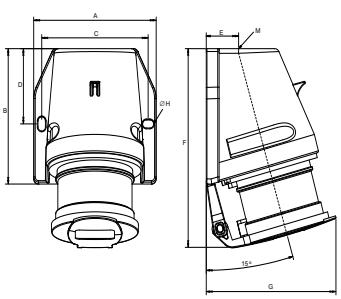


Type ...BBSI...C

Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	M
416BBSI...	88	88	76	48.5	22	123	84	5.3	M25x1,5
416BBSI...C	88	88	76	48.5	22	123.3	84.3	5.3	M25x1,5
432BBSI...	96	102	84	56	26	146	94	5.3	M32x1.5
432BBSI...C	96	102	84	56	26	146.3	94.3	5.3	M32x1.5

Additional products and accessories

Phase inverter, IP67

416BP6IW

Phase Inverter Plug. 16A, IP67. Watertight

Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	346...415	**50 and 60**	416BPI6W	2CMA102265R1000	**10**	**0.19**

Phase Inverter Plug. 32A, IP67. Watertight

Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	346...415	**50 and 60**	432BPI6W	2CMA102272R1000	**5**	**0.25**

416BBI6W

Phase Inverter Panel mounted inlet with unified straight flange. 16A, IP67. Watertight

Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	346...415	50 and 60	416BBI6W	2CMA102266R1000	**10**	**0.15**

Phase Inverter Panel mounted inlet with straight flange. 32A, IP67. Watertight

Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Red	346...415	50 and 60	432BBI6W	2CMA102273R1000	**10**	**0.22**

Additional products and accessories

Phase inverter, IP67

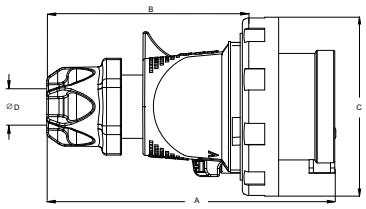
432BBS6IW

Phase Inverter surface inlet for wall mounting. 16A, IP67. Watertight
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
3P+N+E								
5		Red	346...415	50 and 60	416BBSI6W	2CMA102267R1000	**5**	**0.13**

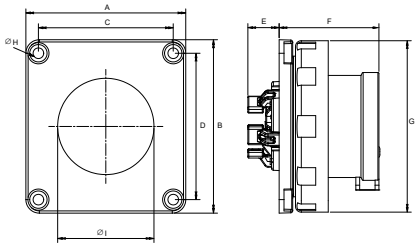
Phase Inverter surface inlet for wall mounting. 32A, IP67. Watertight
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
3P+N+E								
5		Red	346...415	50 and 60	432BBSI6W	2CMA102274R1000	**5**	**0.16**



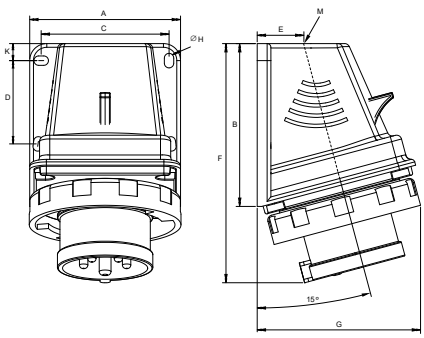
Dimensions (mm)

Type	A	B	C	Ø D
416BPI...W	136	96	89	6-16
432BPI. .W	156	107	102	11-20.5



Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	ØI
416BBI...W	83	90	70	76	17	52	90	5.5	65
432BBI...W	83	90	70	76	21	61	102	5.5	65



Dimensions (mm)

Type	A	B	C	D	E	F	G	K	ØH	M
416BBSI...W	88.5	95.5	75	49	23.5	140	96	10	5.5	M25x1.5
432BBSI...W	88.5	95.5	75	49	23.5	151	103	10	5.5	M25x1.5

Industrial plugs and sockets
for entertainment applications

Plugs

Type EP...B, 16 A...32 A, IP44

Connectors

Type EC...B, 16 A...32 A, IP44

Inlets

For wall mounting, Type BS...B
16 A...32 A, IP44

Socket outlet

For wall mounting, Type RS...B
16 A...32 A, IP44

For panel mounting with unified straight flange, Type RU...B
16 A...32 A, IP44

For panel mounting with minimized angled flange, Type RAM...B
16 A...32 A, IP44

Black plugs and sockets for entertainment applications

With extensive experience of designing and producing industrial plugs and sockets, ABB can provide products of high quality, functionality, reliability and safety. Regardless of the situation, safety of people should be of highest priority in electrical installations, always.

ABB´s series of black plugs and sockets which are very well suited for entertainment applications, such as concerts, cinemas, television studios, and open-air events. The black series are perfect for both indoor and outdoor use, they will blend into their dark surroundings.

Pin and sleeve configuration according to IEC standard. Product labels give the information on which voltage range the product is intended for. The black series are at the high quality level that characterizes ABB´s industrial plugs and sockets.

Plug in black color

for entertainment applications, IP44

EASY & SAFE

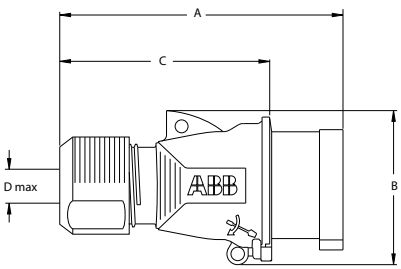
316EP6B

16 A. Splashproof
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	216EP6B	2CMA103579R1000	10	0.11
		380...415		216EP9B	2CMA103598R1000		
3P+E							
4	■ Black	380...415	50 and 60	316EP6B	2CMA103584R1000	10	0.16
		200...250		316EP9B	2CMA103585R1000		
3P+N+E							
5	■ Black	346...415	50 and 60	416EP6B	2CMA103591R1000	10	0.18
		208...250		416EP9B	2CMA103599R1000		

32 A. Splashproof
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	232EP6B	2CMA103581R1000	10	0.21
		380...415		232EP9B	2CMA103600R1000		
3P+E							
4	■ Black	380...415	50 and 60	332EP6B	2CMA103588R1000	10	0.23
		200...250		332EP9B	2CMA103589R1000		
3P+N+E							
5	■ Black	346...415	50 and 60	432EP6B	2CMA103593R1000	10	0.24
		208...250		432EP9B	2CMA103601R1000		



Dimensions (mm)

Type	A	B	C	Dmax
216EP...B	127	62.5	88.5	14
316EP...B	144	74.5	106	17
416EP...B	144	78	106	17
232EP...B	167	82.5	121	22
332EP...B	167	82.5	121	22
432EP...B	167	87.5	121	22

Connector in black color

for entertainment applications, IP44

EASY & SAFE

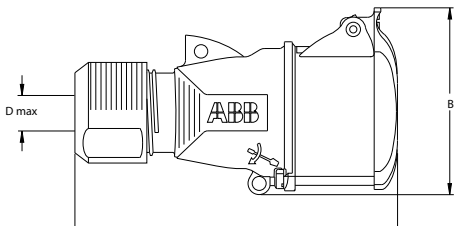
316EC6B

16 A. Splashproof
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	216EC6B	2CMA103578R1000	10	0.11
		380...415		216EC9B	2CMA103594R1000		
3P+E							
4	■ Black	380...415	50 and 60	316EC6B	2CMA103582R1000	10	0.16
		200...250		316EC9B	2CMA103583R1000		
3P+N+E							
5	■ Black	346...415	50 and 60	416EC6B	2CMA103590R1000	10	0.17
		208...250		416EC9B	2CMA103595R1000		

32 A. Splashproof
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	232EC6B	2CMA103580R1000	10	0.20
		380...415		232EC9B	2CMA103596R1000		
3P+E							
4	■ Black	380...415	50 and 60	332EC6B	2CMA103586R1000	10	0.22
		200...250		332EC9B	2CMA103587R1000		
3P+N+E							
5	■ Black	346...415	50 and 60	432EC6B	2CMA103592R1000	10	0.23
		208...250		432EC9B	2CMA103597R1000		



Dimensions (mm)

Type	A	B	Dmax
216EC...B	135.5	74.5	14
316EC...B	155	87	17
416EC...B	156	90.5	17
232EC...B	182	93.5	22
332EC...B	182	93.5	22
432EC...B	182.5	99	22

Inlets for wall mounting in black color

for entertainment applications, IP44

EASY & SAFE

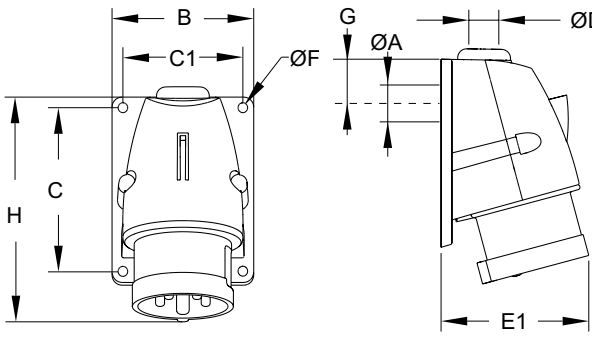
316BS6B

16 A. Splashproof
Housing in plastic (PA). Flexible membrane and metric threaded M20 insert for cop cable entry.
Rear knock-out cable entry. Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	216BS6B	2CMA101027R1000	10	0.15
		380...415		216BS9B	2CMA101058R1000		
3P+E							
4	■ Black	380...415	50 and 60	316BS6B	2CMA101028R1000	10	0.19
		200.250		316BS9B	2CMA101059R1000		
3P+N+E							
5	■ Black	346...415		416BS6B	2CMA101029R1000	10	0.20
		208...250		416BS9B	2CMA101060R1000		

32 A. IP44. Splashproof
Housing in plastic (PA). Flexible membrane and metric threaded M25 insert for cop cable entry.
Rear knock-out cable entry. Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	232BS6B	2CMA101030R1000	10	0.25
		380...415		232BS9B	2CMA101061R1000		
3P+E							
4	■ Black	380...415	50 and 60	332BS6B	2CMA101031R1000	10	0.27
		200...250		332BS9B	2CMA101062R1000		
3P+N+E							
5	■ Black	346...415	50 and 60	432BS6B	2CMA101032R1000	10	0.29
		208...250		432BS9B	2CMA101063R1000		



Dimensions (mm)

Type	A	B	C	C1	Dmax	E1	F	G	H
216BS...B	23	66	75	54	18/M20	72	5.5	27	110
316BS...B	23	79	91	67	18/M20	78	5.5	30	124
416BS...B	23	79	91	67	18/M20	81	5.5	30	125
232BS...B	29	85	111	72	22/M25	94	5.5	34	153
332BS...B	29	85	111	72	22/M25	94	5.5	34	153
432BS...B	29	85	111	72	22/M25	96	5.5	34	154

Socket outlet for wall mounting in black color

for entertainment applications, IP44

EASY & SAFE

316RS6B

16 A. Splashproof

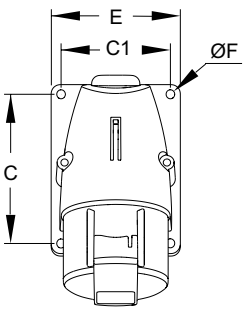
Housing in plastic (PA). Flexible membrane and metric threaded M20 insert for cop cable entry.
Rear knock-out cable entry. Cable area 1.5...4 mm²

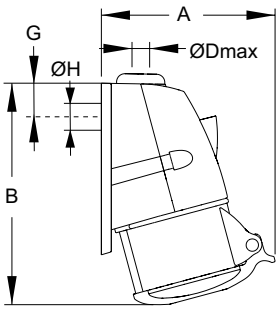
Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	216RS6B	2CMA101021R1000	10	0.22
		380...415		216RS9B	2CMA101052R1000		
3P+E							
4	■ Black	380...415	50 and 60	316RS6B	2CMA101022R1000	10	0.24
		200...250		316RS9B	2CMA101053R1000		
3P+N+E							
5	■ Black	346...415		416RS6B	2CMA101023R1000	10	0.26
		208...250		416RS9B	2CMA101054R1000		

32 A. Splashproof

Housing in plastic (PA). Flexible membrane and metric threaded M25 insert for cop cable entry.
Rear knock-out cable entry. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	232RS6B	2CMA101024R1000	10	0.30
		380...415		232RS9B	2CMA101055R1000		
3P+E							
4	■ Black	380...415	50 and 60	332RS6B	2CMA101025R1000	10	0.32
		200...250		332RS9B	2CMA101056R1000		
3P+N+E							
5	■ Black	346...415	50 and 60	432RS6B	2CMA101026R1000	10	0.34
		208...250		432RS9B	2CMA101057R1000		





Dimensions (mm)

Type	A	B	C	C1	Dmax	E	F	G	H
216RS...B	91	117	75	54	18/M20	66	5.5	27	23
316RS...B	100	132	91	67	18/M20	79	5.5	30	23
416RS...B	104	134	91	67	18/M20	79	5.5	30	23
232RS...B	118	163	111	72	22/M25	85	5.5	34	29
332RS...B	116	163	111	72	22/M25	85	5.5	34	29
432RS...B	121	164	111	72	22/M25	85	5.5	34	29

Socket outlet for panel mounting in black color

for entertainment applications, with unified straight flange, IP44

EASY & SAFE

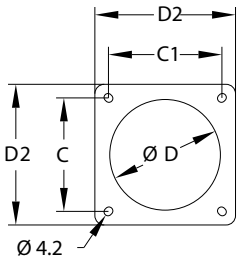
216RU6B

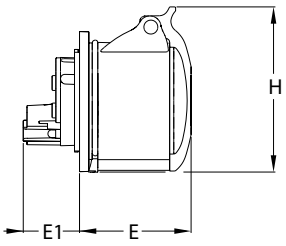
16 A. Splashproof
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	216RU6B	2CMA101639R1000	10	0.15
3P+N+E							
5	■ Black	346...415	50 and 60	416RU6B	2CMA101640R1000	10	0.20

32 A. IP44. Splashproof
Housing in plastic (PA). Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	■ Black	346...415	50 and 60	432RU6B	2CMA101641R1000	10	0.24





Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
216RU6B	60-61	60-61	49	75	56	29	79
416RU6B	60-61	60-61	59	75	60	31	89
432RU6B	60-61	60-61	66	75	71	34	99

Socket outlet for panel mounting in black color

for entertainment applications, with minimized angled flange IP44

EASY & SAFE

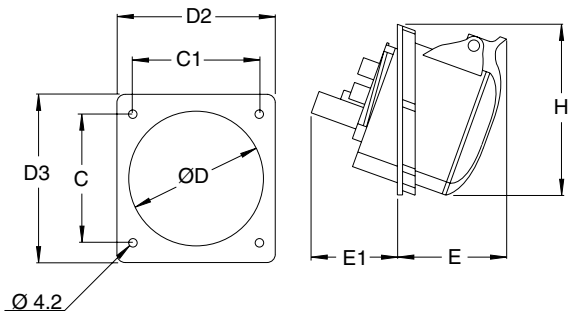
316RAM6B

16 A. Splashproof
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	216RAM6B	2CMA100543R1000	10	0.21
		380...415		216RAM9B	2CMA101048R1000		
3P+E							
4	■ Black	380...415	50 and 60	316RAM6B	2CMA100544R1000	10	0.22
		200...250		316RAM9B	2CMA100873R1000		
3P+N+E							
5	■ Black	346...415	50 and 60	416RAM6B	2CMA100545R1000	10	0.24
		208...250		416RAM9B	2CMA101049R1000		

32 A. Splashproof
Housing in plastic (PA). Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	■ Black	200...250	50 and 60	232RAM6B	2CMA100546R1000	10	0.21
		380...415		232RAM9B	2CMA101050R1000		
3P+E							
4	■ Black	380...415	50 and 60	332RAM6B	2CMA100547R1000	10	0.22
		200...250		332RAM9B	2CMA100876R1000		
3P+N+E							
5	■ Black	346...415	50 and 60	432RAM6B	2CMA100548R1000	10	0.24
		208...250		432RAM9B	2CMA101051R1000		



Dimensions (mm)

Type	C	C1	D	D2	D3	E	E1	H
216RAM...B	55	55	63	70	78	53	42	76
316RAM...B	66	66	78	83	89	53	46	85
416RAM...B	66	66	78	83	89	55	48	89
232RAM...B	75	75	87	93	99	61	52	98
332RAM...B	75	75	87	93	99	61	52	98
432RAM...B	75	75	87	93	99	64	52	101

Industrial plugs and sockets
Fast & Safe

Plugs

Type QP..., 16 A...32 A, IP44

Type QP...W, 16 A...32 A, IP67

Connectors

Type QC..., 16 A...32 A, IP44

Type QC...W, 16 A...32 A, IP67

Inlets

For wall mounting, Type QBS...
16 A...32 A, IP44

For wall mounting, Type QBS...W
16 A...32 A, IP67

For panel mounting with unified straight flange, Type QB...
16 A...32 A, IP44

For panel mounting with unified straight flange, Type QB...W
16 A...32 A, IP67

For panel mounting with straight minimized flange, Type QBM...
16 A...32 A, IP44

For panel mounting with unified angled flange, Type QBA...
16 A...32 A, IP44

For panel mounting with unified angled flange. Type QBA...W
16 A...32 A, IP67

Socket outlet

For wall mounting, Type QRS...
16 A...32 A, IP44

For wall mounting, Type QRS...W
16A...32 A, IP67

For panel mounting with unified straight flange, Type QR...
16 A...32 A, IP44

For panel mounting with unified straight flange, Type QR...W
16 A...32 A, IP67

For panel mounting with unified angled flange, Type QRA...
16 A...32 A, IP44

For panel mounting with unified angled flange, Type QRA...W
16 A...32 A, IP67

For panel mounting with straight minimized flange, Type QRM...
16 A...32 A, IP44

For panel mounting with straight minimized flange, Type QRM...W
16 A...32 A, IP67

Industrial plugs and sockets
New Fast & Safe

In times with high focus on productivity screwless terminal connectors are growing in popularity. Actually up sixty percent of the installation time can be saved with screwless terminals.

We are now completing our standard offering with Fast & Safe in parallel with Easy & Safe. Fast & Safe is a complete offering of 16-32A plugs and sockets, both as IP44 and IP67. Instead of a screw providing contact pressure at the terminal, Fast & Safe is built on spring technology. More than reducing installation time spring technology has high resistance against vibrations and heat fluctuations.

Plugs

IP44

FAST & SAFE

432QP6

16 A. Splashproof

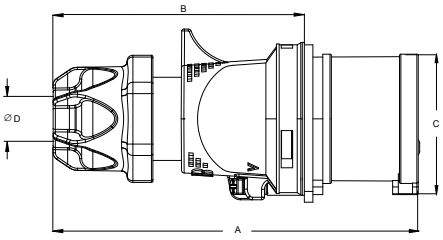
Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QP4	2CMA102579R1000	10	0.15
	Blue	200...250		216QP6	2CMA102286R1000		
	Red	380...415		216QP9	2CMA102858R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QP4	2CMA102598R1000	10	0.16
	Red	380...415		316QP6	2CMA102305R1000		
	Blue	200...250		316QP9	2CMA102877R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QP4	2CMA102617R1000	10	0.18
	Red	346...415		416QP6	2CMA102324R1000		
	Blue	208...250		416QP9	2CMA102896R1000		

32 A. Splashproof

Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QP4	2CMA102638R1000	10	0.18
	Blue	200...250		232QP6	2CMA102345R1000		
	Red	380...415		232QP9	2CMA102917R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QP4	2CMA102690R1000	10	0.20
	Red	380...415		332QP6	2CMA102364R1000		
	Blue	200...250		332QP9	2CMA102936R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QP4	2CMA102709R1000	10	0.24
	Red	346...415		432QP6	2CMA102383R1000		
	Blue	208...250		432QP9	2CMA102955R1000		



Dimensions (mm)

Type	A	B	C	ØD
216QP...	124	83	47	6-13
316QP...	129	89	53	6-13
416QP...	136	96	61	6-13
232QP...	149	100	63	11-20
332QP...	149	100	63	11-20
432QP...	156	107	70	11-20

Connectors

IP44

216QC6

16 A. Splashproof

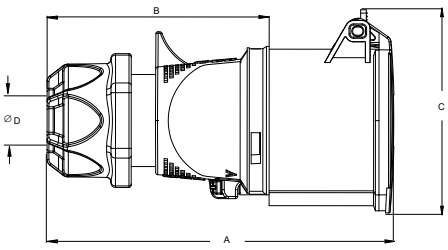
Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QC4	2CMA102580R1000	10	0.18
	Blue	200...250		216QC6	2CMA102287R1000		
	Red	380...415		216QC9	2CMA102859R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QC4	2CMA102599R1000	10	0.21
	Red	380...415		316QC6	2CMA102306R1000		
	Blue	200...250		316QC9	2CMA102878R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QC4	2CMA102618R1000	10	0.25
	Red	346...415		416QC6	2CMA102325R1000		
	Blue	208...250		416QC9	2CMA102897R1000		

32 A. Splashproof

Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QC4	2CMA102639R1000	10	0.25
	Blue	200...250		232QC6	2CMA102346R1000		
	Red	380...415		232QC9	2CMA102918R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QC4	2CMA102691R1000	10	0.26
	Red	380...415		332QC6	2CMA102365R1000		
	Blue	200...250		332QC9	2CMA102937R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QC4	2CMA102710R1000	10	0.26
	Red	346...415		432QC6	2CMA102384R1000		
	Blue	208...250		432QC9	2CMA102956R1000		



Dimensions (mm)

Type	A	B	C	ØD
216QC...	128	83	72	6-13
316QC...	135	89	78	6-13
416QC...	142	96	87	6-13
232QC...	156	100	91	11-20
332QC...	156	100	91	11-20
432QC...	162	107	97	11-20

Inlets

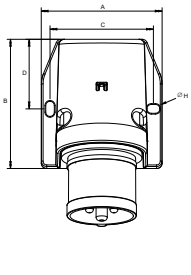
for wall mounting, IP44

FAST & SAFE

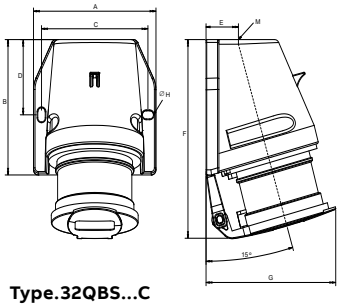
416QBS6

16 A. Splashproof
Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 1...2.5 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Yellow	100...130	50 and 60	216QBS4	2CMA102587R1000	5	0.22
		Yellow	100...130		216QBS4C	2CMA102588R1000		0.25
		Blue	200...250		216QBS6	2CMA102294R1000		0.22
		Blue	200...250		216QBS6C	2CMA102295R1000		0.25
		Red	380...415		216QBS9	2CMA102866R1000		0.22
		Red	380...415		216QBS9C	2CMA102867R1000		0.25
3P+E								
4		Yellow	100...130	50 and 60	316QBS4	2CMA102606R1000	5	0.22
		Yellow	100...130		316QBS4C	2CMA102607R1000		0.25
		Red	380...415		316QBS6	2CMA102313R1000		0.22
		Red	380...415		316QBS6C	2CMA102314R1000		0.25
		Blue	200...250		316QBS9	2CMA102885R1000		0.22
		Blue	200...250		316QBS9C	2CMA102886R1000		0.25
3P+N+E								
5		Yellow	100...130	50 and 60	416QBS4	2CMA102626R1000	5	0.22
		Yellow	100...130		416QBS4C	2CMA102627R1000		0.25
		Red	346...415		416QBS6	2CMA102333R1000		0.22
		Red	346...415		416QBS6C	2CMA102334R1000		0.25
		Blue	208...250		416QBS9	2CMA102905R1000		0.22
		Blue	208...250		416QBS9C	2CMA102906R1000		0.25



Type .32QBS...



Type.32QBS...C

Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	M
216QBS...	75	80	64	43	20	116	70	5.3	M20x1.5
216QBS...C	75	80	64	43	20	116.3	70.3	5.3	M20x1.5
316QBS...	88	88	76	48.5	22	123	77	5.3	M25x1.5
316QBS...C	88	88	76	48.5	22	123.3	77.3	5.3	M25x1.5
416QBS...	88	88	76	48.5	22	123	84	5.3	M25x1.5
416QBS...C	88	88	76	48.5	22	123.3	84.3	5.3	M25x1.5

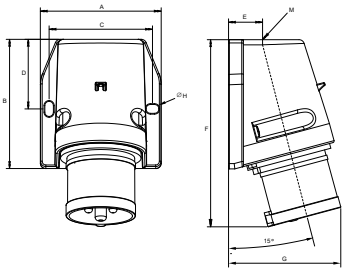
Inlets

for wall mounting, IP44

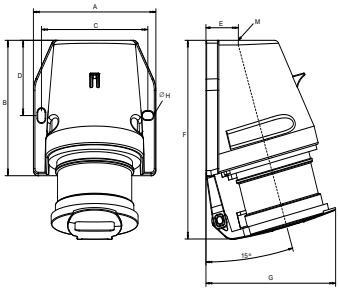
432QBS6

32 A. Splashproof
Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 2.5...6 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Yellow	100...130	50 and 60	232QBS4	2CMA102646R1000	5	0.22
		Yellow	100...130		232QBS4C	2CMA102647R1000		0.25
		Blue	200...250		232QBS6	2CMA102353R1000		0.22
		Blue	200...250		232QBS6C	2CMA102354R1000		0.25
		Red	380...415		232QBS9	2CMA102925R1000		0.22
		Red	380...415		232QBS9C	2CMA102926R1000		0.25
3P+E								
4		Yellow	100...130	50 and 60	332QBS4	2CMA102698R1000	5	0.29
		Yellow	100...130		332QBS4C	2CMA102699R1000		0.31
		Red	380...415		332QBS6	2CMA102372R1000		0.29
		Red	380...415		332QBS6C	2CMA102373R1000		0.31
		Blue	200...250		332QBS9	2CMA102944R1000		0.29
		Blue	200...250		332QBS9C	2CMA102945R1000		0.31
3P+N+E								
5		Yellow	100...130	50 and 60	432QBS4	2CMA102718R1000	5	0.31
		Yellow	100...130		432QBS4C	2CMA102719R1000		0.35
		Red	346...415		432QBS6	2CMA102392R1000		0.31
		Red	346...415		432QBS6C	2CMA102393R1000		0.35
		Blue	208...250		432QBS9	2CMA102964R1000		0.31
		Blue	208...250		432QBS9C	2CMA102965R1000		0.35



Type .32QBS...



Type.32QBS...C

Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	M
232QBS...	88	88	76	48.5	22	132	87	5.3	M25x1.5
232QBS...C	88	88	76	48.5	22.3	132.3	87	5.3	M25x1.5
332QBS...	88	88	76	48.5	22	132	87	5.3	M25x1.5
332QBS...C	88	88	76	48.5	22.3	132.3	87	5.3	M25x1.5
432QBS...	96	102	84	56	26	146	94	5.3	M32x1.5
432QBS...C	96	102	84	56	26.3	146.3	94	5.3	M32x1.5

Inlets

for panel mounting with unified straight flange, IP44

FAST & SAFE

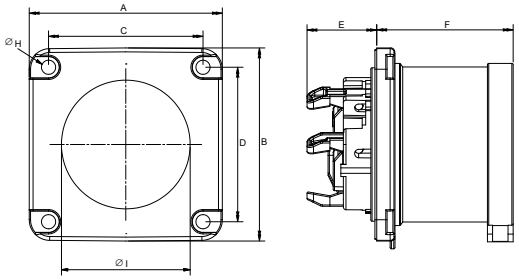
432QB6

16 A. Splashproof
Housing in plastic (PA). Fast connection. Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Yellow	100...130	50 and 60	416QB4	2CMA102624R1000	10	0.13
	Red	346...415		416QB6	2CMA102331R1000		
	Blue	208...250		416QB9	2CMA102903R1000		

32 A. Splashproof
Housing in plastic (PA). Fast connection.Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Yellow	100...130	50 and 60	432QB4	2CMA102716R1000	10	0.17
	Red	346...415		432QB6	2CMA102390R1000		
	Blue	208...250		432QB9	2CMA102962R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	ØH	ØI
416QB...	75	75	60	60	23	44	5.5	56
432QB...	75	75	60	60	27	53	5.5	60

Inlets

for panel mounting with unified angled flange, IP44

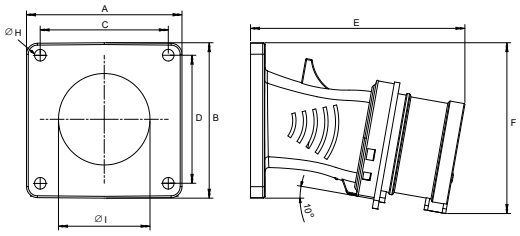
432QBA6

16 A. Splashproof
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QBA4	2CMA102586R1000	10	0.15
	Blue	200...250		216QBA6	2CMA102293R1000		
	Red	380...415		216QBA9	2CMA102865R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QBA4	2CMA102605R1000	10	0.18
	Red	380...415		316QBA6	2CMA102312R1000		
	Blue	200...250		316QBA9	2CMA102884R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QBA4	2CMA102625R1000	10	0.22
	Red	346...415		416QBA6	2CMA102332R1000		
	Blue	208...250		416QBA9	2CMA102904R1000		

32 A. Splashproof
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QBA4	2CMA102645R1000	10	0.17
	Blue	200...250		232QBA6	2CMA102352R1000		
	Red	380...415		232QBA9	2CMA102924R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QBA4	2CMA102697R1000	10	0.20
	Red	380...415		332QBA6	2CMA102371R1000		
	Blue	200...250		332QBA9	2CMA102943R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QBA4	2CMA102717R1000	10	0.48
	Red	346...415		432QBA6	2CMA102391R1000		
	Blue	208...250		432QBA9	2CMA102963R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	ØH	ØI
216QBA...	85	85	70	70	106	85	6.3	50
316QBA...	85	85	70	70	112	88	6.3	50
416QBA...	85	85	70	70	117	94	6.3	50
232QBA...	85	85	70	70	126	96	6.3	50
332QBA...	85	85	70	70	126	96	6.3	50
432QBA...	85	85	70	70	133	102	6.3	50

Inlets

for panel mounting with straight minimized flange, IP44

FAST & SAFE

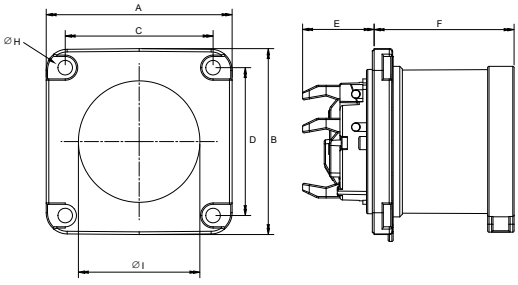
216QBM6

16 A. Splashproof
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QBM4	2CMA102585R1000	10	0.10
	Blue	200...250		216QBM6	2CMA102292R1000		
	Red	380...415		216QBM9	2CMA102864R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QBM4	2CMA102604R1000	10	0.13
	Red	380...415		316QBM6	2CMA102311R1000		
	Blue	200...250		316QBM9	2CMA102883R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QBM4	2CMA102623R1000	10	0.13
	Red	346...415		416QBM6	2CMA102330R1000		
	Blue	208...250		416QBM9	2CMA102902R1000		

32 A. Splashproof
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QBM4	2CMA102644R1000	10	0.11
	Blue	200...250		232QBM6	2CMA102351R1000		
	Red	380...415		232QBM6	2CMA102923R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QBM4	2CMA102696R1000	10	0.15
	Red	380...415		332QBM6	2CMA102370R1000		
	Blue	200...250		332QBM9	2CMA102942R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QBM4	2CMA102715R1000	10	0.17
	Red	346...415		432QBM6	2CMA102389R1000		
	Blue	208...250		432QBM9	2CMA102961R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	ØH	ØI
216QBM...	70	70	56	56	23	44	5.5	44
316QBM...	70	70	56	56	23	44	5.5	52
416QBM...	70	70	56	56	23	44	5.5	56
232QBM...	70	70	56	56	27	53	5.5	56
332QBM...	70	70	56	56	27	53	5.5	56
432QBM...	70	70	56	56	27	53	5.5	60

Socket outlet

for wall mounting, IP44

432QRS6

16 A. Splashproof

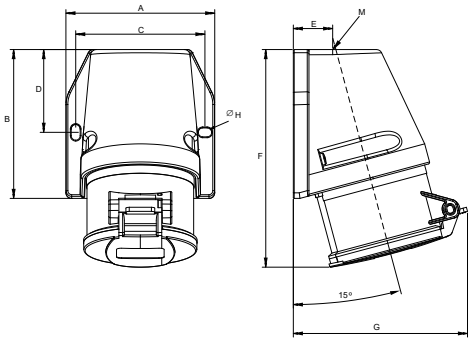
Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QRS4	2CMA102584R1000	10	0.25
	Blue	200...250		216QRS6	2CMA102291R1000		
	Red	380...415		216QRS9	2CMA102863R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QRS4	2CMA102603R1000	10	0.27
	Red	380...415		316QRS6	2CMA102310R1000		
	Blue	200...250		316QRS9	2CMA102882R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QRS4	2CMA102622R1000	10	0.29
	Red	346...415		416QRS6	2CMA102329R1000		
	Blue	208...250		416QRS9	2CMA102901R1000		

32 A. Splashproof

Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QRS4	2CMA102643R1000	10	0.30
	Blue	200...250		232QRS6	2CMA102350R1000		
	Red	380...415		232QRS9	2CMA102922R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QRS4	2CMA102695R1000	10	0.33
	Red	380...415		332QRS6	2CMA102369R1000		
	Blue	200...250		332QRS9	2CMA102941R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QRS4	2CMA102714R1000	10	0.36
	Red	346...415		432QRS6	2CMA102388R1000		
	Blue	208...250		432QRS9	2CMA102960R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	M
216QRS...	75	80	64	43	20	121	88	5.3	M20x1.5
316QRS...	88	88	76	48.5	22	128	96	5.3	M25x1.5
416QRS...	88	88	76	48.5	22	128	103	5.3	M25x1.5
232QRS...	88	88	76	48.5	22	139	106	5.3	M25x1.5
332QRS...	88	88	76	48.5	22	139	106	5.3	M25x1.5
432QRS...	88	102	84	56	26	152	113	5.3	M32x1.5

Socket outlet

for panel mounting with unified straight flange, IP44

FAST & SAFE

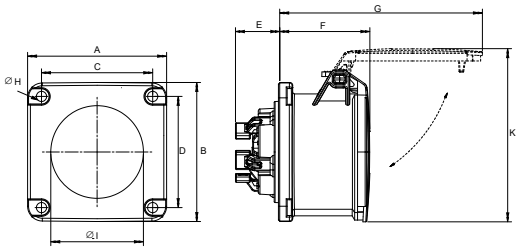
216QR6

16 A. Splashproof
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QR4	2CMA102582R1000	10	0.11
	Blue	200...250		216QR6	2CMA102289R1000		
	Red	380...415		216QR9	2CMA102861R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QR4	2CMA102601R1000	10	0.13
	Red	380...415		316QR6	2CMA102308R1000		
	Blue	200...250		316QR9	2CMA102880R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QR4	2CMA102620R1000	10	0.15
	Red	346...415		416QR6	2CMA102327R1000		
	Blue	208...250		416QR9	2CMA102899R1000		

32 A. Splashproof
Housing in plastic (PA). Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QR4	2CMA102641R1000	10	0.15
	Blue	200...250		232QR6	2CMA102348R1000		
	Red	380...415		232QR9	2CMA102920R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QR4	2CMA102693R1000	10	0.16
	Red	380...415		332QR6	2CMA102367R1000		
	Blue	200...250		332QR9	2CMA102939R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QR4	2CMA102712R1000	10	0.18
	Red	346...415		432QR6	2CMA102386R1000		
	Blue	208...250		432QR9	2CMA102958R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	ØI	K
216QR...	75	75	60	60	24	49	95	5.5	44	86
316QR...	75	75	60	60	24	49	102	5.5	49	90
416QR...	75	75	60	60	24	49	110	5.5	56	94
232QR...	75	75	60	60	30	58	122	5.5	56	98
332QR...	75	75	60	60	30	58	122	5.5	56	98
432QR...	75	75	60	60	30	58	128	5.5	60	105

Socket outlet

for panel mounting with unified angled flange, IP44

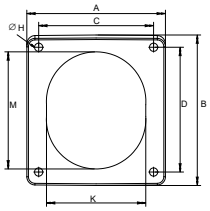
432QRA6

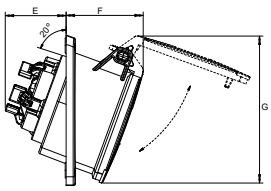
16 A. Splashproof
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QRA4	2CMA102583R1000	10	0.15
	Blue	200...250		216QRA6	2CMA102290R1000		
	Red	380...415		216QRA9	2CMA102862R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QRA4	2CMA102602R1000	10	0.16
	Red	380...415		316QRA6	2CMA102309R1000		
	Blue	200...250		316QRA9	2CMA102881R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QRA4	2CMA102621R1000	10	0.16
	Red	346...415		416QRA6	2CMA102328R1000		
	Blue	208...250		416QRA9	2CMA102900R1000		

32 A. Splashproof
Housing in plastic (PA). Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QRA4	2CMA102642R1000	10	0.20
	Blue	200...250		232QRA6	2CMA102349R1000		
	Red	380...415		232QRA9	2CMA102921R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QRA4	2CMA102694R1000	10	0.22
	Red	380...415		332QRA6	2CMA102368R1000		
	Blue	200...250		332QRA9	2CMA102940R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QRA4	2CMA102713R1000	10	0.40
	Red	346...415		432QRA6	2CMA102387R1000		
	Blue	208...250		432QRA9	2CMA102959R1000		





Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	K	M
216QRA...	83	90	70	76	37	43	90	5	52	65
316QRA...	83	90	70	76	37	45	90	5	56	68
416QRA...	83	90	70	76	37	47	90	5	62	72
232QRA...	83	90	70	76	43	54	98	5	66	76
332QRA...	83	90	70	76	43	54	98	5	66	76
432QRA...	83	90	70	76	49	51	100	5	72	82

Socket outlet

for panel mounting with straight minimized flange, IP44

FAST & SAFE

216QRM6

16 A. Splashproof

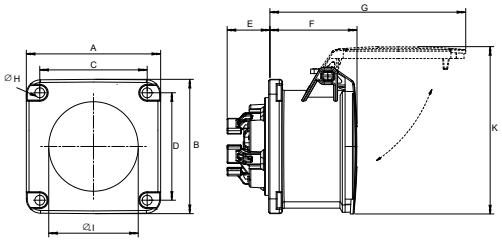
Housing in plastic (PA). Fast connection. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QRM4	2CMA102581R1000	10	0.11
	Blue	200...250		216QRM6	2CMA102288R1000		
	Red	380...415		216QRM9	2CMA102860R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QRM4	2CMA102600R1000	10	0.13
	Red	380...415		316QRM6	2CMA102307R1000		
	Blue	200...250		316QRM9	2CMA102879R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QRM4	2CMA102619R1000	10	0.15
	Red	346...415		416QRM6	2CMA102326R1000		
	Blue	208...250		416QRM9	2CMA102898R1000		

32 A. Splashproof

Housing in plastic (PA). Fast connection.Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QRM4	2CMA102640R1000	10	0.14
	Blue	200...250		232QRM6	2CMA102347R1000		
	Red	380...415		232QRM9	2CMA102919R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QRM4	2CMA102692R1000	10	0.15
	Red	380...415		332QRM6	2CMA102366R1000		
	Blue	200...250		332QRM9	2CMA102938R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QRM4	2CMA102711R1000	10	0.18
	Red	346...415		432QRM6	2CMA102385R1000		
	Blue	208...250		432QRM9	2CMA102957R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	ØI	K
216QRM...	70	70	56	56	24	49	95	5.5	44	86
316QRM...	70	70	56	56	24	49	102	5.5	49	90
416QRM...	70	70	56	56	24	49	110	5.5	56	94
232QRM...	70	70	56	56	30	58	122	5.5	56	98
332QRM...	70	70	56	56	30	58	122	5.5	56	98
432QRM...	70	70	56	56	30	58	128	5.5	60	104

Plugs

IP67

432QP6W

16 A. Watertight

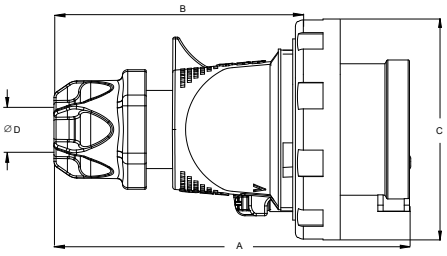
Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QP4W	2CMA102589R1000	10	0.17
	Blue	200...250		216QP6W	2CMA102296R1000		
	Red	380...415		216QP9W	2CMA102868R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QP4W	2CMA102608R1000	10	0.19
	Red	380...415		316QP6W	2CMA102315R1000		
	Blue	200...250		316QP9W	2CMA102887R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QP4W	2CMA102628R1000	10	0.23
	Red	346...415		416QP6W	2CMA102335R1000		
	Blue	208...250		416QP9W	2CMA102907R1000		

32 A. Watertight

Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QP4W	2CMA102648R1000	10	0.23
	Blue	200...250		232QP6W	2CMA102355R1000		
	Red	380...415		232QP9W	2CMA102927R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QP4W	2CMA102700R1000	10	0.25
	Red	380...415		332QP6W	2CMA102374R1000		
	Blue	200...250		332QP9W	2CMA102946R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QP4W	2CMA102720R1000	10	0.29
	Red	346...415		432QP6W	2CMA102394R1000		
	Blue	208...250		432QP9W	2CMA102966R1000		



Dimensions (mm)

Type	A	B	C	ØD
216QP...	124	83	72	6-13
316QP...	129	89	81	6-13
416QP...	136	96	89	6-13
232QP...	149	100	93	11-20
332QP...	149	100	93	11-20
432QP...	156	107	102	11-20

Connectors

IP67

FAST & SAFE

432QC6W

16 A. Watertight

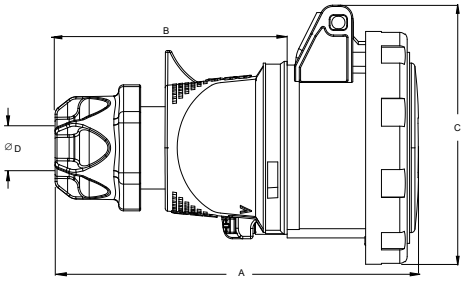
Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QC4W	2CMA102590R1000	10	0.20
	Blue	200...250		216QC6W	2CMA102297R1000		
	Red	380...415		216QC9W	2CMA102869R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QC4W	2CMA102609R1000	10	0.25
	Red	380...415		316QC6W	2CMA102316R1000		
	Blue	200...250		316QC9W	2CMA102888R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QC4W	2CMA102629R1000	10	0.27
	Red	346...415		416QC6W	2CMA102336R1000		
	Blue	208...250		416QC9W	2CMA102908R1000		

32 A. Watertight

Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QC4W	2CMA102649R1000	10	0.29
	Blue	200...250		232QC6W	2CMA102356R1000		
	Red	380...415		232QC9W	2CMA102928R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QC4W	2CMA102701R1000	10	0.31
	Red	380...415		332QC6W	2CMA102375R1000		
	Blue	200...250		332QC9W	2CMA102947R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QC4W	2CMA102721R1000	10	0.32
	Red	346...415		432QC6W	2CMA102395R1000		
	Blue	208...250		432QC9W	2CMA102967R1000		



Dimensions (mm)

Type	A	B	C	ØD
216QC...W	137	83	82	6-13
316QC...W	143	89	89	6-13
416QC...W	150	96	99	6-13
232QC...W	166	100	102	11-20
332QC...W	166	100	102	11-20
432QC...W	173	107	109	11-20

Inlets

for wall mounting, IP67

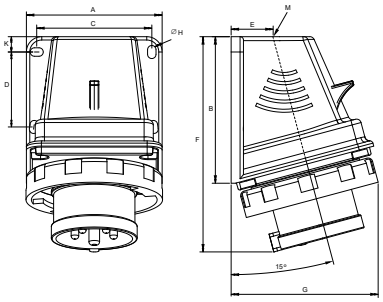
216QBS6W

16 A. Watertight
Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QBS4W	2CMA102597R1000	10	0.23
	Blue	200...250		216QBS6W	2CMA102304R1000		
	Red	380...415		216QBS9W	2CMA102876R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QBS4W	2CMA102616R1000	10	0.29
	Red	380...415		316QBS6W	2CMA102323R1000		
	Blue	200...250		316QBS9W	2CMA102895R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QBS4W	2CMA102637R1000	10	0.30
	Red	346...415		416QBS6W	2CMA102344R1000		
	Blue	208...250		416QBS9W	2CMA102916R1000		

32 A. Watertight
Housing in plastic (PA). Fast connnection. Cable entry with compression gland. Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QBS4W	2CMA102689R1000	10	0.24
	Blue	200...250		232QBS6W	2CMA102363R1000		
	Red	380...415		232QBS9W	2CMA102935R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QBS4W	2CMA102708R1000	10	0.26
	Red	380...415		332QBS6W	2CMA102382R1000		
	Blue	200...250		332QBS9W	2CMA102954R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QBS4W	2CMA102727R1000	10	0.37
	Red	346...415		432QBS6W	2CMA102401R1000		
	Blue	208...250		432QBS9W	2CMA102973R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	G	K	ØH	M
216QBS...W	88.5	95.5	75	49	23.5	138	93	10	5.5	M25x1.5
316QBS...W	88.5	95.5	75	49	23.5	140	93	10	5.5	M25x1.5
416QBS...W	88.5	95.5	75	49	23.5	140	96	10	5.5	M25x1.5
232QBS...W	88.5	95.5	75	49	23.5	149	99	10	5.5	M25x1.5
332QBS...W	88.5	95.5	75	49	23.5	149	99	10	5.5	M25x1.5
432QBS...W	88.5	95.5	75	49	23.5	151	103	10	5.5	M25x1.5

Inlets

for panel mounting with unified straight flange, IP67

FAST & SAFE

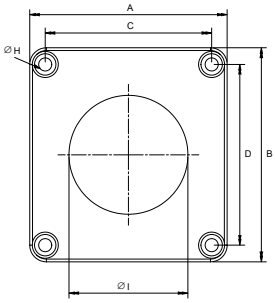
216QB6W

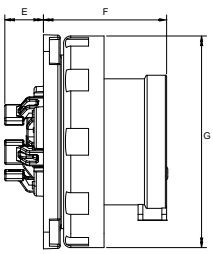
16 A. Watertight
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QB4W	2CMA102595R1000	10	0.12
	Blue	200...250		216QB6W	2CMA102302R1000		
	Red	380...415		216QB9W	2CMA102874R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QB4W	2CMA102614R1000	10	0.14
	Red	380...415		316QB6W	2CMA102321R1000		
	Blue	200...250		316QB9W	2CMA102893R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QB4W	2CMA102635R1000	10	0.18
	Red	346...415		416QB6W	2CMA102342R1000		
	Blue	208...250		416QB9W	2CMA102914R1000		

32 A. Watertight
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QB4W	2CMA102687R1000	10	0.20
	Blue	200...250		232QB6W	2CMA102361R1000		
	Red	380...415		232QB9W	2CMA102933R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QB4W	2CMA102706R1000	10	0.22
	Red	380...415		332QB6W	2CMA102380R1000		
	Blue	200...250		332QB9W	2CMA102952R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QB4W	2CMA102725R1000	10	0.24
	Red	346...415		432QB6W	2CMA102399R1000		
	Blue	208...250		432QB9W	2CMA102971R1000		





Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	ØI
216QB...W	83	90	70	76	17	52	90	5.5	65
316QB...W	83	90	70	76	17	52	90	5.5	65
416QB...W	83	90	70	76	17	52	90	5.5	65
232QB...W	83	90	70	76	21	61	93	5.5	65
332QB...W	83	90	70	76	21	61	93	5.5	65
432QB...W	83	90	70	76	21	61	102	5.5	65

Inlets

for panel mounting with unified angled flange, IP67

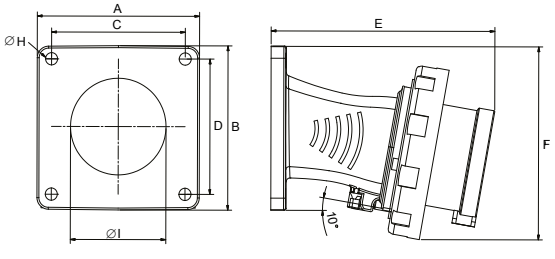
432QBA6W

16 A. Watertight
Housing in plastic (PA). Cable area 1...2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QBA4W	2CMA102596R1000	10	0.12
	Blue	200...250		216QBA6W	2CMA102303R1000		
	Red	380...415		216QBA9W	2CMA102875R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QBA4W	2CMA102615R1000	10	0.22
	Red	380...415		316QBA6W	2CMA102322R1000		
	Blue	200...250		316QBA9W	2CMA102894R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QBA4W	2CMA102636R1000	10	0.24
	Red	346...415		416QBA6W	2CMA102343R1000		
	Blue	208...250		416QBA9W	2CMA102915R1000		

32 A. Watertight
Housing in plastic (PA). Cable area 2.5...6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QBA4W	2CMA102688R1000	10	0.18
	Blue	200...250		232QBA6W	2CMA102362R1000		
	Red	380...415		232QBA9W	2CMA102934R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QBA4W	2CMA102707R1000	10	0.20
	Red	380...415		332QBA6W	2CMA102381R1000		
	Blue	200...250		332QBA9W	2CMA102953R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QBA4W	2CMA102726R1000	10	0.25
	Red	346...415		432QBA6W	2CMA102400R1000		
	Blue	208...250		432QBA9W	2CMA102972R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	K	M
216QBA...W	83	90	70	76	37	50	103	5	52	65
316QBA...W	83	90	70	76	37	52	109	5	56	68
416QBA...W	83	90	70	76	37	55	119	5	62	72
232QBA...W	83	90	70	76	43	62	125	5	66	76
332QBA...W	83	90	70	76	43	62	125	5	66	76
432QBA...W	83	90	70	76	49	59	133	5	72	82

Socket outlet

for wall mounting, IP67

FAST & SAFE

232QRS6W

16 A. Watertight

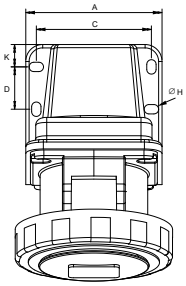
Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 1.5...4 mm²

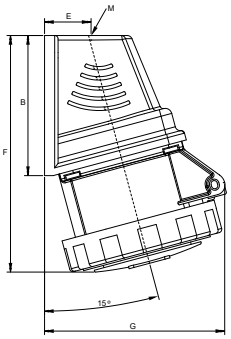
Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QRS4W	2CMA102593R1000	5	0.25
	Blue	200...250		216QRS6W	2CMA102300R1000		
	Red	380...415		216QRS9W	2CMA102872R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QRS4W	2CMA102612R1000	5	0.28
	Red	380...415		316QRS6W	2CMA102319R1000		
	Blue	200...250		316QRS9W	2CMA102891R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QRS4W	2CMA102633R1000	10	0.36
	Red	346...415		416QRS6W	2CMA102340T1000		
	Blue	208...250		416QRS9W	2CMA102912R1000		

32 A. Watertight

Housing in plastic (PA). Fast connection. Cable entry with compression gland. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QRS4W	2CMA102652R1000	5	0.38
	Blue	200...250		232QRS6W	2CMA102359R1000		
	Red	380...415		232QRS9W	2CMA102931R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QRS4W	2CMA102704R1000	5	0.39
	Red	380...415		332QRS6W	2CMA102378R1000		
	Blue	200...250		332QRS9W	2CMA102950R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QRS4W	2CMA102724R1000	5	0.42
	Red	346...415		432QRS6W	2CMA102398R1000		
	Blue	208...250		432QRS9W	2CMA102970R1000		





Dimensions (mm)

Type	A	B	C	D	E	F	G	K	ØH	M
216QRS...W	80.5	83	68	25	23.5	130	97	13.5	5.5	M25x1.5
316QRS...W	80.5	83	68	25	23.5	132	98	13.5	5.5	M25x1.5
416QRS...W	80.5	83	68	25	23.5	133	104	13.5	5.5	M25x1.5
232QRS...W	80.5	83	68	25	23.5	140	108	13.5	5.5	M25x1.5
332QRS...W	80.5	83	68	25	23.5	140	108	13.5	5.5	M25x1.5
432QRS...W	80.5	83	68	25	23.5	143	108	13.5	5.5	M25x1.5

Sockets outlet

for panel mounting with unified straight flange, IP67

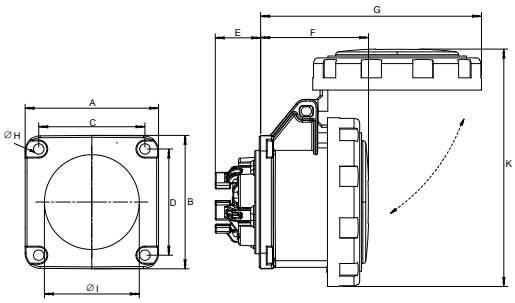
432QR6W

16 A. Watertight
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QR4W	2CMA102591R1000	10	0.13
	Blue	200...250		216QR6W	2CMA102298R1000		
	Red	380...415		216QR9W	2CMA102870R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QR4W	2CMA102610R1000	10	0.14
	Red	380...415		316QR6W	2CMA102317R1000		
	Blue	200...250		316QR9W	2CMA102889R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QR4W	2CMA102631R1000	10	0.15
	Red	346...415		416QR6W	2CMA102338R1000		
	Blue	208...250		416QR9W	2CMA102910R1000		

32 A. Watertight
Housing in plastic (PA). Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QR4W	2CMA102650R1000	10	0.18
	Blue	200...250		232QR6W	2CMA102357R1000		
	Red	380...415		232QR9W	2CMA102929R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QR4W	2CMA102702R1000	10	0.25
	Red	380...415		332QR6W	2CMA102376R1000		
	Blue	200...250		332QR9W	2CMA102948R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QR4W	2CMA102722R1000	10	0.28
	Red	346...415		432QR6W	2CMA102396R1000		
	Blue	208...250		432QR9W	2CMA102968R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	ØI	K
216QR...	75	75	60	60	24	57	102	5.5	44	108
316QR...	75	75	60	60	24	58	109	5.5	49	114
416QR...	75	75	60	60	24	58	117	5.5	56	126
232QR...	75	75	60	60	30	67	128	5.5	56	132
332QR...	75	75	60	60	30	67	128	5.5	56	132
432QR...	75	75	60	60	30	67	133	5.5	60	140

Socket outlet

for panel mounting with unified angled flange, IP67

FAST & SAFE

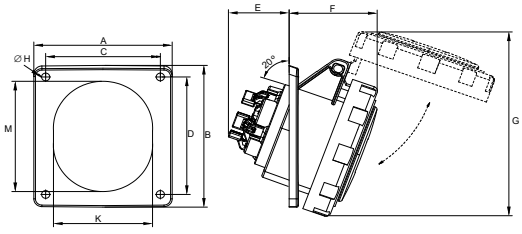
216QRA6W

16 A. Watertight
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216QRA4W	2CMA102592R1000	10	0.17
	Blue	200...250		216QRA6W	2CMA102299R1000		
	Red	380...415		216QRA9W	2CMA102871R1000		
3P+E							
4	Yellow	100...130	50 and 60	316QRA4W	2CMA102611R1000	10	0.19
	Red	380...415		316QRA6W	2CMA102318R1000		
	Blue	200...250		316QRA9W	2CMA102890R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416QRA4W	2CMA102632R1000	10	0.23
	Red	346...415		416QRA6W	2CMA102339R1000		
	Blue	208...250		416QRA9W	2CMA102911R1000		

32 A. Watertight
Housing in plastic (PA). Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232QRA4W	2CMA102651R1000	10	0.24
	Blue	200...250		232QRA6W	2CMA102358R1000		
	Red	380...415		232QRA9W	2CMA102930R1000		
3P+E							
4	Yellow	100...130	50 and 60	332QRA4W	2CMA102703R1000	10	0.26
	Red	380...415		332QRA6W	2CMA102377R1000		
	Blue	200...250		332QRA9W	2CMA102949R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432QRA4W	2CMA102723R1000	10	0.29
	Red	346...415		432QRA6W	2CMA102397R1000		
	Blue	208...250		432QRA9W	2CMA102969R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	K	M
216QRA...W	83	90	70	76	37	50	106	5	52	65
316QRA...W	83	90	70	76	37	52	109	5	56	68
416QRA...W	83	90	70	76	37	55	119	5	62	72
232QRA...W	83	90	70	76	43	62	125	5	66	76
332QRA...W	83	90	70	76	43	62	125	5	66	76
432QRA...W	83	90	70	76	49	59	133	5	72	82

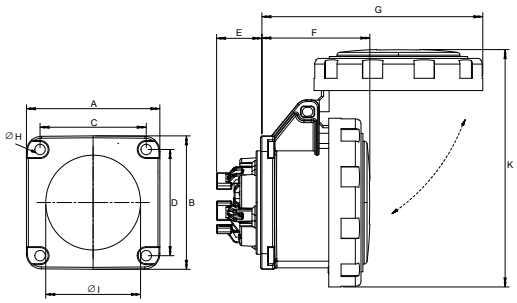
Sockets outlet

for panel mounting with minimized straight flange, IP67

416QRM6W

16 A. Watertight
Housing in plastic (PA). Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
3P+N+E							
5	Yellow	100...130	50 and 60	416QRM4W	2CMA102630R1000	10	0.17
	Red	346...415		416QRM6W	2CMA102337R1000		
	Blue	208...250		416QRM9W	2CMA102909R1000		



Dimensions (mm)

Type	A	B	C	D	E	F	G	ØH	ØI	K
416QRM...W	70	70	56	56	19	57	117	5.5	56	125

Industrial plugs and sockets
Critical & Safe

Switched interlocket socket outlet

Heavy duty, Type MVS...WH
16 A...32A, IP67

Heavy duty, Type MVS...WH
63A...125 A, IP67

Vertical with protection,
Type MPM...W, 16A...32 A, IP67

Vertical with protection,
Type MPR..., 16A...32 A, IP44

Vertical with protection,
Type MPR...W, 16A...32 A, IP67

Vertical prepared for protection,
Type MP...WP, 16A...32 A, IP67

Vertical, Type MVS...
16A...32 A, IP44

Vertical, Type MVS...W
16 A...32A, IP67

Metal enclosed, Type MM
125 A, IP44

Metal enclosed, Type MM...
16 A...32 A, IP44

Metal enclosed, Type MM...
63 A, IP44

Horizontal, Type MHS...
16 A...32 A, IP44

Horizontal, Type MHS
63 A, IP44

Horizontal, Type MHS...W
16A...32 A, IP67

Horizontal, Type MHS..W
63 A, IP67

Surface socket outlet

Vertical with protection,
Type RPM..., 16 A...32 A, IP44

Vertical with protection,
Type RPM...W, 16 A...32 A, IP67

Vertical with protection,
Type RPR..., 16 A...32 A, IP44

Vertical with protection,
Type RPR...W, 16 A...32 A, IP67

Vertical prepared for protection,
Type RP...WP, 16 A...32 A, IP67

Industrial plugs and sockets
Critical & Safe

Our new industrial plugs and sockets complements ABB's strong low-voltage offer. These plugs and sockets are part of CRITICAL & SAFE. CRITICAL & SAFE is a product range suitable for general use in most applications.

"Critical & Safe is the range for applications with high demands on safety, durability and performance. The product range is perfect for applications with frequent connection/disconnection, and to use in public areas. Switch interlock system provides high product and personal safety, thanks to the mechanism it is not possible to turn on the product if a correct plug is not engaged, which in turn means that the risk of personal injuries decreases if by accident coming in contact with live parts. The plug cannot be disengaged if the mechanism is turned on. The only way to engage and disengage the plug from the socket outlet is if the mechanism is switched of.

The housing is made of PBT or aluminum. PBT is a tough plastic material that withstands heavy-duty usage and most chemicals found in industrial environments. The aluminum housing is a mix of aluminium and silicon called silumin, which gives an excellent protection against corrosion while being robust and tough against impact and sunlight."

Switched interlocked socket outlets

Heavy duty

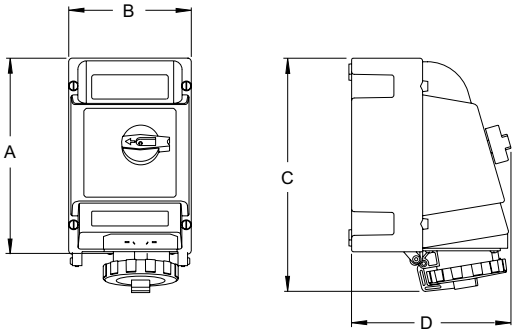
CRITICAL & SAFE

416MVS6WH

16 A. IP67/IP69. Watertight
Housing in plastic (PBT). Cable entry with knock-outs Ø 25+32 mm on top and drill marks on bottom.
Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216MVS1WH	2CMA163255R1000	1	1.75
		Yellow	100...130	50 and 60	216MVS4WH	2CMA163256R1000		
		Blue	200...250		216MVS6WH	2CMA163257R1000		
		Red	380...415		216MVS9WH	2CMA163258R1000		
		Grey	transf		216MVS12WH	2CMA163259R1000		
3P+E								
4		Grey		AC	316MVS1WH	2CMA163261R1000	1	1.79
		Yellow	100...130	50 and 60	316MVS4WH	2CMA163262R1000		
		Black	600...690		316MVS5WH	2CMA163263R1000		
		Red	380...415		316MVS6WH	2CMA163264R1000		
		Black	480...500		316MVS7WH	2CMA163265R1000		
		Blue	200...250		316MVS9WH	2CMA163266R1000		
		Green	100...300	>50	316MVS10WH	2CMA163267R1000		
		Red	440...460	60	316MVS11WH	2CMA163268R1000		
3P+N+E								
5		Grey		AC	416MVS1WH	2CMA163270R1000	1	1.83
		Green	>300...500	>50	416MVS2WH	2CMA163271R1000		
		Red	346...415	50 and 60	416MVS6WH	2CMA163272R1000		
		Black	480...500		416MVS7WH	2CMA101713R1000		
		Blue	208...250		416MVS9WH	2CMA163273R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	D
216MVS...WH	255	160	306	205
316MVS...WH	255	160	306	205
416MVS...WH	255	160	306	205

Switched interlocked socket outlets

Heavy duty

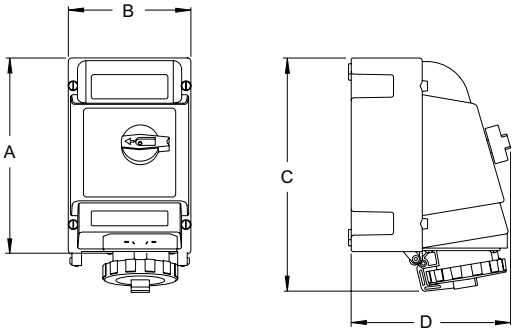
CRITICAL & SAFE

432MVS6WH

32 A. IP67/IP69. Watertight
Housing in plastic (PBT). Cable entry with knock-outs Ø 25+32 mm on top and drill marks on bottom.
Cable area 2.5...10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232MVS1WH	2CMA163275R1000	1	1.87
		Yellow	100...130	50 and 60	232MVS4WH	2CMA105108R1000		
		Blue	200...250		232MVS6WH	2CMA163276R1000		
		Red	380...415		232MVS9WH	2CMA105109R1000		
		Grey	transf.		232MVS12WH	2CMA105110R1000		
3P+E								
4		Grey		AC	332MVS1WH	2CMA163277R1000	1	1.91
		Red	380/440	50/60	332MVS3WH	2CMA100662R1000		
		Yellow	100...130	50 and 60	332MVS4WH	2CMA105111R1000		
		Black	600...690		332MVS5WH	2CMA163278R1000		
		Red	380...415		332MVS6WH	2CMA163279R1000		
		Black	480...500		332MVS7WH	2CMA163280R1000		
		Blue	200...250		332MVS9WH	2CMA163281R1000		
		Green	100...300	>50	332MVS10WH	2CMA105112R1000		
		Red	440...460	60	332MVS11WH	2CMA105113R1000		
3P+N+E								
5		Grey		AC	432MVS1WH	2CMA163284R1000	1	1.95
		Green	>300...500	>50	432MVS2WH	2CMA105114R1000		
		Yellow	100...130	50 and 60	432MVS4WH	2CMA105115R1000		
		Red	346...415		432MVS6WH	2CMA163285R1000		
		Black	480...500		432MVS7WH	2CMA163286R1000		
		Blue	208...250		432MVS9WH	2CMA101701R1000		
		Red	440...460	60	432MVS11WH	2CMA105117R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	D
232MVS...WH	255	160	306	205
332MVS...WH	255	160	306	205
432MVS...WH	255	160	306	205

Switched interlocked socket outlets

Heavy duty

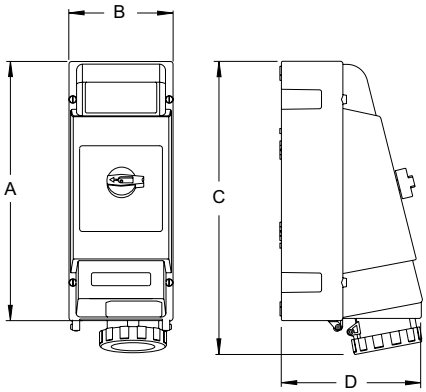
CRITICAL & SAFE

463MVS6WH

63 A. IP67. Watertight
Housing in plastic (PBT). Cable entry with knock-outs Ø 40+50 mm on top and drill marks on bottom.
Cable area 6...25 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263MVS1WH	2CMA162831R1000	1	3.50
		Yellow	100...130	50 and 60	263MVS4WH	2CMA162827R1000		
		Blue	200...250		263MVS6WH	2CMA162828R1000		
		Red	380...415		263MVS9WH	2CMA162829R1000		
3P+E								
4		Grey		AC	363MVS1WH	2CMA162841R1000	1	3.50
		Yellow	100...130	50 and 60	363MVS4WH	2CMA162834R1000		
		Black	600...690		363MVS5WH	2CMA162835R1000		
		Red	380...415		363MVS6WH	2CMA162836R1000		
		Black	480...500		363MVS7WH	2CMA162837R1000		
		Blue	200...250		363MVS9WH	2CMA162838R1000		
		Red	440...460	60	363MVS11WH	2CMA162840R1000		
3P+N+E								
5		Grey		AC	463MVS1WH	2CMA162849R1000	1	3.60
		Yellow	100...130	50 and 60	463MVS4WH	2CMA162844R1000		
		Red	346...415		463MVS6WH	2CMA162845R1000		
		Black	600...690		463MVS5WH	2CMA162805R1000		
		Black	480...500		463MVS7WH	2CMA162846R1000		
		Blue	208...250		463MVS9WH	2CMA162847R1000		
		Red	440...460	60	463MVS11WH	2CMA162848R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	D
263MVS...WH	408	175	463	241
363MVS...WH	408	175	463	241
463MVS...WH	408	175	463	241

Switched interlocked socket outlets

Heavy duty

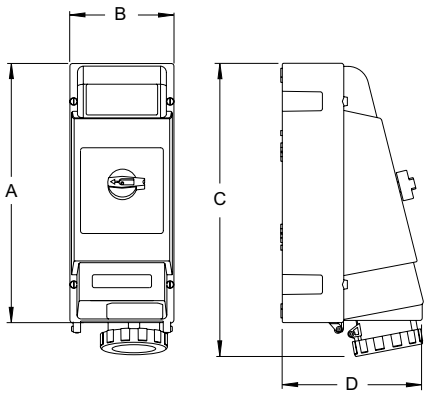
CRITICAL & SAFE

4125MVS6WH

125 A. IP67. Watertight
Housing in plastic (PBT). Cable entry with knock-outs Ø 40+50 mm on top and drill marks on bottom.
Long phase sleeves and pilot sleeve. Cable area 16...70 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	2125MVS1WH	2CMA162740R1000	1	4.20
	Yellow	100...130	50 and 60	2125MVS4WH	2CMA162738R1000		
	Blue	200...250		2125MVS6WH	2CMA162739R1000		
	Red	380...415		2125MVS9WH	2CMA101837R1000		
3P+E							
4	Grey		AC	3125MVS1WH	2CMA162746R1000	1	4.40
	Yellow	100...130	50 and 60	3125MVS4WH	2CMA162741R1000		
	Red	380...415		3125MVS6WH	2CMA162742R1000		
	Black	600...690		3125MVS5WH	2CMA162747R1000		
	Black	480...500		3125MVS7WH	2CMA162743R1000		
	Blue	200...250		3125MVS9WH	2CMA162744R1000		
	Red	440...460	60	3125MVS11WH	2CMA162745R1000		
3P+N+E							
5	Grey		AC	4125MVS1WH	2CMA162796R1000	1	4.50
	Yellow	100...130	50 and 60	4125MVS4WH	2CMA162791R1000		
	Red	346...415		4125MVS6WH	2CMA162792R1000		
	Black	600...690		4125MVS5WH	2CMA162797R1000		
	Black	480...500		4125MVS7WH	2CMA162793R1000		
	Blue	208...250		4125MVS9WH	2CMA162794R1000		
	Red	440...460	60	4125MVS11WH	2CMA162795R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	D
2125MVS...WH	408	175	463	241
3125MVS...WH	408	175	463	241
4125MVS...WH	408	175	463	241

Switched interlocked socket outlets

Metal enclosed

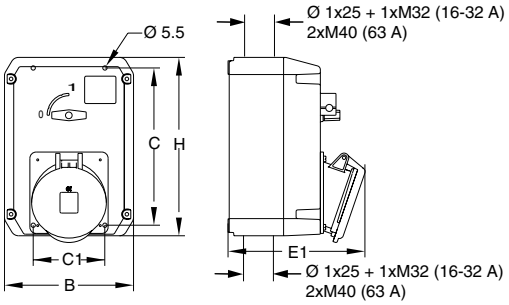
CRITICAL & SAFE

416MM6

16 A. IP44. Splashproof
Housing in aluminum. Cable entry 2 x M25 + 2 x M32. Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
3P+E								
4		Grey		AC	316MM1	2CMA167980R1000	1	1.30
		Yellow	100...130	50 and 60	316MM4	2CMA167973R1000		
		Black	600...690		316MM5	2CMA167974R1000		
		Red	380...415		316MM6	2CMA167975R1000		
		Black	480...500		316MM7	2CMA167976R1000		
		Blue	200...250		316MM9	2CMA167977R1000		
		Green	100...300	>50	316MM10	2CMA167978R1000		
		Red	440...460	60	316MM11	2CMA167979R1000		
3P+N+E								
5		Grey		AC	416MM1	2CMA167988R1000	1	1.32
		Green	>300...500	>50	416MM2	2CMA167981R1000		
		Black	600...690	50 and 60	416MM5	2CMA126695R1000		
		Red	346...415		416MM6	2CMA167984R1000		
		Blue	208...250		416MM9	2CMA167986R1000		
		Red	440...460	60	416MM11	2CMA167987R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	B	C	C1	E1	H
316MM...	135	165	91.5	125	198
416MM...	135	165	91.5	125	198

Switched interlocked socket outlets

Metal enclosed

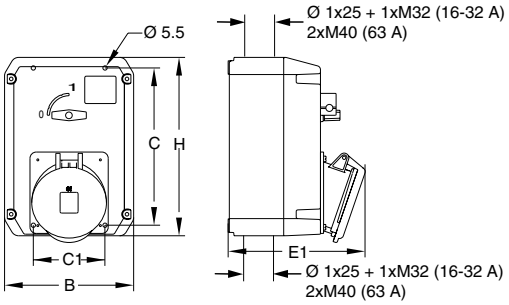
CRITICAL & SAFE

416MM6

32 A. IP44. Splashproof
Housing in aluminum. Cable entry 2 x M25 + 2 x M32. Cable area 2.5...10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
3P+E								
4		Grey		AC	332MM1	2CMA167998R1000	1	1.42
		Red	380/440	50/60	332MM3	2CMA167990R1000		
		Yellow	100...130	50 and 60	332MM4	2CMA167991R1000		
		Black	600...690		332MM5	2CMA167992R1000		
		Red	380...415		332MM6	2CMA167993R1000		
		Black	480...500		332MM7	2CMA167994R1000		
		Blue	200...250		332MM9	2CMA167995R1000		
		Green	100...300	>50	332MM10	2CMA167996R1000		
		Red	440...460	60	332MM11	2CMA167997R1000		
3P+N+E								
5		Grey		AC	432MM1	2CMA168006R1000	1	1.48
		Black	600...690	50 and 60	432MM5	2CMA126696R1000		
		Red	346...415		432MM6	2CMA168002R1000		
		Black	480...500		432MM7	2CMA168003R1000		
		Blue	208...250		432MM9	2CMA168004R1000		
		Red	440...460	60	432MM11	2CMA100027R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	B	C	C1	E1	H
332MM...	135	165	91.5	135	198
432MM...	135	165	91.5	135	198

Switched interlocked socket outlets

Metal enclosed

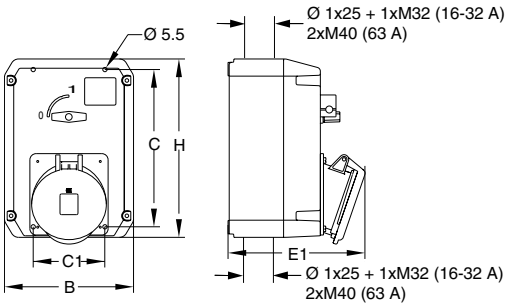
CRITICAL & SAFE

263MM6

63 A. IP44. Splashproof
Housing in aluminum. Cable entry 4 x M40.Cable area 6...25 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263MM1	2CMA168033R1000	1	2.20
		Yellow	100...130	50 and 60	263MM4	2CMA168030R1000		
		Blue	200...250		263MM6	2CMA168031R1000		
		Red	380...415		263MM9	2CMA168032R1000		
3P+E								
4		Grey		AC	363MM1	2CMA168040R1000	1	2.22
		Yellow	100...130	50 and 60	363MM4	2CMA168034R1000		
		Black	600...690		363MM5	2CMA168035R1000		
		Red	380...415		363MM6	2CMA168036R1000		
		Black	480...500		363MM7	2CMA168037R1000		
		Blue	200...250		363MM9	2CMA168038R1000		
		Red	440...460	60	363MM11	2CMA168039R1000		
3P+N+E								
5		Grey		AC	463MM1	2CMA168046R1000	1	2.35
		Black	600...690	50 and 60	463MM5	2CMA126697R1000		
		Red	346...415		463MM6	2CMA168042R1000		
		Black	480...500		463MM7	2CMA168043R1000		
		Blue	208...250		463MM9	2CMA168044R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	B	C	C1	E1	H
263MM...	165	201	91.5	183	228
363MM...	165	201	91.5	183	228
463MM...	165	201	91.5	183	228

Switched interlocked socket outlets

Metal enclosed

CRITICAL & SAFE

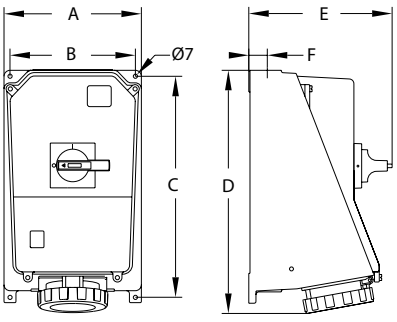
4125MM6

125 A. IP44. Splashproof

Housing in aluminum. Long phase sleeves and pilot sleeve. Cable entry 1 x M50. Cable area 16...70 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
	Blue	200...250	50 and 60	2125MM6	2CMA168047R1000	1	7.70
3P+E							
4	Grey		AC	3125MM1	2CMA168052R1000	1	7.90
	Black	600...690	50 and 60	3125MM5	2CMA168061R1000		
	Red	380...415		3125MM6	2CMA168048R1000		
	Black	480...500		3125MM7	2CMA168049R1000		
	Blue	200...250		3125MM9	2CMA168050R1000		
	Red	440...460	60	3125MM11	2CMA168051R1000		
3P+N+E							
5	Grey		AC	4125MM1	2CMA168056R1000	1	8.10
	Black	600...690	50 and 60	4125MM5	2CMA126698R1000		
	Red	346...415		4125MM6	2CMA168053R1000		
	Black	480...500		4125MM7	2CMA168054R1000		
	Red	440...460	60	4125MM11	2CMA168055R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	D	E	F
2125MM...	230	210	370	405	**230**	**31**
3125MM...	230	210	370	405	**230**	**31**
4125MM...	230	210	370	405	**230**	**31**

Switched interlocked socket outlets
Horizontal

CRITICAL & SAFE

432MHS6

16 A. IP44. Splashproof
Housing in plastic (PBT). Cable entry with knock-outs Ø 25 mm/M25. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage V	Frequency Hz	Type	Order Code	Pkg qty	Weight pkg (1pce) kg
2P+E							
3	Grey		AC	216MHS1	2CMA167626R1000	1	0.55
	Yellow	100...130	50 and 60	216MHS4	2CMA167622R1000		
	Blue	200...250		216MHS6	2CMA167623R1000		
	Red	380...415		216MHS9	2CMA167624R1000		
	Grey	transf.		216MHS12	2CMA167625R1000		
3P+E							
4	Grey		AC	316MHS1	2CMA167636R1000	1	0.58
	Yellow	100...130	50 and 60	316MHS4	2CMA167629R1000		
	Black	600...690		316MHS5	2CMA167630R1000		
	Red	380...415		316MHS6	2CMA167631R1000		
	Black	480...500		316MHS7	2CMA167632R1000		
	Blue	200...250		316MHS9	2CMA167633R1000		
	Green	100...300	>50	316MHS10	2CMA167634R1000		
	Red	440...460	60	316MHS11	2CMA167635R1000		
3P+N+E							
5	Grey		AC	416MHS1	2CMA167644R1000	1	0.61
	Green	100...300	>50	416MHS2	2CMA167637R1000		
	Black	600...690	50 and 60	416MHS5	2CMA126684R1000		
	Red	346...415		416MHS6	2CMA167640R1000		
	Blue	200...250		416MHS9	2CMA167642R1000		

32 A. IP44. Splashproof
Housing in plastic (PBT). Cable entry with knock-outs Ø 25 mm/M25. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage V	Frequency Hz	Type	Order Code	Pkg qty	Weight pkg (1pce) kg
2P+E							
3	Grey		AC	232MHS1	2CMA167672R1000	1	0.60
	Yellow	100...130	50 and 60	232MHS4	2CMA167668R1000		
	Blue	200...250		232MHS6	2CMA167669R1000		
3P+E							
4	Grey		AC	332MHS1	2CMA167682R1000	1	0.63
	Black	600...690	50 and 60	332MHS5	2CMA167676R1000		
	Red	380...415		332MHS6	2CMA167677R1000		
	Black	480...500		332MHS7	2CMA167678R1000		
	Blue	200...250		332MHS9	2CMA167679R1000		
3P+N+E							
5	Grey		AC	432MHS1	2CMA167690R1000	1	0.66
	Black	600...690	50 and 60	432MHS5	2CMA126685R1000		
	Red	346...415		432MHS6 *)	2CMA167686R1000		

- The switch insert can be equipped with an auxiliary contact, (see page 110)

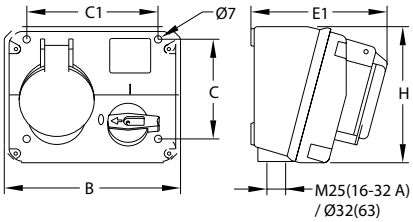
Switched interlocked socket outlets
Horizontal

463MHS6

63 A. IP44. Splashproof
Housing in plastic (PBT). Cable entry with knock-outs Ø 32 mm. Cable area 6...25 mm²

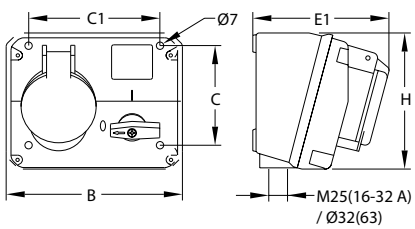
Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263MHS1	2CMA167717R1000	1	2.00
		Yellow	100...130	50 and 60	263MHS4	2CMA167714R1000		
		Blue	200...250		263MHS6	2CMA167715R1000		
3P+E								
4		Grey		AC	363MHS1	2CMA167725R1000	1	2.00
		Black	600...690	50 and 60	363MHS5	2CMA167719R1000		
		Red	380...415		363MHS6	2CMA167721R1000		
		Black	480...500		363MHS7	2CMA167722R1000		
		Blue	200...250		363MHS9	2CMA167723R1000		
3P+N+E								
5		Grey		AC	463MHS1	2CMA167731R1000	1	2.10
		Black	600...690	50 and 60	463MHS5	2CMA126686R1000		
		Red	346...415		463MHS6	2CMA167727R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	B	C	C1	E1	H
263MHS...	206	132	152	168	168
363MHS...	206	132	152	168	168
463MHS...	206	132	152	168	168



Dimensions (mm)

Type	B	C	C1	E1	H
216MHS...416MHS...	168	91	125	116	129
232MHS...432MHS...	168	91	125	126	129

Switched interlocked socket outlets
Horizontal

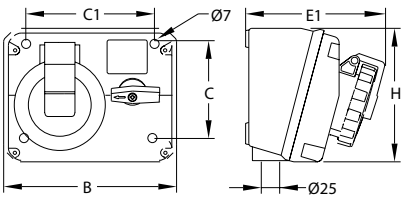
CRITICAL & SAFE

216MHS6W

16 A. IP67. Watertight
Housing in plastic (PBT). Cable entry with knock-outs Ø 25 mm up/M25 down. Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage V	Frequency Hz	Type	Order Code	Pkg qty	Weight pkg (1pce) kg
2P+E								
3		Grey		AC	216MHS1W	2CMA167804R1000	1	0.55
		Yellow	100...130	50 and 60	216MHS4W	2CMA167800R1000		
		Blue	200...250		216MHS6W	2CMA167801R1000		
		Black	480...500		216MHS7W	2CMA101715R1000		
		Red	380...415		216MHS9W	2CMA167802R1000		
		Grey	transf.		216MHS12W	2CMA167803R1000		
3P+E								
4		Grey		AC	316MHS1W	2CMA167814R1000	1	0.58
		Green	>300...500	>50	316MHS2W	2CMA167805R1000		
		Red	380/440	50/60	316MHS3W	2CMA167806R1000		
		Yellow	100...130	50 and 60	316MHS4W	2CMA167807R1000		
		Black	600...690		316MHS5W	2CMA167808R1000		
		Red	380...415		316MHS6W	2CMA167809R1000		
		Black	480...500		316MHS7W	2CMA167810R1000		
		Blue	200...250		316MHS9W	2CMA167811R1000		
		Green	100...300	>50	316MHS10W	2CMA167812R1000		
		Red	440...460	60	316MHS11W	2CMA167813R1000		
3P+N+E								
5		Grey		AC	416MHS1W	2CMA167822R1000	1	0.61
		Green	>300...500	>50	416MHS2W	2CMA167815R1000		
		Red	380/440	50/60	416MHS3W	2CMA167816R1000		
		Yellow	100...130	50 and 60	416MHS4W	2CMA167817R1000		
		Red	346...415		416MHS6W	2CMA167818R1000		
		Black	480...500		416MHS7W	2CMA167819R1000		
		Blue	208...250		416MHS9W	2CMA167820R1000		
		Red	440...460	60	416MHS11W	2CMA167821R1000		

- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	B	C	C1	E1	H
216MHS...W	168	91	125	116	129
316MHS...W	168	91	125	116	129
416MHS...W	168	91	125	116	129

Switched interlocked socket outlets

Horizontal

CRITICAL & SAFE

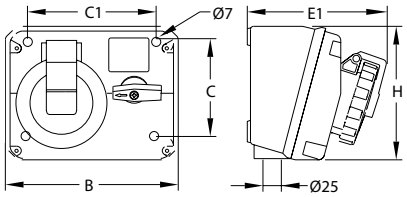
432MHS6W

32 A. IP67. Watertight

Housing in plastic (PBT). Cable entry with knock-outs Ø 25 mm up/M25 down. Cable area 2.5...10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232MHS1W	2CMA167851R1000	1	0.60
		Yellow	100...130	50 and 60	232MHS4W	2CMA167847R1000		
		Blue	200...250		232MHS6W	2CMA167848R1000		
		Red	380...415		232MHS9W	2CMA167849R1000		
		Grey	transf.		232MHS12W	2CMA167850R1000		
3P+E								
4		Grey		AC	332MHS1W	2CMA167814R1000	1	0.63
		Green	>300...500	>50	332MHS2W	2CMA167805R1000		
		Red	380/440	50/60	332MHS3W	2CMA167806R1000		
		Yellow	100...130	50 and 60	332MHS4W	2CMA167807R1000		
		Black	600...690		332MHS5W	2CMA167808R1000		
		Red	380...415		332MHS6W	2CMA167809R1000		
		Black	480...500		332MHS7W	2CMA167810R1000		
		Blue	200...250		332MHS9W	2CMA167811R1000		
		Green	100...300	>50	332MHS10W	2CMA167812R1000		
		Red	440...460	60	332MHS11W	2CMA167813R1000		
3P+N+E								
5		Grey		AC	432MHS1W	2CMA167869R1000	1	0.66
		Green	>300...500	>50	432MHS2W	2CMA167862R1000		
		Red	380/440	50/60	432MHS3W	2CMA167863R1000		
		Yellow	100...130	50 and 60	432MHS4W	2CMA167864R1000		
		Red	346...415		432MHS6W	2CMA167865R1000		
		Black	480...500		432MHS7W	2CMA167866R1000		
		Blue	208...250		432MHS9W	2CMA167867R1000		
		Red	440...460	60	432MHS11W	2CMA167868R1000		

- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	B	C	C1	E1	H
232MHS...W	168	91	125	136	129
332MHS...W	168	91	125	136	129
432MHS...W	168	91	125	116	129

Switched interlocked socket outlets
Horizontal

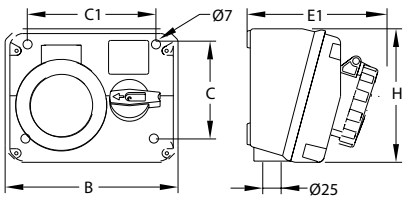
CRITICAL & SAFE

263MHS6W

63 A. IP67. Watertight
Housing in plastic (PBT). Cable entry with knock-outs knock-outs Ø 33 mm up/ Ø 33 down. Cable area 6...25 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	263MHS1W	2CMA167896R1000	1	2.00
	Yellow	100...130	50 and 60	263MHS4W	2CMA167893R1000		
	Blue	200...250		263MHS6W	2CMA167894R1000		
	Red	380...415		263MHS9W	2CMA167895R1000		
3P+E							
4	Grey		AC	363MHS1W	2CMA167903R1000	1	2.00
	Yellow	100...130	50 and 60	363MHS4W	2CMA167897R1000		
	Black	600...690		363MHS5W	2CMA167898R1000		
	Red	380...415		363MHS6W	2CMA167899R1000		
	Black	480...500		363MHS7W	2CMA167900R1000		
	Blue	200...250		363MHW9W	2CMA167901R1000		
	Red	440...460	60	363MHS11W	2CMA167901R1000		
3P+N+E							
5	Grey		AC	463MHS1W	2CMA167909R1000	1	2.10
	Yellow	100...130	50 and 60	463MHS4W	2CMA167904R1000		
	Red	346...415		463MHS6W	2CMA167905R1000		
	Black	480...500		463MHS7W	2CMA167906R1000		
	Blue	208...250		463MHS9W	2CMA167907R1000		
	Red	440...460	60	463MHS11W	2CMA167908R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	B	C	C1	E1	H
263MHS...W	206	132	152	182	168
363MHS...W	206	132	152	182	168
463MHS...W	206	132	152	182	168

Switched interlocked socket outlets

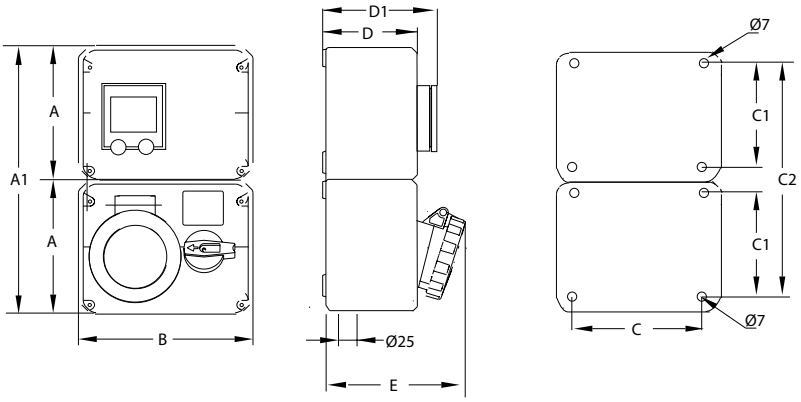
With protection

CRITICAL & SAFE

363MPR6W

63 A. IP67. Watertight
Housing in plastic (PBT). Cable entry with knock-outs Ø 32 mm up and down. Cable area 6...25 mm^2.
Delivered with RCD.

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Yellow	100...130	50 and 60	263MPR4W	2CMA101940R1000	1	1.90
		Blue	200...250		263MPR6W	2CMA101941R1000		
		Red	380...415		263MPR9W	2CMA101942R1000		
3P+E								
5		Yellow	100...130	50 and 60	363MPR4W	2CMA101937R1000	1	1.90
		Red	346...415		363MPR6W	2CMA101938R1000		
		Blue	200...250		363MPR9W	2CMA101939R1000		
3P+N+E								
5		Yellow	100...130	50 and 60	463MPR4W	2CMA101935R1000	1	1.90
		Red	346...415		463MPR6W	2CMA101934R1000		
		Blue	208...250		463MPR9W	2CMA101936R1000		



Dimensions (mm)

Type	A	A1	B	C	C1	C2	D	D1	E
263MPR...W	168	337	206	152	132	300	108	138	175
363MPR...W	168	337	206	152	132	300	108	138	175
463MPR...W	168	337	206	152	132	300	108	138	175

Switched interlocked socket outlets
Vertical

CRITICAL & SAFE

432MVS6

16 A. IP44. Splashproof
Housing in plastic (PBT). Cable entry with knock-outs Ø 25 mm. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	216MVS1	2CMA167649R1000	1	0.63
	Yellow	100...130	50 and 60	216MVS4	2CMA167645R1000		
	Blue	200...250		216MVS6	2CMA167646R1000		
	Red	380...415		216MVS9	2CMA167647R1000		
	Grey	transf.		216MVS12	2CMA167648R1000		
3P+E							
4	Grey		AC	316MVS1	2CMA167659R1000	1	0.67
	Yellow	100...130	50 and 60	316MVS4	2CMA167652R1000		
	Black	600...690		316MVS5	2CMA167653R1000		
	Red	380...415		316MVS6	2CMA167654R1000		
	Black	480...500		316MVS7	2CMA167655R1000		
	Blue	200...250		316MVS9	2CMA167656R1000		
	Green	100...300	>50	316MVS10	2CMA167657R1000		
	Red	440...460	60	316MVS11	2CMA167658R1000		
3P+N+E							
5	Grey		AC	416MVS1	2CMA167667R1000	1	0.70
	Green	>300...500	>50	416MVS2	2CMA167660R1000		
	Black	600...690	50 and 60	416MVS5	2CMA126690R1000		
	Red	346...415		416MVS6	2CMA167663R1000		
	Blue	200...250		416MVS9	2CMA167665R1000		

32 A. IP44. Splashproof
Housing in plastic (PBT). Cable entry with knock-outs Ø 25 mm. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	232MVS1	2CMA167695R1000	1	0.69
	Yellow	100...130	50 and 60	232MVS4	2CMA167691R1000		
	Blue	200...250		232MVS6	2CMA167692R1000		
3P+E							
4	Grey		AC	332MVS1	2CMA167705R1000	1	0.72
	Black	600...690	50 and 60	332MVS5	2CMA167699R1000		
	Red	380...415		332MVS6	2CMA167700R1000		
	Black	480...500		332MVS7	2CMA167701R1000		
	Blue	200...250		332MVS9	2CMA167702R1000		
3P+N+E							
5	Grey		AC	432MVS1	2CMA167713R1000	1	0.76
	Black	600...690	50 and 60	432MVS5	2CMA126691R1000		
	Red	346...415		432MVS6	2CMA167709R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)

Switched interlocked socket outlets

Vertical

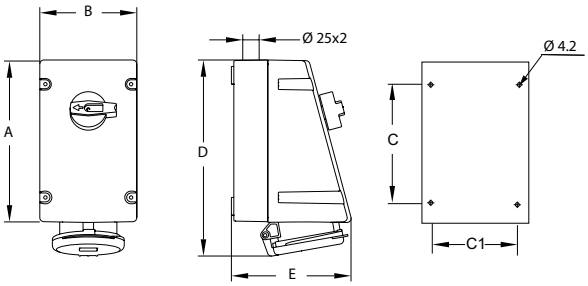
216MVS6W

16 A. IP67. Watertight

Housing in plastic (PBT). Cable entry with knock-outs Ø 25 mm. Cable area 1.5...4 mm²

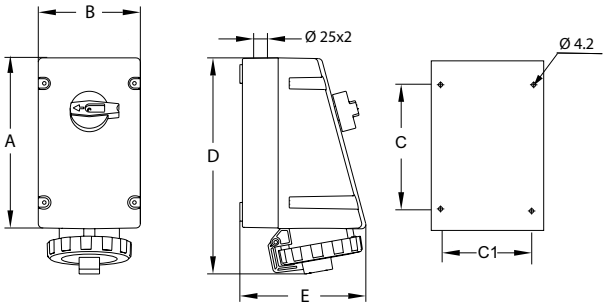
Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216MVS1W	2CMA167827R1000	1	0.63
		Yellow	100...130	50 and 60	216MVS4W	2CMA167823R1000		
		Blue	200...250		216MVS6W	2CMA167824R1000		
		Red	380...415		216MVS9W	2CMA167825R1000		
		Grey	transf.		216MVS12W	2CMA167826R1000		
3P+E								
4		Grey		AC	316MVS1W	2CMA167838R1000	1	0.67
		Green	>300...500	>50	316MVS2W	2CMA167828R1000		
		Red	380/440	50/60	316MVS3W	2CMA167829R1000		
		Yellow	100...130	50 and 60	316MVS4W	2CMA167830R1000		
		Black	600...690		316MVS5W	2CMA167831R1000		
		Red	380...415		316MVS6W	2CMA167832R1000		
		Black	480...500		316MVS7W	2CMA167833R1000		
		Blue	200...250		316MVS9W	2CMA167834R1000		
		Green	100...300	>50	316MVS10W	2CMA167835R1000		
		Red	440...460	60	316MVS11W	2CMA167836R1000		
3P+N+E								
5		Grey		AC	416MVS1W	2CMA167846R1000	1	0.70
		Green	>300...500	>50	416MVS2W	2CMA167839R1000		
		Red	380/440	50/60	416MVS3W	2CMA167840R1000		
		Yellow	100...130	50 and 60	416MVS4W	2CMA167841R1000		
		Red	346...415		416MVS6W	2CMA167842R1000		
		Black	480...500		416MVS7W	2CMA167843R1000		
		Blue	208...250		416MVS9W	2CMA167844R1000		
		Red	440...460	60	416MVS11W	2CMA167845R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	C1	D	E
216MVS...416MVS...	199.5	120	170	90	235	149
232MVS...432MVS...	199.5	120	170	90	235	149



Dimensions (mm)

Type	A	B	C	C1	D	E
216MVS...W	199.5	120	170	90	253	149
316MVS...W	199.5	120	170	90	253	149
416MVS...W	199.5	120	170	90	253	149

Switched interlocked socket outlets
Vertical

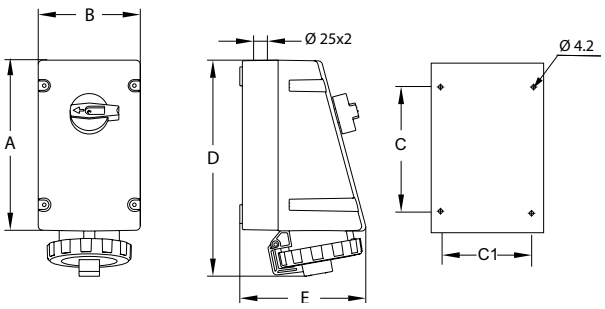
CRITICAL & SAFE

432MHS6W

32 A. IP67. Watertight
Housing in plastic (PBT). Cable entry with knock-outs Ø 25 mm. Cable area 2.5...10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232MVS1W	2CMA167874R1000	1	0.69
		Yellow	100...130	50 and 60	232MVS4W	2CMA167870R1000		
		Blue	200...250		232MVS6W	2CMA167871R1000		
		Red	380...415		232MVS9W	2CMA167872R1000		
		Grey	transf.		232MVS12W	2CMA167873R1000		
3P+E								
4		Grey		AC	332MVS1W	2CMA167884R1000	1	0.72
		Green	>300...500	>50	332MVS2W	2CMA167875R1000		
		Red	380/440	50/60	332MVS3W	2CMA167876R1000		
		Yellow	100...130	50 and 60	332MVS4W	2CMA167877R1000		
		Black	600...690		332MVS5W	2CMA167878R1000		
		Red	380...415		332MVS6W	2CMA167879R1000		
		Black	480...500		332MVS7W	2CMA167880R1000		
		Blue	200...250		332MVS9W	2CMA167881R1000		
		Green	100...300	>50	332MVS10W	2CMA167882R1000		
		Red	440...460	60	332MVS11W	2CMA167883R1000		
3P+N+E								
5		Grey		AC	432MVS1W	2CMA167892R1000	1	0.76
		Green	>300...500	>50	432MVS2W	2CMA167885R1000		
		Red	380/440	50/60	432MVS3W	2CMA167886R1000		
		Yellow	100...130	50 and 60	432MVS4W	2CMA167887R1000		
		Red	346...415		432MVS6W	2CMA167888R1000		
		Black	480...500		432MVS7W	2CMA167889R1000		
		Blue	208...250		432MVS9W	2CMA167890R1000		
		Red	440...460	60	432MVS11W	2CMA167891R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	C1	D	E
232MVS...W	199.5	120	170	90	253	149
332MVS...W	199.5	120	170	90	253	149
432MVS...W	199.5	120	170	90	253	149

Switched interlocked socket outlets

Vertical with protection

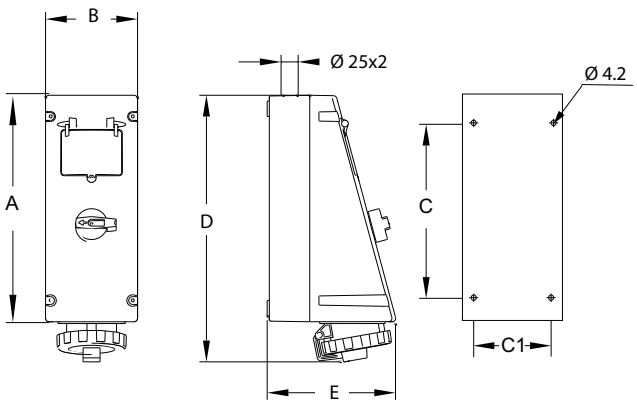
CRITICAL & SAFE

216MPM6W

16 A. IP67. Watertight
Housing in plastic (PBT). Contains MCB series S201/S203 characteristic C.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Yellow	100...130	50 and 60	216MPM4W	2CMA167948R1000	1	1.74
		Blue	200...250		216MPM6W	2CMA167949R1000		
		Red	380...415		216MPM9W	2CMA167950R1000		
		Grey	transf.		216MPM12W	2CMA167951R1000		
3P+E								
4		Green	>300...500	>50	316MPM2W	2CMA167953R1000	1	1.77
		Red	380/440	50/60	316MPM3W	2CMA167954R1000		
		Yellow	100...130	50 and 60	316MPM4W	2CMA167955R1000		
		Black	600...690		316MPM5W	2CMA167956R1000		
		Red	380...415		316MPM6W	2CMA167957R1000		
		Black	480...500		316MPM7W	2CMA167958R1000		
		Blue	200...250		316MPM9W	2CMA167959R1000		
		Green	100...300	>50	316MPM10W	2CMA167960R1000		
		Red	440...460	60	316MPM11W	2CMA167961R1000		
3P+N+E								
5		Green	>300...500	>50	416MPM2W	2CMA167963R1000	1	1.79
		Red	380/440	50/60	416MPM3W	2CMA167964R1000		
		Yellow	100...130	50 and 60	416MPM4W	2CMA167965R1000		
		Red	346...415		416MPM6W	2CMA167966R1000		
		Black	480...500		416MPM7W	2CMA167967R1000		
		Blue	208...250		416MPM9W	2CMA167968R1000		
		Red	440...460	60	416MPM11W	2CMA167969R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	C1	D	E
216MPM...W	320	130	290	100	375	182
316MPM...W	320	130	290	100	375	182
416MPM...W	320	130	290	100	375	182

Switched interlocked socket outlets

Vertical with protection

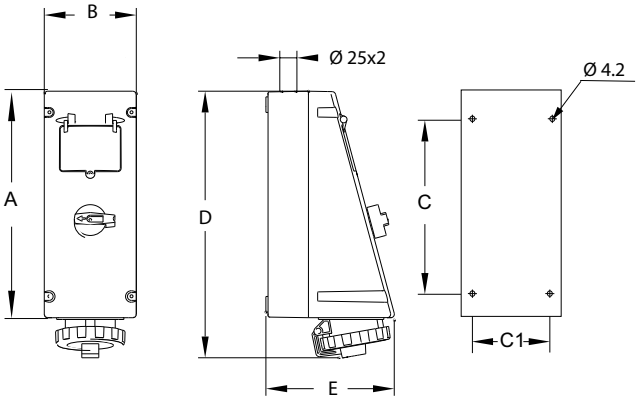
CRITICAL & SAFE

432MPM6W

32 A. IP67. Watertight
Housing in plastic (PBT). Contains MCB series S201/S203 characteristic C.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232MPM4W	2CMA168007R1000	1	1.80
	Blue	200...250		232MPM6W	2CMA168008R1000		
	Red	380...415		232MPM9W	2CMA168009R1000		
	Grey	transf.		232MPM12W	2CMA168010R1000		
3P+E							
4	Green	>300...500	>50	332MPM2W	2CMA168012R1000	1	1.81
	Red	380/440	50/60	332MPM3W	2CMA168013R1000		
	Yellow	100...130	50 and 60	332MPM4W	2CMA168014R1000		
	Black	600...690		332MPM5W	2CMA168015R1000		
	Red	380...415		332MPM6W	2CMA168016R1000		
	Black	480...500		332MPM7W	2CMA168017R1000		
	Blue	200...250		332MPM9W	2CMA168018R1000		
	Green	100...300	>50	332MPM10W	2CMA168019R1000		
	Red	440...460	60	332MPM11W	2CMA168020R1000		
3P+N+E							
5	Green	>300...500	>50	432MPM2W	2CMA168022R1000	1	1.83
	Red	380/440	50/60	432MPM3W	2CMA168023R1000		
	Yellow	100...130	50 and 60	432MPM4W	2CMA168024R1000		
	Red	346...415		432MPM6W	2CMA168025R1000		
	Black	480...500		432MPM7W	2CMA168026R1000		
	Blue	208...250		432MPM9W	2CMA168027R1000		
	Red	440...460	60	432MPM11W	2CMA168028R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	C1	D	E
232MPM...W	320	130	290	100	375	182
332MPM...W	320	130	290	100	375	182
432MPM...W	320	130	290	100	375	182

Switched interlocked socket outlets

Vertical with protection

CRITICAL & SAFE

216MPR6

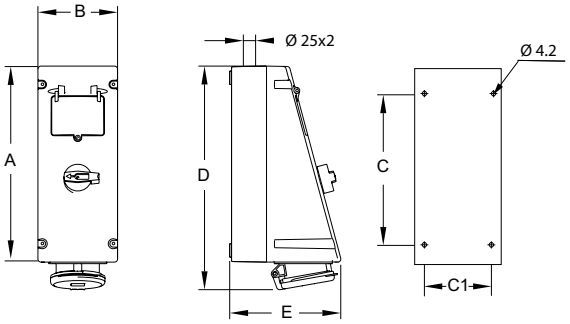
16 A. IP44. Splashproof
Housing in plastic (PBT). Contains RCD 25 A/0.03 A, type A.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	216MPR6	2CMA167756R1000	1	1.71
3P+E							
4	Red	380...415	50 and 60	316MPR6	2CMA167764R1000	1	1.74
	Blue	200...250		316MPR9	2CMA167766R1000		
3P+N+E							
5	Red	346...415	50 and 60	416MPR6	2CMA167772R1000	1	1.76

32 A. IP44. Splashproof
Housing in plastic (PBT). Contains RCD 40 A/0.03 A, type A.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	232MPR6	2CMA167778R1000	1	1.77
3P+E							
4	Red	380...415	50 and 60	332MPR6	2CMA167786R1000	1	1.78
	Blue	200...250		332MPR9	2CMA167788R1000		
3P+N+E							
5	Red	346...415	50 and 60	432MPR6W	2CMA167795R1000	1	1.80

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	C1	D	E
216MPR...	320	130	290	100	366	182
316MPR...	320	130	290	100	366	182
416MPR...	320	130	290	100	366	182

Switched interlocked socket outlets

Vertical with protection

CRITICAL & SAFE

216MPR6W

16 A. IP67. Watertight
Housing in plastic (PBT). Contains RCD 25 A / 0.03 A, type A.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216MPR4W	2CMA168057R1000	1	1.77
	Blue	200...250		216MPR6W	2CMA168058R1000		
	Grey	transf		216MPR12W	2CMA168060R1000		
3P+E							
4	Yellow	100...130	50 and 60	316MPR4W	2CMA168064R1000	1	1.77
	Red	380...415		316MPR6W	2CMA168066R1000		
	Blue	200...250		316MPR9W	2CMA168068R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416MPR4W	2CMA168074R1000	1	1.79
	Red	346...415		416MPR6W	2CMA168075R1000		
	Blue	208...250		416MPR9W	2CMA168077R1000		

32 A. IP67. Watertight
Housing in plastic (PBT). Contains RCD 40 A / 0.03 A, type A.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232MPR4W	2CMA168080R1000	1	1.80
	Blue	200...250		232MPR6W	2CMA168081R1000		
	Grey	transf.		232MPR12W	2CMA168083R1000		
3P+E							
4	Red	380/440	50/60	332MPR3W	2CMA168086R1000	1	1.81
	Yellow	100...130	50 and 60	332MPR4W	2CMA168087R1000		
	Red	380...415		332MPR6W	2CMA168089R1000		
	Blue	200...250		332MPR9W	2CMA168091R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432MPR4W	2CMA168097R1000	1	1.83
	Red	346...415		432MPR6W	2CMA168098R1000		
	Blue	208...250		432MPR9W	2CMA168100R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)

Switched interlocked socket outlets

Vertical prepared for protection

CRITICAL & SAFE

432MP6WP

16 A. IP67. Watertight

Housing in plastic (PBT). Cable entry with knock-outs 2 x Ø 25 mm. Cable area 1.5...4 mm².
Delivered without MCB/RCD. Space for 4 modules.

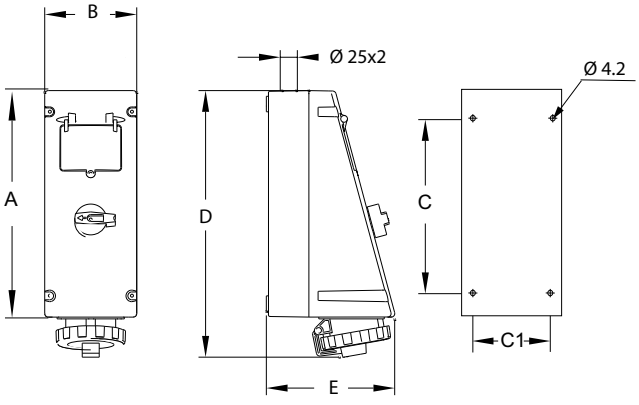
Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	216MP6WP	2CMA162878R1000	1	1.74
3P+N+E							
5	Red	346...415	50 and 60	416MP6WP	2CMA162895R1000	1	1.79
	Black	480...500		416MP7WP	2CMA162896R1000		

32 A. IP67. Watertight

Housing in plastic (PBT). Cable entry with knock-outs 2 x Ø 25 mm. Cable area 2.5...10 mm².
Delivered without MCB/RCD. Space for 4 modules.

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	232MP6WP	2CMA163172R1000	1	1.90
3P+N+E							
5	Red	346...415	50 and 60	432MP6WP	2CMA163193R1000	1	1.95
	Black	480...500		432MP7WP	2CMA163194R1000		

- The switch handle is padlockable (5-8 mm shackle)
- The switch insert can be equipped with an auxiliary contact, (see page 110)



Dimensions (mm)

Type	A	B	C	C1	D	E
216MPR...W...416MPR...W	320	130	290	100	375	182
416MPR...W...432MPR...W	320	130	290	100	375	182
216MP...WP...432MP...WP	320	130	290	100	375	182

Surface socket outlets
Vertical with protection

CRITICAL & SAFE

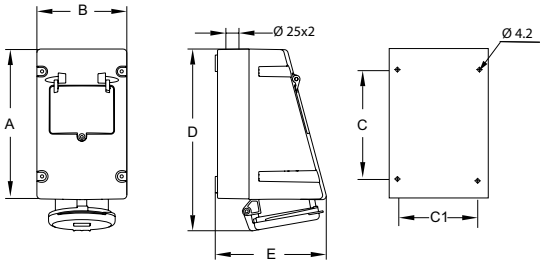
216RPM6

16 A. IP44. Splashproof
Housing in plastic (PBT). Contains MCB type S200 characteristic C.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	216RPM6	2CMA168133R1000	1	1.13
3P+E							
4	Red	380...415	50 and 60	316RPM6	2CMA168141R1000	1	1.16
	Blue	200...250		316RPM9	2CMA168143R1000		
3P+N+E							
5	Red	346...415	50 and 60	416RPM6	2CMA168150R1000	1	1.18

32 A. IP44. Splashproof
Housing in plastic (PBT). Contains MCB type S200 characteristic C.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	232RPM6	2CMA168156R1000	1	1.19
3P+E							
4	Red	380...415	50 and 60	332RPM6	2CMA168164R1000	1	1.20
	Blue	200...250		332RPM9	2CMA168166R1000		
3P+N+E							
5	Red	346...415	50 and 60	432RPM6	2CMA168173R1000	1	1.22



Dimensions (mm)

Type	A	B	C	C1	D	E
216RPM...416RPM...	199.5	120	170	90	243	149
232RPM...432RPM...	199.5	120	170	90	243	149

Surface socket outlets

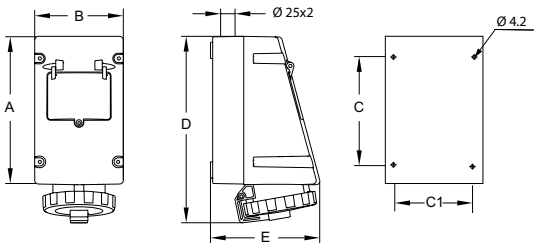
Vertical with protection

CRITICAL & SAFE

216RPM6W

16 A. IP67. Watertight
Housing in plastic (PBT). Contains MCB series S201/S203 characteristic C.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 1.5...4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Yellow	100...130	50 and 60	216RPM4W	2CMA168196R1000	1	1.16
		Blue	200...250		216RPM6W	2CMA168197R1000		
		Red	380...415		216RPM9W	2CMA168198R1000		
		Grey	transf.		216RPM12W	2CMA168199R1000		
3P+E								
4		Green	>300...500	>50	316RPM2W	2CMA168201R1000	1	1.19
		Red	380/440	50/60	316RPM3W	2CMA168202R1000		
		Yellow	100...130	50 and 60	316RPM4W	2CMA168203R1000		
		Black	600...690		316RPM5W	2CMA168204R1000		
		Red	380...415		316RPM6W	2CMA168205R1000		
		Black	480...500		316RPM7W	2CMA168206R1000		
		Blue	200...250		316RPM9W	2CMA168207R1000		
		Green	100...300	>50	316RPM10W	2CMA168208R1000		
		Red	440...460	60	316RPM11W	2CMA168209R1000		
3P+N+E								
5		Green	>300...500	>50	416RPM2W	2CMA168211R1000	1	1.21
		Red	380/440	50/60	416RPM3W	2CMA168212R1000		
		Yellow	100...130	50 and 60	416RPM4W	2CMA168213R1000		
		Red	346...415		416RPM6W	2CMA168214R1000		
		Black	480...500		416RPM7W	2CMA168215R1000		
		Blue	208...250		416RPM9W	2CMA168216R1000		
		Red	440...460	60	416RPM11W	2CMA168217R1000		



Dimensions (mm)

Type	A	B	C	C1	D	E
216RPM...W	199.5	120	170	**90**	253	149
316RPM...W	199.5	120	170	**90**	253	149
416RPM...W	199.5	120	170	**90**	253	149

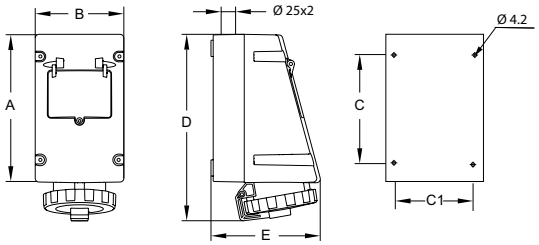
Surface socket outlets
Vertical with protection

CRITICAL & SAFE

216RPM6W

32 A. IP67. Watertight
Housing in plastic (PBT). Contains MCB series S201/S203 characteristic C.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232RPM4W	2CMA168219R1000	1	1.22
	Blue	200...250		232RPM6W	2CMA168220R1000		
	Red	380...415		232RPM9W	2CMA168221R1000		
	Grey	transf.		232RPM12W	2CMA168222R1000		
3P+E							
4	Green	>300...500	>50	332RPM2W	2CMA168224R1000	1	1.23
	Red	380/440	50/60	332RPM3W	2CMA168225R1000		
	Yellow	100...130	50 and 60	332RPM4W	2CMA168226R1000		
	Black	600...690		332RPM5W	2CMA168227R1000		
	Red	380...415		332RPM6W	2CMA168228R1000		
	Black	480...500		332RPM7W	2CMA168229R1000		
	Blue	200...250		332RPM9W	2CMA168230R1000		
	Green	100...300	>50	332RPM10W	2CMA168231R1000		
	Red	440...460	60	332RPM11W	2CMA168232R1000		
3P+N+E							
5	Green	>300...500	>50	432RPM2W	2CMA168234R1000	1	1.25
	Red	380/440	50/60	432RPM3W	2CMA168235R1000		
	Yellow	100...130	50 and 60	432RPM4W	2CMA168236R1000		
	Red	346...415		432RPM6W	2CMA168237R1000		
	Black	480...500		432RPM7W	2CMA168238R1000		
	Blue	208...250		432RPM9W	2CMA168239R1000		
	Red	440...460	60	432RPM11W	2CMA168240R1000		



Dimensions (mm)

Type	A	B	C	C1	D	E
232RPM...W	199.5	120	170	90	253	149
332RPM...W	199.5	120	170	90	253	149
432RPM...W	199.5	120	170	90	253	149

Surface socket outlets

Vertical with protection

CRITICAL & SAFE

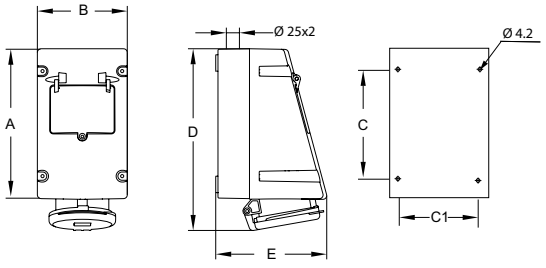
216RPR6

16 A. IP44. Splashproof
Housing in plastic (PBT). Contains RCD 25 A / 0.03 A, type A
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 1.5...4 mm².

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	216RPR6	2CMA168261R1000	1	1.13
3P+E							
4	Red	380...415	50 and 60	316RPR6	2CMA168269R1000	1	1.16
	Blue	200...250		316RPR9	2CMA168271R1000		
3P+N+E							
5	Red	346...415	50 and 60	416RPR6	2CMA168278R1000	1	1.18

32 A. IP44. Splashproof
Housing in plastic (PBT). Contains RCD 40 A / 0.03 A, type A
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 2.5...10 mm².

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	232RPR6	2CMA168283R1000	1	1.19
3P+E							
4	Red	380...415	50 and 60	332RPR6	2CMA168291R1000	1	1.20
	Blue	200...250		332RPR9	2CMA168293R1000		
3P+N+E							
5	Red	346...415	50 and 60	432RPR6	2CMA168300R1000	1	1.22



Dimensions (mm)

Type	A	B	C	C1	D	E
216RPR...416RPR...	199.5	120	170	90	243	149
232RPR...432RPR...	199.5	120	170	90	243	149

Surface socket outlets
Vertical with protection

CRITICAL & SAFE

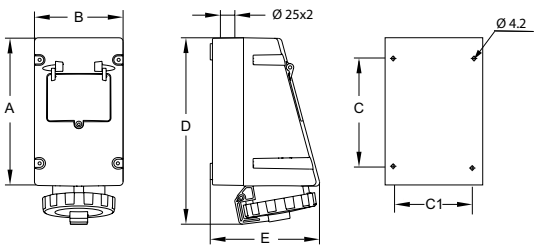
432RPR6W

16 A. IP67. Watertight
Housing in plastic (PBT). Contains RCD 25 A / 0.03 A, type A.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 1.5...4 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	216RPR4W	2CMA168323R1000	1	1.16
	Blue	200...250		216RPR6W	2CMA168324R1000		
	Grey	transf		216RPR12W	2CMA168326R1000		
3P+E							
4	Yellow	100...130	50 and 60	316RPR4W	2CMA168330R1000	1	1.19
	Red	380...415		316RPR6W	2CMA168332R1000		
	Blue	200...250		316MPR9W	2CMA168334R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	416RPR4W	2CMA168340R1000	1	1.21
	Red	346...415		416RPR6W	2CMA168341R1000		
	Blue	208...250		416RPR9W	2CMA168343R1000		

32 A. IP67. Watertight
Housing in plastic (PBT). Contains RCD 40 A / 0.03 A, type A.
Cable entry with knock-outs 2 x Ø 25 mm. Cable area 2.5...10 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Yellow	100...130	50 and 60	232RPR4W	2CMA168346R1000	1	1.22
	Blue	200...250		232RPR6W	2CMA168347R1000		
	Grey	transf.		232RPR12W	2CMA168349R1000		
3P+E							
4	Yellow	100...130	50 and 60	332RPR4W	2CMA168353R1000	1	1.23
	Red	380...415		332RPR6W	2CMA168355R1000		
	Blue	200...250		332RPR9W	2CMA168357R1000		
3P+N+E							
5	Yellow	100...130	50 and 60	432RPR4W	2CMA168363R1000	1	1.25
	Red	346...415		432RPR6W	2CMA168364R1000		
	Blue	208...250		432RPR9W	2CMA168366R1000		



Dimensions (mm)

Type	A	B	C	C1	D	E
216RPR...W...416RPR...W	199.5	120	170	90	253	149
232RPR...W...432RPR...W	199.5	120	170	90	253	149

Surface socket outlets

Vertical prepared for protection

CRITICAL & SAFE

216RP6W

16 A. IP67. Watertight

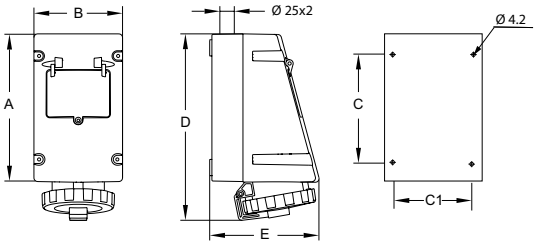
Housing in plastic (PBT). Cable entry with knock-outs 2 x Ø 25 mm. Cable area 1.5...4 mm².
Delivered without MCB/RCD. Space for 4 modules.

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	216RP6WP	2CMA164572R1000	1	1.20
3P+N+E							
5	Red	346...415	50 and 60	416RP6WP	2CMA164589R1000	1	1.20
	Black	480...500		416RP7WP	2CMA164590R1000		

32 A. IP67. Watertight

Housing in plastic (PBT). Cable entry with knock-outs 2 x Ø 25 mm. Cable area 2.5...10 mm².
Delivered without MCB/RCD. Space for 4 modules.

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	232RP6WP	2CMA164602R1000	1	1.40
3P+N+E							
5	Red	346...415	50 and 60	432RP6WP	2CMA164619R1000	1	1.40
	Black	480...500		432RP7WP	2CMA164590R1000		



Dimensions (mm)

Type	A	B	C	C1	D	E
216RP...W...416RP...W	199.5	120	170	90	253	149
232RP...W...432RP...W	199.5	120	170	90	253	149

Accessories

Auxillary contact

CRITICAL & SAFE

OA1G10
OA1G01

Auxillary contacts for all switched socket outlet 16...125 A.
Technical data according to IEC 60947-5-1. Ith 16 A.
Insulation voltage 690 V. Operational voltage (V) 230/400/690. Operational current (A) 6/4/2.

Description	Order Code	Pkg qty
Auillary contact OA1G10 (normally open)	2CMA144690R1000	1
Auillary contact OA1G01 (normally closed)	2CMA144691R1000	

SMS
DEMAG

Industrial plugs and sockets
Tough & Safe

Plugs

Type EP...
63 A, IP44

Type EP...W
16A...125 A, IP67

Connectors

Type EC...
63 A, IP44

Type EC...W
16 A...125 A, IP67

Inlets

For wall mounting, Type BS...
63 A, IP44

For wall mounting, Type EBS...W
16 A...125 A, IP67

For panel mounting with straight flange, Type ...BU...
63 A, IP44

For panel mounting with straight flange, Type EBU...W
63 A...125 A, IP67

for panel mounting with angled flange,
16-32A, IP67

Socket outlet

For wall mounting, Type RS...
63 A, IP44

For wall mounting, Type ERS...W
16 A...125 A, IP67

For panel mounting with unified straight flange, Type RU...
63 A, IP44

For panel mounting with unified angled flange, Type RAU...
63 A, IP44

For panel mounting with unified angled flange, Type R...
16 A...32 A, IP67

For panel mounting with unified straight flange, Type ERU...W
63 A...125 A, IP67

Product overview
Tough & Safe

Tough & Safe is the range for applications in environments that have high demand of functionality and safety. The robust housing is made of PBT plastic. The range Tough & Safe is available as watertight (IP67, 16-125 A) and splashproof (IP44, 63 A). The devices are equipped with internal and external cable clamps. The 125 A devices are equipped with two screws on each terminal.

Features
- IP67 Watertight or IP44 Splashproof
- 16-125 A, 50-690 VAC
- IEC 60 309-1, -2
- All external screws are made of stainless steel

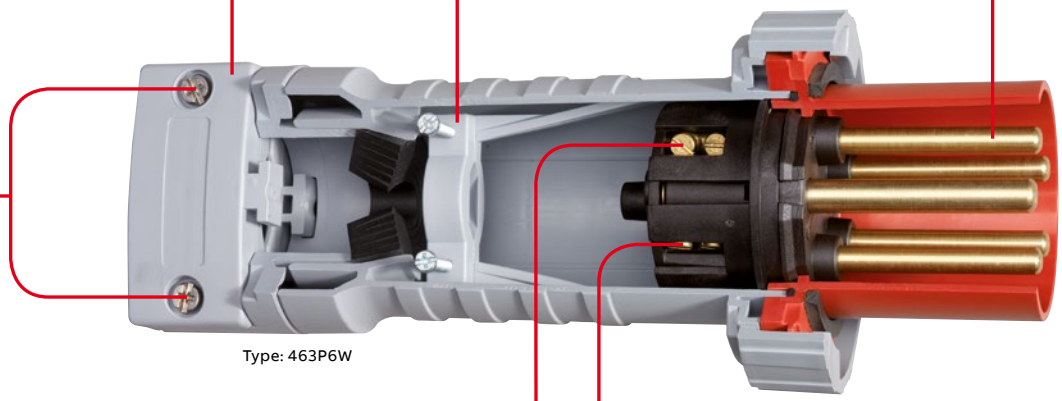
Application examples
- Industry/workshops
- Harbours/shipyards
- Mines
- Food & beverage

Clear marking, at the front and the rear of the terminals
Ground ⏚
Neutral N
Phase L1, L2, L3

Internal and external cable clamp

Clean brass pins

External screws made of stainless steel



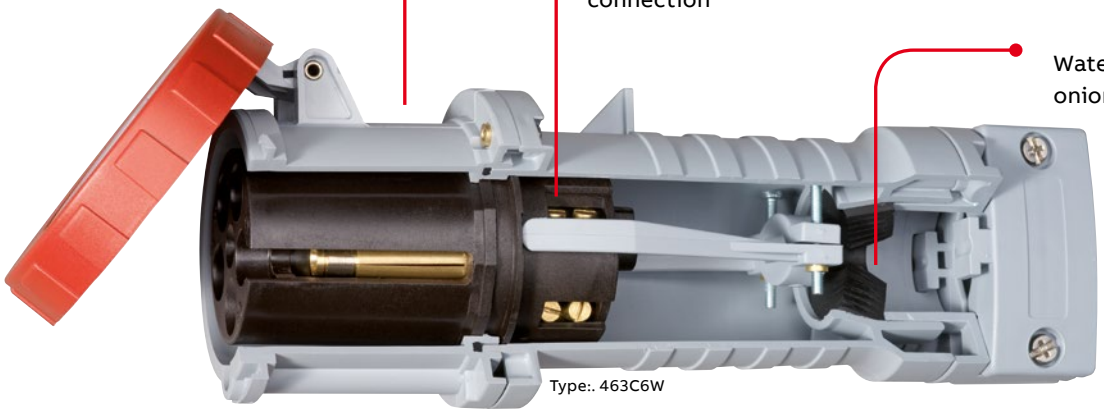
Type: 463P6W

Rear terminals, raised lettering, identification contacts

Robust plastic housing that withstands most chemicals found in industrial environments

Two screws at each terminal to assure safe and reliable cable connection

Watertight chloroprene onion skin grommet



Type:. 463C6W

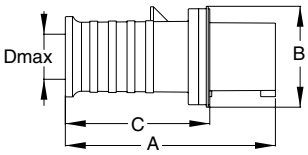
Plugs

TOUGH & SAFE

463P6

63 A, IP44 Splashproof
Plastic enclosure (PBT). Cable entry with membrane. Cable area 4-16 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	263P1	2CMA166746R1000	1	0.60
	Yellow	100...130	50 and 60	263P4	2CMA166740R1000		
	Blue	200...250		263P6	2CMA166742R1000		
	Blue	200...250		263P9	2CMA166744R1000		
3P+E							
4	Grey		AC	363P1	2CMA166760R1000	1	0.70
	Black	600...690	50 and 60	363P5	2CMA166750R1000		
	Red	380...415		363P6	2CMA166752R1000		
	Black	480...500		363P7	2CMA166754R1000		
	Blue	200...250		363P9	2CMA166756R1000		
	Red	440...460	60	363P11	2CMA166758R1000		
3P+N+E							
5	Red	346...415	50 and 60	463P6	2CMA166764R1000	1	0.75



Dimensions (mm)

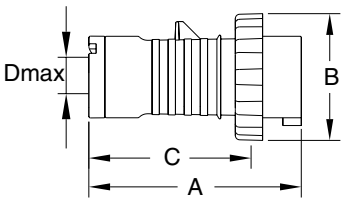
Type	A	B	C	Dmax
263-463P..	215	103	148	35

Plugs

216P6W

16 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry with compression gland. Cable area 1-2.5 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216P1W	2CMA166466R1000	1	0.18
		Grey	>50...250	DC	216P3W	2CMA166456R1000		
		Yellow	100...130	50 and 60	216P4W	2CMA166458R1000		
		Blue	200...250		216P6W	2CMA166460R1000		
		Red	380...415		216P9W	2CMA166462R1000		
		Grey	transf		216P12W	2CMA166464R1000		
3P+E								
4		Grey		AC	316P1W	2CMA166486R1000	1	0.24
		Green	>300...500	>50	316P2W	2CMA166468R1000		
		Red	380/440	50/60	316P3W	2CMA166470R1000		
		Yellow	100...130	50 and 60	316P4W	2CMA166472R1000		
		Black	600...690		316P5W	2CMA166474R1000		
		Red	380...415		316P6W	2CMA166476R1000		
		Black	480...500		316P7W	2CMA166478R1000		
		Blue	200...250		316P9W	2CMA166480R1000		
		Green	100...300	>50	316P10W	2CMA166482R1000		
		Red	440...460	60	316P11W	2CMA166484R1000		
3P+N+E								
5		Grey		AC	416P1W	2CMA166502R1000	1	0.26
		Green	>300...500	>50	416P2W	2CMA166488R1000		
		Yellow	100...130	50 and 60	416P4W	2CMA166492R1000		
		Black	600...690		416P5W	2CMA126773R1000		
		Red	346...415		416P6W	2CMA166494R1000		
		Black	480...500		416P7W	2CMA166496R1000		
		Blue	208...250		416P9W	2CMA166498R1000		
		Red	440...460	60	416P11W	2CMA166500R1000		



Dimensions (mm)

Type	A	B	C	Dmax
216P..W	128	71	94	13
316P..W	144	79	111	17
416P..W	146	87	112	17

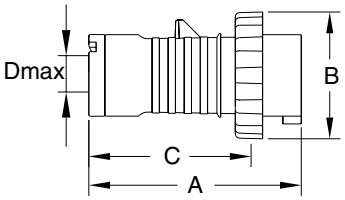
Plugs

TOUGH & SAFE

432P6W

32 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry with compression gland. Cable area 2.5-6 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232P1W	2CMA166728R1000	1	0.28
		Yellow	100...130	50 and 60	232P4W	2CMA166504R1000		
		Blue	200...250		232P6W	2CMA166722R1000		
		Red	380...415		232P9W	2CMA166724R1000		
		Grey	transf		232P12W	2CMA166726R1000		
3P+E								
4		Grey		AC	332P1W	2CMA166516R1000	1	0.30
		Green	>300...500	>50	332P2W	2CMA166730R1000		
		Red	380/440	50/60	332P3W	2CMA166732R1000		
		Yellow	100...130	50 and 60	332P4W	2CMA166734R1000		
		Black	600...690		332P5W	2CMA166736R1000		
		Red	380...415		332P6W	2CMA166738R1000		
		Black	480...500		332P7W	2CMA166506R1000		
		Blue	200...250		332P9W	2CMA166508R1000		
		Green	100...300	>50	332P10W	2CMA166510R1000		
		Red	440...460	60	332P11W	2CMA166513R1000		
3P+N+E								
5		Grey		AC	432P1W	2CMA166532R1000	1	0.32
		Green	>300...500	>50	432P2W	2CMA166518R1000		
		Red	380/440	50/60	432P3W	2CMA166520R1000		
		Yellow	100...130	50 and 60	432P4W	2CMA166522R1000		
		Black	600...690		432P5W	2CMA126656R1000		
		Red	346...415		432P6W	2CMA166524R1000		
		Black	480...500		432P7W	2CMA166526R1000		
		Blue	208...250		432P9W	2CMA166528R1000		
		Red	440...460	60	432P11W	2CMA166530R1000		



Dimensions (mm)

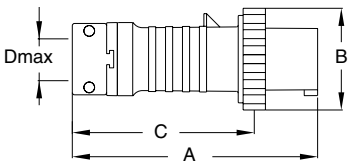
Type	A	B	C	Dmax
232P..W	147	94	105	21.5
332P..W	147	94	105	21.5
432P..W	161	101	119	21.5

Plugs

263P6W

63 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry with compression gland, internal and external cable clamp. Cable area 4-16 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263P1W	2CMA166780R1000	1	0.95
		Yellow	100...130	50 and 60	263P4W	2CMA166774R1000		
		Blue	200...250		263P6W	2CMA166776R1000		
		Red	380...415		263P9W	2CMA166778R1000		
3P+E								
4		Grey		AC	363P1W	2CMA166794R1000	1	1.05
		Yellow	100...130	50 and 60	363P4W	2CMA166782R1000		
		Black	600...690		363P5W	2CMA166784R1000		
		Red	380...415		363P6W	2CMA166786R1000		
		Black	480...500		363P7W	2CMA166788R1000		
		Blue	200...250		363P9W	2CMA166790R1000		
		Red	440...460	60	363P11W	2CMA166792R1000		
3P+N+E								
5		Grey		AC	463P1W	2CMA166806R1000	1	1.15
		Green	>300...500	>50	463P2W	2CMA168186R1000		
		Yellow	100...130	50 and 60	463P4W	2CMA166796R1000		
		Red	346...415		463P6W	2CMA166798R1000		
		Black	480...500		463P7W	2CMA166800R1000		
		Blue	208...250		463P9W	2CMA166802R1000		
		Red	440...460	60	463P11W	2CMA166804R1000		



Dimensions (mm)

Type	A	B	C	Dmax
263-463P..W	275	114	213	41

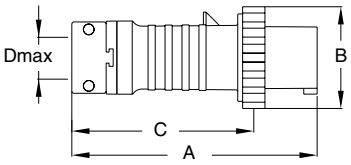
Plugs

TOUGH & SAFE

4125P6W

125 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry with compression gland, internal nd external cable clamp. Cable area 16-50 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	2125P1W	2CMA166812R1000	1	1.32
	Yellow	100...130	50 and 60	2125P4W	2CMA166808R1000		
	Blue	200...250		2125P6W	2CMA166810R1000		
3P+E							
4	Grey		AC	3125P1W	2CMA166824R1000	1	1.43
	Yellow	100...130	50 and 60	3125P4W	2CMA166814R1000		
	Black	600...690		3125P5W	2CMA166815R1000		
	Red	380...415		3125P6W	2CMA166816R1000		
	Black	480...500		3125P7W	2CMA166818R1000		
	Blue	200...250		3125P9W	2CMA166820R1000		
	Red	440...460	60	3125P11W	2CMA166822R1000		
3P+N+E							
5	Grey		AC	4125P1W	2CMA166836R1000	1	1.54
	Yellow	100...130	50 and 60	4125P4W	2CMA166826R1000		
	Black	600...690		4125P5W	2CMA126658R1000		
	Red	346...415		4125P6W	2CMA166828R1000		
	Black	480...500		4125P7W	2CMA166830R1000		
	Blue	208...250		4125P9W	2CMA166832R1000		
	Black	440...460	60	4125P11W	2CMA166834R1000		



Dimensions (mm)

Type	A	B	C	Dmax
2125-4125P..W	313	130	242	48

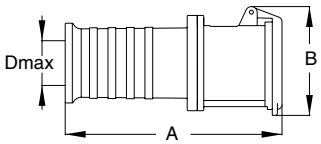
Connectors

TOUGH & SAFE

463C6

63 A, IP44 Splashproof
Plastic enclosure (PBT). Cable entry with membrane. Cable area 4-16 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263C1	2CMA166844R1000	1	0.80
		Yellow	100...130	50 and 60	263C4	2CMA166838R1000		
		Blue	200...250		263C6	2CMA166840R1000		
		Red	380...415		263C9	2CMA166842R1000		
3P+E								
4		Grey		AC	363C1	2CMA166858R1000	1	0.83
		Yellow	100...130	50 and 60	363C4	2CMA166846R1000		
		Black	600...690		363C5	2CMA166848R1000		
		Red	380...415		363C6	2CMA166850R1000		
		Black	480...500		363C7	2CMA166852R1000		
		Blue	200...250		363C9	2CMA166854R1000		
		Red	440...460	60	363C11	2CMA166856R1000		
3P+N+E								
5		Grey		AC	463C1	2CMA166870R1000	1	0.88
		Black	600...690	50 and 60	463C5	2CMA126661R1000		
		Red	346...415		463C6	2CMA166862R1000		
		Black	480...500		463C7	2CMA166864R1000		
		Blue	200...250		463C9	2CMA166866R1000		



Dimensions (mm)

Type	A	B	Dmax
263-463C..	224	112	35

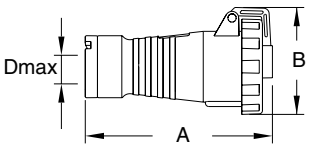
Connectors

TOUGH & SAFE

216C6W

16 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry with compression gland. Cable area 1-2.5 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	216C1W	2CMA166544R1000	1	0.22
	Grey	>50...250	DC	216C3W	2CMA166534R1000		
	Yellow	100...130	50 and 60	216C4W	2CMA166536R1000		
	Blue	200...250		216C6W	2CMA166538R1000		
	Red	380...415		216C9W	2CMA166540R1000		
	Grey	transf		216C12W	2CMA166542R1000		
3P+E							
4	Grey		AC	316C1W	2CMA166564R1000	1	0.31
	Green	>300...500	>50	316C2W	2CMA166546R1000		
	Red	380/440	50/60	316C3W	2CMA166548R1000		
	Yellow	100...130	50 and 60	316C4W	2CMA166550R1000		
	Black	600...690		316C5W	2CMA166552R1000		
	Red	380...415		316C6W	2CMA166554R1000		
	Black	480...500		316C7W	2CMA166556R1000		
	Blue	200...250		316C9W	2CMA166558R1000		
	Green	100...300	>50	316C10W	2CMA166560R1000		
	Red	440...460	60	316C11W	2CMA166562R1000		
3P+N+E							
5	Grey		AC	416C1W	2CMA166580R1000	1	0.32
	Green	>300...500	>50	416C2W	2CMA166566R1000		
	Red	380/440	50/60	416C3W	2CMA166568R1000		
	Yellow	100...130	50 and 60	416C4W	2CMA166570R1000		
	Black	600...690		416C5W	2CMA126662R1000		
	Red	346...415		416C6W	2CMA166572R1000		
	Black	480...500		416C7W	2CMA166574R1000		
	Blue	208...250		416C9W	2CMA166576R1000		
	Red	440...460	60	416C11W	2CMA166578R1000		



Dimensions (mm)

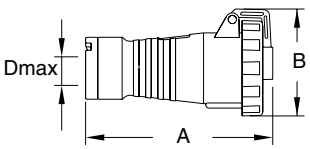
Type	A	B	Dmax
216C..W	151	80	13
316C..W	168	88	17
416C..W	170	97	17

Connectors

432C6W

32 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry with compression gland. Cable area 2.5-6 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	232C1W	2CMA166590R1000	1	0.35
	Yellow	100...130	50 and 60	232C4W	2CMA166582R1000		
	Blue	200...250		232C6W	2CMA166584R1000		
	Red	380...415		232C9W	2CMA166586R1000		
	Grey	transf		232C12W	2CMA166588R1000		
3P+E							
4	Grey		AC	332C1W	2CMA166592R1000	1	0.38
	Green	>300...500	>50	332C2W	2CMA166596R1000		
	Red	380/440	50/60	332C3W	2CMA166598R1000		
	Yellow	100...130	50 and 60	332C4W	2CMA166600R1000		
	Black	600...690		332C5W	2CMA166602R1000		
	Red	380...415		332C6W	2CMA166604R1000		
	Black	480...500		332C7W	2CMA166606R1000		
	Blue	200...250		332C9W	2CMA166608R1000		
	Green	100...300	>50	332C10W	2CMA166610R1000		
	Red	440...460	60	332C11W	2CMA166594R1000		
3P+N+E							
5	Grey		AC	432C1W	2CMA166526R1000	1	0.41
	Green	>300...500	>50	432C2W	2CMA166612R1000		
	Red	380/440	50/60	432C3W	2CMA166614R1000		
	Yellow	100...130	50 and 60	432C4W	2CMA166616R1000		
	Black	600...690		432C5W	2CMA126663R1000		
	Red	346...415		432C6W	2CMA166618R1000		
	Black	480...500		432C7W	2CMA166620R1000		
	Blue	208...250		432C9W	2CMA166622R1000		
	Red	440...460	60	432C11W	2CMA166624R1000		



Dimensions (mm)

Type	A	B	Dmax
232C..W	177	102	21.5
332C..W	177	102	21.5
432C..W	182	109	21.5

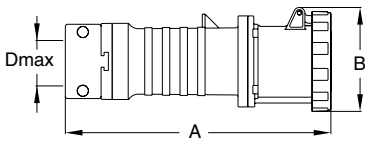
Connectors

TOUGH & SAFE

263C6W

63 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry with compression gland. Internal and external cable clamp. Cable area 4-16 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263C1W	2CMA166878R1000	1	0.80
		Yellow	100...130	50 and 60	263C4W	2CMA166872R1000		
		Blue	200...250		263C6W	2CMA166874R1000		
		Red	380...415		263C9W	2CMA166876R1000		
3P+E								
4		Grey		AC	363C1W	2CMA166902R1000	1	0.83
		Yellow	100...130	50 and 60	363C4W	2CMA166890R1000		
		Black	600...690		363C5W	2CMA166892R1000		
		Red	380...415		363C6W	2CMA166894R1000		
		Black	480...500		363C7W	2CMA166896R1000		
		Blue	200...250		363C9W	2CMA166898R1000		
		Red	440...460	60	363C11W	2CMA166900R1000		
3P+N+E								
5		Grey		AC	463C1W	2CMA166914R1000	1	0.88
		Green	>300...500	>50	463C2W	2CMA168184R1000		
		Yellow	100...130	50 and 60	463C4W	2CMA166904R1000		
		Red	346...415		463C6W	2CMA166906R1000		
		Black	480...500		463C7W	2CMA166908R1000		
		Blue	208...250		463C9W	2CMA166910R1000		
		Red	440...460	60	463C11W	2CMA166912R1000		



Dimensions (mm)

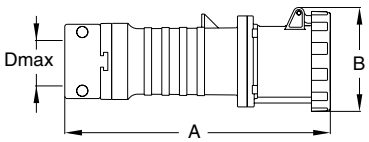
Type	A	B	Dmax
263-463C..W	286	111	41

Connectors

4125C6W

125 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry with compression gland. Internal and external cable clamp.
LP types with long phase sleeves and pilot sleeve. Cable area 16-50 mm²

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	2125C1W	2CMA166920R1000	1	1.37
	Yellow	100...130	50 and 60	2125C4W	2CMA166916R1000		
	Blue	200...250		2125C6W	2CMA166918R1000		
3P+E							
4	Grey		AC	3125C1W	2CMA166932R1000	1	1.41
	Yellow	100...130	50 and 60	3125C4W	2CMA166922R1000		
	Black	600...690		3125C5W	2CMA166923R1000		
	Red	380...415		3125C6W	2CMA166924R1000		
	Red	380...415		3125C6W LP	2CMA169211R1000		
	Black	480...500		3125C7W	2CMA166926R1000		
	Blue	200...250		3125C9W	2CMA166928R1000		
	Red	440...460	60	3125C11W	2CMA166930R1000		
3P+N+E							
5	Grey		AC	4125C1W	2CMA166944R1000	1	1.53
	Yellow	100...130	50 and 60	4125C4W	2CMA166934R1000		
	Red	346...415		4125C6W	2CMA166936R1000		
	Red	346...415		4125C6W LP	2CMA169212R1000		
	Black	480...500		4125C7W	2CMA166938R1000		
	Blue	208...250		4125C9W	2CMA166940R1000		
	Red	440...460	60	4125C11W	2CMA166942R1000		



Dimensions (mm)

Type	A	B	Dmax
2125-4125C..W	325	122	48

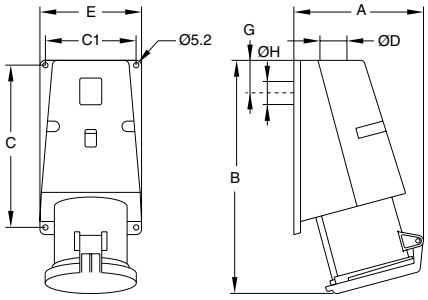
Surface socket outlets
Plastic enclosed

TOUGH & SAFE

463RS6

63 A, IP44 Splashproof
Plastic enclosure (PBT). Cable entry M32, alternative rear knock-out. Cable area 6-25 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263RS1	2CMA167480R1000	1	0.95
		Yellow	100...130	50 and 60	263RS4	2CMA167474R1000		
		Blue	200...250		263RS6	2CMA167476R1000		
		Red	380...415		263RS9	2CMA167478R1000		
3P+E								
4		Grey		AC	363RS1	2CMA167506R1000	1	0.99
		Yellow	100...130	50 and 60	363RS4	2CMA167494R1000		
		Black	600...690		363RS5	2CMA167496R1000		
		Red	380...415		363RS6	2CMA167498R1000		
		Black	480...500		363RS7	2CMA167500R1000		
		Blue	200...250		363RS9	2CMA167502R1000		
		Red	440...460		363RS11	2CMA167504R1000		
3P+N+E								
5		Grey		AC	463RS1	2CMA167492R1000	1	1.05
		Black	600...690	50 and 60	463RS5	2CMA126668R1000		
		Red	346...415		463RS6	2CMA167484R1000		
		Black	480...500		463RS7	2CMA167486R1000		
		Blue	200...250		463RS9	2CMA167488R1000		



Dimensions (mm)

Type	A	B	C	C1	ØD	E	G	H
263-463RS..	136	254	170	95	M32	107	68	35

Surface socket outlets

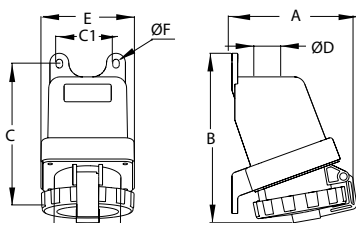
Plastic enclosed

216RS6W

16 A, IP67 Watertight

Plastic enclosure (PBT). Cable entry Ø 25 mm. Cable area 1.5-4 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Yellow	100...130	50 and 60	216RS4W	2CMA167148R1000	1	0.34
		Blue	200...250		216RS6W	2CMA167149R1000		
		Red	380...415		216RS9W	2CMA167150R1000		
		Grey	transf		216RS12W	2CMA167151R1000		
		Grey		AC	216RS1W	2CMA167152R1000		
3P+E								
4		Green	>300...500	>50	316RS2W	2CMA167153R1000	1	0.37
		Red	380/440	50/60	316RS3W	2CMA167154R1000		
		Yellow	100...130	50 and 60	316RS4W	2CMA167155R1000		
		Black	600...690		316RS5W	2CMA167156R1000		
		Red	380...415		316RS6W	2CMA167157R1000		
		Black	480...500		316RS7W	2CMA167158R1000		
		Blue	200...250		316RS9W	2CMA167159R1000		
		Green	100...300	>50	316RS10W	2CMA167160R1000		
		Red	440...460	60	316RS11W	2CMA167161R1000		
		Grey		AC	316RS1W	2CMA167162R1000		
3P+N+E								
5		Green	>300...500	>50	416RS2W	2CMA167163R1000	1	0.40
		Red	380/440	50/60	416RS3W	2CMA167164R1000		
		Yellow	100...130	50 and 60	416RS4W	2CMA167165R1000		
		Black	600...690		416RS5W	2CMA126669R1000		
		Red	346...415		416RS6W	2CMA167166R1000		
		Black	480...500		416RS7W	2CMA167167R1000		
		Blue	208...250		416RS9W	2CMA167168R1000		
		Red	440...460	60	416RS11W	2CMA167169R1000		
		Grey		AC	416RS1W	2CMA167170R1000		



Dimensions (mm)

Type	A	B	C	C1	D	E	G	H
216RS..W	115	172	150	60	60	25	99	6.5
316RS..W	118	170	150	60	60	25	99	6.5
416RS..W	124	169	150	60	60	25	99	6.5

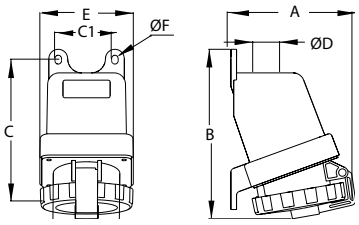
Surface socket outlets
Plastic enclosed

TOUGH & SAFE

232RS6W

32 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry Ø 25 mm. Cable area 2.5-10 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Yellow	100...130	50 and 60	232RS4W	2CMA167171R1000	1	0.41
		Blue	200...250		232RS6W	2CMA167172R1000		
		Red	380...415		232RS9W	2CMA167173R1000		
		Grey	transf		232RS12W	2CMA167174R1000		
		Grey		AC	232RS1W	2CMA167175R1000		
3P+E								
4		Green	>300...500	>50	332RS2W	2CMA167176R1000	1	0.43
		Red	380/440	50/60	332RS3W	2CMA167177R1000		
		Yellow	100...130	50 and 60	332RS4W	2CMA167178R1000		
		Black	600...690		332RS5W	2CMA167179R1000		
		Red	380...415		332RS6W	2CMA167180R1000		
		Black	480...500		332RS7W	2CMA167181R1000		
		Blue	200...250		332RS9W	2CMA167182R1000		
		Green	100...300	>50	332RS10W	2CMA167183R1000		
		Red	440...460	60	332RS11W	2CMA167184R1000		
		Grey		AC	332RS1W	2CMA167185R1000		
3P+N+E								
5		Green	>300...500	>50	432RS2W	2CMA167186R1000	1	0.48
		Red	380/440	50/60	432RS3W	2CMA167187R1000		
		Yellow	100...130	50 and 60	432RS4W	2CMA167188R1000		
		Black	600...690		432RS5W	2CMA126670R1000		
		Red	346...415		432RS6W	2CMA167189R1000		
		Black	480...500		432RS7W	2CMA167190R1000		
		Blue	208...250		432RS9W	2CMA167191R1000		
		Red	440...460	60	432RS11W	2CMA167192R1000		
		Grey		AC	432RS1W	2CMA167193R1000		



Dimensions (mm)

Type	A	B	C	C1	D	E	G	H
232RS..W	129	178	150	60	6	25	99	6.5
332RS..W	129	178	150	60	60	25	99	6.5
432RS..W	131	178	150	60	60	25	99	6.5

Surface socket outlets

Plastic enclosed

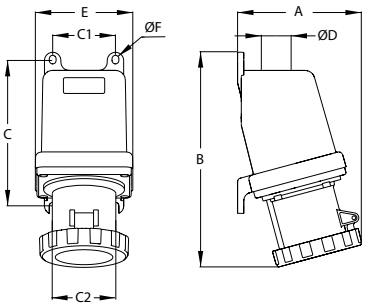
TOUGH & SAFE

263RS6W

63 A, IP67 Watertight

Plastic enclosure (PBT). Cable entry Ø 32 mm. Cable area 6-25 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263RS1W	2CMA167310R1000	1	1.00
		Yellow	100...130	50 and 60	263RS4W	2CMA167304R1000		
		Blue	200...250		263RS6W	2CMA167306R1000		
		Red	380...415		263RS9W	2CMA167308R1000		
3P+E								
4		Grey		AC	363RS1W	2CMA167324R1000	1	1.07
		Yellow	100...130	50 and 60	363RS4W	2CMA167312R1000		
		Black	600...690		363RS5W	2CMA167314R1000		
		Red	380...415		363RS6W	2CMA167316R1000		
		Black	480...500		363RS7W	2CMA167318R1000		
		Blue	200...250		363RS9W	2CMA167320R1000		
		Red	440...460	60	363RS11W	2CMA167322R1000		
3P+N+E								
5		Grey		AC	463RS1W	2CMA167336R1000	1	1.15
		Yellow	100...130	50 and 60	463RS4W	2CMA167326R1000		
		Black	600...690		463RS5W	2CMA126671R1000		
		Red	346...415		463RS6W	2CMA167328R1000		
		Black	480...500		463RS7W	2CMA167330R1000		
		Blue	208...250		463RS9W	2CMA167332R1000		
		Red	440...460	60	463RS11W	2CMA167334R1000		



Dimensions (mm)

Type	A	B	C	C1	C2	D	E	F
263-463RS..W	150	263	176	76	76	32	118	8.0

Surface socket outlets

Plastic enclosed

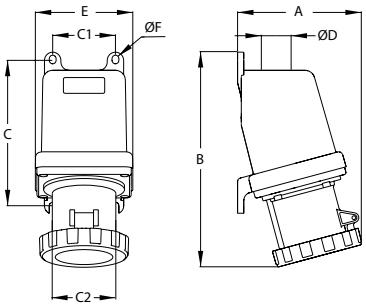
TOUGH & SAFE

4125RS6W

125 A, IP67 Watertight

Plastic enclosure (PBT). Cable entry Ø 50 mm. Cable area 16-70 mm²

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	2125RS1W	2CMA167248R1000	1	1.45
		Yellow	100...130	50 and 60	2125RS4W	2CMA167244R1000		
		Blue	200...250		2125RS6W	2CMA167246R1000		
3P+E								
4		Grey		AC	3125RS1W	2CMA167260R1000	1	1.55
		Yellow	100...130	50 and 60	3125RS4W	2CMA167250R1000		
		Black	600...690		3125RS5W	2CMA167251R1000		
		Red	380...415		3125RS6W	2CMA167252R1000		
		Black	480...500		3125RS7W	2CMA167254R1000		
		Blue	200...250		3125RS9W	2CMA167256R1000		
		Red	440...460	60	3125RS11W	2CMA167258R1000		
3P+N+E								
5		Grey		AC	4125RS1W	2CMA167272R1000	1	1.69
		Yellow	100...130	50 and 60	4125RS4W	2CMA167262R1000		
		Black	600...690		4125RS5W	2CMA126672R1000		
		Red	346...415		4125RS6W	2CMA167264R1000		
		Black	480...500		4125RS7W	2CMA167266R1000		
		Blue	208...250		4125RS9W	2CMA167268R1000		
		Red	440...460	60	4125RS11W	2CMA167270R1000		



Dimensions (mm)

Type	A	B	C	C1	C2	D	E	F
2125-4125RS..W	171	282	188	102	85	50	145	9.0

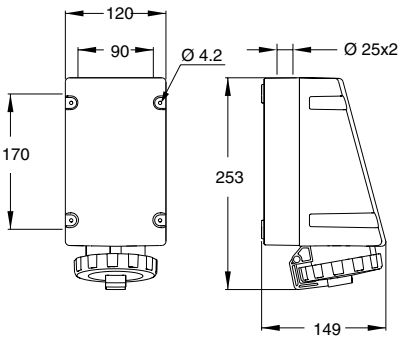
Surface socket outlets

For looping

216RL6W

16 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry knock-outs 2×Ø 25 mm. Terminal block 2×(2.5-10 mm²).
Outlet is connected to terminal block.

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216RL1W	2CMA168461R1000	1	0.63
		Grey	>50...250	DC	216RL3W	2CMA168456R1000		
		Yellow	100...130	50 and 60	216RL4W	2CMA168457R1000		
		Blue	200...250		216RL6W	2CMA168458R1000		
		Red	380...415		216RL9W	2CMA168459R1000		
		Grey	transf	DC	216RL12W	2CMA168460R1000		
3P+E								
4		Grey		AC	316RL1W	2CMA168471R1000	1	0.66
		Green	>300...500	>50	316RL2W	2CMA168462R1000		
		Red	380/440	50/60	316RL3W	2CMA168463R1000		
		Yellow	100...130	50 and 60	316RL4W	2CMA168464R1000		
		Black	600...690		316RL5W	2CMA168465R1000		
		Red	380...415		316RL6W	2CMA168466R1000		
		Black	480...500		316RL7W	2CMA168467R1000		
		Blue	200...250		316RL9W	2CMA168468R1000		
		Green	100...300	>50	316RL10W	2CMA168469R1000		
		Red	440...460	60	316RL11W	2CMA168470R1000		
3P+N+E								
5		Grey		AC	416RL1W	2CMA168479R1000	1	0.68
		Green	>300...500	>50	416RL2W	2CMA168472R1000		
		Red	380/440	50/60	416RL3W	2CMA168473R1000		
		Yellow	100...130	50 and 60	416RL4W	2CMA168474R1000		
		Red	346...415		416RL6W	2CMA168475R1000		
		Black	480...500		416RL7W	2CMA168476R1000		
		Blue	208...250		416RL9W	2CMA168477R1000		
		Red	440...460	60	416RL11W	2CMA168478R1000		



Surface socket outlets

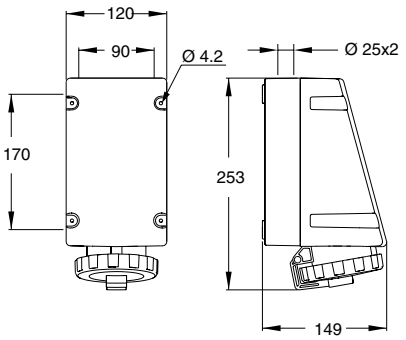
For looping

TOUGH & SAFE

432RL6W

32 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry knock-outs 2xØ 25 mm. Terminal block 2x(2.5-10 mm²).
Outlet is connected to terminal block.

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232RL1W	2CMA168484R1000	1	0.69
		Yellow	100...130	50 and 60	232RL4W	2CMA168480R1000		
		Blue	200...250		232RL6W	2CMA168481R1000		
		Red	380...415		232RL9W	2CMA168482R1000		
		Grey	transf		232RL12W	2CMA168483R1000		
3P+E								
4		Grey		AC	332RL1W	2CMA168494R1000	1	0.70
		Green	>300...500	>50	332RL2W	2CMA168485R1000		
		Red	380/440	50/60	332RL3W	2CMA168486R1000		
		Yellow	100...130	50 and 60	332RL4W	2CMA168487R1000		
		Black	600...690		332RL5W	2CMA168488R1000		
		Red	380...415		332RL6W	2CMA168489R1000		
		Black	480...500		332RL7W	2CMA168490R1000		
		Blue	200...250		332RL9W	2CMA168491R1000		
		Green	100...300	>50	332RL10W	2CMA168492R1000		
		Red	440...460	60	332RL11W	2CMA168493R1000		
3P+N+E								
5		Grey		AC	432RL1W	2CMA168502R1000	1	0.72
		Green	>300...500	>50	432RL2W	2CMA168495R1000		
		Red	380/440	50/60	432RL3W	2CMA168496R1000		
		Yellow	100...130	50 and 60	432RL4W	2CMA168497R1000		
		Red	346...415		432RL6W	2CMA168498R1000		
		Black	480...500		432RL7W	2CMA168499R1000		
		Blue	208...250		432RL9W	2CMA168500R1000		
		Red	440...460	60	432RL11W	2CMA168501R1000		



Surface socket outlets

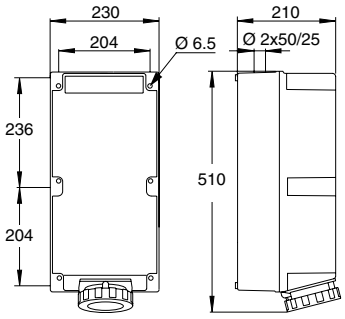
For looping

4125RL6W

125 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry with knock-outs 2×Ø 50/25 mm. Terminal block 2×(16-70 mm²).
Outlet is connected to terminal block.

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	2125RL1W	2CMA168528R1000	1	4.00
		Yellow	100...130	50 and 60	2125RL4W	2CMA168526R1000		
		Blue	200...250		2125RL6W	2CMA168527R1000		
3P+E								
4		Grey		AC	3125RL1W	2CMA168534R1000	1	4.10
		Yellow	100...130	50 and 60	3125RL4W	2CMA168529R1000		
		Red	380...415		3125RL6W	2CMA168530R1000		
		Black	480...500		3125RL7W	2CMA168531R1000		
		Blue	200...250		3125RL9W	2CMA168532R1000		
		Red	440...460	60	3125RL11W	2CMA168533R1000		
3P+N+E								
5		Grey		AC	4125RL1W	2CMA168540R1000	1	4.25
		Yellow	100...130	50 and 60	4125RL4W	2CMA168535R1000		
		Red	346...415		4125RL6W	2CMA168536R1000		
		Black	480...500		4125RL7W	2CMA168537R1000		
		Blue	208...250		4125RL9W	2CMA168538R1000		
		Red	440...460	60	4125RL11W	2CMA168539R1000		

- 2125 - 4125RL...W can be equipped with sealing up to 70 mm².
- Cable clamps for Al available on request.
- RL...W have terminal block for 2 wire feeding under the same clamp.



2125 - 4125RL..W

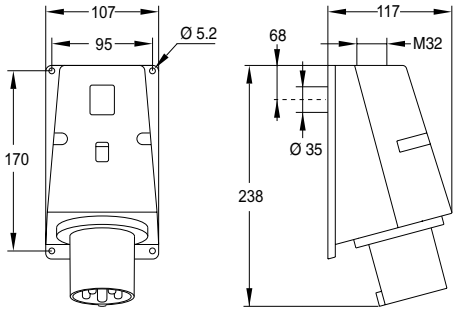
Surface inlets

TOUGH & SAFE

463BS6

63 A, IP44 Splashproof
Plastic enclosure (PBT). M32 alternative rear knock-out cable entry. Cable area 6-25 mm².

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	263BS1	2CMA167548R1000	1	0.80
	Yellow	100...130	50 and 60	263BS4	2CMA167542R1000		
	Blue	200...250		263BS6	2CMA167544R1000		
	Red	380...415		263BS9	2CMA167546R1000		
3P+E							
4	Grey		AC	363BS1	2CMA167562R1000	1	0.85
	Yellow	100...130	50 and 60	363BS4	2CMA167550R1000		
	Black	600...690		363BS5	2CMA167552R1000		
	Red	380...415		363BS6	2CMA167554R1000		
	Black	480...500		363BS7	2CMA167556R1000		
	Blue	200...250		363BS9	2CMA167558R1000		
	Red	440...460	60	363BS11	2CMA167560R1000		
3P+N+E							
5	Grey		AC	463BS1	2CMA167574R1000	1	0.90
	Black	600...690	50 and 60	463BS5	2CMA126701R1000		
	Red	346...415		463BS6	2CMA167566R1000		
	Black	480...500		463BS7	2CMA167568R1000		
	Blue	200...250		463BS9	2CMA167570R1000		

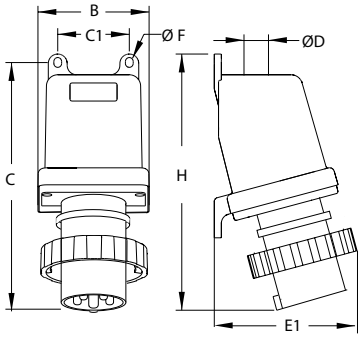


Surface inlets

216BS6W

16 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry Ø 25 mm. Cable area 1.5-4 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216BS1W	2CMA167050R1000	1	0.36
		Green	>300...500	>50	216BS2W	2CMA167051R1000		
		Yellow	100...130	50 and 60	216BS4W	2CMA167042R1000		
		Blue	200...250		216BS6W	2CMA167044R1000		
		Red	380...415		216BS9W	2CMA167046R1000		
		Grey	transf		216BS12W	2CMA167048R1000		
3P+E								
4		Grey		AC	316BS1W	2CMA167070R1000	1	0.41
		Green	>300...500	>50	316BS2W	2CMA167052R1000		
		Red	380/440	50/60	316BS3W	2CMA167054R1000		
		Yellow	100...130	50 and 60	316BS4W	2CMA167056R1000		
		Black	600...690		316BS5W	2CMA167058R1000		
		Red	380...415		316BS6W	2CMA167060R1000		
		Black	480...500		316BS7W	2CMA167062R1000		
		Blue	200...250		316BS9W	2CMA167064R1000		
		Green	100...300	>50	316BS10W	2CMA167066R1000		
		Red	440...460	60	316BS11W	2CMA167068R1000		
3P+N+E								
5		Grey		AC	416BS1W	2CMA167086R1000	1	0.43
		Green	>300...500	>50	416BS2W	2CMA167072R1000		
		Red	380/440	50/60	416BS3W	2CMA167074R1000		
		Yellow	100...130	50 and 60	416BS4W	2CMA167076R1000		
		Black	600...690		416BS5W	2CMA126774R1000		
		Red	346...415		416BS6W	2CMA167078R1000		
		Black	480...500		416BS7W	2CMA167080R1000		
		Blue	208...250		416BS9W	2CMA167082R1000		
		Red	440...460	60	416BS11W	2CMA167084R1000		



Dimensions (mm)

Type	B	C	C1	D	E1	F	H
216BS..W	99	150	60	28.3	129	06.6	196
316BS..W	99	150	60	28.3	132	06.5	202
416BS..W	99	150	60	28.3	134	06.5	209

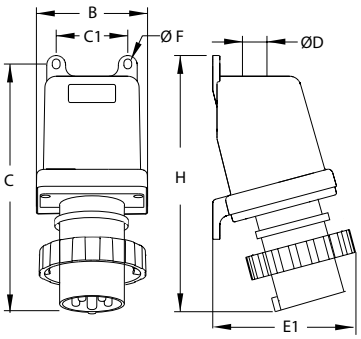
Surface inlets

TOUGH & SAFE

432BS6W

32 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry Ø 25 mm. Cable area 2.5-10 mm².

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	232BS1W	2CMA167096R1000	1	0.44
	Yellow	100...130	50 and 60	232BS4W	2CMA167088R1000		
	Blue	200...250		232BS6W	2CMA167090R1000		
	Red	380...415		232BS9W	2CMA167092R1000		
	Grey	transf		232BS12W	2CMA167094R1000		
3P+E							
4	Grey		AC	332BS1W	2CMA167114R1000	1	0.46
	Green	>300...500	>50	332BS2W	2CMA167098R1000		
	Red	380/440	50/60	332BS3W	2CMA167100R1000		
	Yellow	100...130	50 and 60	332BS4W	2CMA167102R1000		
	Black	600...690		332BS5W	2CMA167103R1000		
	Red	380...415		332BS6W	2CMA167104R1000		
	Black	480...500		332BS7W	2CMA167106R1000		
	Blue	200...250		332BS9W	2CMA167108R1000		
	Green	100...300	>50	332BS10W	2CMA167110R1000		
	Red	440...460	60	332BS11W	2CMA167112R1000		
3P+N+E							
5	Grey		AC	432BS1W	2CMA167130R1000	1	0.48
	Green	>300...500	>50	432BS2W	2CMA167116R1000		
	Red	380/440	50/60	432BS3W	2CMA167118R1000		
	Yellow	100...130	50 and 60	432BS4W	2CMA167120R1000		
	Black	600...690		432BS5W	2CMA126776R1000		
	Red	346...415		432BS6W	2CMA167122R1000		
	Black	480...500		432BS7W	2CMA167124R1000		
	Blue	208...250		432BS9W	2CMA167126R1000		
	Red	440...460	60	432BS11W	2CMA167128R1000		



Dimensions (mm)

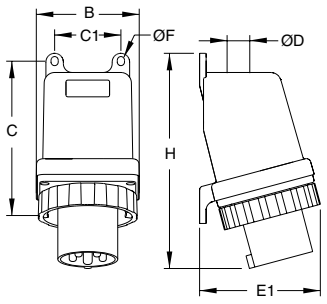
Type	B	C	C1	D	E1	F	H
232BS..W	99	150	60	28.3	136	6.5	220
332BS..W	99	150	60	28.3	136	6.5	220
432BS..W	99	150	60	28.3	140	6.5	226

Surface inlets

263BS6W

63 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry Ø 32 mm. Cable area 6-25 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263BS1W	2CMA167344R1000	1	1.20
		Yellow	100...130	50 and 60	263BS4W	2CMA167338R1000		
		Blue	200...250		263BS6W	2CMA167340R1000		
		Red	380...415		263BS9W	2CMA167342R1000		
3P+E								
4		Grey		AC	363BS1W	2CMA167358R1000	1	1.30
		Yellow	100...130	50 and 60	363BS4W	2CMA167346R1000		
		Black	600...690		363BS5W	2CMA167348R1000		
		Red	380...415		363BS6W	2CMA167350R1000		
		Black	480...500		363BS7W	2CMA167352R1000		
		Blue	200...250		363BS9W	2CMA167354R1000		
		Red	440...460	60	363BS11W	2CMA167356R1000		
3P+N+E								
5		Grey		AC	463BS1W	2CMA167370R1000	1	1.40
		Yellow	100...130	50 and 60	463BS4W	2CMA167360R1000		
		Black	600...690		463BS5W	2CMA126775R1000		
		Red	346...415		463BS6W	2CMA167362R1000		
		Black	480...500		463BS7W	2CMA167364R1000		
		Blue	208...250		463BS9W	2CMA167366R1000		
		Red	440...460	60	463BS11W	2CMA167368R1000		



Dimensions (mm)

Type	B	C	C1	D	E1	F	H
263-463BS..W	118	176	76	38	138	8	249

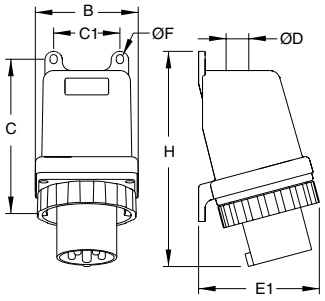
Surface inlets

TOUGH & SAFE

4125BS6W

125 A, IP67 Watertight
Plastic enclosure (PBT). Cable entry Ø 50 mm. Cable area 16-70 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	2125BS1W	2CMA167278R1000	1	4.00
		Yellow	100...130	50 and 60	2125BS4W	2CMA167274R1000		
		Blue	200...250		2125BS6W	2CMA167276R1000		
3P+E								
4		Grey		AC	3125BS1W	2CMA167290R1000	1	4.10
		Yellow	100...130	50 and 60	3125BS4W	2CMA167280R1000		
		Red	380...415		3125BS6W	2CMA167282R1000		
		Black	480...500		3125BS7W	2CMA167284R1000		
		Blue	200...250		3125BS9W	2CMA167286R1000		
		Red	440...460	60	3125BS11W	2CMA167288R1000		
3P+N+E								
5		Grey		AC	4125BS1W	2CMA167302R1000	1	4.25
		Yellow	100...130	50 and 60	4125BS4W	2CMA167292R1000		
		Black	600...690		4125BS5W	2CMA126705R1000		
		Red	346...415		4125BS6W	2CMA167294R1000		
		Black	480...500		4125BS7W	2CMA167296R1000		
		Blue	208...250		4125BS9W	2CMA167298R1000		
		Red	440...460	60	4125BS11W	2CMA167300R1000		



Dimensions (mm)

Type	B	C	C1	D	E1	F	H
2125-4125BS..W	145	188	85	47	160	9	265

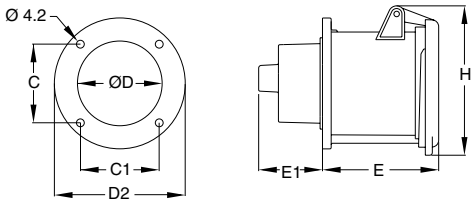
Panel mounted socket outlets

Unified straight flange

463RU6

63 A, IP44 Splashproof
Plastic enclosure (PBT). Cable area 6-25 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263RU1	2CMA167514R1000	1	0.60
		Yellow	100...130	50 and 60	263RU4	2CMA167508R1000		
		Blue	200...250		263RU6	2CMA167510R1000		
3P+E								
4		Grey		AC	363RU1	2CMA167528R1000	1	0.69
		Black	600...690	50 and 60	363RU5	2CMA167518R1000		
		Red	380...415		363RU6	2CMA167520R1000		
		Black	480...500		363RU7	2CMA167522R1000		
		Blue	200...250		363RU9	2CMA167524R1000		
3P+N+E								
5		Grey		AC	463RU1	2CMA167540R1000	1	0.76
		Black	600...690	50 and 60	463RU5	2CMA126675R1000		
		Red	346...415		463RU6	2CMA167532R1000		



Dimensions (mm)

Type	B	C	C1	D	E1	F	H
263-463RU..	61	61	70	104	87	48	112

Panel mounted socket outlets

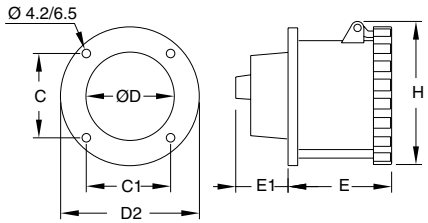
Unified straight flange

TOUGH & SAFE

263RU6W

63 A, IP67 Watertight
Plastic enclosure (PBT). Cable area 6-25 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263RU1W	2CMA167378R1000	1	0.64
		Yellow	100...130	50 and 60	263RU4W	2CMA167372R1000		
		Blue	200...250		263RU6W	2CMA167374R1000		
		Red	380...415		263RU9W	2CMA167376R1000		
3P+E								
4		Grey		AC	363RU1W	2CMA167392R1000	1	0.69
		Yellow	100...130	50 and 60	363RU4W	2CMA167380R1000		
		Black	600...690		363RU5W	2CMA167382R1000		
		Red	380...415		363RU6W	2CMA167384R1000		
		Black	480...500		363RU7W	2CMA167386R1000		
		Blue	200...250		363RU9W	2CMA167388R1000		
		Red	440...460	60	363RU11W	2CMA167390R1000		
3P+N+E								
5		Grey		AC	463RU1W	2CMA167404R1000	1	0.76
		Green	>300...500	>50	463RU2W	2CMA168182R1000		
		Yellow	100...130	50 and 60	463RU4W	2CMA167394R1000		
		Black	600...690		463RU5W	2CMA126676R1000		
		Red	346...415		463RU6W	2CMA167396R1000		
		Black	480...500		463RU7W	2CMA167398R1000		
		Blue	208...250		463RU9W	2CMA167400R1000		
		Red	440...460	60	463RU11W	2CMA167402R1000		



Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
263RU..W...463RU...W	61	61	70	104	89	48	111

Panel mounted socket outlets

Unified straight flange

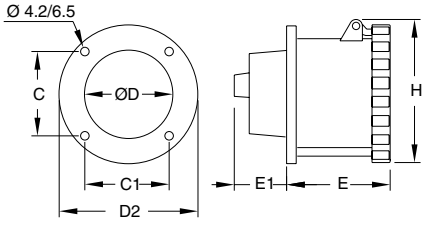
4125RU6W

125 A, IP67 Watertight

Plastic enclosure (PBT). LP types with long phase sleeves and pilot sleeve. Cable area 16-70 mm².

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Grey		AC	2125RU1W	2CMA167134R1000	1	0.85
	Yellow	100...130	50 and 60	2125RU4W	2CMA167132R1000		
	Blue	200...250		2125RU6W	2CMA167133R1000		
	Blue	200...250		2125RU6W LP	2CMA192729R1000		
3P+E							
4	Grey		AC	3125RU1W	2CMA167140R1000	1	1.00
	Yellow	100...130	50 and 60	3125RU4W	2CMA167135R1000		
	Black	600...690		3125RU5W	2CMA126718R1000		
	Red	380...415		3125RU6W	2CMA167136R1000		
	Red	380...415		3125RU6W LP	2CMA192730R1000		
	Black	480...500		3125RU7W	2CMA167137R1000		
	Black	480...500		3125RU7W LP	2CMA101865R1000		
	Blue	200...250		3125RU9W	2CMA167138R1000		
	Blue	200...250		3125RU9W LP	2CMA101866R1000		
	Red	440...460	60	3125RU11W	2CMA167139R1000		
	Red	440...460		3125RU11W LP	2CMA101867R1000		
3P+N+E							
5	Grey		AC	4125RU1W	2CMA167146R1000	1	1.14
	Yellow	100...130	50 and 60	4125RU4W	2CMA167141R1000		
	Red	346...415		4125RU6W	2CMA167142R1000		
	Red	346...415		4125RU6W LP	2CMA169213R1000		
	Black	480...500		4125RU7W	2CMA167143R1000		
	Blue	208...250		4125RU9W	2CMA167144R1000		
	Red	440...460	60	4125RU11W	2CMA167145R1000		

- Delivered with flange gasket.



Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
2125RU...W...4125RU..W	71	71	88	115	100	58	122

Panel mounted socket outlets

Unified straight flange

TOUGH & SAFE

3125RF6W LP

125 A, IP67 Watertight
Thermoplastic enclosure (PBT). Screw calmps. Cable area 16-70 mm².

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2P+E							
3	Blue	200...250	50 and 60	2125RF6W LP	2CMA101881R1000	1	1.2
3P+E							
4	Grey		AC	3125RF1W LP	2CMA101874R1000	1	1.23
	Yellow	100...130	50 and 60	3125RF4W LP	2CMA101875R1000		
	Black	600...690		3125RF5W LP	2CMA101876R1000		
	Red	380...415		3125RF6W LP	2CMA101877R1000		
	Black	480...500		3125RF7W LP	2CMA101878R1000		
	Blue	200...250		3125RF9W LP	2CMA101879R1000		
	Red	440...460	60	3125RF11W LP	2CMA101880R1000		
3P+N+E							
5	Green	>300...500	>50	4125RF2W LP	2CMA101871R1000	1	1.3
	Red	200/346... 240/415	50 and 60	4125RF6W LP	2CMA101870R1000		
	Blue	120/208... 144/250		4125RF9W LP	2CMA101872R1000		
	Red	250/440... 265/460	60	4125RF11W LP	2CMA101873R1000		

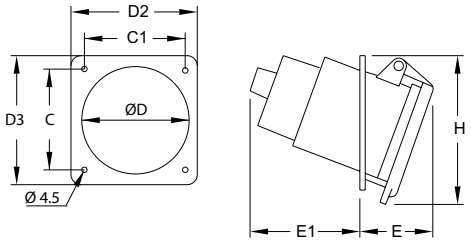
Panel mounted socket outlets

Unified angled flange

463RAU6

63 A, IP44 Splashproof
Plastic enclosure (PBT). Cable area 6-25 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263RAU1	2CMA167412R1000	1	0.60
		Yellow	100...130	50 and 60	263RAU4	2CMA167406R1000		
		Blue	200...250		263RAU6	2CMA167408R1000		
3P+E								
4		Grey		AC	363RAU1	2CMA167426R1000	1	0.63
		Black	600...690	50 and 60	363RAU5	2CMA167416R1000		
		Red	380...415		363RAU6	2CMA167418R1000		
		Black	480...500		363RAU7	2CMA167420R1000		
		Blue	200...250		363RAU9	2CMA167422R1000		
3P+N+E								
5		Grey		AC	463RAU1	2CMA167438R1000	1	0.69
		Black	600...690	50 and 60	463RAU5	2CMA126680R1000		
		Red	346...415		463RAU6	2CMA167430R1000		
		Blue	200...250		463RAU9	2CMA101700R1000		



Dimensions (mm)

Type	C	C1	D	D2	D3	E	E1	H
263-463RAU..	84	80	92	100	104	62	73	111

Panel mounted socket outlets

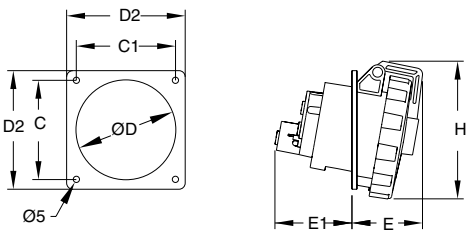
Unified angled flange

TOUGH & SAFE

216RAU6W

16 A, IP67 Watertight
Plastic enclosure (PBT). Cable area 1.5-4 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216RAU1W	2CMA167002R1000	1	0.12
		Yellow	100...130	50 and 60	216RAU4W	2CMA166994R1000		
		Blue	200...250		216RAU6W	2CMA166996R1000		
		Red	380...415		216RAU9W	2CMA166998R1000		
		Grey	transf		216RAU12W	2CMA167000R1000		
3P+E								
4		Grey		AC	316RAU1W	2CMA167022R1000	1	0.15
		Green	>300...500	>50	316RAU2W	2CMA167004R1000		
		Red	380/440	50/60	316RAU3W	2CMA167006R1000		
		Yellow	100...130	50 and 60	316RAU4W	2CMA167008R1000		
		Black	600...690		316RAU5W	2CMA167010R1000		
		Red	380...415		316RAU6W	2CMA167012R1000		
		Black	480...500		316RAU7W	2CMA167014R1000		
		Blue	200...250		316RAU9W	2CMA167016R1000		
		Green	100...130	>50	316RAU10W	2CMA167018R1000		
		Red	440...460	60	316RAU11W	2CMA167020R1000		
3P+N+E								
5		Grey		AC	416RAU1W	2CMA167038R1000	1	0.18
		Green	>300...500	>50	416RAU2W	2CMA167024R1000		
		Red	380/440	50/60	416RAU3W	2CMA167026R1000		
		Yellow	100...130	50 and 60	416RAU4W	2CMA167028R1000		
		Black	600...690		416RAU5W	2CMA126681R1000		
		Red	346...415		416RAU6W	2CMA167030R1000		
		Black	480...500		416RAU7W	2CMA167032R1000		
		Blue	208...250		416RAU9W	2CMA167034R1000		
		Red	440...460	60	416RAU11W	2CMA167036R1000		



Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
216RAU..W	79.5	79.5	83	95	45	57	95
316RAU..W	79.5	79.5	83	95	45	57	95
416RAU..W	79.5	79.5	83	95	47	57	99

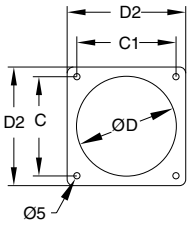
Panel mounted socket outlets

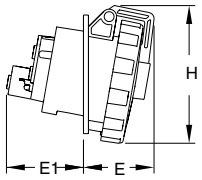
Unified angled flange

432RAU6W

32 A, IP67 Watertight
Plastic enclosure (PBT). Cable area 2.5-10 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232RAU1W	2CMA166954R1000	1	0.19
		Yellow	100...130	50 and 60	232RAU4W	2CMA166946R1000		
		Blue	200...250		232RAU6W	2CMA166948R1000		
		Red	380...415		232RAU9W	2CMA166950R1000		
		Grey	transf		232RAU12W	2CMA166952R1000		
3P+E								
4		Grey		AC	332RAU1W	2CMA166974R1000	1	0.21
		Green	>300...500	>50	332RAU2W	2CMA166956R1000		
		Red	380/440	50/60	332RAU3W	2CMA166958R1000		
		Yellow	100...130	50 and 60	332RAU4W	2CMA166960R1000		
		Black	600...690		332RAU5W	2CMA166962R1000		
		Red	380...415		332RAU6W	2CMA166964R1000		
		Black	480...500		332RAU7W	2CMA166966R1000		
		Blue	200...250		332RAU9W	2CMA166968R1000		
		Green	100...300	>50	332RAU10W	2CMA166970R1000		
		Red	440...460	60	332RAU11W	2CMA166972R1000		
3P+N+E								
5		Grey		AC	432RAU1W	2CMA166990R1000	1	0.26
		Green	>300...500	>50	432RAU2W	2CMA166976R1000		
		Red	380/440	50/60	432RAU3W	2CMA166978R1000		
		Yellow	100...130	50 and 60	432RAU4W	2CMA166980R1000		
		Black	600...690		432RAU5W	2CMA126682R1000		
		Red	346...415		432RAU6W	2CMA166982R1000		
		Black	480...500		432RAU7W	2CMA166984R1000		
		Blue	208...250		432RAU9W	2CMA166986R1000		
		Red	440...460	60	432RAU11W	2CMA166988R1000		





Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
232RAU..W	79.5	79.5	83	95	56	61	104
332RAU..W	79.5	79.5	83	95	56	61	104
432RAU..W	79.5	79.5	83	95	56	62	111

Panel mounted socket outlets

Unified angled flange

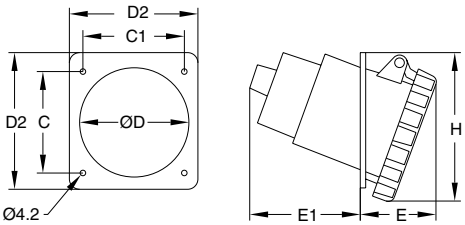
TOUGH & SAFE

463RAU6W

63 A, IP67 Watertight
Plastic enclosure (PBT). Cable area 6-25 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263RAU1W	2CMA167446R1000	1	0.60
		Yellow	100...130	50 and 60	263RAU4W	2CMA167440R1000		
		Blue	200...250		263RAU6W	2CMA167442R1000		
		Red	380...415		263RAU9W	2CMA167444R1000		
3P+E								
4		Grey		AC	363RAU1W	2CMA167460R1000	1	0.63
		Yellow	100...130	50 and 60	363RAU4W	2CMA167448R1000		
		Black	600...690		363RAU5W	2CMA167450R1000		
		Red	380...415		363RAU6W	2CMA167452R1000		
		Black	480...500		363RAU7W	2CMA167454R1000		
		Blue	200...250		363RAU9W	2CMA167456R1000		
		Red	440...460	60	363RAU11W	2CMA167458R1000		
3P+N+E								
5		Grey		AC	463RAU1W	2CMA167472R1000	1	0.69
		Yellow	100...130	50 and 60	463RAU4W	2CMA167462R1000		
		Black	600...690		463RAU5W	2CMA126683R1000		
		Red	346...415		463RAU6W	2CMA167464R1000		
		Black	480...500		463RAU7W	2CMA167466R1000		
		Blue	208...250		463RAU9W	2CMA167468R1000		
		Red	440...460	60	463RAU11W	2CMA167470R1000		

- Delivered with flange gasket.



Dimensions (mm)

Type	C	C1	D	D2	E	E1	H
263-463RAU..W	84	80	92	104	61	71	115

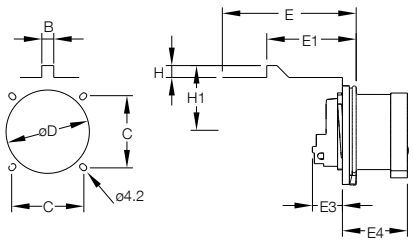
Panel mounted socket inlets

Straight flange

463BU6

63 A, IP44 Splashproof
Plastic enclosure (PBT). Cable area 6-25 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263BU1	2CMA167216R1000	**1**	**0.50**
		Blue	200...250	50 and 60	263BU6	2CMA167212R1000		
3P+E								
4		Grey		AC	363BU1	2CMA167230R1000	1	0.55
		Black	600...690	50 and 60	363BU5	2CMA167220R1000		
		Red	380...415		363BU6	2CMA167222R1000		
		Blue	200...250		363BU9	2CMA167226R1000		
3P+N+E								
5		Grey		AC	463BU1	2CMA167242R1000	1	0.60
		Red	346...415	50 and 60	463BU6	2CMA167234R1000		



Dimensions (mm)

Type	B	C	D	E	E1	E3	E4	H	H1
263-463BU..	11	61	70	105	62.0	50.0	78.0	9	49.5

Panel mounted socket inlets

Straight flange

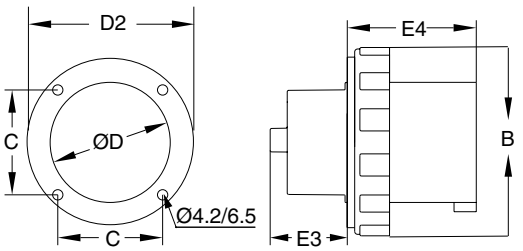
TOUGH & SAFE

263BU6W

63 A, IP67 Watertight
Plastic enclosure (PBT). Cable area 6-25 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	263BU1W	2CMA168106R1000	1	0.50
		Yellow	100...130	50 and 60	263BU4W	2CMA168103R1000		
		Blue	200...250		263BU6W	2CMA168104R1000		
		Red	380...415		263BU9W	2CMA168105R1000		
3P+E								
4		Grey		AC	363BU1W	2CMA168113R1000	1	0.55
		Yellow	100...130	50 and 60	363BU4W	2CMA168107R1000		
		Black	600...690		363BU5W	2CMA168108R1000		
		Red	380...415		363BU6W	2CMA168109R1000		
		Black	480...500		363BU7W	2CMA168110R1000		
		Blue	200...250		363BU9W	2CMA168111R1000		
		Red	440...460	60	363BU11W	2CMA168112R1000		
3P+N+E								
5		Grey		AC	463BU1W	2CMA168119R1000	1	0.60
		Green	>300...500	>50	463BU2W	2CMA168180R1000		
		Yellow	100...130	50 and 60	463BU4W	2CMA168114R1000		
		Black	600...690		463BU5W	2CMA100859R1000		
		Red	346...415		463BU6W	2CMA168115R1000		
		Black	480...500		463BU7W	2CMA168116R1000		
		Blue	208...250		463BU9W	2CMA168117R1000		
		Red	440...460	60	463BU11W	2CMA168118R1000		

- Delivered with flange gasket.



Dimensions (mm)

Type	B	C	D	D2	E3	E4
263-463BU..W	112	61	70	98	50	80

Panel mounted socket inlets

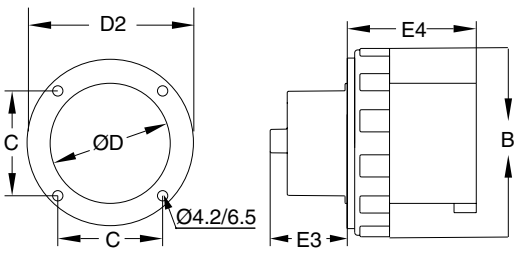
Straight flange

4125BU6W

125 A, IP67 Watertight
Plastic enclosure (PBT). Cable area 16-70 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	2125BU1W	2CMA167196R1000	1	0.78
		Yellow	100...130	50 and 60	2125BU4W	2CMA167194R1000		
		Blue	200...250		2125BU6W	2CMA167195R1000		
3P+E								
4		Grey		AC	3125BU1W	2CMA167202R1000	1	0.84
		Yellow	100...130	50 and 60	3125BU4W	2CMA167197R1000		
		Black	600...690		3125BU5W	2CMA126719R1000		
		Red	380...415		3125BU6W	2CMA167198R1000		
		Black	480...500		3125BU7W	2CMA167199R1000		
		Blue	200...250		3125BU9W	2CMA167200R1000		
		Red	440...460	60	3125BU11W	2CMA167201R1000		
3P+N+E								
5		Grey		AC	4125BU1W	2CMA167208R1000	1	0.96
		Yellow	100...130	50 and 60	4125BU4W	2CMA167203R1000		
		Red	380...415		4125BU6W	2CMA167204R1000		
		Black	480...500		4125BU7W	2CMA167205R1000		
		Blue	208...250		4125BU9W	2CMA167206R1000		
		Red	440...460	60	4125BU11W	2CMA167207R1000		

- Delivered with flange gasket.



Dimensions (mm)

Type	B	C	D	D2	E3	E4
2125-4125BU..W	122	71	81	118	56	89

Panel mounted socket inlets

Angled flange

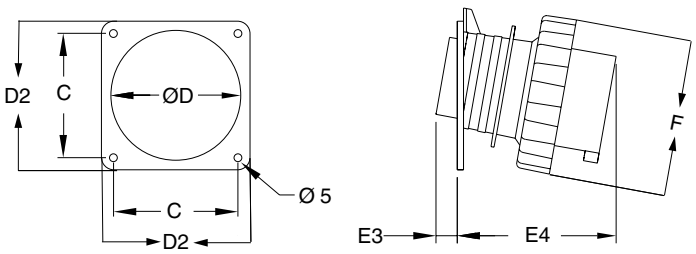
TOUGH & SAFE

216BAU6W

16 A, IP67 Watertight
Plastic enclosure (PBT). Cable area 1.5-4 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	216BAU1W	2CMA166684R1000	1	0.14
		Grey	>50...250	DC	216BAU3W	2CMA166674R1000		
		Yellow	100...130	50 and 60	216BAU4W	2CMA166676R1000		
		Blue	200...250		216BAU6W	2CMA166678R1000		
		Red	380...415		216BAU9W	2CMA166680R1000		
		Grey	transf		216BAU12W	2CMA166682R1000		
3P+E								
4		Grey		AC	316BAU1W	2CMA166704R1000	1	0.19
		Green	>300...500	>50	316BAU2W	2CMA166686R1000		
		Red	380/440	50/60	316BAU3W	2CMA166688R1000		
		Yellow	100...130	50 and 60	316BAU4W	2CMA166690R1000		
		Black	600...690		316BAU5W	2CMA166692R1000		
		Red	380...415		316BAU6W	2CMA166694R1000		
		Black	480...500		316BAU7W	2CMA166696R1000		
		Blue	200...250		316BAU9W	2CMA166698R1000		
		Green	100...300	>50	316BAU10W	2CMA166700R1000		
		Red	440...460	60	316BAU11W	2CMA166702R1000		
3P+N+E								
5		Grey		AC	416BAU1W	2CMA166720R1000	1	0.21
		Green	>300...500	>50	416BAU2W	2CMA166706R1000		
		Red	380/440	50/60	416BAU3W	2CMA166708R1000		
		Yellow	100...130	50 and 60	416BAU4W	2CMA166710R1000		
		Red	346...415		416BAU6W	2CMA166712R1000		
		Black	480...500		416BAU7W	2CMA166714R1000		
		Blue	208...250		416BAU9W	2CMA166716R1000		
		Red	440...460	60	416BAU11W	2CMA166718R1000		

- Delivered with flange gasket.



Dimensions (mm)

Type	C	D	D2	E3	E4	F
216BAU..W	79.5	83	95	10	47	71
316BAU..W	79.5	83	95	10	53	79
416BAU..W	79.5	83	95	10	87	87

Panel mounted socket inlets

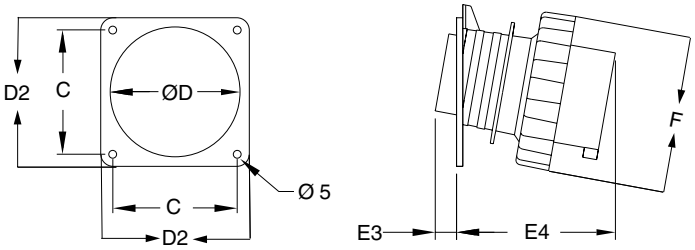
Angled flange

432BAU6W

32 A, IP67 Watertight
Plastic enclosure (PBT). Cable area 2.5-10 mm².

Terminals/ Poles	Color code		Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
			V	Hz				kg
2P+E								
3		Grey		AC	232BAU1W	2CMA166636R1000	1	0.22
		Yellow	100...130	50 and 60	232BAU4W	2CMA166628R1000		
		Blue	200...250		232BAU6W	2CMA166630R1000		
		Red	380...415		232BAU9W	2CMA166632R1000		
		Grey	transf		232BAU12W	2CMA166634R1000		
3P+E								
4		Grey		AC	332BAU1W	2CMA166656R1000	1	0.84
		Green	>300...500	>50	332BAU2W	2CMA166638R1000		
		Red	380/440	50/60	332BAU3W	2CMA166640R1000		
		Yellow	100...130	50 and 60	332BAU4W	2CMA166642R1000		
		Black	600...690		332BAU5W	2CMA166644R1000		
		Red	380...415		332BAU6W	2CMA166646R1000		
		Black	480...500		332BAU7W	2CMA166648R1000		
		Blue	200...250		332BAU9W	2CMA166650R1000		
		Green	100...300	>50	332BAU10W	2CMA166652R1000		
		Red	440...460	60	332BAU11W	2CMA166654R1000		
3P+N+E								
5		Grey		AC	432BAU1W	2CMA166672R1000	1	0.96
		Green	>300...500	>50	432BAU2W	2CMA166658R1000		
		Red	380/440	50/60	432BAU3W	2CMA166660R1000		
		Yellow	100...130	50 and 60	432BAU4W	2CMA166662R1000		
		Red	346...415		432BAU6W	2CMA166664R1000		
		Black	480...500		432BAU7W	2CMA166666R1000		
		Blue	208...250		432BAU9W	2CMA166668R1000		
		Red	440...460	60	432BAU11W	2CMA166670R1000		

- Delivered with flange gasket.



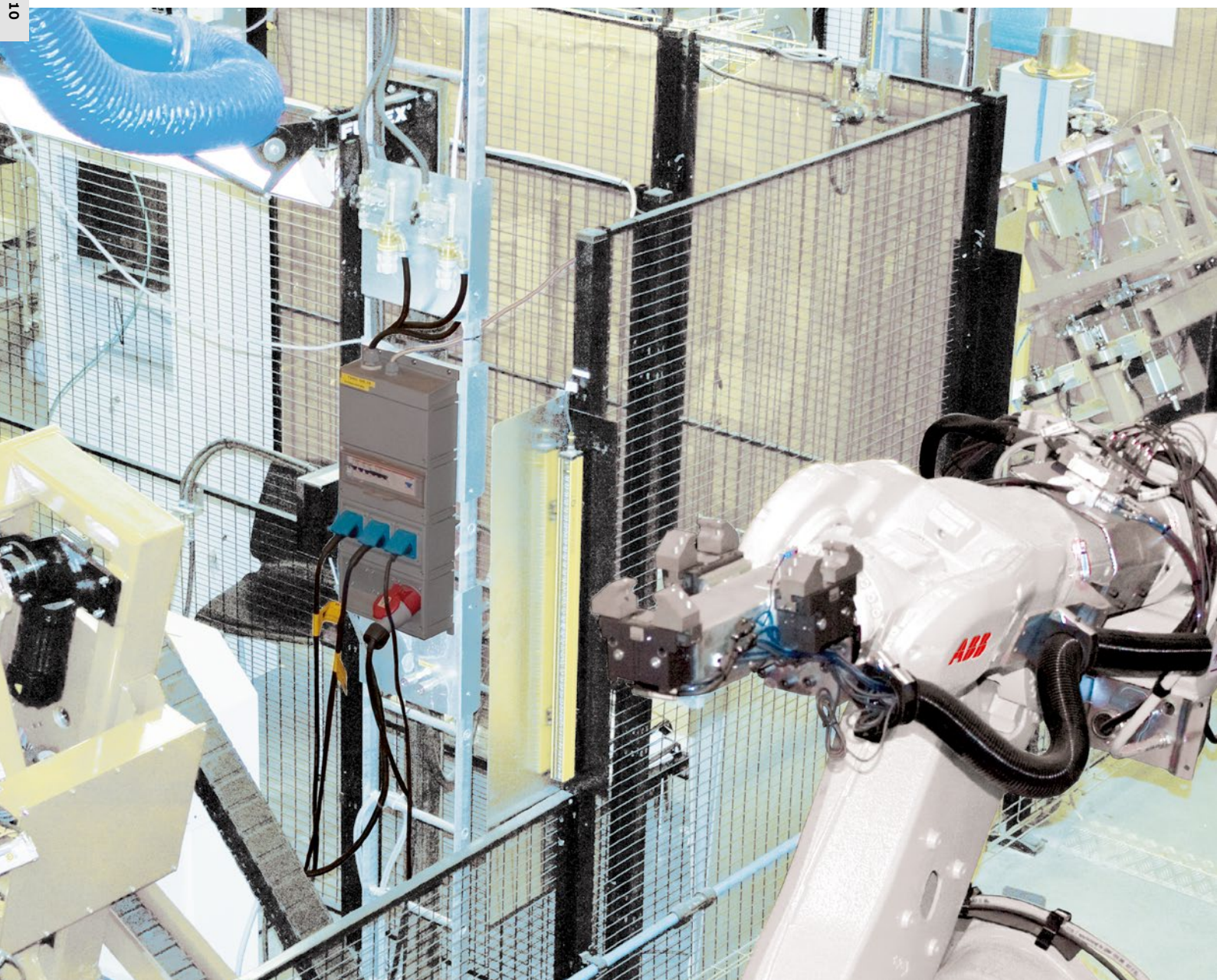
Dimensions (mm)

Type	C	D	D2	E3	E4	F
232BAU..W	79.5	83	95	12	60	94
332BAU..W	79.5	83	95	12	60	94
432BAU..W	79.5	83	95	12	67	101

Industrial plugs and sockets
Modular Combi

Modular Combi is a system consisting of compact units replacing outlets that traditionally has been scattered around the walls.
Modular combi is a cost effective system.

Modular Combi is a cost effective system with different types of outlets, RCDs and MCBs in one location. Modular Combi is very easy to install and, thanks to the solutions and design, it saves time and money.
The Modular Combi range consists of two lines, one product line in plastic, and the other one in metal. Common for them are among other features that you only need one feeding cable, it can be mounted with an already existing 4-wire as well as 5-wire cable and that the modules are easy to modify in the future for additional needs.



Modular Combi

Plastic 16 A

M Combi 16-3

IP65

MCB	RCD	Eart fault protector	Outlet IEC	Type	Order Code	Size W	H	D	Weight pkg (1pce) kg
1xS201 C16 1xS203 M C16	1	40 A/0.03	1x216 1x416	M Combi 16-1	2CMA104324R1000	275	455	142	5.60
2xS203 M C16	1	40 A/0.03	2x416	M Combi 16-2	2CMA104326R1000	275	455	142	5.60
1xS201 C16 1xS203 M C16	1	40 A/0.03	1x216 1x316	M Combi 16-3	2CMA104329R1000	275	455	142	5.60
2xS203 M C16	1	40 A/0.03	2x316	M Combi 16-4	2CMA104330R1000	275	455	142	5.60
3xS203 M C16	1	63 A/0.03	3x416	M Combi 16-5	2CMA104341R1000	380	570	152	6.50
3xS203 M C16	1	63 A/0.03	3x316	M Combi 16-6	2CMA104344R1000	380	570	152	6.50

Plastic 32 A

M Combi 32-6

IP65

MCB	RCD	Eart fault protector	Outlet IEC	Type	Order Code	Size W	H	D	Weight pkg (1pce) kg
1xS201 C16 1xS203 M C32	1	63 A/0.03	1x216 1x432	M Combi 32-1	2CMA104325R1000	275	455	152	5.70
1xS203 C16 1xS203 M C32	1	63 A/0.03	1x416 1x432	M Combi 32-2	2CMA104327R1000	275	455	152	5.70
1xS201 C16 1xS203 M C32	1	63 A/0.03	1x216 1x332	M Combi 32-3	2CMA104328R1000	275	455	152	5.70
1xS203 C16 1xS203 M C32	1	63 A/0.03	1x316 1x332	M Combi 32-4	2CMA104331R1000	275	455	152	5.70
1xS201 C16 1xS203 M C16 1xS203 M C32	1	63 A/0.03	1x216 1x416 1x432	M Combi 32-5	2CMA104332R1000	275	455	152	5.80
1xS201 C16 1xS203 M C16 1xS203 M C32	1	63 A/0.03	1x216 1x316 1x332	M Combi 32-6	2CMA104333R1000	275	455	152	5.80
2xS201 C16 1xS203 M C16 1xS203 M C32	1	63 A/0.03	2x216 1x416 1x432	M Combi 32-7	2CMA104339R1000	380	570	152	6.90
2xS201 C16 1xS203 M C16 1xS203 M C32	1	63 A/0.03	2x216 1x316 1x332	M Combi 32-8	2CMA104340R1000	380	570	152	6.90
3xS203 M C32	1	60 A/0.03	3x432	M Combi 32-9	2CMA104342R1000	380	570	152	6.70
2xS203 M C16 1xS203M C32	1	63 A/0.03	2x416 1x432	M Combi 32-10	2CMA104343R1000	380	570	152	6.60
3xS203 M C16	1	63 A/0.03	3x332	M Combi 32-11	2CMA104345R1000	380	570	152	6.70
2xS203 M C16 1xS203 M C32	1	63 A/0.03	2x316 1x332	M Combi 32-12	2CMA104346R1000	380	570	152	6.60

Modular Combi
Plastic

The enclosure is in aluminium with front plates of galvanised steel. Modul Combi Metal is designed for different types of single phase domestic outlets and for IEC outlets up to and including 63 A.

Operating voltage 230/400 V ~

Enclosure:	Plastic (PBT)
Dimensions:	According to table
Outlets:	Combi Plastic is designed for different types of single phase domestic outlets and for IEC outlets up to and including 63 A. With or without mechanical interlocked IEC outlets.
Cable entry:	4 knock-outs at the top, suitable for 2xØ 40 mm and 2xØ 25 mm At the bottom 3xØ 47 mm
Cable area:	2x16 mm^2 Cu. Designed for looping
Covers:	For MCB/RCD, maximum 13 modules, 2 opened and knock-outs for the rest of the modules row. DIN-rail in bottom for terminals and MCB/RCDs. With a distance at the bottom to allow wiring behind the rail. The lid is pad lockable.

Modular Combi

Plastic 16 A

MPR16/3MS

IP44, Splashproof

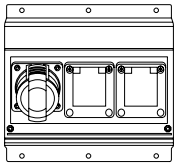
MCB	RCD	Switch	Schuko outlet	Outlet	Type	Order Code	Size			Weight pkg (1pce)
			10/16 A	IEC			W	H	D	kg
-	-	-	2 single	1x416	MP16	2CMA168999R1000	250	170	160	1.7
1xS201 C16 1xS203 M C16	-	-	2 single	1x416	MP16/1	2CMA168998R1000	250	300	160	2.0
1xS201 C16 1xS203 M C16	-	OT80F3/B	2 single	1x416	MP16/1MS	2CMA168981R1000	250	300	160	2.6
1xS203 M C16	25 A/0.03	-	2 single	1x416	MPR16	2CMA168997R1000	250	300	160	3.1
1xS203 M C16	25 A/0.03	OT80F3/B	2 single	1x416	MPR16MS	2CMA168980R1000	250	430	160	3.1
2xS201 C16 2xS203 M C16	-	-	2 double	3x416	MP16/3	2CMA168996R1000	250	430	160	3.1
2xS201 C16 2xS203 M C16	40 A/0.03	-	2 double	3x416	MPR16/3	2CMA168995R1000	250	430	160	3.4
2xS201 C16 2XS203 M C16	40 A/0.03	OT80F3/B	2 double	3x416	MPR16/3MS	2CMA168982R1000	250	560	160	4.7

1) 1xcovered top and 1xFL21

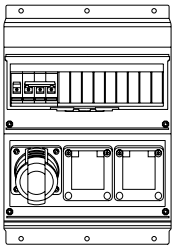
Modular Combi

Plastic 16 A

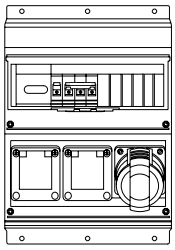
Front view



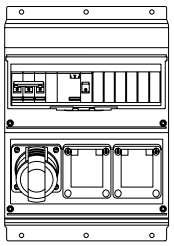
MP16



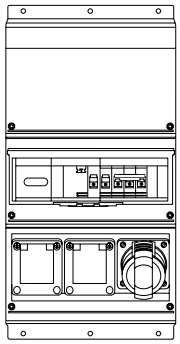
MP16/1



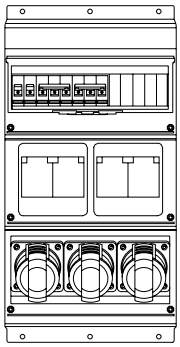
MP16/1MS



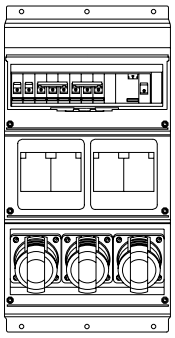
MPR16



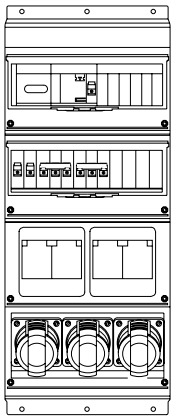
MPR16MS



MP16/3

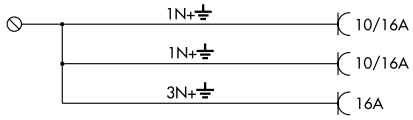


MPR16/3

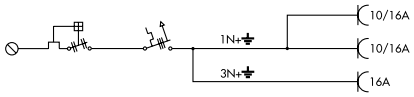


MPR16/3MS

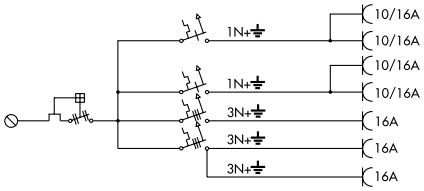
Wiring diagrams



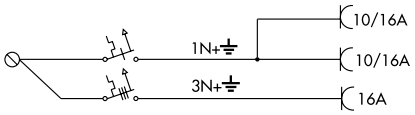
MP16



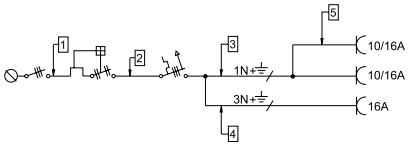
MPR16



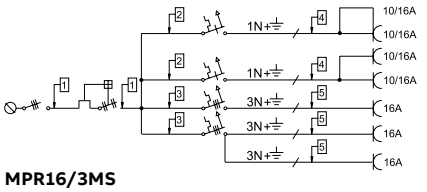
MPR16/3



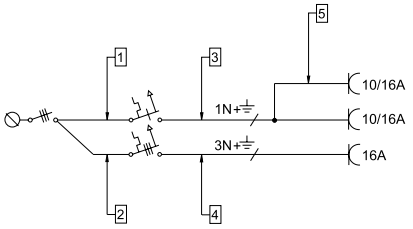
MP16/1



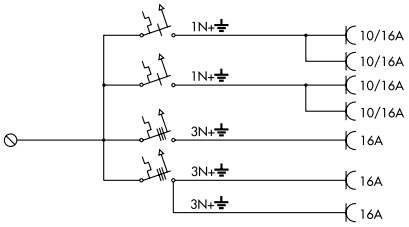
MPR16MS



MPR16/3MS



MP16/1MS



MP16/3

Modular Combi

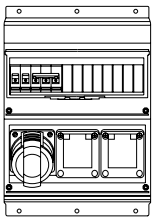
Plastic 32 A

IP44, Splashproof

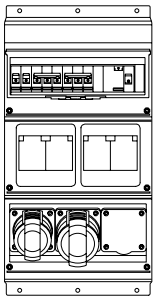
MCB	RCD	Switch	Schuko outlet	Outlet	Type	Order Code	Size			Weight pkg (1pce)
			10/16 A	IEC			W	H	D	kg
2xS201 C16 1xS203 M C16	-	-	2 single	1x416	MP32	2CMA168994R1000	250	300	160	1.7
1xS201 C16 2xS203 M C16	40 K/0.03	-	2 double	1x416 1x432	MPR32	2CMA168991R1000	250	300	160	4.0
1xS201 C16 2xS203 M C16	-	-	2 single	1x432	MP32/1	2CMA168993R1000	250	300	160	2.6
1xS201 C16 2xS203 M C16 1xS203 C32			1 single	2x416 1x432	MP32/SW1*)	2CMA168987R1000	250	430	160	4.1
2xS201 C16 2xS203 M C16	-	-	1 single 2 double	1x416 1x432	MP32/2	2CMA168992R1000	250	430	160	3.1
2xS201 C16 2xS203 M C16	63 A/0.03	OT80F3/B	1 single 2 double	1x416 1x432	MP32/2MS	2CMA168983R1000	250	430	160	3.3
2xS201 C16 2xS203 M C16	63 A/0.03	OT80F3/B	2 double	1x416 1x432	MPR32/1MS	2CMA168984R1000	250	560	160	4.8

*) Mechanically interlocked

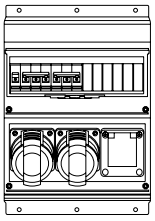
Front view



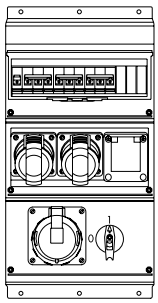
MP32



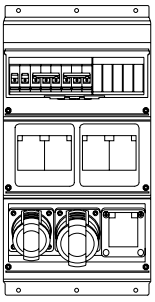
MPR32



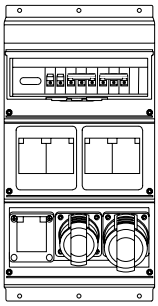
MP32/1



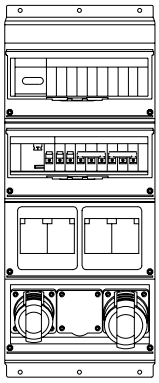
MP32/SW1



MP32/2

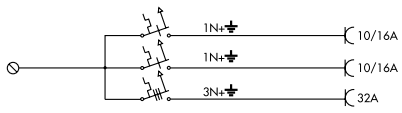


MP32/2MS

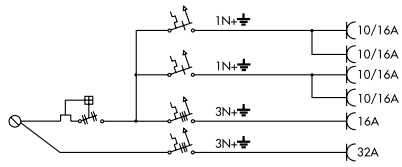


MPR32/1MS

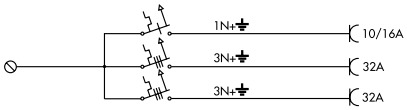
Wiring diagrams



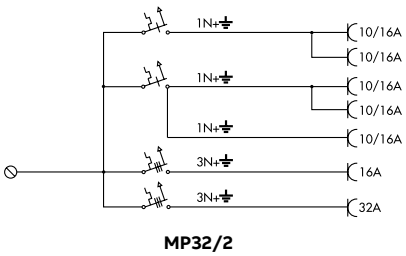
MP32



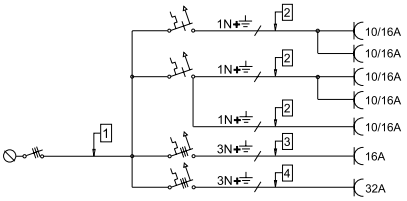
MPR32



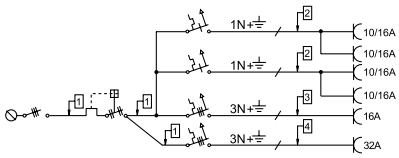
MP32/1



MP32/2



MP32/2MS



MPR32/1MS

Modular Combi

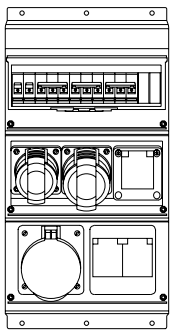
Plastic 63 A

IP44, Splashproof

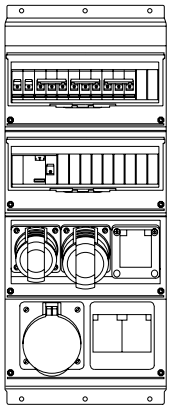
MCB	RCD	Switch	Schuko outlet	Outlet	Type	Order Code	Size			Weight pkg (1pce)
			10/16 A	IEC			W	H	D	kg
1xS201 C16 2xS203 M C16	-	-	1 single 2 double	1x416 1x432 1x463	MP63	2CMA168990R1000	250	430	160	4.0
2xS201 C16 3xS203 M C16	40 A/0.03	-	1 single 2 double	1x416 1x432 1x463	MPR63	2CMA168989R1000	250	560	160	5.4
2x S201 C16 3x S203 M C16	-	-	1 single 2 double	1x416 1x432 1x463	MPR63/1	2CMA168988R1000	250	560	160	5.4
2xS201 C16 3xS203 M C16	40 A/0.03	OT80F3/B	1 single 2 double	1x416 1x432	MPR63/1MS	2CMA168985R1000	250	560	160	5.7

10

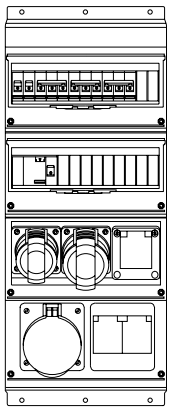
Front view



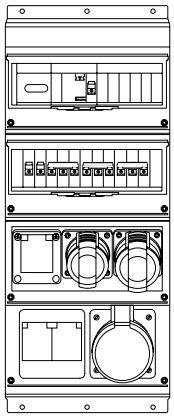
MP63



MPR63

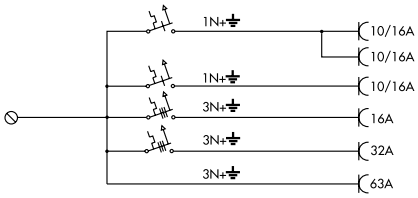


MPR63/1

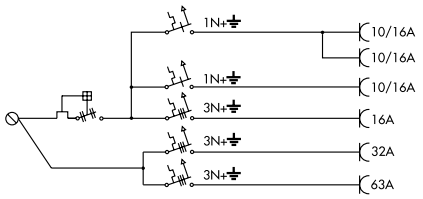


MPR63/1MS

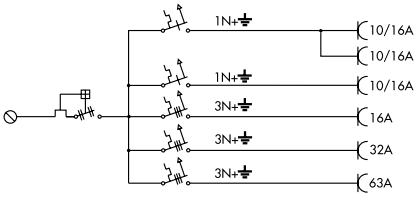
Wiring diagrams



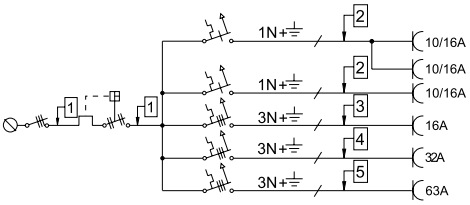
MP63



MPR63



MPR63/1



MPR63/1MS

Modular Combi
Metal

The enclosure is in aluminium with front plates of galvanised steel. Modul Combi Metal is designed for different types of single phase domestic outlets and for IEC outlets up to and including 63 A.

Operating voltage 230/400 V~

Enclosure:	Aluminium with front plates of galvanised steel.
Dimensions:	According to table or customer order
Outlets:	Combi Metal is designed for different types of single phase domestic outlets and for IEC outlets up to and including 63 A. With or without mechanical interlocked IEC outlets.
Cable entry:	FL21 flange openings at top and bottom
Cable area:	2x16 mm^2 Cu. Designed for looping
Covers:	For MCB/RCD, maximum 12 modules. DIN-rail in bottom for terminals and MCB/RCDs. With a distance at the bottom to allow wiring behind the rail. The lid is pad lockable.

Modular Combi

Metal

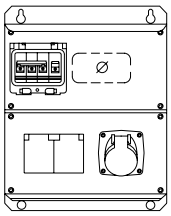
IP44, Splashproof

MCB	RCD	Switch	Schuko outlet	Outlet	Type	Order Code	Size			Weight pkg (1pce)
			10/16 A	IEC			W	H	D	kg
1xS201 C16 1xS203 M C16	-	-	1 single	1x416	M16/1	2CMA179348R1000	250	314	172	3.80
1xS201 C16 1xS203 M C16	25 A/0.03	-	1 single	1x416	M16/2JFB	2CMA179349R1000	250	314	172	4.55
2x S201 C16 2x S203 M C16	-	-	2 double	1x416 1x432	M32/1	2CMA179350R1000	250	574	179	6.75
2xS201 C16 2xS203 M C16	63 A/0.03	-	2 double	2x416 1x432	MP32/2JFB	2CMA179351R1000	250	574	179	7.35
2xS201 C16 3xS203 M C16	-	-	1 single 2 double	1x416 1x432 1x463	MP63	2CMA179352R1000	250	704	188	8.95
2xS201 C16 3xS203 M C16	63 A/0.03	-	2 double	1x416 1x432 1x463	MP63/2JFB	2CMA1793531000	250	704	188	9.55

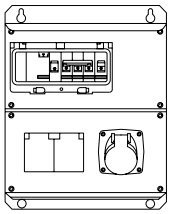
Modular Combi

Metal

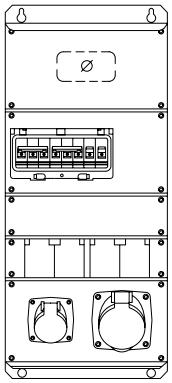
Front view



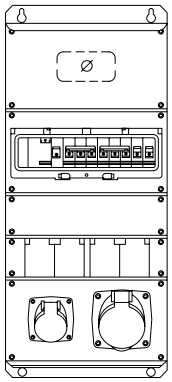
M16/1



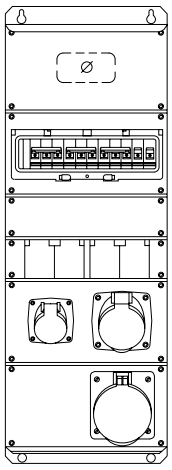
M16/2JFB



M32/1



M32/2JFB



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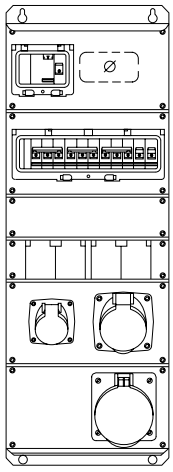

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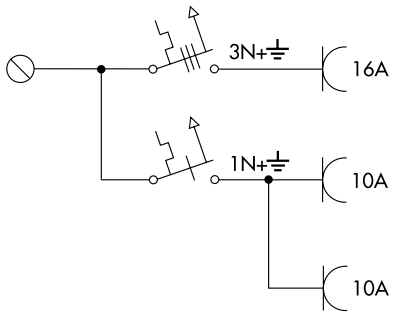
Wiring diagrams



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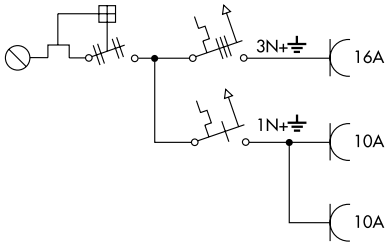

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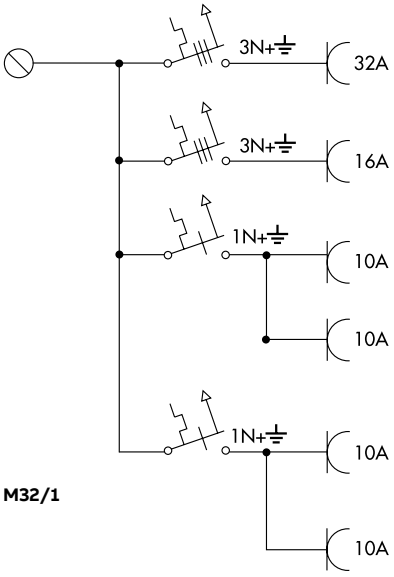

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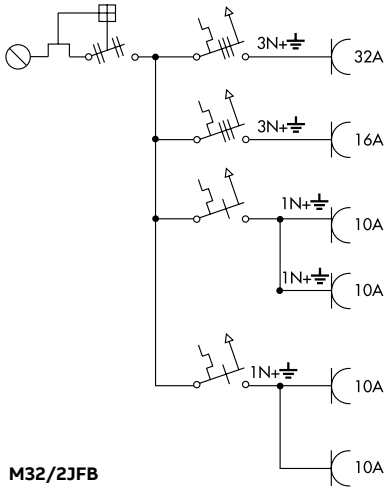

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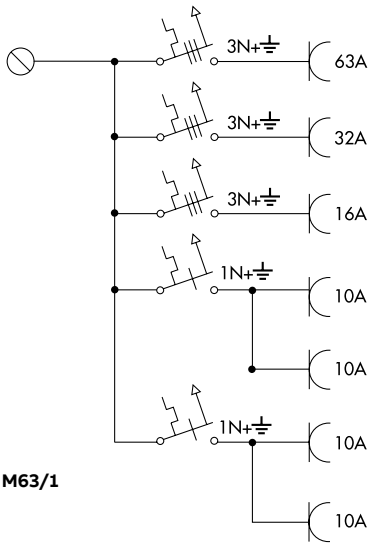

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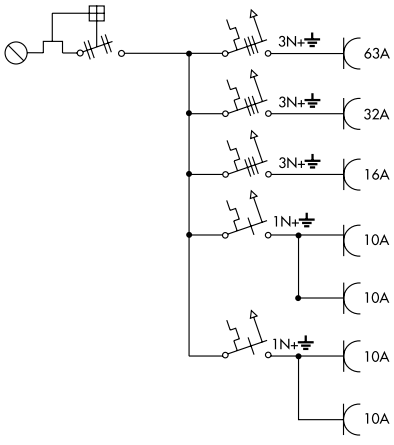


M63/2JFB

Modular Combi
Parts

We are offering modular combi parts for special requests that are not covered by our standard range. The modular combi parts housing are made of heavy duty PBT plastic material that guarantees robustness, chemical resistance and high flammability rate in your application.

Modular Combi parts, IP44
Plastic PBT
Modular combi parts are Easy to assemble and install. It is a flexible and time efficient choice for special applications. Modular combi parts can be assembled to a height of 2 meters and there is a possibility to build on the width by looping if required. Din rail are suitable for 13 modules with a lot of space for your socket outlets protection.

There are a large number of socket outlets to choose from our Easy & Safe and Tough & Safe Range depending on which IP degree and material that is required. There is also a possibility to have switched interlocked socket outlet to maximize personal safety. Assembled enclosure is tested and fulfills IP44 protection degree and can handle Socket outlets up to 63A.

Modular Combi parts

Top, bottom and middle section. Front and cover plates, cable flange and N/E terminal

Top section FMCE40

Bottom section FMCE40

FMCE45

FMCE47

FMCE46

FMCE52

FMCE50

FMCE41

FMCE54

FMCE53

FMCE42

FMCE43

Parts in plastic (PBT)

Description	Type	Order Code	Pkg qty	Weight pkg (1pce) kg
Top and bottom section				
Top (2x40 mm and 2x25 mm) and bottom (3x47 mm) section incl. screws. Suitable for MP..., MPR...	FMCE40	2CMA191077R1000		
Middle section				
Middle section incl. screws. Suitable for MP..., MPR...	FMCE45	2CMA191082R1000		
Front plate for 16-32 A outlet				
Front plate suitable for three 16-32 A outlets incl. screws. Suitable for RU and FMCE50	FMCE47	2CMA191084R1000		
Front plate for 63 A outlet				
Front plate suitable for two 63 A outlets incl. screws	FMCE46	2CMA191083R1000		
Front plate with lid and DIN rail				
Front with lid and DIN rail L=241 mm	FMCE52	2CMA191089R1000		
Front plate with schuko				
Front plate with schuko outlet 10/16 A, incl. screws. Suitable for FMCE47	FMCE50	2CMA191087R1000		
Cover plate for 16-32 A				
Cover plate suitable for 16-32 A incl. screws	FMCE54	2CMA191091R1000		
Cover plate for 63 A				
Cover plate suitable for 63 A incl. screws	FMCE53	2CMA191090R1000		
Cover plate				
Cover plate incl. screws	FMCE42	2CMA191079R1000		
Cable flange				
Hose clamp, cable tightening, flange incl. screws	FMCE41	2CMA191088R1000		
N/E terminal				
N/E terminal 16 mm², brass bar = 240 mm	FMCE43	2CMA191080R1000		

Industrial plugs and sockets
Extra low voltage

Plugs

Type PLV...
16 A...32A, IP44

Type PLV...W
16A...32 A, IP67

Connectors

Type CLV...
16 A...32 A, IP44

Type CLV...W
16 A...32 A, IP67

Socket outlet

For panel mounting with straight flange, Type RLV...
16A...32 A, IP44

For surface mounting, Type BSLV...
16 A...32A, IP44

Inlets

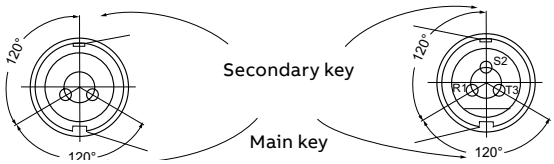
For surface mounting, Type RSLV...
16 A...32 A, IP44

Industrial plugs and sockets
Extra low voltage

We will make changes to our offering for extra low voltage (ELV). The current range will be replaced and the main improvement is that we will add also IP67 versions to our offering.

Our range of Industrial plugs and sockets for extra low voltage covers voltages up to 50V AC or DC and fulfills IEC 60309.

The old range will be available for the remainder of 2015, since we will no longer hold inventory of the old range delivery time might increase during the year.



Positions and connections of the contact

Extra low voltage is one way to protect from electrical shock. Extra-low voltage is used where the risks are great: swimming pools, wandering-lead hand lamps, and other portable appliances for outdoor use, etc.

The plugs and sockets are intended for an operating voltage not exceeding 50 V. Their rated voltage is 24 V and 50 V for 16 A and 32 A.

Standards
The products are designed according to the following standards: IEC 60 309-1, 60 309-2.

Connections
Screw type terminals.

Non-interchangeability
To achieve non-interchangeability, the plugs and sockets have a main key and a secondary key. The position of the secondary key is indicated by a number followed by a letter h (the hour position or o´ clock position). The number is determined by the position of the secondary key relative to the main key, the position of which is defined as 6 o´clock. Non hour position is given for 20-25 V, 50-60 Hz, since there is no secondary key on these plugs and sockets.
The width of the key is different for 16 A and 32 A plugs and sockets. In addition, there is a color coding system: The cover or front part is violet on 20-25 V and white on 40-50 V plugs and sockets. Plugs and sockets for direct current are grey.

Table according to IEC 60309-2
Plugs and sockets for max. 50 V.

Terminals/ Poles	Color code	Voltage	Frequency	Position of secondary key [1]
		V	Hz	
2	Violet	20-25	50-60	(none)
	White	40-50	50-60	12 h
	Green	20-25 and 40-50	100-200	4 h
			300	2 h
			400	3 h
			>400-500	11 h
	Grey		DC	10 h
3	Violet	20-25	50-60	(none)
	White	40-50	50-60	12 h
	Green	20-25 and 40-50	100-200	4 h
			300	2 h
			400	3 h
			>400-500	11 h

1) The position of main key is defined as 6h (6 o´clock)

Plugs

For extra low voltage

PLV216

16 A. IP44. Splashproof
Housing in plastic (PA). Cable entry with compression gland.

Terminals/ Poles	Color code	Voltage V	Frequency Hz	Type	Order Code	Pkg qty	Weight pkg (1pce) kg
2	Violet	20...25 AC	50 and 60	PLV216	2CMA100877R1000	10	0.142
	Grey	25 and 50 DC	-	PLV216-10	2CMA100879R1000		
	White	40...50 AC	50 and 60	PLV216-12	2CMA100878R1000		
3	Violet	20...25 AC	50 and 60	PLV316	2CMA100888R1000	10	0.160
	Green	25 and 50 DC	100...200	PLV316-4	2CMA100882R1000		
	White	40...50 AC	50 and 60	PLV316-12	2CMA100881R1000		

32 A. IP44.Splashproof
Housing in plastic (PA). Cable entry with compression gland.

2	Violet	20...25 AC	50 and 60	PLV232	2CMA100883R1000	10	0.142
	Grey	25 and 50 DC	-	PLV232-10	2CMA100885R1000		
	White	40...50 AC	50 and 60	PLV232-12	2CMA100884R1000		
3	Violet	20...25 AC	50 and 60	PLV332	2CMA100886R1000	10	0.160
	Green	25 and 50 DC	100...200	PLV332-4	2CMA100888R1000		
	White	40...50 AC	50 and 60	PLV332-12	2CMA100887R1000		

PLV216W

16 A. IP67. Watertight
Housing in plastic (PA). Cable entry with compression gland.

Terminals/ Poles	Color code	Voltage V	Frequency Hz	Type	Order Code	Pkg qty	Weight pkg (1pce) kg
2	Violet	20...25 AC	50 and 60	PLV216W	2CMA100889R1000	10	0.164
	Grey	25 and 50 DC	-	PLV216-10W	2CMA100891R1000		
	White	40...50 AC	50 and 60	PLV216-12W	2CMA100890R1000		
3	Violet	20...25 AC	50 and 60	PLV316W	2CMA100892R1000	10	0.182
	Green	25 and 50 DC	100...200	PLV316-4W	2CMA100894R1000		
	White	40...50 AC	50 and 60	PLV316-12W	2CMA100893R1000		

32 A. IP67. Watertight
Housing in plastic (PA). Cable entry with compression gland.

2	Violet	20...25 AC	50 and 60	PLV232W	2CMA100895R1000	10	0.164
	Grey	25 and 50 DC	-	PLV232-10W	2CMA100897R1000		
	White	40...50 AC	50 and 60	PLV232-12W	2CMA100896R1000		
3	Violet	20...25 AC	50 and 60	PLV332W	2CMA100898R1000	10	0.182
	Green	25 and 50 DC	100...200	PLV332-4W	2CMA100900R1000		
	White	40...50 AC	50 and 60	PLV332-12W	2CMA100899R1000		

Connectors

For extra low voltage

CLV216

16 A. IP44. Splashproof
Housing in plastic (PA). Cable entry with compression gland.

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2	Violet	20...25 AC	50 and 60	CLV216	2CMA100901R1000	10	0.177
	Grey	25 and 50 DC	-	CLV216-10	2CMA100903R1000		
	White	40...50 AC	50 and 60	CLV216-12	2CMA100902R1000		
3	Violet	20...25 AC	50 and 60	CLV316	2CMA100904R1000	10	0.198
	Green	25 and 50 DC	100...200	CLV316-4	2CMA100906R1000		
	White	40...50 AC	50 and 60	CLV316-12	2CMA100905R1000		

32 A. IP44.Splashproof
Housing in plastic (PA). Cable entry with compression gland.

2	Violet	20...25 AC	50 and 60	CLV232	2CMA100907R1000	10	0.178
	Grey	25 and 50 DC	-	CLV232-10	2CMA100909R1000		
	White	40...50 AC	50 and 60	CLV232-12	2CMA100908R1000		
3	Violet	20...25 AC	50 and 60	CLV332	2CMA100910R1000	10	0.198
	Green	25 and 50 DC	100...200	CLV332-4	2CMA100912R1000		
	White	40...50 AC	50 and 60	CLV332-12	2CMA100911R1000		

CLV216W

16 A. IP67. Watertight
Housing in plastic (PA). Cable entry with compression gland.

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2	Violet	20...25 AC	50 and 60	CLV216W	2CMA100913R1000	10	0.199
	Grey	25 and 50 DC	-	CLV216-10W	2CMA100915R1000		
	White	40...50 AC	50 and 60	CLV216-12W	2CMA100914R1000		
3	Violet	20...25 AC	50 and 60	CLV316W	2CMA100916R1000	10	0.219
	Green	25 and 50 DC	100...200	CLV316-4W	2CMA100918R1000		
	White	40...50 AC	50 and 60	CLV316-12W	2CMA100917R1000		

32 A. IP67. Watertight
Housing in plastic (PA). Cable entry with compression gland.

2	Violet	20...25 AC	50 and 60	CLV232W	2CMA100919R1000	10	0.199
	Grey	25 and 50 DC	-	CLV232-10W	2CMA100921R1000		
	White	40...50 AC	50 and 60	CLV232-12W	2CMA100920R1000		
3	Violet	20...25 AC	50 and 60	CLV332W	2CMA100922R1000	10	0.219
	Green	25 and 50 DC	100...200	CLV332-4W	2CMA100924R1000		
	White	40...50 AC	50 and 60	CLV332-12W	2CMA100923R1000		

Socket outlets

For extra low voltage

RLV216

For panel mounting with straight flange. 16 A. IP44. Splashproof
Housing in plastic (PA).

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2	Violet	20...25 AC	50 and 60	RLV216	2CMA100973R1000	10	0.099
	Grey	25 and 50 DC	-	RLV216-10	2CMA100975R1000		
	White	40...50 AC	50 and 60	RLV216-12	2CMA100974R1000		
3	Violet	20...25 AC	50 and 60	RLV316	2CMA100976R1000	10	0.114
	Green	25 and 50 DC	100...200	RLV316-4	2CMA100978R1000		
	White	40...50 AC	50 and 60	RLV316-12	2CMA100977R1000		

For panel mounting with straight flange. 32 A. IP44.Splashproof
Housing in plastic (PA).

2	Violet	20...25 AC	50 and 60	RLV232	2CMA100979R1000	10	0.099
	Grey	25 and 50 DC	-	RLV232-10	2CMA100981R1000		
	White	40...50 AC	50 and 60	RLV232-12	2CMA100980R1000		
3	Violet	20...25 AC	50 and 60	RLV332	2CMA100982R1000	10	0.114
	Green	25 and 50 DC	100...200	RLV332-4	2CMA100984R1000		
	White	40...50 AC	50 and 60	RLV332-12	2CMA100983R1000		

RSLV216

For surface mounging 16 A. IP44. Splashproof
Housing in plastic (PA). Treaded cable entry M25

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2	Violet	20...25 AC	50 and 60	RSLV216	2CMA100985R1000	10	0.198
	Grey	25 and 50 DC	-	RSLV216-10	2CMA100987R1000		
	White	40...50 AC	50 and 60	RSLV216-12	2CMA100986R1000		
3	Violet	20...25 AC	50 and 60	RSLV316	2CMA100988R1000	10	0.215
	Green	25 and 50 DC	100...200	RSLV316-4	2CMA100990R1000		
	White	40...50 AC	50 and 60	RSLV316-12	2CMA100989R1000		

Inlets

For extra low voltage

BSLV216

For surface mounting. 16 A. IP44. Splashproof
Housing in plastic (PA). Threaded cable entry M25.

Terminals/ Poles	Color code	Voltage	Frequency	Type	Order Code	Pkg qty	Weight pkg (1pce)
		V	Hz				kg
2	Violet	20...25 AC	50 and 60	BSLV216	2CMA100991R1000	10	0.165
	Grey	25 and 50 DC	-	BSLV216-10	2CMA100993R1000		
	White	40...50 AC	50 and 60	BSLV216-12	2CMA100992R1000		
3	Violet	20...25 AC	50 and 60	BSLV316	2CMA100994R1000	10	0.180
	Green	25 and 50 DC	100...200	BSLV316-4	2CMA100996R1000		
	White	40...50 AC	50 and 60	BSLV316-12	2CMA100995R1000		

Industrial plugs and sockets
High current connectors

The right soloution for every application.
The connector product portfolio covers almost all application in the defined high current range.

C-Line - 200 A/250 A
The compact C-Line connectors have a robust plastic housing and are perfect for applications with limited space conditions as well as for certain industries (chemistry, food industry). Additional options allow use in a variety of applications.

B-Line - 250 A/400 A
The robust B-Line connectors are ideal for applications (tunneling, mining), where high mechanical loads may arise. Furthermore, numerous options, such as the saltwater resistant housing, make the connectors also suitable for marine applications.

Connector units 200 A...400 A
To ensure maximum safety for users, we can offer special connector units:
CUMI (connector unit with mechanical interlock)
CUBC (connector unit with block contactor)
CUCB (connector unit with circuit breaker)

High current connectors

In applications where high current connectors are used, safety, qauality and reliability are the top priorites for customers.

Connectors for challenging applications
In order to fulfill this task, all these properties were bundled into one product range. Thus, all customers receive a product with the highest degree of performance.

Whether in tunnel construction, where extremely mechanical strength is required or railway applications where vibration-proof is of highest importance, the high current connectors are always the right choice.

Robust housing
The connectors are designed for ambient temperatures from -40 C to +100 °C. This ensures full functionality at low and very high temperatures. This leads to significantly fewer plant failures (reduced risk of overheating) and reduced fire risk. Another important aspect for vaious industries, such as tunnel construction, construction sites, mines is the high robustness of the connectors. These can withstand loads of up to 2 tonnes.

IK Code
The IK code is a coding system according to IEC/EN 50102 or IEC/EN 62262, which indicates the degreee of protection by a housing against harmful external stresses. Each characteristic number of the IK code represent a stress relief value.

IK code	01	02	03	04	05	06	07	08	09	10
Stress energy joule	0,14	0.2	0.35	0.5	0.7	1	2	4	10	20

The connectors of the C-Line and B-Line are IK 10 classified.

Finger toutch protection
each socket is equipped with a finger touch protection in order to safeguard the user against electrical shocks in the event of unintentional contact with live parts.

IP67/IP55
The connectors are IP67. They are dust-proof and suitable for temporary immersions under water. The connector units are IP55, which means protected against dust and splashing water.
- Always reliable in adverse enverinmental conditions
- Suitable for high humidity applications
- Low maintenance (no dust/moisture penetration)
- High security ensured at all times

Voltage coding
Arrangement of the PE contact pin and bushing to prevent wrong plugging of vaious voltages and frequencies after the time setting in accordance with table 104 from EN 60309-2. The standard earthing contact specifies the time setting.

Applications
Connectors for every task
- Tunnel contruction
- Marine
- Railway
- Military
- Industry
- Construction site
- Event technology
- Minig
- Chemistry

Characteristics
- 200 A...400 A
- Robust housing
- 4- and 5-poles
- High reliability
- Compact design
- IP 67
- Finger touch protection
- Designed for high temperatures
- Vibration resistent

Special applications - On request
- Vibration resistants screws
- Seawater resistant housing
- Harnessed connectors

Customized solutions
If standard solutions do not meet all the requiremens of an application, customer-specific solutions are made upon request.

C-Line

The compact C-Line connectors have a robust plastic housing and are perfect for applications with limited space conditions as well as for certain industries (chemistry, food industry). Additional options allow use in a varienty of applications.

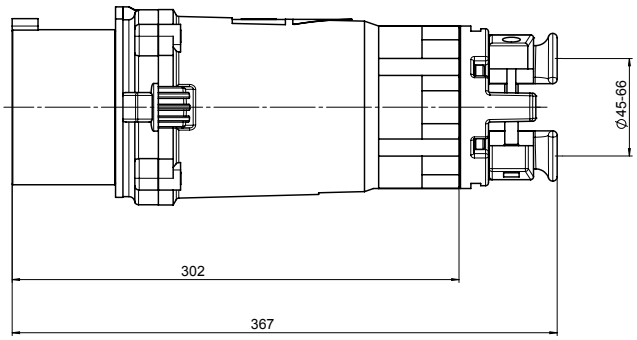
Technical data	Unit	C-Line		
Norminal current	A	200		250
Rated current	A	250		285
Rated voltage	V		1000	
Rated frequency	Hz		50/60	
Withstand voltage (1 Min/50 Hz)	V		4000	
Protection grade			IP67	
Shock resistance			IK10	
Ambient temperature	°C		-40/+100	
Insulation resistance (Phase-phase and phase-earth	MOhm		>500	
Comparative tracking index of the insert	CTI		>600	
Terminal cross-section (EN 60228 Class 5)	mm^2		35-150	
Max cross section pilot cable, conductor (EN 60228 Class 5)	mm^2		4	
Diameter of cable - separat pilot cable	mm		34-66	
Diameter of cable	mm		5-10	

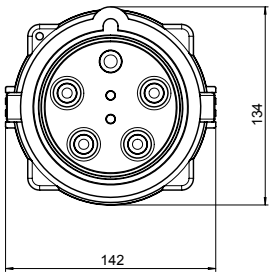
Plugs
C-Line

MC-S5/200 400V

IP67. Watertight
Robust plastic housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	MC-S4/200A/230V	2CMA103139R1000	1	2.7
		400		6	MC-S4/200A/400V	2CMA103140R1000		
		500		7	MC-S4/200A/500V	2CMA103141R1000		
		690		5	MC-S4/200A/690V	2CMA103142R1000		
		1000		1	MC-S4/200A/1000V	2CMA103143R1000		
3L+N+PE								
5	200	230	50/60	9	MC-S5/200A/230V	2CMA103144R1000	1	2.9
		400		6	MC-S5/200A/400V	2CMA103145R1000		
		500		7	MC-S5/200A/500V	2CMA103146R1000		
		690		5	MC-S5/200A/690V	2CMA103147R1000		
		1000		1	MC-S5/200A/1000V	2CMA103148R1000		
3L+PEN								
4	250	230	50/60	9	MC-S4/250A/230V	2CMA103149R1000	1	2.7
		400		6	MC-S4/250A/400V	2CMA103150R1000		
		500		7	MC-S4/250A/500V	2CMA103151R1000		
		690		5	MC-S4/250A/690V	2CMA103152R1000		
		1000		1	MC-S4/250A/1000V	2CMA103153R1000		
3L+N+PE								
5	250	230	50/60	9	MC-S5/250A/230V	2CMA103154R1000	1	2.9
		400		6	MC-S5/250A/400V	2CMA103155R1000		
		500		7	MC-S5/250A/500V	2CMA103156R1000		
		690		5	MC-S5/250A/690V	2CMA103157R1000		
		1000		1	MC-S5/250A/1000V	2CMA103158R1000		



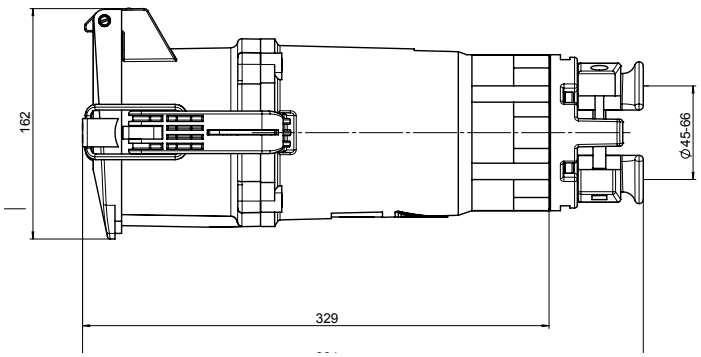


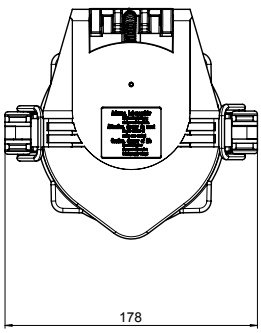
Sockets
C-Line

FC-S5/200 400V

IP67. Watertight
Robust plastic housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	FC-S4/200 230V	2CMA103299R1000	1	3.4
		400		6	FC-S4/200 400V	2CMA103300R1000		
		500		7	FC-S4/200 500V	2CMA103301R1000		
		690		5	FC-S4/200 690V	2CMA103302R1000		
		1000		1	FC-S4/200 1000V	2CMA103303R1000		
3L+N+PE								
5	200	230	50/60	9	FC-S5/200 230V	2CMA103304R1000	1	3.6
		400		6	FC-S5/200 400V	2CMA103305R1000		
		500		7	FC-S5/200 500V	2CMA103306R1000		
		690		5	FC-S5/200 690V	2CMA103307R1000		
		1000		1	FC-S5/200 1000V	2CMA103308R1000		
3L+PEN								
4	250	230	50/60	9	FC-S4/250 230V	2CMA103309R1000	1	3.4
		400		6	FC-S4/250 400V	2CMA103310R1000		
		500		7	FC-S4/250 500V	2CMA103311R1000		
		690		5	FC-S4/250 690V	2CMA103312R1000		
		1000		1	FC-S4/250 1000V	2CMA103313R1000		
3L+N+PE								
5	250	230	50/60	9	FC-S5/250 230V	2CMA103314R1000	1	3.6
		400		6	FC-S5/250 400V	2CMA103315R1000		
		500		7	FC-S5/250 500V	2CMA103316R1000		
		690		5	FC-S5/250 690V	2CMA103317R1000		
		1000		1	FC-S5/250 1000V	2CMA103318R1000		





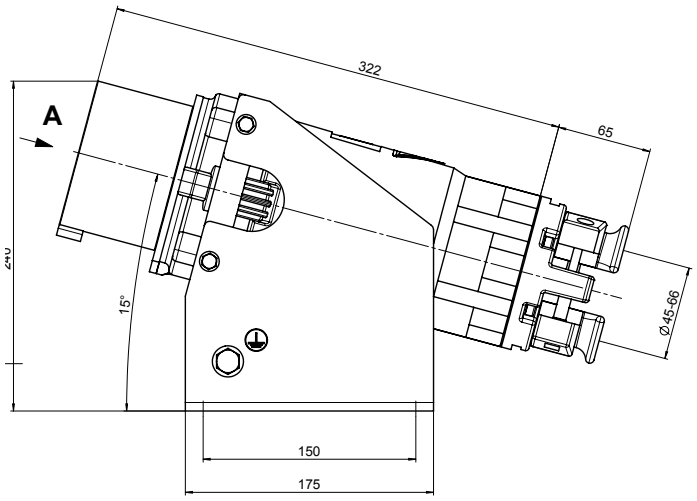
Inlets for wall mounting

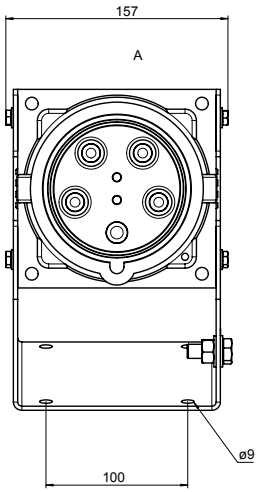
C-Line

MCW-S5/200 400V

IP67. Watertight
Robust plastic housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	MCW-S4/200 230V	2CMA103259R1000	1	3.6
		400		6	MCW-S4/200 400V	2CMA103260R1000		
		500		7	MCW-S4/200 500V	2CMA103261R1000		
		690		5	MCW-S4/200 690V	2CMA103262R1000		
		1000		1	MCW-S4/200 1000V	2CMA103263R1000		
3L+N+PE								
5	200	230	50/60	9	MCW-S5/200 230V	2CMA103264R1000	1	3.8
		400		6	MCW-S5/200 400V	2CMA103265R1000		
		500		7	MCW-S5/200 500V	2CMA103266R1000		
		690		5	MCW-S5/200 690V	2CMA103267R1000		
		1000		1	MCW-S5/200 1000V	2CMA103268R1000		
3L+PEN								
4	250	230	50/60	9	MCW-S4/250 230V	2CMA103269R1000	1	3.6
		400		6	MCW-S4/250 400V	2CMA103270R1000		
		500		7	MCW-S4/250 500V	2CMA103271R1000		
		690		5	MCW-S4/250 690V	2CMA103272R1000		
		1000		1	MCW-S4/250 1000V	2CMA103273R1000		
3L+N+PE								
5	250	230	50/60	9	MCW-S5/250 230V	2CMA103274R1000	1	3.8
		400		6	MCW-S5/250 400V	2CMA103275R1000		
		500		7	MCW-S5/250 500V	2CMA103276R1000		
		690		5	MCW-S5/250 690V	2CMA103277R1000		
		1000		1	MCW-S5/250 10000V	2CMA103278R1000		





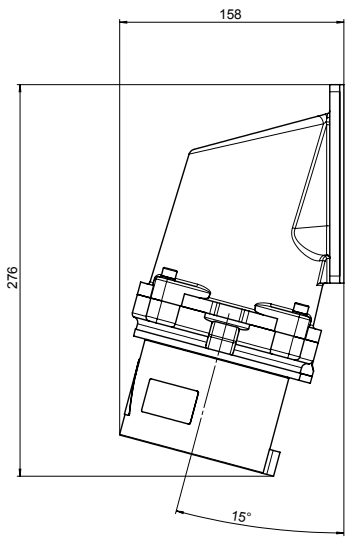
Inlets for panel mounting

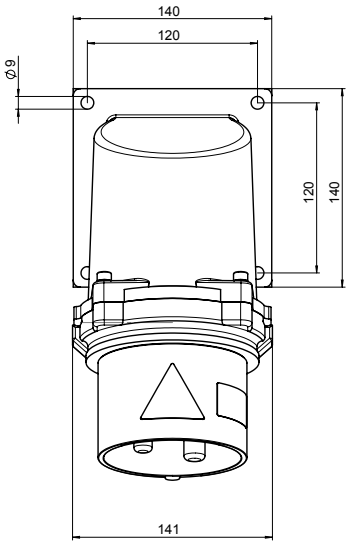
C-Line

MCPA-S5/200 400V

IP67. Watertight
Robust housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	MCPA-S4/200 230V	2CMA103219R1000	1	4.2
		400		6	MCPA-S4/200 400V	2CMA103220R1000		
		500		7	MCPA-S4/200 500V	2CMA103221R1000		
		690		5	MCPA-S4/200 690V	2CMA103222R1000		
		1000		1	MCPA-S4/200 1000V	2CMA103223R1000		
3L+N+PE								
5	200	230	50/60	9	MCPA-S5/200 230V	2CMA103224R1000	1	4.4
		400		6	MCPA-S5/200 400V	2CMA103225R1000		
		500		7	MCPA-S5/200 500V	2CMA103226R1000		
		690		5	MCPA-S5/200 690V	2CMA103227R1000		
		1000		1	MCPA-S5/200 1000V	2CMA103228R1000		
3L+PEN								
4	250	230	50/60	9	MCPA-S4/250 230V	2CMA103229R1000	1	4.2
		400		6	MCPA-S4/250 400V	2CMA103230R1000		
		500		7	MCPA-S4/250 500V	2CMA103231R1000		
		690		5	MCPA-S4/250 690V	2CMA103232R1000		
		1000		1	MCPA-S4/250 1000V	2CMA103233R1000		
3L+N+PE								
5	250	230	50/60	9	MCPA-S5/250 230V	2CMA103234R1000	1	4.4
		400		6	MCPA-S5/250 400V	2CMA103235R1000		
		500		7	MCPA-S5/250 500V	2CMA103236R1000		
		690		5	MCPA-S5/250 690V	2CMA103237R1000		
		1000		1	MCPA-S5/250 1000V	2CMA103238R1000		





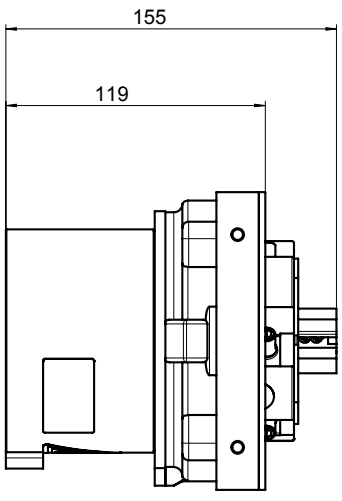
Inlets for panel mounting

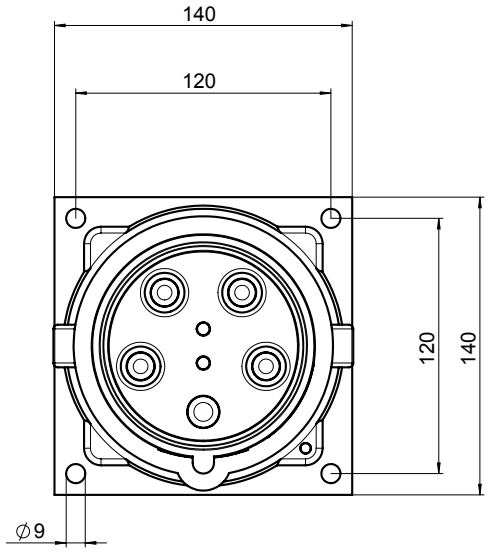
C-Line

MCP-S5/200 400V

IP67. Watertight
Robust housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	MCP-S4/200 230V	2CMA103179R1000	1	2.2
		400		6	MCP-S4/200 400V	2CMA103180R1000		
		500		7	MCP-S4/200 500V	2CMA103181R1000		
		690		5	MCP-S4/200 690V	2CMA103182R1000		
		1000		1	MCP-S4/200 1000V	2CMA103183R1000		
3L+N+PE								
5	200	230	50/60	9	MCP-S5/200 230V	2CMA103184R1000	1	2.4
		400		6	MCP-S5/200 400V	2CMA103185R1000		
		500		7	MCP-S5/200 500V	2CMA103186R1000		
		690		5	MCP-S5/200 690V	2CMA103187R1000		
		1000		1	MCP-S5/200 1000V	2CMA103188R1000		
3L+PEN								
4	250	230	50/60	9	MCP-S4/250 230V	2CMA103189R1000	1	2.2
		400		6	MCP-S4/250 400V	2CMA103190R1000		
		500		7	MCP-S4/250 500V	2CMA103191R1000		
		690		5	MCP-S4/250 690V	2CMA103192R1000		
		1000		1	MCP-S4/250 1000V	2CMA103193R1000		
3L+N+PE								
5	250	230	50/60	9	MCP-S5/250 230V	2CMA103194R1000	1	2.4
		400		6	MCP-S5/250 400V	2CMA103195R1000		
		500		7	MCP-S5/250 500V	2CMA103196R1000		
		690		5	MCP-S5/250 690V	2CMA103197R1000		
		1000		1	MCP-S5/250 1000V	2CMA103198R1000		





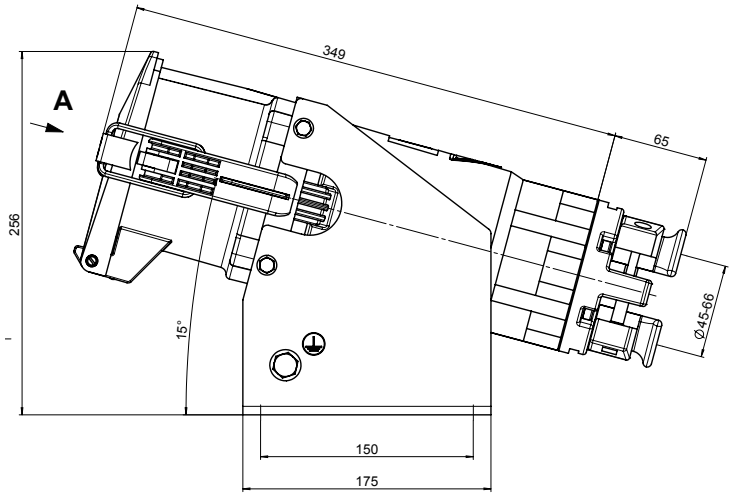
Socket outlet for wall mounting

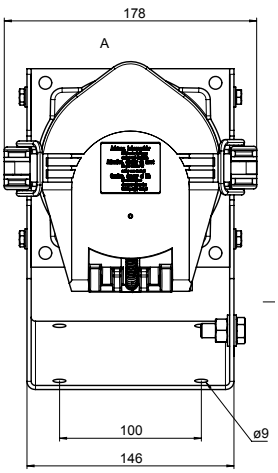
C-Line

FCW-S5/200 400V

IP67. Watertight
Robust plastic housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	FCW-S4/200 230V	2CMA103419R1000	1	4.3
		400		6	FCW-S4/200 400V	2CMA103420R1000		
		500		7	FCW-S4/200 500V	2CMA103421R1000		
		690		5	FCW-S4/200 690V	2CMA103422R1000		
		1000		1	FCW-S4/200 1000V	2CMA103423R1000		
3L+N+PE								
5	200	230	50/60	9	FCW-S5/200 230V	2CMA103424R1000	1	4.5
		400		6	FCW-S5/200 400V	2CMA103425R1000		
		500		7	FCW-S5/200 500V	2CMA103426R1000		
		690		5	FCW-S5/200 690V	2CMA103427R1000		
		1000		1	FCW-S5/200 1000V	2CMA103428R1000		
3L+PEN								
4	250	230	50/60	9	FCW-S4/250 230V	2CMA103429R1000	1	4.3
		400		6	FCW-S4/250 400V	2CMA103430R1000		
		500		7	FCW-S4/250 500V	2CMA103431R1000		
		690		5	FCW-S4/250 690V	2CMA103432R1000		
		1000		1	FCW-S4/250 1000V	2CMA103433R1000		
3L+N+PE								
5	250	230	50/60	9	FCW-S5/250 230V	2CMA103434R1000	1	4.5
		400		6	FCW-S5/250 400V	2CMA103435R1000		
		500		7	FCW-S5/250 500V	2CMA103436R1000		
		690		5	FCW-S5/250 690V	2CMA103437R1000		
		1000		1	FCW-S5/250 1000V	2CMA103438R1000		





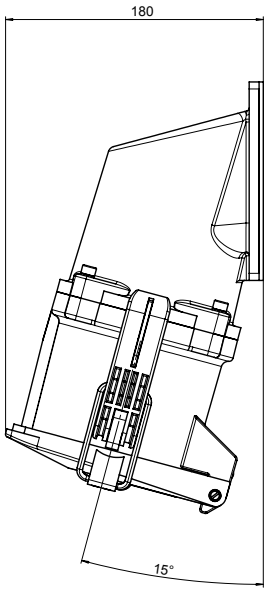
Socket outlet for wall mounting

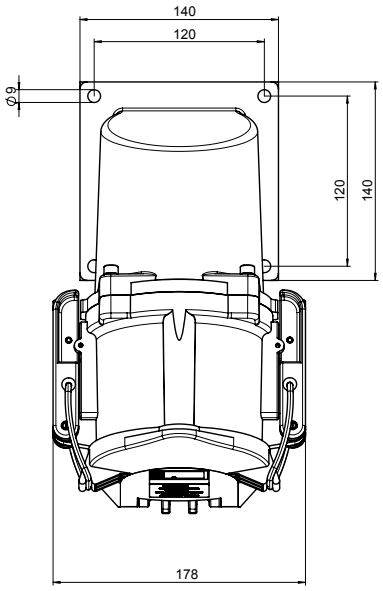
C-Line

FCPA-S5/200 400V

IP67. Watertight
Robust housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	FCPA-S4/200 230V	2CMA103379R1000	1	4.4
		400		6	FCPA-S4/200 400V	2CMA103380R1000		
		500		7	FCPA-S4/200 500V	2CMA103381R1000		
		690		5	FCPA-S4/200 690V	2CMA103382R1000		
		1000		1	FCPA-S4/200 1000V	2CMA103383R1000		
3L+N+PE								
5	200	230	50/60	9	FCPA-S5/200 230V	2CMA103384R1000	1	4.6
		400		6	FCPA-S5/200 400V	2CMA103385R1000		
		500		7	FCPA-S5/200 500V	2CMA103386R1000		
		690		5	FCPA-S5/200 690V	2CMA103387R1000		
		1000		1	FCPA-S5/200 1000V	2CMA103388R1000		
3L+PEN								
4	250	230	50/60	9	FCPA-S4/250 230V	2CMA103389R1000	1	4.4
		400		6	FCPA-S4/250 400V	2CMA103390R1000		
		500		7	FCPA-S4/250 500V	2CMA103391R1000		
		690		5	FCPA-S4/250 690V	2CMA103392R1000		
		1000		1	FCPA-S4/250 1000V	2CMA103393R1000		
3L+N+PE								
5	250	230	50/60	9	FCPA-S5/250 230V	2CMA103394R1000	1	4.6
		400		6	FCPA-S5/250 400V	2CMA103395R1000		
		500		7	FCPA-S5/250 500V	2CMA103396R1000		
		690		5	FCPA-S5/250 690V	2CMA103397R1000		
		1000		1	FCPA-S5/250 1000V	2CMA103398R1000		





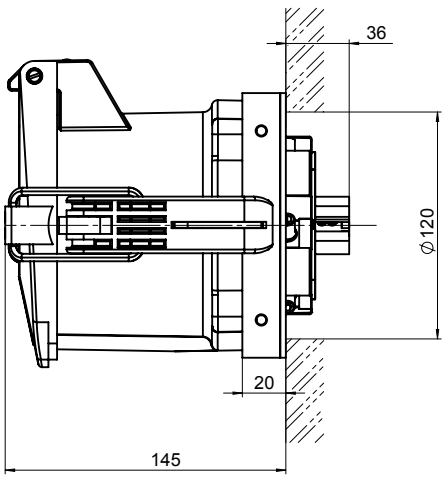
Socket outlet for panel mounting

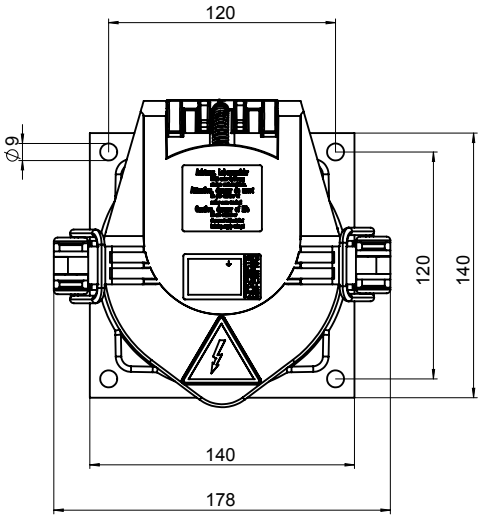
C-Line

FCP-S5/200 400V

IP67. Watertight
Robust housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	FCP-S4/200 230V	2CMA103339R1000	1	3.2
		400		6	FCP-S4/200 400V	2CMA103340R1000		
		500		7	FCP-S4/200 500V	2CMA103341R1000		
		690		5	FCP-S4/200 690V	2CMA103342R1000		
		1000		1	FCP-S4/200 1000V	2CMA103343R1000		
3L+N+PE								
5	200	230	50/60	9	FCP-S5/200 230V	2CMA103344R1000	1	3.5
		400		6	FCP-S5/200 400V	2CMA103345R1000		
		500		7	FCP-S5/200 500V	2CMA103346R1000		
		690		5	FCP-S5/200 690V	2CMA103347R1000		
		1000		1	FCP-S5/200 1000V	2CMA103348R1000		
3L+PEN								
4	250	230	50/60	9	FCP-S4/250 230V	2CMA103349R1000	1	3.2
		400		6	FCP-S4/250 400V	2CMA103350R1000		
		500		7	FCP-S4/250 500V	2CMA103351R1000		
		690		5	FCP-S4/250 690V	2CMA103352R1000		
		1000		1	FCP-S4/250 1000V	2CMA103353R1000		
3L+N+PE								
5	250	230	50/60	9	FCP-S5/250 230V	2CMA103354R1000	1	3.5
		400		6	FCP-S5/250 400V	2CMA103355R1000		
		500		7	FCP-S5/250 500V	2CMA103356R1000		
		690		5	FCP-S5/250 690V	2CMA103357R1000		
		1000		1	FCP-S5/250 1000V	2CMA103358R1000		





B-Line

The robust B-Line connectors are ideal for applications (tunneling, mining), where high mechanical loads may arise. Furthermore, numerous options, such as the saltwater-resistant housing, make the connecors also suitable for marine applications.

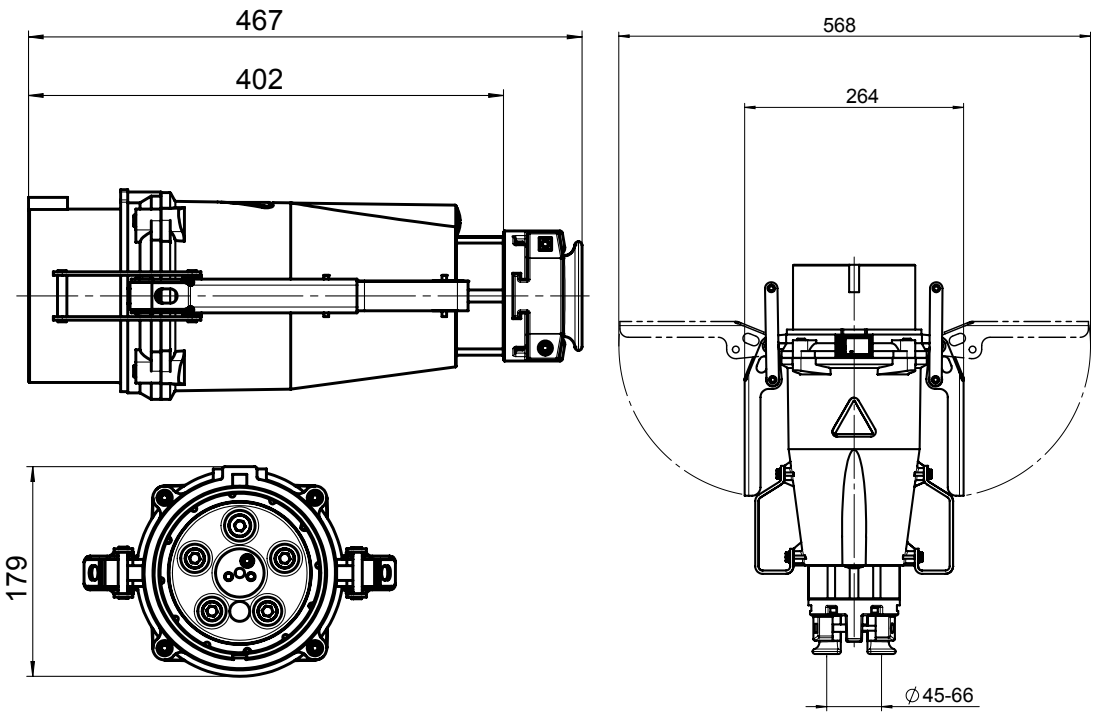
Technical data	Unit	B-Line	
Norminal current	A	250	400
Rated current	A	315	450
Rated voltage	V	1000	
Rated frequency	Hz	50/60	
Withstand voltage (1 Min/50 Hz)	V	4000	
Protection grade		IP67	
Shock resistance		IK10	
Ambient temperature	°C	-40/+100	
Insulation resistance (Phase-phase and phase-earth	MOhm	>500	
Comparative tracking index of the insert	CTI	>600	
Terminal cross-section (EN 60228 Class 5)	mm^2	70-240	
Max cross section pilot cable, conductor (EN 60228 Class 5)	mm^2	4	
Diameter of cable - separat pilot cable	mm	34-66	
Diameter of cable	mm	8-15	

Plugs
B-Line

MC-S5/250 400V

IP67. Watertight
Aluminum housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	250	230	50/60	9	MC-S4/250A/230V	2CMA103159R1000	1	8.1
		400		6	MC-S4/250A/400V	2CMA103160R1000		
		500		7	MC-S4/250A/500V	2CMA103161R1000		
		690		5	MC-S4/250A/690V	2CMA103162R1000		
		1000		1	MC-S4/250A/1000V	2CMA103163R1000		
3L+N+PE								
5	250	230	50/60	9	MC-S5/250A/230V	2CMA103164R1000	1	8.6
		400		6	MC-S5/250A/400V	2CMA103165R1000		
		500		7	MC-S5/250A/500V	2CMA103166R1000		
		690		5	MC-S5/250A/690V	2CMA103167R1000		
		1000		1	MC-S5/250A/1000V	2CMA103168R1000		
3L+PEN								
4	400	230	50/60	9	MC-S4/400A/230V	2CMA103169R1000	1	8.1
		400		6	MC-S4/400A/400V	2CMA103170R1000		
		500		7	MC-S4/400A/500V	2CMA103171R1000		
		690		5	MC-S4/400A/690V	2CMA103172R1000		
		1000		1	MC-S4/400A/1000V	2CMA103173R1000		
3L+N+PE								
5	400	230	50/60	9	MC-S5/400A/230V	2CMA103174R1000	1	8.6
		400		6	MC-S5/400A/400V	2CMA103175R1000		
		500		7	MC-S5/400A/500V	2CMA103176R1000		
		690		5	MC-S5/400A/690V	2CMA103177R1000		
		1000		1	MC-S5/400A/1000V	2CMA103178R1000		

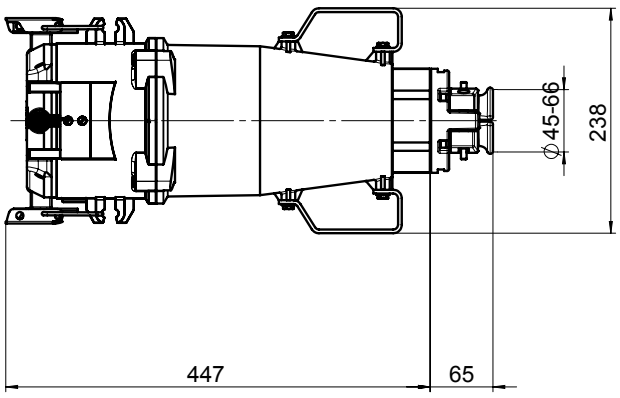


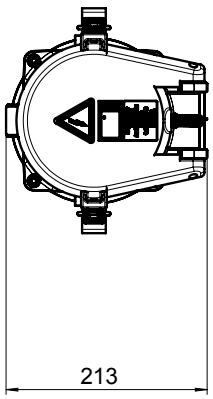
Sockets
B-Line

FC-S5/250 400V

IP67. Watertight
Aluminum housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	250	230	50/60	9	FC-S4/250 230V	2CMA103319R1000	1	9.4
		400		6	FC-S4/250 400V	2CMA103320R1000		
		500		7	FC-S4/250 500V	2CMA103321R1000		
		690		5	FC-S4/250 690V	2CMA103322R1000		
		1000		1	FC-S4/250 1000V	2CMA103323R1000		
3L+N+PE								
5	250	230	50/60	9	FC-S5/250 230V	2CMA103324R1000	1	9.9
		400		6	FC-S5/250 400V	2CMA103325R1000		
		500		7	FC-S5/250 500V	2CMA103326R1000		
		690		5	FC-S5/250 690V	2CMA103327R1000		
		1000		1	FC-S5/250 1000V	2CMA103328R1000		
3L+PEN								
4	400	230	50/60	9	FC-S4/400 230V	2CMA103329R1000	1	9.4
		400		6	FC-S4/400 400V	2CMA103330R1000		
		500		7	FC-S4/400 500V	2CMA103331R1000		
		690		5	FC-S4/400 690V	2CMA103332R1000		
		1000		1	FC-S4/400 1000V	2CMA103333R1000		
3L+N+PE								
5	400	230	50/60	9	FC-S5/400 230V	2CMA103334R1000	1	9.9
		400		6	FC-S5/400 400V	2CMA103335R1000		
		500		7	FC-S5/400 500V	2CMA103336R1000		
		690		5	FC-S5/400 690V	2CMA103337R1000		
		1000		1	FC-S5/400 1000V	2CMA103338R1000		





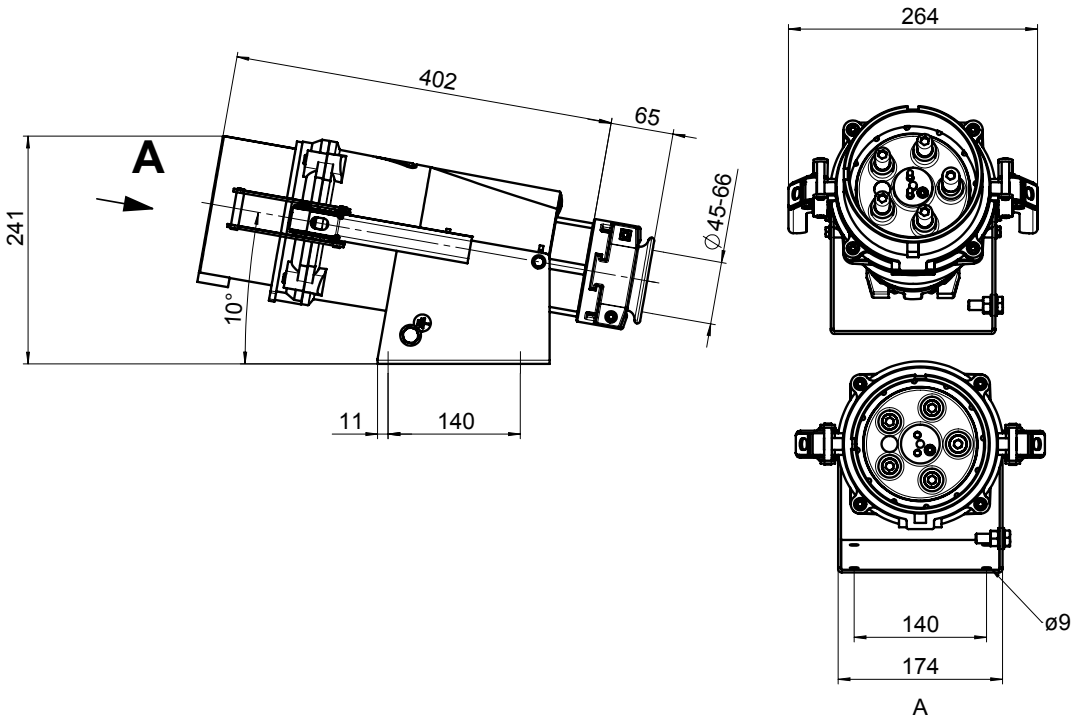
Inlets for wall mounting

B-Line

MCW-S5/250 400V

IP67. Watertight
Aluminum housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	250	230	50/60	9	MCW-S4/250 230V	2CMA103279R1000	1	10.0
		400		6	MCW-S4/250 400V	2CMA103280R1000		
		500		7	MCW-S4/250 500V	2CMA103281R1000		
		690		5	MCW-S4/250 690V	2CMA103282R1000		
		1000		1	MCW-S4/250 1000V	2CMA103283R1000		
3L+N+PE								
5	250	230	50/60	9	MCW-S5/250 230V	2CMA103284R1000	1	10.5
		400		6	MCW-S5/250 400V	2CMA103285R1000		
		500		7	MCW-S5/250 500V	2CMA103286R1000		
		690		5	MCW-S5/250 690V	2CMA103287R1000		
		1000		1	MCW-S5/250 10000V	2CMA103288R1000		
3L+PEN								
4	400	230	50/60	9	MCW-S4/400 230V	2CMA103289R1000	1	10.0
		400		6	MCW-S4/400 400V	2CMA103290R1000		
		500		7	MCW-S4/400 500V	2CMA103291R1000		
		690		5	MCW-S4/400 690V	2CMA103292R1000		
		1000		1	MCW-S4/400 1000V	2CMA103293R1000		
3L+N+PE								
5	400	230	50/60	9	MCW-S5/400 230V	2CMA103294R1000	1	10.5
		400		6	MCW-S5/400 400V	2CMA103295R1000		
		500		7	MCW-S5/400 500V	2CMA103296R1000		
		690		5	MCW-S5/400 690V	2CMA103297R1000		
		1000		1	MCW-S5/400 1000V	2CMA103298R1000		



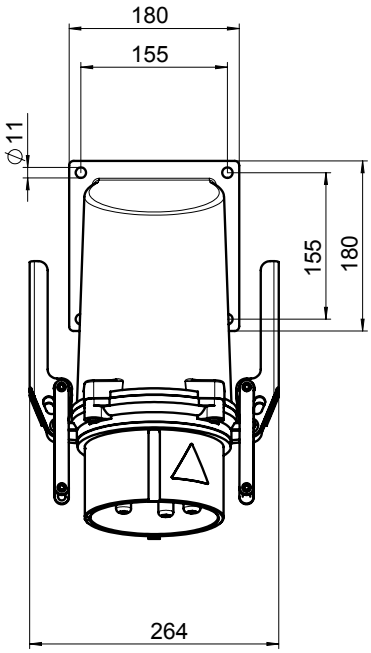
Inlets for panel mounting

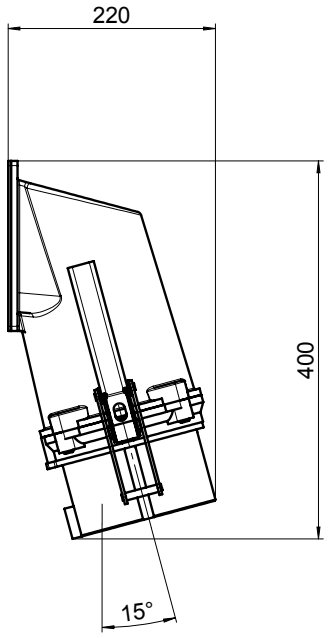
B-Line

MCPA-S5/250 400V

IP67. Watertight
Aluminum housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	250	230	50/60	9	MCPA-S4/250 230V	2CMA103239R1000	1	9.8
		400		6	MCPA-S4/250 400V	2CMA103240R1000		
		500		7	MCPA-S4/250 500V	2CMA103241R1000		
		690		5	MCPA-S4/250 690V	2CMA103242R1000		
		1000		1	MCPA-S4/250 1000V	2CMA103243R1000		
3L+N+PE								
5	250	230	50/60	9	MCPA-S5/250 230V	2CMA103244R1000	1	10.3
		400		6	MCPA-S5/250 400V	2CMA103245R1000		
		500		7	MCPA-S5/250 500V	2CMA103246R1000		
		690		5	MCPA-S5/250 690V	2CMA103247R1000		
		1000		1	MCPA-S5/250 1000V	2CMA103248R1000		
3L+PEN								
4	400	230	50/60	9	MCPA-S4/400 230V	2CMA103249R1000	1	9.8
		400		6	MCPA-S4/400 400V	2CMA103250R1000		
		500		7	MCPA-S4/400 500V	2CMA103251R1000		
		690		5	MCPA-S4/400 690V	2CMA103252R1000		
		1000		1	MCPA-S4/400 1000V	2CMA103253R1000		
3L+N+PE								
5	400	230	50/60	9	MCPA-S5/400 230V	2CMA103254R1000	1	10.3
		400		6	MCPA-S5/400 400V	2CMA103255R1000		
		500		7	MCPA-S5/400 500V	2CMA103256R1000		
		690		5	MCPA-S5/400 690V	2CMA103257R1000		
		1000		1	MCPA-S5/400 1000V	2CMA103258R1000		





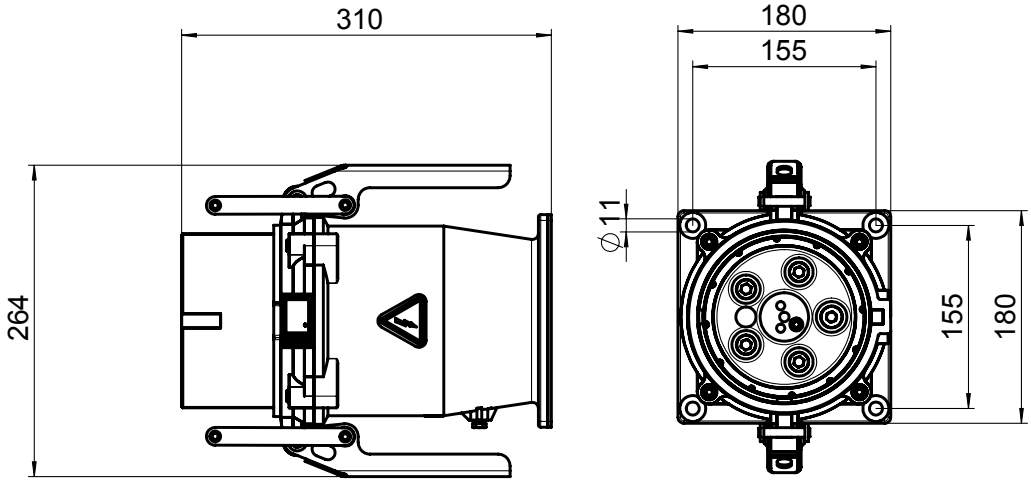
Inlets for panel mounting

B-Line

MCP-S5/250 400V

IP67. Watertight
Aluminum housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	250	230	50/60	9	MCP-S4/250 230V	2CMA103199R1000	1	8.1
		400		6	MCP-S4/250 400V	2CMA103200R1000		
		500		7	MCP-S4/250 500V	2CMA103201R1000		
		690		5	MCP-S4/250 690V	2CMA103202R1000		
		1000		1	MCP-S4/250 1000V	2CMA103203R1000		
3L+N+PE								
5	250	230	50/60	9	MCP-S5/250 230V	2CMA103204R1000	1	8.6
		400		6	MCP-S5/250 400V	2CMA103205R1000		
		500		7	MCP-S5/250 500V	2CMA103206R1000		
		690		5	MCP-S5/250 690V	2CMA103207R1000		
		1000		1	MCP-S5/250 1000V	2CMA103208R1000		
3L+PEN								
4	400	230	50/60	9	MCP-S4/400 230V	2CMA103209R1000	1	8.1
		400		6	MCP-S4/400 400V	2CMA103210R1000		
		500		7	MCP-S4/400 500V	2CMA103211R1000		
		690		5	MCP-S4/400 690V	2CMA103212R1000		
		1000		1	MCP-S4/400 1000V	2CMA103213R1000		
3L+N+PE								
5	400	230	50/60	9	MCP-S5/400 230V	2CMA103214R1000	1	8.6
		400		6	MCP-S5/400 400V	2CMA103215R1000		
		500		7	MCP-S5/400 500V	2CMA103216R1000		
		690		5	MCP-S5/400 690V	2CMA103217R1000		
		1000		1	MCP-S5/400 1000V	2CMA103218R1000		



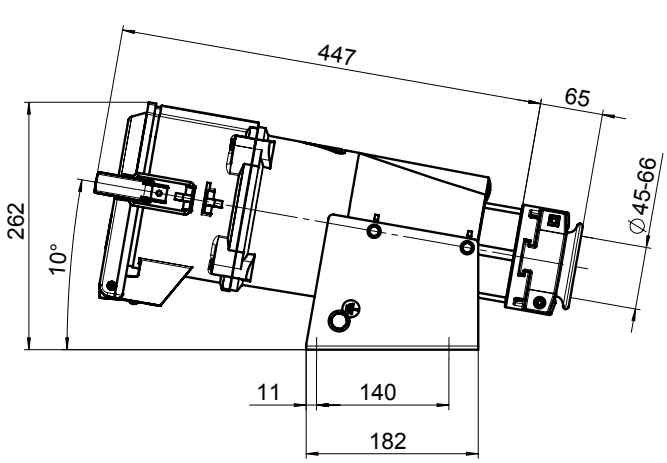
Socket outlet for wall mounting

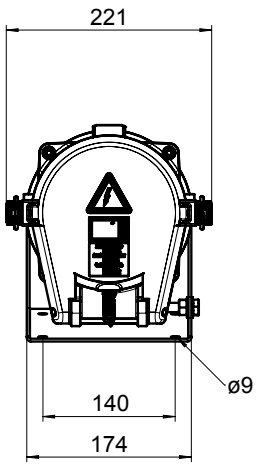
B-Line

FCW-S5/250 400V

IP67. Watertight
Aluminum housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	250	230	50/60	9	FCW-S4/250 230V	2CMA103439R1000	1	11.5
		400		6	FCW-S4/250 400V	2CMA103440R1000		
		500		7	FCW-S4/250 500V	2CMA103441R1000		
		690		5	FCW-S4/250 690V	2CMA103442R1000		
		1000		1	FCW-S4/250 1000V	2CMA103443R1000		
3L+N+PE								
5	250	230	50/60	9	FCW-S5/250 230V	2CMA103444R1000	1	12.0
		400		6	FCW-S5/250 400V	2CMA103445R1000		
		500		7	FCW-S5/250 500V	2CMA103446R1000		
		690		5	FCW-S5/250 690V	2CMA103447R1000		
		1000		1	FCW-S5/250 1000V	2CMA103448R1000		
3L+PEN								
4	400	230	50/60	9	FCW-S4/400 230V	2CMA103449R1000	1	11.5
		400		6	FCW-S4/400 400V	2CMA103450R1000		
		500		7	FCW-S4/400 500V	2CMA103451R1000		
		690		5	FCW-S4/400 690V	2CMA103452R1000		
		1000		1	FCW-S4/400 1000V	2CMA103453R1000		
3L+N+PE								
5	400	230	50/60	9	FCW-S5/400 230V	2CMA103454R1000	1	12.0
		400		6	FCW-S5/400 400V	2CMA103455R1000		
		500		7	FCW-S5/400 500V	2CMA103456R1000		
		690		5	FCW-S5/400 690V	2CMA103457R1000		
		1000		1	FCW-S5/400 1000V	2CMA103458R1000		





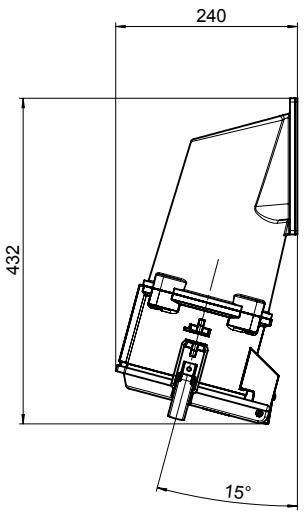
Socket outlet for wall mounting

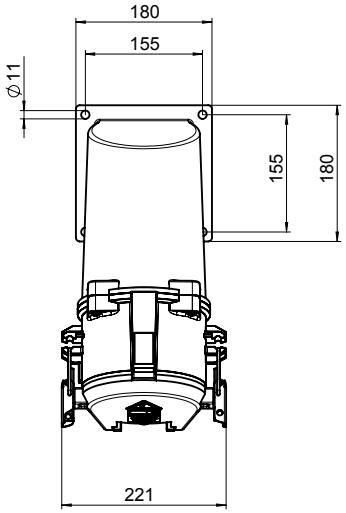
B-Line

FCPA-S5/250 400V

IP67. Watertight
Aluminum housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	250	230	50/60	9	FCPA-S4/250 230V	2CMA103399R1000	1	10.3
		400		6	FCPA-S4/250 400V	2CMA103400R1000		
		500		7	FCPA-S4/250 500V	2CMA103401R1000		
		690		5	FCPA-S4/250 690V	2CMA103402R1000		
		1000		1	FCPA-S4/250 1000V	2CMA103403R1000		
3L+N+PE								
5	250	230	50/60	9	FCPA-S5/250 230V	2CMA103404R1000	1	10.8
		400		6	FCPA-S5/250 400V	2CMA103405R1000		
		500		7	FCPA-S5/250 500V	2CMA103406R1000		
		690		5	FCPA-S5/250 690V	2CMA103407R1000		
		1000		1	FCPA-S5/250 1000V	2CMA103408R1000		
3L+PEN								
4	400	230	50/60	9	FCPA-S4/400 230V	2CMA103409R1000	1	10.3
		400		6	FCPA-S4/400 400V	2CMA103410R1000		
		500		7	FCPA-S4/400 500V	2CMA103411R1000		
		690		5	FCPA-S4/400 690V	2CMA103412R1000		
		1000		1	FCPA-S4/400 1000V	2CMA103413R1000		
3L+N+PE								
5	400	230	50/60	9	FCPA-S5/400 230V	2CMA103414R1000	1	10.8
		400		6	FCPA-S5/400 400V	2CMA103415R1000		
		500		7	FCPA-S5/400 500V	2CMA103416R1000		
		690		5	FCPA-S5/400 690V	2CMA103417R1000		
		1000		1	FCPA-S5/400 1000V	2CMA103418R1000		





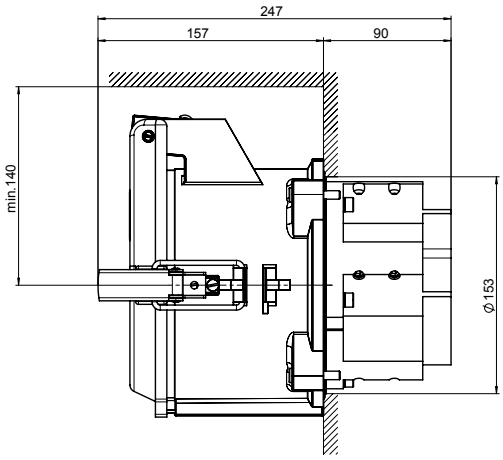
Socket outlet for panel mounting

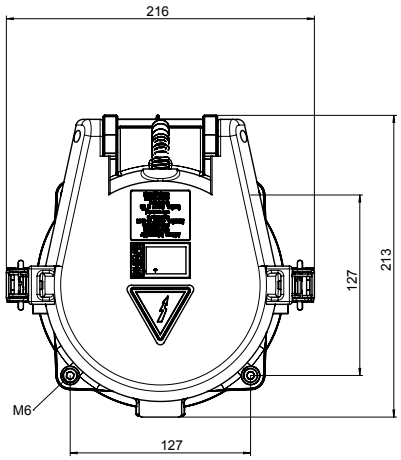
B-Line

FCP-S5/250 400V

IP67. Watertight
Aluminum housing. Designed for high temperature.

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	250	230	50/60	9	FCP-S4/250 230V	2CMA103359R1000	1	6.8
		400		6	FCP-S4/250 400V	2CMA103360R1000		
		500		7	FCP-S4/250 500V	2CMA103361R1000		
		690		5	FCP-S4/250 690V	2CMA103362R1000		
		1000		1	FCP-S4/250 1000V	2CMA103363R1000		
3L+N+PE								
5	250	230	50/60	9	FCP-S5/250 230V	2CMA103364R1000	1	7.3
		400		6	FCP-S5/250 400V	2CMA103365R1000		
		500		7	FCP-S5/250 500V	2CMA103366R1000		
		690		5	FCP-S5/250 690V	2CMA103367R1000		
		1000		1	FCP-S5/250 1000V	2CMA103368R1000		
3L+PEN								
4	400	230	50/60	9	FCP-S4/400 230V	2CMA103369R1000	1	6.8
		400		6	FCP-S4/400 400V	2CMA103370R1000		
		500		7	FCP-S4/400 500V	2CMA103371R1000		
		690		5	FCP-S4/400 690V	2CMA103372R1000		
		1000		1	FCP-S4/400 1000V	2CMA103373R1000		
3L+N+PE								
5	400	230	50/60	9	FCP-S5/400 230V	2CMA103374R1000	1	7.3
		400		6	FCP-S5/400 400V	2CMA103375R1000		
		500		7	FCP-S5/400 500V	2CMA103376R1000		
		690		5	FCP-S5/400 690V	2CMA103377R1000		
		1000		1	FCP-S5/400 1000V	2CMA103378R1000		





Connector units
with mechanical interlock, CUMI

To ensure maximum safety for users, we can offer special connector units.

Technical data	Unit	C-Line		B-Line	
Norminal current	A	200	250	250	400
Rated current	A	250	285	315	450
Rated voltage	V	1000		1000	
Rated frequency	Hz	50/60		50/60	
Withstand voltage (1 Min/50 Hz)	V	4000		4000	
Protection grade		IP55		IP55	
Shock resistance		IK07		IK07	
Ambient temperature	°C	-40/+70		-40/+70	
Insulation resistance (Phase-phase and phase-earth	MOhm	>500		>500	
Comparative tracking index of the insert	CTI	>600		>600	
Weight 4 poles (3L+PEN)	kg	25.1		45.6	
Weight 5 poles (3L+N+PE)	kg	25.3		47.1	
Connection bolts for cable shoes		M8		M10	
Max cross section pilot cable, conductor (EN 60228 Class 1)	mm^2	4		4	
Diameter of cable - normal other diameters on request	mm	20-70		20-70	

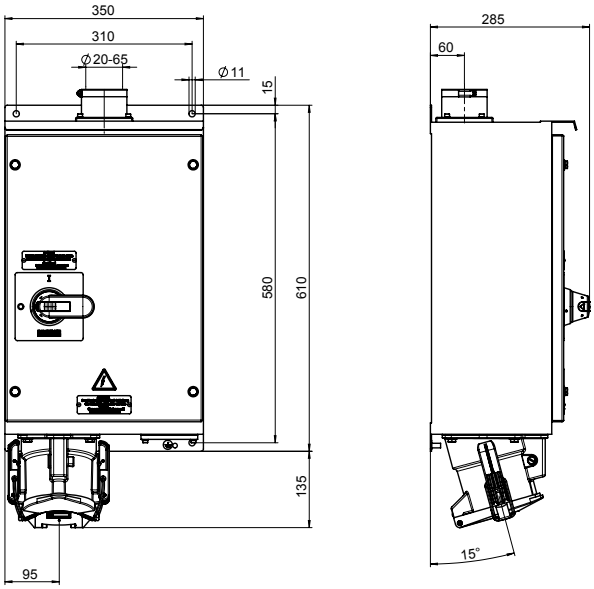
Connector unit with mechanical interlock

C-Line

CUMI-S5/200 400V

IP55
Steel housing

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	CUMI-S4/200 230V-9h	2CMA103459R1000	1	25.1
		400		6	CUMI-S4/200 400V-6h	2CMA103460R1000		
		500		7	CUMI-S4/200 500V-7h	2CMA103461R1000		
		690		5	CUMI-S4/200 690V-5h	2CMA103462R1000		
		1000		1	CUMI-S4/200 1000V-1h	2CMA103463R1000		
3L+N+PE								
5	200	230	50/60	9	CUMI-S5/200 230V-9h	2CMA103464R1000	1	25.3
		400		6	CUMI-S5/200 400V-6h	2CMA103465R1000		
		500		7	CUMI-S5/200 500V-7h	2CMA103466R1000		
		690		5	CUMI-S5/200 690V-5h	2CMA103467R1000		
		1000		1	CUMI-S5/200 1000V-1h	2CMA103468R1000		
3L+PEN								
4	250	230	50/60	9	CUMI-S4/250 230V-9h	2CMA103469R1000	1	25.1
		400		6	CUMI-S4/250 400V-6h	2CMA103470R1000		
		500		7	CUMI-S4/250 500V-7h	2CMA103471R1000		
		690		5	CUMI-S4/250 690V-5h	2CMA103472R1000		
		1000		1	CUMI-S4/250 1000V-1h	2CMA103473R1000		
3L+N+PE								
5	250	230	50/60	9	CUMI-S5/250 230V-9h	2CMA103474R1000	1	25.3
		400		6	CUMI-S5/250 400V-6h	2CMA103475R1000		
		500		7	CUMI-S5/250 500V-7h	2CMA103476R1000		
		690		5	CUMI-S5/250 690V-5h	2CMA103477R1000		
		1000		1	CUMI-S5/250 1000V-1h	2CMA103478R1000		



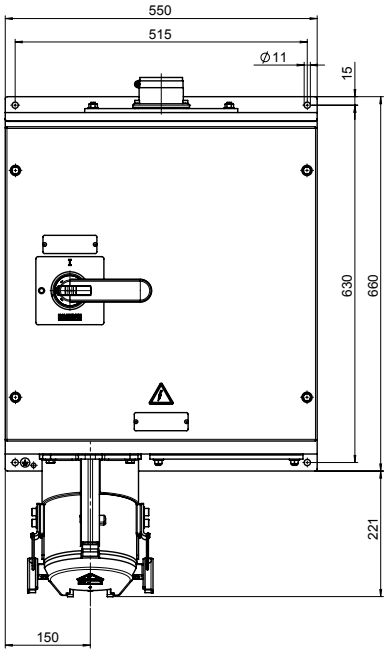
Connector unit with mechanical interlock

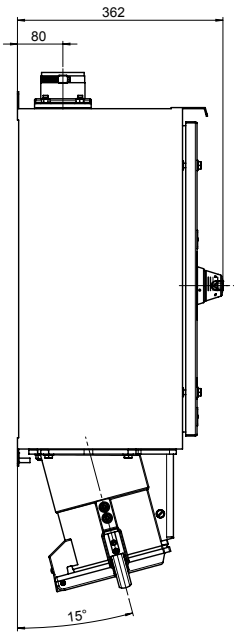
B-Line

CUMI-S5/250 400V

IP55
Steel housing

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	250	230	50/60	9	CUMI-S4/250 230V-9h	2CMA103479R1000	1	45.6
		400		6	CUMI-S4/250 400V-6h	2CMA103480R1000		
		500		7	CUMI-S4/250 500V-7h	2CMA103481R1000		
		690		5	CUMI-S4/250 690V-5h	2CMA103482R1000		
		1000		1	CUMI-S4/250 1000V-1h	2CMA103483R1000		
3L+N+PE								
5	250	230	50/60	9	CUMI-S5/250 230V-9h	2CMA103484R1000	1	47.1
		400		6	CUMI-S5/250 400V-6h	2CMA103485R1000		
		500		7	CUMI-S5/250 500V-7h	2CMA103486R1000		
		690		5	CUMI-S5/250 690V-5h	2CMA103487R1000		
		1000		1	CUMI-S5/250 1000V-1h	2CMA103488R1000		
3L+PEN								
4	400	230	50/60	9	CUMI-S4/400 230V-9h	2CMA103489R1000	1	45.6
		400		6	CUMI-S4/400 400V-6h	2CMA103490R1000		
		500		7	CUMI-S4/400 500V-7h	2CMA103491R1000		
		690		5	CUMI-S4/400 690V-5h	2CMA103492R1000		
		1000		1	CUMI-S4/400 1000V-1h	2CMA103493R1000		
3L+N+PE								
5	400	230	50/60	9	CUMI-S5/400 230V-9h	2CMA103494R1000	1	47.1
		400		6	CUMI-S5/400 400V-6h	2CMA103495R1000		
		500		7	CUMI-S5/400 500V-7h	2CMA103496R1000		
		690		5	CUMI-S5/400 690V-5h	2CMA103497R1000		
		1000		1	CUMI-S5/400 1000V-1h	2CMA103498R1000		





Connector units
with block contactor, CUBC

To ensure maximum safety for users, we can offer special connector units.

Technical data	Unit	C-Line		B-Line	
Norminal current	A	200	250	250	400
Rated current	A	250	285	315	450
Rated voltage	V	1000		1000	
Rated frequency	Hz	50/60		50/60	
Withstand voltage (1 Min/50 Hz)	V	4000		4000	
Protection grade		IP55		IP55	
Shock resistance		IK07		IK07	
Ambient temperature	°C	-40/+70		-40/+70	
Insulation resistance (Phase-phase and phase-earth	MOhm	>500		>500	
Comparative tracking index of the insert	CTI	>600		>600	
Weight 4 poles (3L+PEN)	kg	25.1		45.6	
Weight 5 poles (3L+N+PE)	kg	25.3		47.1	
Connection bolts for cable shoes		M8		M10	
Max cross section pilot cable, conductor (EN 60228 Class 1)	mm^2	4		4	
Diameter of cable - normal other diameters on request	mm	20-70		20-70	

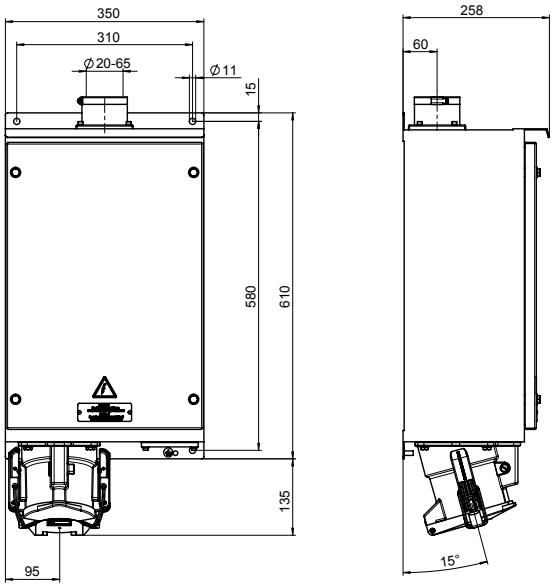
Connector unit with block contactor

C-Line

CUBC-S5/200 400V

IP55
Steel housing

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	CUBC-S4/200 230V	2CMA103499R1000	1	25.1
		400		6	CUBC-S4/200 400V	2CMA103500R1000		
		500		7	CUBC-S4/200 500V	2CMA103501R1000		
		690		5	CUBC-S4/200 690V	2CMA103502R1000		
		1000		1	CUBC-S4/200 1000V	2CMA103503R1000		
3L+N+PE								
5	200	230	50/60	9	CUBC-S5/200 230V	2CMA103504R1000	1	25.3
		400		6	CUBC-S5/200 400V	2CMA103505R1000		
		500		7	CUBC-S5/200 500V	2CMA103506R1000		
		690		5	CUBC-S5/200 690V	2CMA103507R1000		
		1000		1	CUBC-S5/200 1000V	2CMA103508R1000		
3L+PEN								
4	250	230	50/60	9	CUBC-S4/250 230V	2CMA103509R1000	1	25.1
		400		6	CUBC-S4/250 400V	2CMA103510R1000		
		500		7	CUBC-S4/250 500V	2CMA103511R1000		
		690		5	CUBC-S4/250 690V	2CMA103512R1000		
		1000		1	CUBC-S4/250 1000V	2CMA103513R1000		
3L+N+PE								
5	250	230	50/60	9	CUMI-S5/250 230V	2CMA103514R1000	1	25.3
		400		6	CUMI-S5/250 400V	2CMA103515R1000		
		500		7	CUMI-S5/250 500V	2CMA103516R1000		
		690		5	CUMI-S5/250 690V	2CMA103517R1000		
		1000		1	CUMI-S5/250 1000V	2CMA103518R1000		



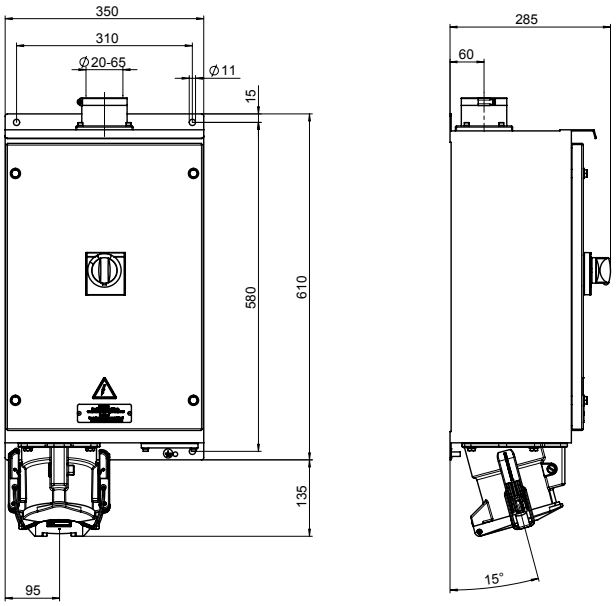
Connector unit with circuit breaker

C-Line

CUCB-S5/200 400V

IP54
Steel housing

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	200	230	50/60	9	CUCB-S4/200 230V	2CMA103539R1000	1	25.1
		400		6	CUCB-S4/200 400V	2CMA103540R1000		
		500		7	CUCB-S4/200 500V	2CMA103541R1000		
		690		5	CUCB-S4/200 690V	2CMA103542R1000		
3L+N+PE								
5	200	230	50/60	9	CUCB-S5/200 230V	2CMA103543R1000	1	25.3
		400		6	CUCB-S5/200 400V	2CMA103544R1000		
		500		7	CUCB-S5/200 500V	2CMA103545R1000		
		690		5	CUCB-S5/200 690V	2CMA103546R1000		
3L+PEN								
4	250	230	50/60	9	CUCB-S4/250 230V	2CMA103547R1000	1	25.1
		400		6	CUCB-S4/250 400V	2CMA103548R1000		
		500		7	CUCB-S4/250 500V	2CMA103549R1000		
		690		5	CUCB-S4/250 690V	2CMA103550R1000		
3L+N+PE								
5	250	230	50/60	9	CUCB-S5/250 230V	2CMA103551R1000	1	25.3
		400		6	CUCB-S5/250 400V	2CMA103552R1000		
		500		7	CUCB-S5/250 500V	2CMA103553R1000		
		690		5	CUCB-S5/250 690V	2CMA103554R1000		



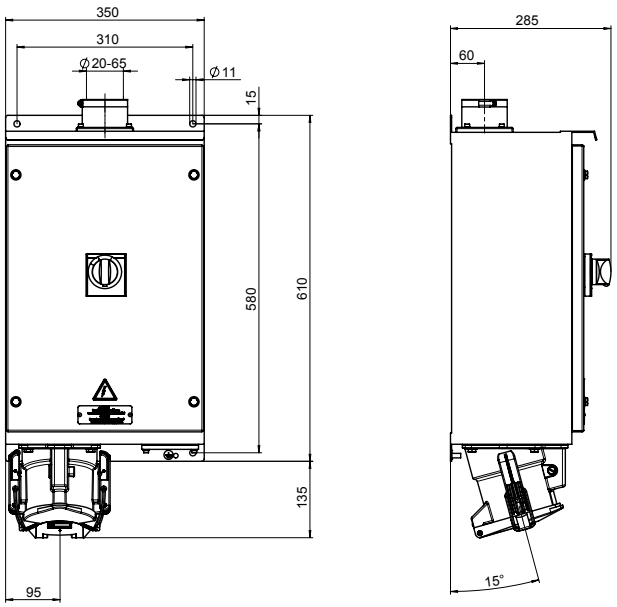
Connector unit with circuit breaker

B-Line

CUCB-S5/250 400V

IP54
Steel housing

Terminals/ Poles	Ampere	Voltage	Frequency	Hour	Type	Order Code	Pkg qty	Weight pkg (1pce)
	A	V	Hz					kg
3L+PEN								
4	250	230	50/60	9	CUCB-S4/250 230V	2CMA103555R1000	1	45.6
		400		6	CUCB-S4/250 400V	2CMA103556R1000		
		500		7	CUCB-S4/250 500V	2CMA103557R1000		
		690		5	CUCB-S4/250 690V	2CMA103558R1000		
3L+N+PE								
5	250	230	50/60	9	CUCB-S5/250 230V	2CMA103559R1000	1	47.1
		400		6	CUCB-S5/250 400V	2CMA103560R1000		
		500		7	CUCB-S5/250 500V	2CMA103561R1000		
		690		5	CUCB-S5/250 690V	2CMA103562R1000		
3L+PEN								
4	400	230	50/60	9	CUCB-S4/400 230V	2CMA103563R1000	1	45.6
		400		6	CUCB-S4/400 400V	2CMA103564R1000		
		500		7	CUCB-S4/400 500V	2CMA103565R1000		
		690		5	CUCB-S4/400 690V	2CMA103566R1000		
3L+N+PE								
5	400	230	50/60	9	CUCB-S5/400 230V	2CMA103567R1000	1	47.1
		400		6	CUCB-S5/400 400V	2CMA103568R1000		
		500		7	CUCB-S5/400 500V	2CMA103569R1000		
		690		5	CUCB-S5/400 690V	2CMA103570R1000		



Electrical installation solutions for buildings

Light switches and socket outlets

Index

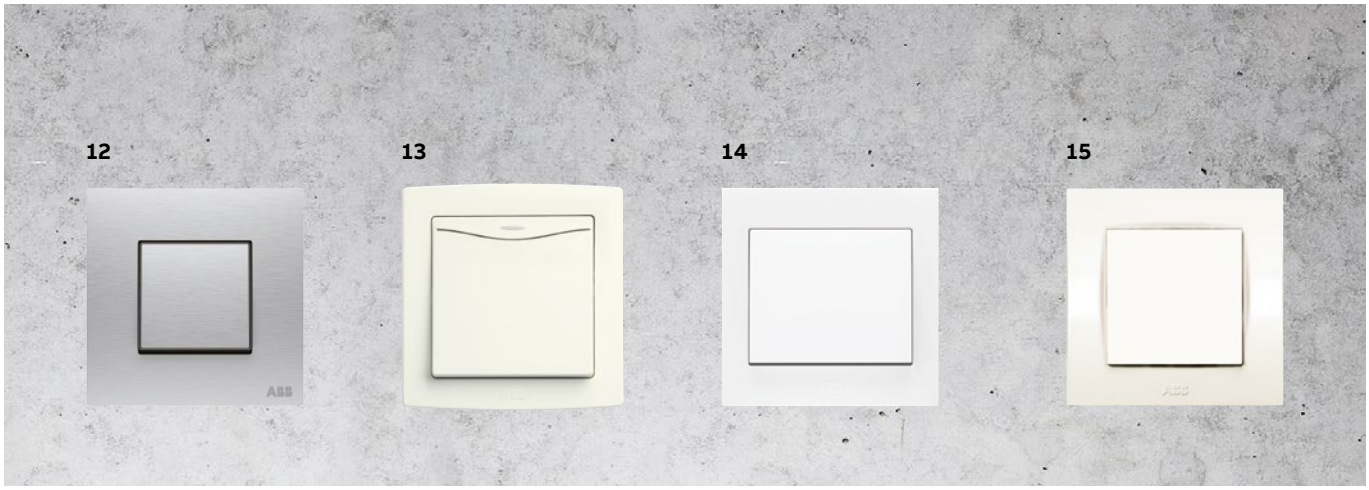
carat®	11/4
Busch-dynasty®	11/42
pure stainless steel	11/80
solo®	11/114
Busch-axcent®	11/152
future® linear	11/188
basic55®	11/238
Sky Niessen	11/272
Zenit	11/288
Impressivo	11/338
Swing®L	11/374
Millenium	11/388
Concept bs	11/416
Kalo	11/434
Uni-art	11/442
Mylos®	11/458
Unno	11/504
Ocean	11/514
Movement detectors	11/528

Light switches and socket outlets
A piece of design in your interior.

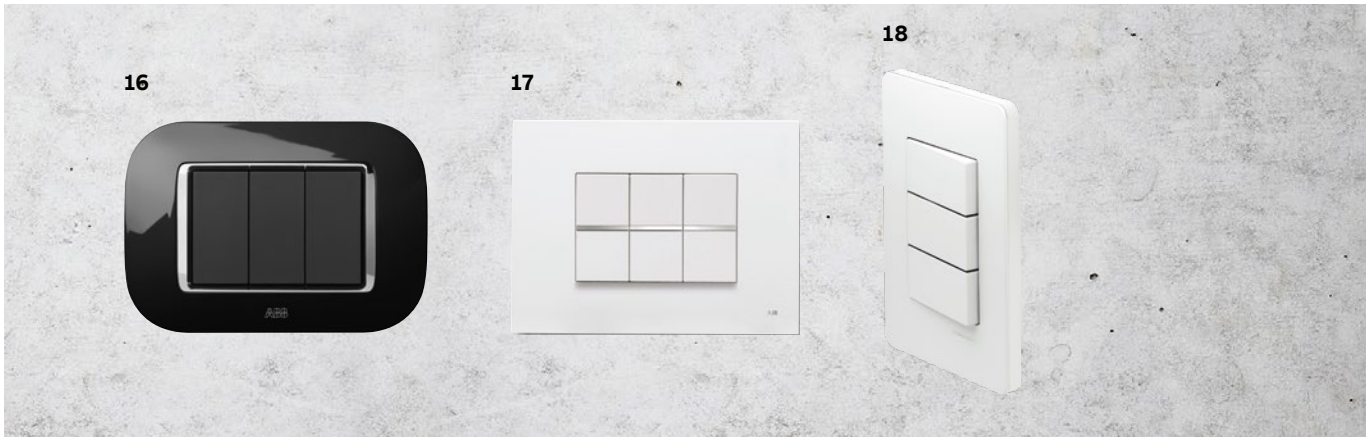
Discover the wide range of designs, colours, finishes and functions and find the best solutions with innovative technology. Let modern light switches highlight the individual design of your living space.

VDE-standard

British standard



IT-standard



01 **carat®**
02 **Busch-dynasty®**
03 **pure stainless steel**
04 **solo®**
05 **Busch-axcent®**
06 **future® linear**
07 **basic55®**
08 **Sky Niessen**
09 **Zenit**
10 **Impressivo**
11 **Swing®L**
12 **Millenium**
13 **Concept bs**
14 **Kalo**
15 **Uni-art**
16 **Mylos®**
17 **Zenit**
18 **Unno**

For design range availability on the local market contact your local sales team.

carat®
Everyday indulgence.

Extraordinary and distinct design, of the highest quality. Each piece becomes a unique object of any interior. It attracts attention and that is the point. Solid frames made from bronze, polished steel or glossy glass, show immediately their real value and an exquisite owner's taste. The aesthetics, together with innovative functions make every day luxurious.

01 ivory white / bronze
02 studio white / glass black
03 anthracite / stainless steel
04 studio white / chrome
05 ivory white / gold
06 studio white / white glass

Materials
UV-resistant, free of PVC and halogen.
Frame: genuine materials.

carat®

Selected functions.

01

02

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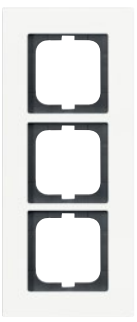
01 Rocker switch 1gang
02 Rocker switch 2gang
03 Busch Universal Rotary Dimmer
04 Touch dimmer
05 Busch-Comfort switch
06 Busch-steplight®
07 Busch-Protector® SCHUKO® socket outlet with overvoltage protection
08 SCHUKO® USB socket outlet
09 Socket outlet with earthing pin
10 Switched socket outlet BS standard
11 Blind switch with rotary knob
12 Busch-Blind control switch with semi-cylindrical lock
13 Busch-Blind comfort switch
14 Comfort timer
15 Room thermostat with display
16 Busch-Infoline® alarm insert
17 Busch-AudioWorld® Busch-Radio iNet
18 Antenna socket for radio/TV/satellite
19 Universal data connection box
20 Stereo loudspeaker connecting box
21 KNX sensor, for more KNX products see part 12 of the catalogue - Intelligent Building Solutions

01

02

03

04 

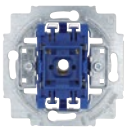
05

1 to 4gang cover frame for horizontal and vertical installation.
01 Side view, 11 mm x 107 mm
02 107 mm x 107 mm
03 107 mm x 178 mm
04 107 mm x 249 mm
05 107 mm x 320 mm

For more information about light switch ranges visit ABB global web sites.

carat®

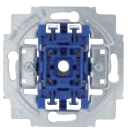
Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism** [1] Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way **2000/6 US-500**	2CKA001012A2198	10/100
	2gang 1way **2000/5 US-500**	2CKA001012A1150	10/100
	DP, 1gang 2way **2000/6/2 US**	2CKA001012A0954	10
	1gang intermediate **2000/7 US-500**	2CKA001012A2199	10/100
	DP, 1gang 1way **2000/2 US-500**	2CKA001012A2196	10/100
	SP, 1gang 1way switch **2000/1 US-500**	2CKA001012A2059	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker Switch Mechanism [1] **2gang 2way** With screwless terminals. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	2000/6/6US-101-500	2CKA001011A0928	10/100

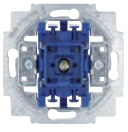
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Rocker Switch Mechanism** [1] [2] **DP, 1gang 1way** For switching high loads. Rated voltage: 250 V~ Rated current: 16 AX IEC 60669-1		
	2000/2 US-101-500	2CKA001012A2193	10/100

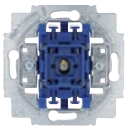
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Also for switching SCHUKO® socket outlets.

	Rocker Switch Mechanism [1] [2] **3-pole, 1gang 1way switch** Rated voltage: 400 V~ Rated current: 16 AX IEC 60669-1		
	2000/3 US	2CKA001011A0816	10

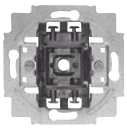
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] With screw-type terminals. Non-illuminable.

	**Rocker Switch Mechanism** [1] With neon lamp 8338-1. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way [2] **2000/6 USGL-500**	2CKA001012A2194	10/100
	2gang 1way **2000/5 USGL**	2CKA001012A1135	10

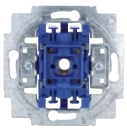
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism, control** [1] [2] [3] With neon lamp. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way with N-terminal **2000/6 USK-500**	2CKA001022A0659	10/100
	DP, 1gang 1way **2000/2 UK**	2CKA001022A0656	10

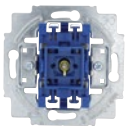
[1] With 1 mA neon lamp.
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3] Illuminable by using lamps 8360, 8362, 8363, 8365, 8366, and 8367 and LED inserts.

	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US	2CKA001413A0475	10/100
	2020 US-500	2CKA001413A0574	10/100

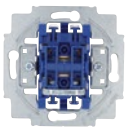
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With 2 independent signalling contacts. Rated voltage: 250 V~ Inputs: 1 Outputs: 1 Rated current: 10 A IEC 60669-1		
	2020 US-201	2CKA001413A0483	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] [2] [3] **SP, with normally open contact (operating current)** With illumination. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 USGL-500	2CKA001413A1106	10/100

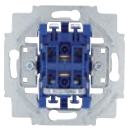
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.
[3] For relay and touch dimmer applications.

	**Push-switch mechanism** [1] With one input terminal and 2 actuating covers. Rated voltage: 250 V~ Inputs: 1 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-500	2CKA001413A1105	10/100

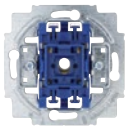
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

carat®

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] **2 x SP, 2 normally open contact** 2 normally open contacts. Rated voltage: 250 V~ Inputs: 2 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-101	2CKA001413A0509	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] **SP, 1gang 2way** Can be wired for normally open contacts (stand-by current) or normally closed contacts (operating current). With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US-206-500	2CKA001413A1104	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker For flush-mounted switch 1g1w, 1g2w, intermediate, push switch.		
anthracite	**1786-81-500**	2CKA001751A3079	10/100
ivory white	**1786-82-500**	2CKA001751A3083	10/100
studio white	**1786-84-500**	2CKA001751A3074	10/100

	Rocker For flush-mounted switch 2g 1w, 2g push switch.		
anthracite	**1785-81**	2CKA001751A2930	10
ivory white	**1785-82**	2CKA001751A2744	10/100
studio white	**1785-84-500**	2CKA001751A3076	10/100

	Rocker **with small red spherical cap** As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way.		
anthracite	**1789-81**	2CKA001751A2928	10
ivory white	**1789-82**	2CKA001751A2813	10
studio white	**1789-84-500**	2CKA001751A3091	10/100

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small transparent lens** With symbol. As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way.		
anthracite	**1789 LI-81**	2CKA001751A2931	10
ivory white	**1789 LI-82**	2CKA001751A2745	10
studio white	**1789 LI-84-500**	2CKA001751A3084	10/100

	Switch rocker with marking **with small transparent lens** With key symbol. For flush-mounted push switch.		
anthracite	**1789 TR-81**	2CKA001751A2933	10
ivory white	**1789 TR-82**	2CKA001751A2747	10
studio white	**1789 TR-84**	2CKA001751A2755	10

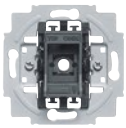
	Switch rocker with marking **with small transparent lens** With bell symbol. For flush-mounted push switch.		
anthracite	**1789 KI-81**	2CKA001751A2932	10
ivory white	**1789 KI-82**	2CKA001751A2746	10
studio white	**1789 KI-84**	2CKA001751A2754	10

	Rocker [1] [2] **with labelling field** With pilot lamp for uniform illumination of the labelling field. For flush-mounted switch 1g1w, 1g2w, intermediate, push switch. Size of labelling field: 59.7 x 11.7 mm.		
anthracite	**1764 NLI-81**	2CKA001731A1552	10
ivory white	**1764 NLI-82**	2CKA001731A1876	10
studio white	**1764 NLI-84**	2CKA001731A1877	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Illumination using neon lamp 8353 or incandescent lamp 8344-1 and LED inserts.

	Switch rocker with marking **with small red spherical cap** With imprint "0" and "I". As cover for 2-pole or 3-pole flush-mounted on-off switch and 2-pole control on-off switch.		
anthracite	**1788-81**	2CKA001751A2927	10
ivory white	**1788-82**	2CKA001751A2742	10
studio white	**1788-84**	2CKA001751A2750	10/100

carat®
Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking with small red spherical cap With marking "Heizung". As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way. As cover for 2-pole or 3-pole flush-mounted on-off switch and 2-pole control on-off switch.		
anthracite	**1789 H-81**	2CKA001751A2929	10
ivory white	**1789 H-82**	2CKA001751A2743	10
studio white	**1789 H-84**	2CKA001751A2751	10
	**Card switch 10 A** [1] **SP, with normally open contact (operating current)** Illuminable. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	2025 U	2CKA001012A1713	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
delivery form:	Adapter plate APBS to be ordered separate.		

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Cover plate For card switch. For insert 2025 U. Suitable for cards sized 54 x 86 mm. The inner part of the cover plate is made of light-conducting plastic, so that the card slot is illuminated.		
anthracite	**1792-81**	2CKA001710A3639	10
ivory white	**1792-82**	2CKA001710A3640	10
studio white	**1792-84**	2CKA001710A3641	10
	Pull switch [1] **SP, with normally open contact (operating current)** With 2-metre pull cord, red handle, and red neon indicator. Rated voltage: 250 V~ Rated current: 10 A		
	2020/01 US	2CKA001413A1077	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Pull switch [1] **SP, break contact** With 2-metre pull cord, red handle, and red neon indicator. Rated voltage: 250 V~ Rated current: 10 A		
	2020/10 US	2CKA001413A1076	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **open for red pull switch neon indicator** For pull switch 2020/xx US.		
anthracite	**1720-81**	2CKA001731A1914	10
ivory white	**1720-82**	2CKA001731A1915	10
studio white	**1720-84**	2CKA001731A1916	10
	Three-step rotary switch [1] **SP, with zero position** With zero position. Rated voltage: 250 V~ Rated current: 16 A		
	2710 U	2CKA001101A0918	1/10

[1] Install only in conjunction with wall boxes ø 60 mm.

	Three-step rotary switch [1] **SP, without zero position** Without zero position. Rated voltage: 250 V~ Rated current: 16 A		
	2710/1 U	2CKA001101A0919	1/10

[1] Install only in conjunction with wall boxes ø 60 mm.

	Cover plate **with rotary control, with marking** As cover for flush mounted three-step rotary switch. With zero position. For insert 2710 U.		
ivory white	**2542 DR/01-82**	2CKA001710A3645	10
studio white	**2542 DR/01-84**	2CKA001710A3646	10
	Cover plate **with rotary control, with marking** As cover for flush mounted three-step rotary switch. Without zero position. For insert 2710/1 U.		
anthracite	**2542 DR/02-81**	2CKA001710A3649	10
ivory white	**2542 DR/02-82**	2CKA001710A3650	10
studio white	**2542 DR/02-84**	2CKA001710A3651	10

carat®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1) 2) 3) 4) 5) 6) 7)]
Flush-mounted, LED, 2-100 W
With rotary control, two-way switch and soft-catch.
2-wire connection (neutral conductor not required)
Optimised for dimming of retrofit LED lamps (LEDi).
For dimmable Retrofit-LEDs (LEDi).
For dimmable Retrofit-LEDs (LEDi) with conventional or electronic transformers.
For incandescent lamps, 230 V tungsten halogen lamps, low-voltage halogen lamps with conventional or electronic transformers and dimmable energy-saving halogen lamps.
Mix operaton of LEDi with conventional loads possible.
Via mode switch adjustable between leading edge control and trailing edge control.
Low-noise level by MOSFET transistors.
With electronic short-circuit protection.
With electronic overload protection.
With adjustable minimum brightness.
Without cover plate.
Rated voltage: 230 V~, + 10% / - 10%
Rated frequency: 50 Hz/60 Hz
Nominal power: 2 - 100 W/VA (retrofit LED loads).
Nominal power: 10 - 250 W/VA (non-LED loads).
Protection class (Device): IP 20
Temperature range (Device): 0 °C to 35 °C
IEC 60669-2-1, British Standard EN 60669-2-1

	6523 U-102-500	2CKA006512A0335	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Also applicable for 1gang 2way installations.
[5)] Provided with terminal for net disconnection devices.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[7)] Recommendation: Please use loads and types of one producer.

Product	Article-No.	Order-No.	Pack/Qty

Busch-touch dimmer [1) 2) 3) 4) 5) 6)]
Flush-mounted, LED, 2-100 W
Touch dimmer.
2-wire connection (neutral conductor not required)
Neutral conductor optionally connectable (recommended for the connection of low loads < 10 W/VA).
Optimised for dimming of retrofit LED lamps (LEDi).
For incandescent lamps, 230V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers and dimmable halogen energy-saving lamps.
Mix operaton of LEDi with conventional loads possible.
With adjustable minimum brightness.
The minimum brightness for the leading edge control can be adjusted using the potentiometer.
The potentiometer at the left limit stop corresponds with the trailing edge control mode.
Low-noise level by MOSFET transistors.
With electronic short-circuit protection.
With electronic overload protection.
With light-level memory and minimum brightness memory.
Operation also possible via conventional push buttons (2020 US, 2021/6 UK).
Without control cover.
For control cover with control lamp 6543-xxx-10x.
For Busch-Remote control IR control cover 6066-xxx-10x.
For comfort timer control element 6455-101-500.
For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx.
Nominal power: 2 - 100 W/VA (retrofit LED loads).
Nominal power: 10 - 200 W/VA (non-LED loads).
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 20
Temperature range (Device): 0 °C to 35 °C
IEC 60669-2-1, British Standard EN 60669-2-1

	6526 U-500	2CKA006512A0323	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Recommendation: Please use loads and types of one producer.
[6)] In connection with 6810-21x-101 and 6800-xx-104 (M) only suitable for switching retrofit LEDs (for 2-conductor connection).

Busch-rotary dimmer [1) 2) 3) 4)]
flush mounted, R, 60-600 W
With rotary control, 2way On-Off switching and soft-catch.
Leading Edge control.
For incandescent lamps and 230 V tungsten halogen lamps.
With adjustable minimum brightness.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 60 - 600 W
IEC 60669-2-1, British Standard EN 60669-2-1

	2250 U-500	2CKA006515A0848	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] Also applicable for 1gang 2way installations.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Provided with terminal for net disconnection devices.

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Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5)] **flush mounted, RL, 20-500 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 20 - 500 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	2247 U-500	2CKA006512A0302	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **UP, RL, 200-700 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. Short-circuit-proof, overload-protected. With adjustable minimum brightness. Without cover plate. Without claws. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 200 - 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6520 U-500	2CKA006520A0227	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[6)] Should be mounted in a seperate wallbox.

	Busch-2gang switch/rotary dimmer [1) 2) 3)] **flush mounted, RL, 60-400 W** 1 channel designed as dimmer. 1 channel designed as switch contact (1gang 2way contact element) with leading edge control For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. With adjustable minimum brightness. Without cover plate. Rated current 6A (changeover contact switch output). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 400 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6517 U-101-500	2CKA006517A0018	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Can be used to replace a 2gang 1way switch.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **flush mounted, RC, 40-420 W** With rotary control, soft-catch and with trailing edge control. For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers. Low-noise, short-circuit-proof, overload-protected. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 40 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6513 U-102	2CKA006513A0568	1/10
	6513 U-102-500	2CKA006513A0586	1/10

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **flush mounted, RC, 40-550 W** With rotary control, soft-catch and with trailing edge control. For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers. Low-noise, short-circuit-proof, overload-protected. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 40 - 550 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6519 U	2CKA006519A0011	1

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

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Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5)] **flush mounted, RLC, 60-420 W** with soft-catch With intelligence for universal operation. For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Short-circuit-proof, overload-protected. Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible. Operation via rotary-type remote control 6592 U possible, Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 60 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6591 U-101-500	2CKA006513A0588	1/10

[1)] Illuminable with neon lamp 3855. Neon lamp included in delivery with cover plate.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In the case of conventional transformers, take ~20% transformer loss into account.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Cannot be combined with a 2way switch.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer, extension [1) 2)] **flush mounted** for connection to 6591 U-101, To be used with Busch-Dimmer®, MDRC 6583. with soft-catch A maximum of 5 multi-way extensions can be connected to a 6591U-101, Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz		
	6592 U-500	2CKA006513A0590	1

[1)] Control elements 2115-xxx and 6540-xxx.
[2)] Required for illuminating the N-connection control element.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4)] **flush mounted, 1-10V** With rotary control. For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For LED control via control gears Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	2112 U-101-500	2CKA006599A2873	1/10

[1)] Non-illuminable.
[2)] Use cover plates 2115 J-.../2115-.../6540-... .
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Making-current limiters have to be provided in case of too high making currents.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1)] **flush mounted, DALI** For DALI broadcast service (via central telegram). For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With rotary control and ON/OFF push operation. Fool proved. Brightness power-on level and backround brightness level adjustable, buffered. With integrated LED illumination for orientation. Color of orientation light adjustable (18 presets and OFF). Up to 5 potentiometers are connectable in parallel. Max. current consumption: 15 mA. Not suitable for combining with other DALI sensors or central units of other manufacturers. An additional DALI power supply is needed, e.g. by Tridonic, Philips, Helvar or 2117/11 U. Max. DALI-cable length: 300 m (1,5 - 2,5 mm²). Without cover plate. Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C		
	2117 U-500	2CKA006599A2987	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1)] **flush mounted, DALI, with internal power supply** For DALI broadcast service (via central telegram). With integrated DALI power adaptor. For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With rotary control and ON/OFF push operation. With electronic short-circuit protection. With electronic overload protection. Brightness power-on level and backround brightness level adjustable, buffered. With integrated LED illumination for orientation. Color of orientation light adjustable (18 presets and OFF). Up to 5 potentiometers are connectable in parallel. Up to 3 potentiometers are connectable in parallel in active mode. Not suitable for combining with other DALI sensors or central units of other manufacturers. DALI-voltage: 15,5 V= Rated current: max. 75 mA Power consumption: < 2,5 W Number of DALI-units: 37 in case of one active power-potentiometer in case of three active power-potentiometer in parallel connection: 111 Active mode: the potentiometer is supporting the necessary control circuit for other DALI-devices. Passive mode: the potentiometer is suitable as additional operation point. Max. DALI-cable length: 300 m (1,5 - 2,5 mm²). Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C		
	2117/11 U-500	2CKA006599A2988	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

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Dimmers

Product	Article-No.	Order-No.	Pack/Qty

Busch-touch dimmer [1) 2)]
flush mounted, RL, 25-500 W
With light-level memory and leading edge control.
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
Compatible with control covers 6543-xxx-10x.
Operation also possible via conventional push buttons (2020 US, 2021/6 UK).
Parallel operation of several transformers and/or incandescents lamps possible.
Without control cover.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Rated power: 25 - 500 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

6560 U-101-500	2CKA006560A1207	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch touch-dimmer range [1) 2) 3) 4)]
flush mounted, RC, 45-315 W
For switching and dimming 2 independent devices.
With trailing edge control.
2gang 1way
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with electronic transformers.
Compatible with control covers 6545-xxx.
Without cover, without cover plate.
Outputs: 2 independent dimmer channels.
Rated power: 40-315 W/VA per channel.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
IEC 60669-2-1, British Standard EN 60669-2-1

6565 U-500	2CKA006565A0057	1/10

[1)] Not suitable with conventional transformers.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Does not provide an extension input.

Product	Article-No.	Order-No.	Pack/Qty

Busch-touch dimmer [1) 2) 3) 4)]
flush mounted, RLC, 60-420 W
With light-level memory and intelligence for universal operation.
Selectable Soft-ON/OFF function and memory function.
Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible.
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers.
Short-circuit-proof, overload-protected.
With touch control.
Operation also possible via conventional push buttons (2020 US, 2021/6 UK).
Without control cover.
For control cover with control lamp 6543-xxx-10x.
For Busch-Remote control IR control cover 6066-xxx-10x.
For comfort timer control element 6455-101-500.
For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101.
For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M.
For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx.
Combinable with Busch-Watchdog extension insert 6805 U.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 60 - 420 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

6593 U-500	2CKA006590A0171	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In conjunction with 6800-xxx-104 (M) a Soft Off can be adjusted.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-Dimmer®, capacity booster [1)]
flush mounted, RLC, 200-315 W
The control is effected by a Busch-Universal master dimmer 6593 U or Busch-Universal rotary dimmer 6591U-101
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers.
Can only be installed in conjunction with a cover plate 2114-xxx and 6541-xxx.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 200 - 315 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

6594 U-500	2CKA006590A0172	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

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Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3)] **flush mounted, 1-10V** 3 wire connection (neutral conductor required). For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). For LED control via control gears Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6550 U-101-500	2CKA006550A0042	1

[1)] Non-illuminable.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3)] With integrated making-current limiter.

	Cover plate [1)] **with rotary knob, with indication lamp** Elevated knob. For Busch-Dimmer®. For inserts 2112 U-101/2116(/11) U/ 2117(/11) U/2247 U/2250 U/6513 U-102/6517 U-10x/6519 U/6520 U/6523 U(10x) /6591 U-10x and 6592 U.		
anthracite	**6540-81-102**	2CKA006599A2950	10
ivory white	**6540-82-102**	2CKA006599A2951	10/100
studio white	**6540-84-102-500**	2CKA006599A3009	10/100

[1)] Replacement neon lamp, Art. No. 3855.

	Control element [1) 2) 3)] **with neon lamp** Can be combined with LED dimmer 6524 U, and 6526 U, Busch-Universal touch-type controller 6550 U-10x, Busch-Memory touch dimmer 6560 U-101, Busch-Universal-Dimmer® 6593 U, Busch-Universal relay insert 6401 U-10x, Busch-Universal 2gang insert 6402 U.		
anthracite	**6543-81-101**	2CKA006599A2881	1/10
ivory white	**6543-82-101**	2CKA006599A2831	1/10
studio white	**6543-84-101-500**	2CKA006599A3010	1/10

[1)] Compatible with previous type 6543-xxx.
[2)] Touch-type Controller 6550 U-xxx non-illuminable.
[3)] Replacement neon lamp 3857.

Product	Article-No.	Order-No.	Pack/Qty
	Control element [1)] **with neon lamp** Combinable with Busch-Memory 2gang dimmer 6565 U.		
anthracite	**6545-81**	2CKA006599A2906	1/10
ivory white	**6545-82**	2CKA006599A2907	1/10
studio white	**6545-84**	2CKA006599A2908	1/10

[1)] Replacement neon lamp 3857.

	Cover plate **for cooling element** For Busch-Universal master dimmer power module 6594 U. For room temperature controller object range 6108/0x and base for blind cover 6930/01.		
anthracite	**6541-81**	2CKA006599A2882	10
ivory white	**6541-82**	2CKA006599A2832	10
studio white	**6541-84**	2CKA006599A2835	10

	IR control element [1)] **with marking, illuminated** For LED dimmer insert 6524 U and 6526 U. For Busch-Universal master dimmer insert 6593 U. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal 2gang 1way insert 6402 U. for Busch-Universal touch-type controller 6550 U-101 Manual operation on-site and remote control via IR remote control (6010-25) or wall-mounted transmitter (6020-xx/6021-xx) possible.		
anthracite	**6066-81**	2CKA006020A1379	1/10
ivory white	**6066-82**	2CKA006020A1332	1/10
studio white	**6066-84**	2CKA006020A1334	1/10

[1)] Touch-type Controller 6550 U-101 non-illuminable.

	IR control element **with marking, illuminated** For Busch-Universal relay switch insert 6401 U-10x and Busch-Universal 2gang 1way insert 6402 U. Manual operation on-site and remote control via IR remote control (6010-25) or wall-mounted transmitter (6020-xx/6021-xx) possible.		
anthracite	**6067-81**	2CKA006020A1380	1/10
ivory white	**6067-82**	2CKA006020A1333	1
studio white	**6067-84**	2CKA006020A1335	1

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch 2-wire insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 40 - 300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6815 U	2CKA006800A2270	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Output cannot be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch relay mechanism [1) 2) 3)] 3 wire connection (neutral conductor required). For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer. Rated power: 2300 W/VA Suitable for: 230 V halogen lamps Rated power: 1200 W Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.5 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6816 U-500	2CKA006800A2621	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Output can be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal relay switch insert 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog 180 FP sensor for All Weather 44 6800-3x-102C. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For comfort timer control element 6455-101-500. For Busch-Remote control IR control cover 6067-xxx-10x. For control cover with control lamp 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): -25 °C to 55 °C British Standard EN 60669-2-1		
	6401 U-102-500	2CKA006401A0049	1/10
	Busch-Universal 2gang 1way insert 3 wire connection (neutral conductor required). For the serial switch operating mode: 2 separate outputs, 2 separate extension inputs. For operation mode timer: output 1 (eg lighting), output 2: ON/Off delay in dependence of output 1 (eg fan control). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For control cover 6430-xxx-10x and 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6402 U-500	2CKA006401A0051	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	neon lamp 3855, one neon lamp is supplied together with control cover plates 6540-2x.		

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog relay mechanism 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated power: 700 W/VA Temperature range (Device): 0 °C to 55 °C British Standard EN 60669-2-1		
	6812 U-101-500	2CKA006800A2160	1/10
	Busch-Watchdog MOS-Fet Insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 60 - 420 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6804 U-101-500	2CKA006800A2219	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Requires an NIS international socket, E-No. 372507676.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog extension insert [1)] 3 wire connection (neutral conductor required). For extending Busch-Watchdog 180 flush-mounted and Busch-Watchdog Presence tech installations. For combination with relay insert 6401 U-102 and 6402 U. For combination with MOS-Fet insert 6804 U-101. For combination with Dimmer insert 6593 U and 6550 U-101. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Control/Signal outputs: 1, electronic output, potential-bound Temperature range (Device): 0 °C to 35 °C		
	6805 U-500	2CKA006800A2161	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Not combinable with relay switch insert 6812 U-101.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1)] **with select-lens** For automatic switching of devices dependent on motion and brightness. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
anthracite	**6800-81-104**	2CKA006800A2268	1
ivory white	**6800-82-104**	2CKA006800A2099	1/10
studio white	**6800-84-104**	2CKA006800A2101	1/10

[1)] Please order the respective flush-mounted insert separately.

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1) 2)] **with multi-lens** For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 15 m, lateral: 5 m, Mounting height: 2.5 m Detection range 2: frontal: 10 m, lateral: 2.5 m, Mounting height: 1.2 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
anthracite	**6800-81-104M**	2CKA006800A2269	1
ivory white	**6800-82-104M**	2CKA006800A2100	1
studio white	**6800-84-104M**	2CKA006800A2102	1/10

[1)] installation: slide switch top.
[2)] Please order the respective flush-mounted insert separately.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch control element [1)] **with neon lamp** For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
anthracite	**6815-81**	2CKA006800A2284	1/10
ivory white	**6815-82**	2CKA006800A2285	1/10
studio white	**6815-84**	2CKA006800A2286	1/10

[1)] Please order the respective flush-mounted insert separately.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For proximity switch 6406 U.		
ivory white	**6476-82**	2CKA006470A0003	10
studio white	**6476-84**	2CKA006470A0004	10

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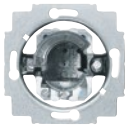
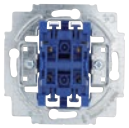
Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	**Key Switch Insert** [1) 2) 3)] **breaking circuit, 1-pole** For profile semi-cylindrical lock. In switched-on and switched-off status the key can be pulled out in the central position, respectively. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	2733 USL-101	2CKA001101A0914	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

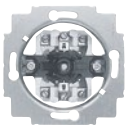
[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Use the cylindrical lock according to the enclosed drawing.
[3)] See profile semi-cylindrical lock.

	**Blind switch insert** [1) 2)] With interlock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	SP, switch **2000/4 US-500**	2CKA001012A2197	10/100
	SP, push switch **2020/4 US-500**	2CKA001413A1103	10/100

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] These blind switches/push buttons safely prevent a switch-over of the running direction being carried out too quickly.

	Blind switch insert [1) 2)] With rotary knob/switch and push switch. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1, British Standard EN 60669-1		
	DP [3)] **2712 U**	2CKA001101A0534	10
	SP, N, E **2713 U**	2CKA001101A0542	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

Product	Article-No.	Order-No.	Pack/Qty
	**Blind switch insert** [1) 2)] With rotary knob/push button. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	DP [3)] **2722 U**	2CKA001101A0559	10
	SP, N, E **2723 U**	2CKA001101A0567	10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

	Blind switch/push-switch [1) 2) 3) 4)] For profile semi-cylindrical lock/switch and push-switch. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	DP [5)] **2712 USL-101**	2CKA001101A0872	10
	SP, N, E **2713 USL-101**	2CKA001101A0880	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	Blind switch insert [1) 2) 3) 4)] For profile semi-cylindrical lock/push-button. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 A British Standard EN 60669-1, IEC60669-1		
	DP [5)] **2722 USL-101**	2CKA001101A0898	10
	SP, N, E **2723 USL-101**	2CKA001101A0906	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	DIN profile-semi cylindrical lock Acc. to German Standard DIN 18252. Total length 40 mm for blind switches and push switches For inserts 2712/2713/2722/2723/2733 USL-101 and 2712/2733 SLW-5x.		
	different lock mechanism, with 3 keys **0520 PZ-VS**	2CKA000470A0013	1/100
	lock mechanism, with 3 keys **0521 PZ-GS**	2CKA000470A0021	1/100

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Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Comfort blind insert [1) 2) 3)] **with memory and positioning function** For the manual and automatic control of roller blinds. The roller blind moves to the position set using the turn knob. Executes the individually programmed switching commands (UP/DOWN) in a 24-hour rhythm. Suitable for roller blind drives with mechanical or electronic limit switch shut-off. Suitable for operation without neutral conductor. Without an extension input. Power reserve of 45 minutes (maintenance-free as capacitor). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 1.3 A, cos ϕ 0.5 Rated power: 300 VA Temperature range (Device): 0 °C to 35 °C		
	6419 U	2CKA006410A0390	1/10

[1)] Pertinent cover plates 6436-xx.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.
[3)] Only suitable for single unit control.

	Basic blind insert [1) 2)] Suitable for blind and roller blind drives with mechanical or electronic limit switch shut-off. Suitable for operation without neutral conductor. Without an extension input. For control cover 6430-xx-xxx. For standard timer control element 6456-101. Running time: 3 min Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 3 A, cos ϕ 0.5 Rated power: 690 VA Temperature range (Device): 0 °C to 35 °C		
	6418 U-500	2CKA006410A0376	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] N-conductor connection required for operation with control cover 6430-7x, illuminated.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Blind control II switch insert [1)] Suitable for blind, roller blind and awning drives with mechanical or electronic limit switch shut-off. With two 230 V multi-way input terminals (Up/Down) for group control. With operating mode switch for the following modes: normal, louvre, base station, position. With party function (disables the local control unit) in combination with Busch-Blind control II control cover 6430-xx-xxx, 6066-xx-xxx. Wind alarm, cleaning functions can be accommodated via extension input. For control cover 6430-xx-xxx. For IR control element 6066-xx-xxx. For comfort timer control element 6455-101-500. Running time: 3 min Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 3 A, cos ϕ 0.5 Rated power: 690 VA Control/Signal outputs: 2 Temperature range (Device): 0 °C to 35 °C		
	6411 U-101	2CKA006410A0377	1/10

[1)] Compatible with types 6411 U/x.

	Burglar alert sensor For insert 6411U/S-101. With 4 m connecting cable.		
	6413-500	2CKA006410A0349	10
	Brightness sensor For insert 6411U/S-101. With 2 m connecting cable. Measuring range: 15-50,000 lux.		
	6414-101	2CKA006410A0389	1/10
	Sun sensor For insert 6411U/S-101. Measuring range: 5-50,000 lux.		
	6482	2CKA006410A0203	1

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Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Short-time timer insert [1] **countdown timer** For time-programmed switching of electrical consumers. With control cover, without cover plate. Minimum timer time: 1 second. Maximum timer time: 9:59:59 hours. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact Rated current: 10 A, cos ϕ 1 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1		
	6465 U-101-500	2CKA006410A0393	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker with marking As cover for flush-mounted blind control switch/push switch. For inserts 2000/4 and 2020/4 US.		
anthracite	**1785 JA-81**	2CKA001751A2934	10
ivory white	**1785 JA-82**	2CKA001751A2748	10
studio white	**1785 JA-84-500**	2CKA001751A3088	10/100

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate with rotary control, with marking As cover for flush-mounted blind control switch/push switch. For inserts 2712 U, 2713 U and 2722 U, 2723 U.		
anthracite	**1740-81**	2CKA001710A3623	10
ivory white	**1740-82**	2CKA001710A3154	10
studio white	**1740-84**	2CKA001710A3172	10/100

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **with labelling field** With marking. For half-cylindrical type switches and blind control switch/push-switch. For inserts 2733 USL-101 and 2712 USL-101, 2713 USL-101, 2722 USL-101, 2723 USL-101.		
anthracite	**1755 SL/PZ-81-101**	2CKA001710A3626	10
ivory white	**1755 SL/PZ-82-101**	2CKA001710A3157	10
studio white	**1755 SL/PZ-84-101**	2CKA001710A3175	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Control element For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For basic blind insert 6418 U. For Busch-Universal 2gang 1way insert 6402 U.		
anthracite	**6430-81-102**	2CKA006430A0326	1/10
ivory white	**6430-82-102**	2CKA006430A0327	1/10
studio white	**6430-84-102-500**	2CKA006430A0400	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **with rotary knob** For comfort blinds insert 6419 U.		
anthracite	**6436-81**	2CKA006430A0387	10
ivory white	**6436-82**	2CKA006430A0356	10
studio white	**6436-84**	2CKA006430A0358	10

[1] Continuous lighting of the turn knob possible using glow lamp 3855.
Not included in delivery. Neutral wire required for operation with neon lamp.

Product	Article-No.	Order-No.	Pack/Qty
	Standard timer control element [1] For manual and time-controlled switching of blinds and roller blinds. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Programming possible only with control element attached and energized. 2 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. For basic blind insert 6418 U. Temperature range (Device): 0 °C to 35 °C		
	6456-101	2CKA006410A0398	1/10

[1] See respective cover plates 6435-xx.

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Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Comfort timer control element [1] For manual and time-controlled switching of blinds, roller blinds, awnings, lighting and other electrical devices. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Combined with Busch-Blind control II insert 6411 U/S-101, sun protection and twilight function. Freely adjustable temperature and brightness-dependent sun protection function. Freely adjustable twilight function. User-adjustable running times for blinds and air conditioning. Programming possible only with control element attached and energized. 6 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. When combined with LED dimmer 6524 U, Busch-Universal master dimmer insert 6593 U or Busch-Memory touch-type controller 6550 U-101, the brightness of the lighting can be adjusted for each ON switching time. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal relay switch insert 6401 U-102. For Busch-Universal master dimmer insert 6593 U. For LED dimmer insert 6524 U and 6526 U. For Busch-Memory touch-type controller 6550 U-101. Temperature range (Device): 0 °C to 35 °C		
	6455-101-500	2CKA006410A0399	1/10

[1] See respective cover plates 6435-xx.

Product	Article-No.	Order-No.	Pack/Qty
	Time switch mechanism 16 A [1] [2] **DP, break contact for staircases, exterior lighting, fans, etc.** Running time: 15 min For time-programmed switching of electrical consumers. Rated voltage: 230 V~, +10 % / -10 % Rated current: 16 A, cos ϕ 0.25		
	1070 U	2CKA001043A0025	1/10

[1] For screw-fixing only
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Time switch mechanism 16 A [1] [2] **DP, break contact for staircases, exterior lighting, fans, etc.** Running time: 120 min For time-programmed switching of electrical consumers. Rated voltage: 230 V~, +10 % / -10 % Rated current: 16 A, cos ϕ 0.25		
	1071 U	2CKA001043A0124	1

[1] For screw-fixing only
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Cover plate For comfort timer control element 6455-101-500. For standard timer control element 6456-101. For room thermostats 1098 U-101 and 1098 UF-101. For short-time timer 6465 U-101. For Busch-CO2 sensor 1091 U-500.		
anthracite	**6435-81**	2CKA006430A0303	10
ivory white	**6435-82**	2CKA006430A0304	10

carat®
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**20 EUC-81-500**	2CKA002011A6215	10/100
ivory white	**20 EUC-82-500**	2CKA002011A6214	10/100
studio white	**20 EUC-84-500**	2CKA002011A6207	10/100
	SCHUKO® socket outlet [1] **shuttered** With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**20 EUCKS-81**	2CKA002013A5265	10
ivory white	**20 EUCKS-82**	2CKA002013A5244	10/100
ivory white	**20 EUCKS-82-500**	2CKA002013A5376	10/100
studio white	**20 EUCKS-84-500**	2CKA002013A5372	10/100

[1] Increased shock protection.

	SCHUKO® USB socket outlet [1] [2] [3] **shuttered** With screwless terminals. DP (2 P + E) For supply and support of mobile devices via USB-cable. With USB female connector type A. With electronic short-circuit protection. With electronic overload protection. Simultaneous charging via USB connection and use of the SCHUKO® socket outlet. Rated voltage: 250 V~ Secondary: 5 V-, +5 % / -5 % Rated frequency: 50 Hz Suitable for: SCHUKO® socket outlet Rated current: 16 A Suitable for: USB connection Rated current: 700 mA Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm Mounting depth: 35 mm		
anthracite	**20 EUCBUSB-81-500**	2CKA002011A6176	1
ivory white	**20 EUCBUSB-82-500**	2CKA002011A6177	1
studio white	**20 EUCBUSB-84-500**	2CKA002011A6179	1/10

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] No data transfer.
[3] Use dust cover 2098 when cleaning the device.

	SCHUKO® socket outlet steplight® [1] [2] **With night orientation light** with separate connection cables for switch contact. with LED, Shuttered. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUCBLI-82**	2CKA002013A5292	1
studio white	**20 EUCBLI-84**	2CKA002013A5294	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] Resistant to aggressive media, e.g. ammonia, benzine, oils, greases, alcohol, cleansing agents, in normal concentrations.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] **with labelling field** DP (2 P + E) Size of labelling field: 60 x 9 mm. Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**20 EUN-81**	2CKA002011A3802	10
ivory white	**20 EUN-82**	2CKA002011A3726	10
studio white	**20 EUN-84-500**	2CKA002011A6209	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	SCHUKO® socket outlet [1] **with marking "EDV"** With screwless terminals. DP (2 P + E) Shuttered. Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**20 EUCKS/DV-81**	2CKA002013A5266	10
ivory white	**20 EUCKS/DV-82**	2CKA002013A5267	10
studio white	**20 EUCKS/DV-84**	2CKA002013A5268	10

[1] Increased shock protection .

	Busch-Protector® SCHUKO® socket outlet [1] **with overvoltage protection** DP (2 P + E) With integrated and external signalling contact. ISN = 5 kA Device protection for technical sensitive such as computer, entertainment electronics and building management systems. Effectively reduces overvoltage peaks occurring between the sub-distribution switch board and SCHUKO® socket outlet. Arrestor test class: classification Type 2 Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**2310 EUGL/VA-81-11**	2CKA002011A3830	1
ivory white	**2310 EUGL/VA-82-11**	2CKA002011A3831	1
studio white	**2310 EUGL/VA-84-11**	2CKA002011A3833	1
red RAL 3003	**2310 EUGL/VA-12-82**	2CKA002011A3878	1/10

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.

	SCHUKO® socket outlet [1] **with LED control light** Shuttered. DP (2 P + E) With transparent lens. LED colour green. Rated voltage: 250 V~ Rated current: 16 A		
NEW			
ivory white	**20 EUCBL-82**	2CKA002013A5284	10
studio white	**20 EUCBL-84**	2CKA002013A5286	10

[1] Resistant to aggressive media, e.g. ammonia, benzine, oils, greases, alcohol, cleansing agents, in normal concentrations.

carat®
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet with hinged lid With screwless terminals. DP (2 P + E) Hinged lid notches when opened. Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**20 EUK-81**	2CKA002018A1486	10
ivory white	**20 EUK-82**	2CKA002018A1465	10
studio white	**20 EUK-84-500**	2CKA002018A1509	10/100
	Socket outlet [1) 2)] **with earthing pin** With screwless terminals. Shuttered. DP (2 P + E) For supply and support of mobile devices via USB-cable. With USB female connector type A. With electronic short-circuit protection. With electronic overload protection. Simultaneous charging via USB connection and use of the SCHUKO® socket outlet. Suitable for the countries like Poland, Czech Republic. Rated voltage: 250 V~ Secondary: 5 V-, +5 % / -5 % Rated frequency: 50 Hz Suitable for: Socket outlet connection Rated current: 16 A Suitable for: USB connection Rated current: 700 mA Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm NEW Mounting depth: 35 mm		
anthracite	**20 MUCBUSB-81-500**	2CKA002017A0893	1
ivory white	**20 MUCBUSB-82-500**	2CKA002017A0875	1
studio white	**20 MUCBUSB-84-500**	2CKA002017A0876	1

[1)] No data transfer.
[2)] Use dust cover 2098 when cleaning the device.

Product	Article-No.	Order-No.	Pack/Qty
	FI-SCHUKOMAT, SCHUKO® socket outlet (RCD) [1) 2) 3)] **with earth leakage circuit breaker** Shuttered. DP cut off (P,N) Without PE monitoring. With connecting conductor and protection of downstream socket outlets. Rated actuating current: 30 mA. Release time: ≤ 30 ms. Short-circuit strength: 3000 A (with 25 A GL fuse). Current surge strength: 250 A (8/20) µs. With fixing claws. Rated frequency: 45-60 Hz. Rated voltage: 230 V~ Rated current: 16 A Protection class (Device): IP 20 Temperature range (Device): -25 °C to 40 °C		
ivory white	**3120 EUCKS-82**	2CKA003116A0655	1
studio white	**3120 EUCKS-84**	2CKA003116A0656	1
ivory white	**3120 EUCB-82**	2CKA003116A0661	1
studio white	**3120 EUCB-84**	2CKA003116A0662	1

[1)] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2)] Protective measure according to VDE 0100; can be proven or checked using the Profitest 0100S testing device, for example.
[3)] Increased shock protection .

Product	Article-No.	Order-No.	Pack/Qty
	Buschmat® FI - Insert [1)] **with earth leakage breaker with connecting conductor** Protection of downstream consumers. Rated actuating current: 30 mA. Release time: ≤ 30 ms. Short-circuit strength: 3000 A (with 25 A GL fuse). Current surge strength: 250 A (8/20) µs. DP cut off (P,N) Without claw fixation. Rated frequency: 45-60 Hz. Rated voltage: 230 V~ Rated current: 16 A Protection class (Device): IP 20 Temperature range (Device): -25 °C to 40 °C		
ivory white	**3151 UC-82**	2CKA003117A0005	1/10
studio white	**3151 UC-84**	2CKA003117A0006	1/10

[1)] Protective measure according to VDE 0100; can be proven or checked using the Profitest 0100S testing device, for example.

	Shaver socket outlet For installation into FM 2gang wall box 3030 and 3031. Rated voltage: 240 V, +10 % / -10 % Output voltage: 115 V, +10 % / -10 % Secondary: 240 V, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 20 VA		
ivory white	**2332 UJBS-82**	2CKA002130A0290	1
studio white	**2332 UJBS-84**	2CKA002130A0292	1
	Flush-mounting wall box, 2gang For shaver socket outlet 2332 UJBS-8xx. Dimensions: (L x W x D): 135 mm x 75 mm x 47 mm		
	3030	2CKA001741A0067	4
	Flush-mounting wall box, 2gang For shaver socket outlet 2332 UJBS-8xx. Dimensions: (L x W x D): 142 mm x 82 mm x 45 mm		
	3031	2CKA001741A0068	4
	13 A Switched socket outlet 1gang With screw-type terminals. SP switched Without claws. Only for mounting in VDE flush-mounted wallboxes CFB 122 and CFBM 122. Rated voltage: 250 V~ Rated current: 13 A BS 1363: part2		
anthracite	**2190 EUC-81**	2CKA002190A0216	10/100
ivory white	**2190 EUC-82**	2CKA002190A0213	10/100
studio white	**2190 EUC-84**	2CKA002190A0215	10/100

carat®
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	European/American socket outlet, 10A 2gang With screw-type terminals. SP switched Without claws. Rated voltage: 250 V~ Rated current: 10 A		
anthracite	delivery on request **2192-02 UC-81-500**		
ivory white	delivery on request **2192-02 UC-82-500**		
studio white	delivery on request **2192-02 UC-84-500**		
	Socket outlet cover frame shuttered For socket outlet insert 20 M-500. Rated voltage: 250 V~		
anthracite	**2399 UCKS-81**	2CKA002099A0216	10
ivory white	**2399 UCKS-82**	2CKA002099A0211	10
studio white	**2399 UCKS-84**	2CKA002099A0214	10
	Socket outlet with earthing pin With screwless terminals. Suitable for the countries like Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 MUC-82-500**	2CKA002017A0785	10/100
studio white	**20 MUC-84-500**	2CKA002017A0786	10/100
	Socket outlet [1] **with earthing pin** With screwless terminals. Shuttered. Suitable for the countries like Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 MUCKS-82-500**	2CKA002017A0806	10
studio white	**20 MUCKS-84-500**	2CKA002017A0807	10

[1] Socket outlet with integrated child protection.
Replaces the usual term"...with child protection".

Product	Article-No.	Order-No.	Pack/Qty
	Chinese socket outlet, 10 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 10 A		
anthracite	delivery on request **2193 EUC/10-81-500**		
ivory white	delivery on request **2193 EUC/10-82-500**		
studio white	delivery on request **2193 EUC/10-84-500**		
	Chinese socket outlet, 16 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 16 A		
anthracite	delivery on request **2193 EUC/16-81-500**		
ivory white	delivery on request **2196 EUC/16-82-500**		
studio white	delivery on request **2193 EUC/16-84-500**		
	Chinese and Euro American socket outlet, 10 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 10 A		
anthracite	delivery on request **2195 EUC/10-81-500**		
ivory white	delivery on request **2195 EUC/10-82-500**		
studio white	delivery on request **2195 EUC/10-84-500**		
	International socket outlet 13A [1] 1gang With screw-type terminals. Without claws. Rated voltage: 250 V~ Rated current: 13 A		
anthracite	delivery on request **2197 EUC-81-500**		
ivory white	delivery on request **2197 EUC-82-500**		
studio white	delivery on request **2197 EUC-84-500**		

[1] Usage may be restricted in certain countries.

	Euro American socket outlet with earth, 16 A 1gang With screw-type terminals. Without claws. Rated voltage: 250 V~ Rated current: 16 A		
anthracite	delivery on request **2196 EUC-81-500**		
ivory white	delivery on request **2196 EUC-82-500**		
studio white	delivery on request **2196 EUC-84-500**		

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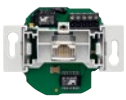
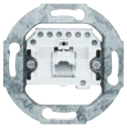
Data communication

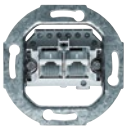
Product	Article-No.	Order-No.	Pack/Qty
	**WLAN access point, flush-mounted** [1) 2)] **power supply from mains power** Operation as WLAN access point for the connection of WLAN terminal devices to the LAN. Operation as WLAN repeater for extending the transmission range of a WLAN. Operation as WLAN adapter for integrating Ethernet terminal devices into a WLAN. Supports WLAN standards IEEE 802.11b/g/n with 2.4 GHz; integrated WLAN antenna. Backward connection of an Ethernet cable via screw terminals (10/100 Mbit/s). Front-side Ethernet connection via a RJ45 socket (10/100 Mbit/s). The three connections (WLAN, Ethernet/screw terminals and Ethernet/RJ45)can be used in parallel via the integrated switch. Power supply via 2-pole connecting terminal. Nominal voltage: 100 - 240 V~ For mounting in commercially available deep flush-mounted and hollow-wall boxes. Rated frequency: 50 Hz - 60 Hz		
	8186/31-101-500	2CKA008100A0359	1

[1)] Suitable for cover plate 1803-xxx.
[2)] Not to be mounted in SM box 1701-xxx, 1702-xxx, 1703-xxx.

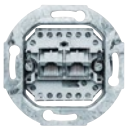
	Reset magnet For resetting WLAN access point UP 8186/31-101 and WLAN access point PoE UP 8186/41 to the factory settings.		
	8186/11-500	2CKA008100A0361	1

	**Universal data connection unit, cat. 3** [1)] **1gang** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0213-500	2CKA000230A1549	10/100

[1)] Suitable for cover plate 1803-xxx.

	**Universal data connection box with down-leading outlet** [1)] **2gang internally parallel connected** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0214	2CKA000230A0235	10/100
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	**Universal data connection box with down-leading outlet** [1)] **2 x outlets, 8/8-pole** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0215	2CKA000230A0243	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

	UAE connection unit, RJ45, cat. 6e, shielded [1)] **1gang** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0216-102	2CKA000230A0465	1/10

[1)] Suitable for cover plate 1803-xxx.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	UAE connection unit, RJ45, cat. 6e, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0217-102	2CKA000230A0467	1/10

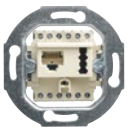
[1] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **1gang** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0218/11-101	2CKA000230A0409	1/10

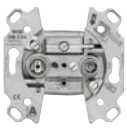
[1] Suitable for cover plate 1803-xxx.

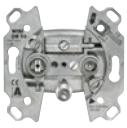
Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For trunk systems, flush-mounted wall boxes and underfloor systems. For wires of AWG 24-22. Without claws. Mounting depth: 31 mm.		
	0218/12-101	2CKA000230A0411	1/10

[1] Suitable for cover plate 1803-02-xxx.

	**Universal data connection box 8(6)/ telephone unit 6F+N - connection box** [1] **2 x 6-pole** with straight outlet, with screw contacts, Universal data-connection boxes: RJ 11/12, ISDN capable Cat. 3 in acc. with IEC 603-7/German Standard DIN EN 60603-7, Telecommunication outlet (telephone unit): for 1 telephone, 1 auxiliary device or 1 data transmission unit, With claw.		
white	**UAE 8(6)TAE 6 F+N**	2CKA000230A0381	10/100

[1] Suitable for cover plate 2539-xxx, 1766-xxx and 1746-2xx-FN.

	**Satellite co-axial outlets 2 connectors/dead-end feeder** Broadband technology 5-2.400 MHz For DVB-T, satellite and broad-band cable systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0230-101	2CKA000230A0250	10/100

	**Satellite co-axial outlets Radio/TV/SAT 3gang dead-end feeder** Broadband technology 47-2.150 MHz. SAT connection designed as screwable F-male plug. with remote feed via F-bush For DVB-T and broadband-cable-systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0232-101-500	2CKA000230A0463	10/100

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Terminating resistor 75 Ohm		
	0239	2CKA000230A0201	10/100
	Mounting plate [1) 2)] **with green insert** For 2 modular jack inserts. For systems: CommScope (AVAYA / AT&T / Lucent Technologies), GigaSPEED, PowerSUM, 360 GS 10E bis MGS 600-BK, M1 BH-xx, MPS 100E-xx. With R&M adapter R310694 suitable for R&M connection modules R305111, R305112, R305113 and R305114. Pitch dimensions: (WxH) approx. 16.9 x 17.9 mm. Without claws.		
	1810	2CKA001753A8048	10/100
	1810-500	2CKA001753A9974	10/100
	Mounting plate [1) 2)] **with red insert** For 2 modular jack inserts. Suitable for Art. Nos. 0210, 0211 and 0219-101. For systems: AMP / tyco Electronics, BTR, EFB, Krone, Panduit, Quante, Radiall, Setec, Dr.-Ing. Sieger, Telena, Thomas & Betts For Telegärtner AMJ/UMJ connection modules/ couplings. For 2 fiber optic modules of the following types: 3M-Volition, Krone, mvk. Pitch dimensions: (WxH) approx. 14.8 x 19.4 mm. Without claws.		
	1812-500	2CKA001753A9972	10/100
	Mounting plate [1) 2)] **with black insert** For MTRJ or 2 modular jack inserts. For systems: Ackermann, AMP / tyco Electronics (Slim Line (SL) -SM 2gang/switches: 110Connect Jacks, Toolless Jacks / Standard 110Connect Jacks), Brand-Rex, CombiNet, EFB Electronic, Telena. For 2 fiber optic modules of the following types: AMP / tyco Electronics MTRJ. Pitch dimensions: (WxH) approx. 14.8 x 20.4 mm. Without claws.		
	1814-500	2CKA001753A9973	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

Product	Article-No.	Order-No.	Pack/Qty
	Mounting plate [1) 2)] **with blue insert** For 2 modular jack inserts. For system: ITT Cannon RJ45 Cat. 5 type 808 RJ45 Mark III. Pitch dimensions: (WxH) approx. 16.0 x 11.0 mm. Without claws.		
	1816	2CKA001710A3100	10/100
	Mounting plate [1) 2)] **with orange base** For 2 modular jack inserts. For system: LexCom 150 and LexCom 250. Pitch dimensions: (WxH) approx. 15.4 x 15.4 mm. Without claws.		
	1819	2CKA001753A8056	10/100
	Mounting plate [1) 2)] **with grey base** For 2 modular jack inserts. For system: Panduit MiniCom (Cu. z. B. TX6 10 Gig Shielded Jack modules and fiber optic modules. Pitch dimensions: (WxH) approx. 15.9 x 18.7 mm. Without claws.		
	1820	2CKA001753A8057	10/100
	Flush-mounted assembly adapter For the accommodation of one or two universal modules 0219. For flush-mounted installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/12	2CKA000230A0395	1/10
	Channel assembly adapter For the accommodation of one or two universal modules 0219. For channel and under-floor installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/13	2CKA000230A0396	1/10

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Universal module, RJ 45, cat. 6a iso, shielded [1] **1gang** For installation in installation adapter 0219/12 or 0219/13. Also suited for mounting into cover plate 2561 and bases 1812, 1866 EB, and 1867 EB. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Cat. 6A according to ISO/IEC 11801: 2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Bend-radius optimised cable feed (30°). Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. For 8-pole plug RJ 45 only. Housing made from diecast zinc. With integrated dust-protection cap (can be removed if necessary). With insulation displacement connection For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems.		
	0219-101	2CKA000230A0413	1/10

[1] With assembly adapters appropriate for telephone unit cover plates 2539-21x and 1766-xxx.

	Modular-Jack insert **6-pole Cat. 3 (AMP-No. 216000-2)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0210	2CKA000225A0078	10

	Modular-Jack insert **8-pole Cat. 3 (AMP-No. 216005-4)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0211	2CKA000225A0086	10

	Built-in jack For potential balancing jack cover plate and installation in cover plates. For devices of 19 mm diameter.		
	0471-0-0037	2CKA000471A0037	10

Product	Article-No.	Order-No.	Pack/Qty
	Potential balancing plug Suitable for plug 2095 UC-212 and built-in jack 0471-0-0037 acc. to German Standard DIN 42801. For potential balancing jack cover plate (connection up to 6 mm² crimped or soldered).		
	0299-0-0032	2CKA000299A0032	10

	Blank plate **with metal mounting plate**		
anthracite	**1742-81**	2CKA001710A3612	10
ivory white	**1742-82**	2CKA001710A3143	10
studio white	**1742-84-500**	2CKA001710A3991	10/100

	Cover plate [1] **with metal mounting plate** As cover for flex outlet, for cords up to 10.3 mm diameter. With strain relief (without terminal block).		
anthracite	**1749-81**	2CKA001710A3614	10
ivory white	**1749-82**	2CKA001710A3145	10
studio white	**1749-84**	2CKA001710A3163	10/100

[1] Cover plate can also be used individually as cover for telephone connector boxes (VDo).

	Cover plate [1] As cover for universal data connection boxes. Art.-No. 0213 (Cat 3/ISDN), 0216-101, 0218/11-101 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. For WLAN access points 8186/31 and 8186/41. Brand-Rex (WAEGV 8 EKR/EK). BTR (universal data connecting unit design and IAE design). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm.		
anthracite	**1803-81**	2CKA001710A3616	10
ivory white	**1803-82**	2CKA001710A3147	10
studio white	**1803-84-500**	2CKA001710A1550	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **2gang** As cover for universal data connection boxes. Art. No. 0214, 0215 (Cat 3), 0220/12-507, 0221/12-507, 0218, 0217 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. Brand-Rex (WAEGV 8/8 EKR/EK). AMP (NETCONNECT 5E). BTR (E-DAT C6, E-DAT design, Universal data connecting unit design and IAE design). cti (cti-wire 2.8 Cat.6). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm.		
anthracite	**1803-02-81**	2CKA001710A3615	10
ivory white	**1803-02-82**	2CKA001710A3146	10
studio white	**1803-02-84-500**	2CKA001710A1551	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
anthracite	**1766-81**	2CKA001710A3613	10
ivory white	**1766-82**	2CKA001710A3144	10/100
studio white	**1766-84-500**	2CKA001710A3992	10/100

	Cover plate As cover for telephone connector boxes (VDo). Can be knocked out for single or double connection.		
anthracite	**1745-81**	2CKA001710A3624	10
ivory white	**1745-82**	2CKA001710A3155	10
studio white	**1745-84**	2CKA001710A3173	10

	Cover plate [1] [2] **as cover for standard Radio/TV/SAT socket outlets** With 2 connectors Acc. to German Standard DIN 45330. Radio/TV/SAT. With M3 fixing screw.		
anthracite	**1743-81**	2CKA001724A4252	10
ivory white	**1743-82**	2CKA001724A2758	10
studio white	**1743-84-500**	2CKA001724A4332	10/100

[1] Third opening can be knocked out.
[2] See inserts for satellite coaxial socket outlets.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **with labelling field** For modular jack with slide entrance. To fit only Art. No. 1810, 1812, 1814, 1816, 1818, 1819 and 1820. Size of labelling field: 60 x 9 mm.		
anthracite	**1800-81**	2CKA001710A3627	10
ivory white	**1800-82**	2CKA001710A3158	10
studio white	**1800-84-500**	2CKA001710A3990	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Cover plate For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc.		
anthracite	**1746/10-81**	2CKA001710A3628	10
ivory white	**1746/10-82**	2CKA001710A3521	10
studio white	**1746/10-84-500**	2CKA001710A3993	10/100

	Intermediate ring For fitting cover plates from the Busch-Duro 2000® SI and Reflex SI range.		
ivory white	**1747 SI-82**	2CKA001710A3862	10
studio white	**1747 SI-84**	2CKA001710A3863	10

	Cover plate **with hinged lid** For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc.		
ivory white	**1746-82**	2CKA001710A3149	10
studio white	**1746-84**	2CKA001710A3167	10

	Cover plate **with metal mounting plate** For covering universal data communication connectors and circular connectors with screwed plug M 16x0.75 (installable in insert) in accordance with DIN 41524, 41529, 45322, 45327, 45328 and 45329. Knock-out openings 6, 8, 18 mm.		
anthracite	**1748-81**	2CKA001710A3654	10
ivory white	**1748-82**	2CKA001710A3655	10
studio white	**1748-84**	2CKA001710A3656	10

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate **with metal mounting plate** As cover for BNC and TNC sockets. Knock-out openings 6, 8, 18 mm.		
anthracite	**1750-81**	2CKA001710A3617	10
ivory white	**1750-82**	2CKA001710A3148	10
studio white	**1750-84**	2CKA001710A3166	10
	Equipotential socket outlet **2gang** Without claws. For connecting wires up to 1 x 6 mm² and 4 x 2.5 mm². IEC 60601-1:2005; DIN EN 60601 (VDE 0750-1): July 2007 Connection bolts German Standard DIN 42801.		
anthracite	**2095 UC-81**	2CKA002495A0084	10
ivory white	**2095 UC-82**	2CKA002495A0085	10
studio white	**2095 UC-84**	2CKA002495A0086	10
	Cover plate **with metal mounting plate** With screw-type terminal. Fixed with central locknut. As cover for pilot devices with a diameter of 22.5 mm Without claws.		
anthracite	**2533-81**	2CKA001724A4254	10
ivory white	**2533-82**	2CKA001724A4255	10
studio white	**2533-84**	2CKA001724A4256	10
	Cover plate [1] **with metal mounting plate** for communication devices. With labelling field 60.2 x 10.2 mm. Without claws.		
anthracite	**1758-81**	2CKA001724A4253	10
ivory white	**1758-82**	2CKA001724A2759	10
studio white	**1758-84**	2CKA001724A2761	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-DigitalRadio [1) 2) 3) 4) 5)] RDS stereo radio alarm clock for flush-mounted installation. Reception frequency: 87.50 MHz - 108.00 MHz. With display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. For mono/stereo operation. 8 radio stations storable. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated antenna. With additional connection for external antenna. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 34 mm		
	8215 U-500	2CKA008200A0182	1/10

[1] No claw. Screw-fixing via keyholes.
[2] Matching loudspeaker insert 8223 U.
[3] Also combinable with built-in ceiling loudspeaker (8225 EB & 8226 EB) and HiFi built-in ceiling loudspeaker (8226/11 EB).
[4] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[5] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Radio iNet [1) 2) 3) 4)] WLAN Internet radio alarm clock for flush-mounted installation. For the reception of national and international radio stations via Internet. Radio station search possible via various genres. With high resolution graphic display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. Integrated web-server for configuration and control. Remote operation with smartphone via browser surface. UPnP replay function. It is controlled via smartphone. For mono/stereo operation. 8 radio stations storable. With time and date display. With alarm function. With short-time timer. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated WLAN antenna. WLAN standards: IEEE 802.11b / IEEE 802.11g. WLAN safety: WPA / WPA2. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 33 mm APP		
	8216 U-500	2CKA008200A0153	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[4)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

Product	Article-No.	Order-No.	Pack/Qty
	Loudspeaker insert [1)] **5 cm (2")** For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U. For Busch Bluetooth receiver 8219 U. With broadband characteristics. With flat plug connector. Incl. speaker connection cable. Rated output: 2 W (RMS) Frequency response: 200 - 20,000 Hz Impedance: 4 Ohm Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
	8223 U-500	2CKA008200A0183	1/10

[1)] No claw. Screw-fixing via keyholes.

Product	Article-No.	Order-No.	Pack/Qty
	Intercom amplifier insert [1) *)] **with display** Busch-AudioWorld® system amplifier. For individual volume control. For language announcements to 15 individual call zones. With additional broadcast function For switching between Busch-AudioWorld® system channel 1 and 2. For switching of the central radio channel. Optional deactivation of announcements (do not disturb). For mono/stereo operation. With noise control function. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With acoustic monitoring function (baby monitor). Permitted speaker impedance: 8 - 16 Ohm Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 36 mm		
anthracite	**8214 U**	2CKA008200A0119	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

	Amplifier insert [1) *)] For individual volume control. With switchover between radio and external music source. For switching of the central radio channel. For mono/stereo operation. With automatic loudness function. Optional automatic switch-off after 30 min. (Sleep function). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
anthracite	**8211 U**	2CKA008200A0010	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

	Audio input [1) *)] For feeding external music sources into the Busch-AudioWorld® public address system. For 1 stereo audio channel For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. MDRC amplifier 8208. Can be combined with Busch-DigitalRadio (8215 U) and Busch-Radio iNet (8216 U). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 34 mm		
anthracite	**8210 U**	2CKA008200A0108	1

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Insert [1] For charging and supplying mobile terminal devices. With quick charging function for devices compatible with quickcharge. Makes possible fast charging of the mobile terminal device. Rated voltage: 100 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: Apple terminal device Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with USB-C connection Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with quick-charge support and USB-C connection Rated current: 2 A Output voltage: 9 V Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 32 mm NEW Mounting depth: 32 mm		
	6473 U-500	2CKA006400A0039	1/10

[1] No claw. Screw-fixing via keyholes.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Charging cradle with Apple lightning connection [1] For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with lightning connection. For iPhone 7 Plus, iPhone 7, iPhone SE, iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5. For iPod touch (6th generation), iPod touch (5th generation), iPod nano (7th generation). Suitable for use with protective covers certified by Apple. Temperature range (Device): 5 °C to 35 °C NEW Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473-500	2CKA006400A0081	1/10

[1] Not released for use with the iPad.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Charging cradle with USB-C connection For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with USB-C connection. Temperature range (Device): 5 °C to 35 °C NEW Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473/11-500	2CKA006400A0083	1/10

Product	Article-No.	Order-No.	Pack/Qty
	HDMI connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link high-definition digital audio and video data from e.g. SAT-receiver, DVD-/Blue-Ray-player to plasma-type, LCD- or-LED-TVs/screens. HDMI-type A, 3D-compatible. Fully HD ready (1920 x 1080 pixel). For 20-wire HDMI-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/31-500**	2CKA000230A0430	1
alpine white	**0261/32-500**	2CKA000230A0431	1
grey	**0261/33-500**	2CKA000230A0432	1

[1] Please follow the recommendations of the cable and device producers for the max. HDMI cable lengths.

Product	Article-No.	Order-No.	Pack/Qty
	VGA connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link analogue video data between PCs and laptops to monitors or digital projectors etc. VGA-type: D-type, 15-pole. Fully HD ready (1920 x 1080 pixel). For 15-wire VGA-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/21-500**	2CKA000230A0424	1
alpine white	**0261/22-500**	2CKA000230A0425	1
grey	**0261/23-500**	2CKA000230A0426	1

[1] Please follow the recommendations of the cable and device producers for the max. VGA cable lengths.

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	USB connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link mobile devices like e.g. printer, scanner, USB-sticks or digital cameras etc. USB-type A, USB 2.0 compatible. For 5-wire USB- cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/11-500**	2CKA000230A0418	1
alpine white	**0261/12-500**	2CKA000230A0419	1
grey	**0261/13-500**	2CKA000230A0420	1

[1] Please follow the recommendations of the cable and device producers for the max. USB cable lengths.

	Communication adapter for BNC-F Duct-jacks Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0262/11-500**	2CKA000230A0436	1
alpine white	**0262/12-500**	2CKA000230A0437	1
grey	**0262/13-500**	2CKA000230A0438	1

	F duct-jack for communication adapter For connection of antenna cables e.g.. for TVs with integrated TV-tuner and satellite receiver. With screw-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems.		
metal clad	**0262-500**	2CKA000230A0440	1

	Communication adapter for Cinch-jacks Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0263/11-500**	2CKA000230A0444	1
alpine white	**0263/12-500**	2CKA000230A0445	1
grey	**0263/13-500**	2CKA000230A0446	1

Product	Article-No.	Order-No.	Pack/Qty
	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked white: audio , channel left. With soldering tag.		
alpine white	**0263/04-500**	2CKA000230A0451	1

	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked black: audio , channel left. With soldering tag.		
black	**0263/05-500**	2CKA000230A0452	1

	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked red: audio , channel left. With soldering tag.		
Red	**0263/06-500**	2CKA000230A0453	1

	Cinch-jacks for communication adapter For connecting analogue video devices, such as DVD players, hard disc recorders, video recorders or receivers. Marked yellow: audio , channel left. With soldering tag.		
yellow	**0263/07-500**	2CKA000230A0454	1

	Communication adapter for Mini-jacks 3,5mm. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0264/11-500**	2CKA000230A0458	1
alpine white	**0264/12-500**	2CKA000230A0459	1
grey	**0264/13-500**	2CKA000230A0460	1

	Mini-jack 3,5 mm for communication adapter For the connection of mobile terminal devices such as MP3 player (stereo), mobile telephone and smartphones. Audio-band 20Hz - 20kHz. With soldering tag.		
chrome gloss	**0264-500**	2CKA000230A0462	1

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
white	**0248/02-101**	2CKA000230A0402	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
alpine white	**0248/04-101-500**	2CKA000230A0464	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
anthracite	**0248/05-101**	2CKA000230A0404	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Cover plate [*] For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. For audio input 8210 U. For loudspeaker insert 8221 U.		
anthracite	**8251-81**	2CKA008200A0031	10
ivory white	**8251-82**	2CKA008200A0032	10
studio white	**8251-84**	2CKA008200A0033	10

[*] Phase-out type

	Cover plate For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U.		
anthracite	**8252-81**	2CKA008200A0050	10
ivory white	**8252-82**	2CKA008200A0051	10
studio white	**8252-84**	2CKA008200A0053	10

	Cover plate For loudspeaker insert 8223 U.		
anthracite	**8253-81**	2CKA008200A0078	1/10
ivory white	**8253-82**	2CKA008200A0079	1/10
studio white	**8253-84**	2CKA008200A0081	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
anthracite	**1766-81**	2CKA001710A3613	10
ivory white	**1766-82**	2CKA001710A3144	10/100
studio white	**1766-84-500**	2CKA001710A3992	10/100

	Cover plate with metal mounting plate With fixing claws. loudspeaker inserts and cover. Conductor cross-sections up to 4 mm² rigid. With screw-type terminals.		
anthracite	**1751-81**	2CKA001723A0253	10
ivory white	**1751-82**	2CKA001723A0239	10
studio white	**1751-84**	2CKA001723A0240	10/100

	Cover plate with rotary control, with marking As a cover for volume controllers. Suitable for the "LR 15 mono BJ UP" devices of WHD.		
ivory white	**1740 DR/03-82**	2CKA001710A3807	10
studio white	**1740 DR/03-84**	2CKA001710A3808	10

	Cover plate For Busch Bluetooth receiver 8219 U.		
anthracite	**8255-81**	2CKA008200A0211	1
ivory white	**8255-82**	2CKA008200A0212	1
studio white	**8255-84**	2CKA008200A0214	1/10

	Cover plate for Busch-powerDock For Busch-powerDock charging cradles.		
NEW			
anthracite	**6477-81**	2CKA006400A0056	10
ivory white	**6477-82**	2CKA006400A0057	10
studio white	**6477-84**	2CKA006400A0059	10

carat®
Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact** Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 10 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1094 U-500	2CKA001032A0512	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact, slide switch** With built-in slide switch and control lamp for nightly reduction of 4 K. Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 10 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1095 U-500	2CKA001032A0514	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact, sliding switch, 24 V** With built-in slide switch and control lamp for nightly reduction of 4 K. Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 24 V~ Rated current: 1 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1096 U	2CKA001032A0485	1
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **1gang 2way** With fixing claws. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 5 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1097 U-500	2CKA001032A0513	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

carat®
Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, actual value indication
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1094 UTA	2CKA001032A0487	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UTA	2CKA001032A0488	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication, 24 V
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 24 V~
Rated current: 1 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1096 UTA	2CKA001032A0489	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat, e.g., Art. No. 6164/10 .
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, actual value indication
With actual value temperature display
Automatic controller calibration
With fixing claws.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 5 A
EN 60730-2-9, British Standard EN 60669-2-1

	1097 UTA	2CKA001032A0490	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized“ design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, setpoint indication, timer
With change-over contact.
Easy adjustment using menu and text-based display.
4 switching times per day can be user-defined for each day of the week.
With fixing claws.
Automatic summer/wintertime switch-over
Power reserve > 10 hours.
To fit cover plate 6435-xxx.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
NEW
EN 60730-2-9

	1098 U-101	2CKA001032A0508	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized“ design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

carat®
Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1]
NC contact, remote sensor
With remote sensor and thermal feedback
For underfloor heating.
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Adjusting range: +10 to +50° C.
Connecting cable: 1mm² to 2.5 mm²
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A, cos ϕ 1
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UF	2CKA001032A0497	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Room thermostat, flush-mounted [1] [2]
Change-over contact, setpoint indication, timer, remote sensor
With change-over contact.
Easy adjustment using menu and text-based display.
4 switching times per day can be user-defined for each day of the week.
With fixing claws.
Automatic summer/wintertime switch-over
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Power reserve > 10 hours
To fit cover plate 6435-xxx.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A
Temperature range (Device): 10 °C to 50 °C
NEW
EN 60730-2-9

	1098 UF-101	2CKA001032A0509	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.

Electrothermal Valve Drives with function indicator
For the actuation of heaters and cooling ceilings in connection with conventional room temperature controllers (e.g., 1094 U) or KNX, or free@home heating/valve actuators (e.g., 6164/46, 6254/0.XX)).
With function display (opened or closed).
de-energized when closed
Max. opening/closing time: 3.5 min
For installing, a suitable valve adapter is required.
Power input: 4 mA (approx. 1 W)
Inrush current: < 550 mA (max. 100 ms)
Connecting cable: 1.0 m (pluggable)
Rated voltage: 230 V~
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 54
Dimensions: (L x W x D): 59 mm x 45 mm x 53 mm

	6164/10-102	2CKA006151A0257	1/100

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1] [2] [3]
2 NC contacts, heating/cooling
With separate connection (230 V~) for external switchover between heating or cooling.
Switch contact opens when the set temperature is reached.
With fixing claws.
Nominal current: 10 A heating
Nominal current: 5 A cooling
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1099 UHK	2CKA001032A0515	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1] [2] [3]
2 NC contacts, heating/cooling, sliding switch
With built-in sliding switch for switchover between cooling or heating.
Switch contact opens when the set temperature is reached.
With fixing claws.
Nominal current: 10 A heating
Nominal current: 5 A cooling
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1099 UHKEA	2CKA001032A0516	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3] Switching temperature difference: ± 0.5 K.

Cover plate for room thermostat
For room thermostats 1094 U, 1097 U.

anthracite	**1794-81**	2CKA001710A3629	10
ivory white	**1794-82**	2CKA001710A3543	10
studio white	**1794-84**	2CKA001710A3544	10

Cover plate for room thermostat
With sliding switch for nightly room temperature reduction.
to activate nighttime mode and reduction of room temperature by 4K, for thermostats 1095 U, 1096 U and 1095 UF.

anthracite	**1795-81**	2CKA001710A3630	10
ivory white	**1795-82**	2CKA001710A3568	10
studio white	**1795-84**	2CKA001710A3569	10

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for room thermostat For room thermostats 1094 UTA, 1097 UTA.		
anthracite	**1794 TA-81**	2CKA001710A3695	10
ivory white	**1794 TA-82**	2CKA001710A3696	10
studio white	**1794 TA-84**	2CKA001710A3698	10
	Cover plate for room thermostat With sliding switch for nightly room temperature reduction. For room thermostats 1095 UTA, 1096 UTA.		
anthracite	**1795 TA-81**	2CKA001710A3722	10
ivory white	**1795 TA-82**	2CKA001710A3723	10
studio white	**1795 TA-84**	2CKA001710A3725	10
	Cover plate For comfort timer control element 6455-101-500. For standard timer control element 6456-101. For room thermostats 1098 U-101 and 1098 UF-101. For short-time timer 6465 U-101. For Busch-CO2 sensor 1091 U-500.		
anthracite	**6435-81**	2CKA006430A0303	10
ivory white	**6435-82**	2CKA006430A0304	10
	Cover plate for room thermostat For room temperature controller 1099 UHK.		
anthracite	**1795 HK-81**	2CKA001710A4013	10
ivory white	**1795 HK-82**	2CKA001710A4015	10
studio white	**1795 HK-84**	2CKA001710A4017	10
	Cover plate for room thermostat For room temperature controller 1099 UHKEA. With sliding switch for switchover between cooling or heating.		
anthracite	**1795 HKEA-81**	2CKA001710A4045	10
ivory white	**1795 HKEA-82**	2CKA001710A4047	10
studio white	**1795 HKEA-84**	2CKA001710A4049	10

LED light

Product	Article-No.	Order-No.	Pack/Qty
	Info light unit [1) 2)] Size of information field 43 x 43 mm. Long service life of the lighting element (LEDs). Homogeneous backlighting of the information field. Rated voltage: 230 V~		
	2062 U	2CKA001511A0115	1/10

[1)] Use relay inserts when switching through movement sensors or comfort switches.
[2)] For switching the LED flush mounted insert use switches without orientation light only.

	Cover plate [1) 2)] As cover for flush-mounted info light. For insert 2062 U. Size of information field 43 x 43 mm.		
anthracite	**1716-81**	2CKA001731A1921	1
ivory white	**1716-82**	2CKA001731A1922	1
studio white	**1716-84**	2CKA001731A1923	1

[1)] Included with the cover are 46 different text labels and symbols.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

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WaveLINE control elements

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **1-channel** 1gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 1 radio channel can be operated or up to 2 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6731-82-500**	2CKA006730A0032	1/10
aluminium silver [3)]	**6731-83-500**	2CKA006730A0035	1/10
studio white	**6731-84-500**	2CKA006730A0038	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **2-channel** 2gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 2 radio channels can be operated or up to 4 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6732-82-500**	2CKA006730A0033	1/10
studio white	**6732-84-500**	2CKA006730A0039	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **4-channel** 4gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 4 radio channels can be operated or up to 8 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6733-82-500**	2CKA006730A0034	1/10
studio white	**6733-84-500**	2CKA006730A0040	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	WaveLINE LED display [1)] For status display of window handle positions: open = red, closed = green, tilted = yellow. Direct onsite operation possible for switching / dimming an electrical device depending on the flush-mounted insert. 4 individual LED display channels. Up to 8 WaveLine transmitters can be taught-in on each LED display channel. Up to 8 WaveLine transmitters can be taught-in on onsite operation. After a power cut all LED-Display channels light in red. The cyclic telegram repeat of the WaveLINE window position sensor 6720-xxx sensor automatically updates the window open state. Status display for depleted WaveLINE transmitter battery. Status display for faulty transmission link and defective WaveLINE transmitter. User-friendly start-up without PC / software. Printed labelling sheet with 8 different inlay sheets. For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-Watchdog 220 WaveLINE 6747 AGM. For Busch-Universal relay switch insert 6404 U. For universal dimmer switch insert 6595 U. Free-field range: approx. 100 m. Send/receive frequency: 868 MHz. Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm		
anthracite	**6730-81**	2CKA006730A0014	1
ivory white	**6730-82**	2CKA006730A0015	1
studio white	**6730-84**	2CKA006730A0017	1

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

carat®

Busch-Infoline®

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **1gang, with labelling field** With operating knob. For signal/cancel push-button 1520/1 UK. For monitoring unit 1511 U. For Busch-Leakage guard insert 1531 U. With labelling field 61 x 20 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1571 CN-84**	2CKA001582A0346	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **2gang, with labelling field** With operating knob. For signal push-button insert 1520/1 UKZ. With labelling field 61 x 20 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1572 CN-84**	2CKA001582A0348	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **with red and neutral light panel and labelling field** For Alarm Control Unit insert 1515 U-12. For Busch-Alarm signal insert 1563 U-12. For indication lamp insert 1564 U-1x. With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1573 CN-84**	2CKA001582A0350	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **6gang, illuminable, with labelling field** For signal panel insert 1566 U. With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1575 CN-84**	2CKA001582A0353	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **with labelling field** For power supply insert 1518 U. For relay insert 1539 U. For signal generator insert 1561 U-.... With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1576 CN-84**	2CKA001582A0355	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Extension of claws [1)] For the installation of flush-mounted SCHUKO® socket outlets and also switches, push-buttons, etc. and deeply installed flush-mounted boxes.		
	2148	2CKA002148A0120	100

[1)] Not suitable for types 2000/3 US, 2000/6/2 US, 2000/6/6 US-101 and double socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Braille symbol self-adhesive (transparent) for cover 2506-xxx		
	light **2144 LI**	2CKA001714A0295	10/1000
	bell **2144 KI**	2CKA001714A0296	10/1000
	key **2144 TR**	2CKA001714A0297	10/1000

Product	Article-No.	Order-No.	Pack/Qty
	Braille symbol **socket outlet** self-adhesive, transparent for SCHUKO® socket outlets with hinged lid 20 EUK-xxx		
	2144 ST	2CKA001714A0298	10/1000

Product	Article-No.	Order-No.	Pack/Qty
	DIN A 4 labelling sheet [1)] **plastic foil** Suitable for all to be labeled Busch-Jaeger devices. For laser printer. The text of the foil is printed via the Busch-Jeager labeling service.		
translucent	**1799/02**	2CKA001799A0959	1
transparent	**1799/03**	2CKA001799A0960	1

[1)] 1 piece = 1 sheet.

Product	Article-No.	Order-No.	Pack/Qty
	RC suppressor For protection against the damage or destruction of electronic devices due to overvoltages. For wiring network-interconnected inductivities (e.g.. relay, protection, fluorescent lamps, transformers, etc.). Eliminates functional disturbances on electronic devices, e.g. automatic circuit reclosure (clocking) of a movement detector. Dimensions: diameter 25 mm, length 35 mm, length of the connecting cable approx. 100 mm. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz		
	6899	2CKA006899A0231	10

carat®
Tools

Product	Article-No.	Order-No.	Pack/Qty
	Mounting set carat® flat [1) 2)] For flat flush-mounted installation, stonework Suitable for cover frame carat®. Set consists of a flush-mounted box for brickwork 3040. With plastering moulding tool and positioning device. With integrated RFID-chip for easy detection. With vertically adjustable rotary ring. With Torx/slotted screws. With variable basement depth. Mounting boxes are combinable directly. With flex knockouts for cables or pipes. The boxes need to be plastered. Hole size : 82 mm		
	1gang **3048/11**	2CKA001740A0066	1/30
	2gang **3048/21**	2CKA001740A0067	1
	3gang **3048/31**	2CKA001740A0068	1
	4gang **3048/41**	2CKA001740A0069	1

[1)] RFID = Radio Frequency IDentification
[2)] Not suitable for fixing claws.

Product	Article-No.	Order-No.	Pack/Qty
	Mounting set carat® flat For flat flush-mounted installation, hollow wall Suitable for cover frame carat®. For double planking. Set consists of a flush-mounted box for cavity walls 3050. With positioning device and adapter rings. Suitable for drywalls and plasterboards for 9,5 mm, 10 mm and 12,5 mm. With Torx/slotted screws. Mounting boxes are combinable directly. With flex knockouts for cables or pipes. Fast installation via cable strap latches. A 74 mm diameter moulding cutter with countersink is needed. Hole size : 74 mm		
	1gang **3058/11**	2CKA001740A0077	1
	2gang **3058/21**	2CKA001740A0078	1/20
	3gang **3058/31**	2CKA001740A0079	1
	4gang **3058/41**	2CKA001740A0080	1

Product	Article-No.	Order-No.	Pack/Qty
	Mounting set carat® flat For flat flush-mounted installation, concrete construction Suitable for cover frame carat®. Suitable for prefabricated and in-situ concrete directly onto the formwork. Set consists of a flush-mounted box for concrete walls 3060. Delivered with a lid with distance positioning device. Fixing exclusively and directly to formwork by nailing or hot gluing. With Torx/slotted screws. Mounting boxes are combinable directly. With flex knockouts for pipes.		
	1gang **3068/11**	2CKA001740A0088	1
	2gang **3068/21**	2CKA001740A0089	1
	3gang **3068/31**	2CKA001740A0090	1
	4gang **3068/41**	2CKA001740A0091	1
	RFID-Detector [1)] To recover of RFID-chips. Power supply: 9V alkaline cell (included in delivery).		
	3049	2CKA001740A0070	1

[1)] RFID = Radio Frequency IDentification.

	Compensation rings for flush-mounted boxes For additional compensation for too deep mounted flush-mounted boxes. Adjustment height: 2,6 mm		
	3057	2CKA001740A0081	10

carat®
Cover frames

Product	Article-No.	Order-No.	Pack/Qty
	Cover frame **1gang frame**		
white glass	**1721-811**	2CKA001754A4442	1
bronze	**1721-821**	2CKA001754A4258	1
gold [1]	**1721-823-101**	2CKA001754A4356	1
glass black	**1721-825**	2CKA001754A4322	1
chrome	**1721-826-101**	2CKA001754A4360	1
stainless steel	**1721-860**	2CKA001754A4254	1

[1] Gold plated 24 carat.

	Cover frame **2gang frame** For vertical or horizontal installation.		
white glass	**1722-811**	2CKA001754A4443	1
bronze	**1722-821**	2CKA001754A4259	1
gold [1]	**1722-823-101**	2CKA001754A4357	1
glass black	**1722-825**	2CKA001754A4323	1
chrome	**1722-826-101**	2CKA001754A4361	1
stainless steel	**1722-860**	2CKA001754A4255	1

[1] Gold plated 24 carat.

	Cover frame **3gang frame** For vertical or horizontal installation.		
white glass	**1723-811**	2CKA001754A4444	1
bronze	**1723-821**	2CKA001754A4260	1
gold [1]	**1723-823-101**	2CKA001754A4358	1
glass black	**1723-825**	2CKA001754A4324	1
chrome	**1723-826-101**	2CKA001754A4362	1
stainless steel	**1723-860**	2CKA001754A4256	1

[1] Gold plated 24 carat.

	Cover frame **4gang frame** For vertical or horizontal installation.		
white glass	**1724-811**	2CKA001754A4445	1
bronze	**1724-821**	2CKA001754A4261	1
gold [1]	**1724-823-101**	2CKA001754A4359	1
glass black	**1724-825**	2CKA001754A4325	1
chrome	**1724-826-101**	2CKA001754A4363	1
stainless steel	**1724-860**	2CKA001754A4257	1

[1] Gold plated 24 carat.

Busch-dynasty®
Opulence with a story.

It's like a painting with a stylish frame. Inspired by a real fairy tale, which takes you to a different world. Exclusive design, the finest material and perfect effect. The frames decorated with curved latticework. Polished and antique brass. Beauty and functionality come together to attain perfection. Something unique for your residence.

01 polished brass, decor, ivory white
02 polished brass, decor, anthracite
03 antique brass, decor, ivory white
04 antique brass, decor, anthracite
05 polished brass, ivory white
06 polished brass, anthracite
07 antique brass, ivory white
08 antique brass, anthracite
09 ivory white
10 anthracite

Busch-dynasty®

Selected functions.

01

02

03

04

05

06

07

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12

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14

01 Rocker switch 1gang
02 Rotary dimmer
03 SCHUKO® socket outlet with LED indicator light
04 SCHUKO® USB socket outlet
05 Socket outlet with earthing pin
06 Switched socket outlet BS standard
07 Busch-iceLight®
08 Busch-AudioWorld® Busch-Radio iNet
09 Loudspeaker connection box
10 USB power adapter insert
11 RJ 45 connection socket
12 Busch-iDock
13 Intelligent card switch
14 KNX sensor, for more KNX products see part 12 of the catalogue - Intelligent Building Solutions

01

02

03

04

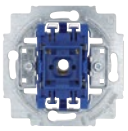
05

1 to 5gang cover frame for horizontal or vertical installation
01 106 x 106 mm
02 106 x 177 mm
03 106 x 283 mm
04 106 x 389 mm
05 106 x 495 mm

For more information about light switch ranges visit ABB global web sites.

Busch-dynasty®

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism** [1] Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way **2000/6 US-500**	2CKA001012A2198	10/100
	2gang 1way **2000/5 US-500**	2CKA001012A1150	10/100
	DP, 1gang 2way **2000/6/2 US**	2CKA001012A0954	10
	1gang intermediate **2000/7 US-500**	2CKA001012A2199	10/100
	DP, 1gang 1way **2000/2 US-500**	2CKA001012A2196	10/100
	SP, 1gang 1way switch **2000/1 US-500**	2CKA001012A2059	10/100

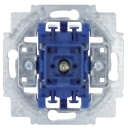
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker Switch Mechanism [1] **2gang 2way** With screwless terminals. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	2000/6/6US-101-500	2CKA001011A0928	10/100

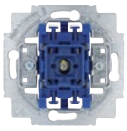
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker Switch Mechanism [1] [2] **DP, 1gang 1way** For switching high loads. Rated voltage: 250 V~ Rated current: 16 AX IEC 60669-1		
	2000/2 US-101-500	2CKA001012A2193	10/100

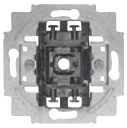
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Also for switching SCHUKO® socket outlets.

	**Rocker Switch Mechanism** [1] With neon lamp 8338-1. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way [2] **2000/6 USGL-500**	2CKA001012A2194	10/100
	2gang 1way **2000/5 USGL**	2CKA001012A1135	10

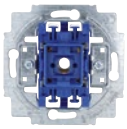
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism, control** [1] [2] [3] With neon lamp. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way with N-terminal **2000/6 USK-500**	2CKA001022A0659	10/100
	DP, 1gang 1way **2000/2 UK**	2CKA001022A0656	10

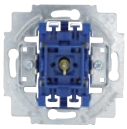
[1] With 1 mA neon lamp.
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3] Illuminable by using lamps 8360, 8362, 8363, 8365, 8366, and 8367 and LED inserts.

	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US	2CKA001413A0475	10/100
	2020 US-500	2CKA001413A0574	10/100

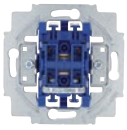
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With 2 independent signalling contacts. Rated voltage: 250 V~ Inputs: 1 Outputs: 1 Rated current: 10 A IEC 60669-1		
	2020 US-201	2CKA001413A0483	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] [2] [3] **SP, with normally open contact (operating current)** With illumination. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 USGL-500	2CKA001413A1106	10/100

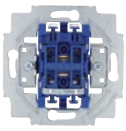
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.
[3] For relay and touch dimmer applications.

	**Push-switch mechanism** [1] With one input terminal and 2 actuating covers. Rated voltage: 250 V~ Inputs: 1 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-500	2CKA001413A1105	10/100

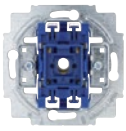
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-dynasty®

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] **2 x SP, 2 normally open contact** 2 normally open contacts. Rated voltage: 250 V~ Inputs: 2 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-101	2CKA001413A0509	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] **SP, 1gang 2way** Can be wired for normally open contacts (stand-by current) or normally closed contacts (operating current). With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US-206-500	2CKA001413A1104	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker For flush-mounted switch 1g1w, 1g2w, intermediate, push switch.		
anthracite	**1786-81-500**	2CKA001751A3079	10/100
ivory white	**1786-82-500**	2CKA001751A3083	10/100
antique brass [1]	**1786-840-500**	2CKA001751A3116	10/100

[1] Real metal surface refined by hand.

	Rocker For flush-mounted switch 2g 1w, 2g push switch.		
anthracite	**1785-81**	2CKA001751A2930	10
ivory white	**1785-82**	2CKA001751A2744	10/100
antique brass [1]	**1785-840-500**	2CKA001751A3117	10

[1] Real metal surface refined by hand.

	Rocker **with small red spherical cap** As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way.		
anthracite	**1789-81**	2CKA001751A2928	10
ivory white	**1789-82**	2CKA001751A2813	10
antique brass [1]	**1789-840-500**	2CKA001751A3118	10

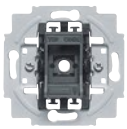
[1] Real metal surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker [1] [2] **with labelling field** With pilot lamp for uniform illumination of the labelling field. For flush-mounted switch 1g1w, 1g2w, intermediate, push switch. Size of labelling field: 59.7 x 11.7 mm.		
anthracite	**1764 NLI-81**	2CKA001731A1552	10
ivory white	**1764 NLI-82**	2CKA001731A1876	10
antique brass [3]	**1764 NLI-840-500**	2CKA001731A2024	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Illumination using neon lamp 8353 or incandescent lamp 8344-1 and LED inserts.
[3] Plastic surface refined by hand.

	Rocker With marking. For flush-mounted switch 2g 1w, 2g push switch. With Marking " DO NOT DISTURB / MAKE UP ROOM"		
ivory white	**1785/11-82**	2CKA001751A2991	10
antique brass [1]	**1785/11-840-500**	2CKA001751A3119	10

[1] Real metal surface refined by hand.

	**Card switch 10 A** [1] **SP, with normally open contact (operating current)** Illuminable. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	2025 U	2CKA001012A1713	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
delivery form:	Adapter plate APBS to be ordered separate.		

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Cover plate For card switch. For insert 2025 U. Suitable for cards sized 54 x 86 mm. The inner part of the cover plate is made of light-conducting plastic, so that the card slot is illuminated.		
anthracite	**1792-81**	2CKA001710A3639	10
ivory white	**1792-82**	2CKA001710A3640	10
antique brass [1]	**1792-840-500**	2CKA001710A4078	10

[1] Plastic surface refined by hand.

Busch-dynasty®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6) 7)] **Flush-mounted, LED, 2-100 W** With rotary control, two-way switch and soft-catch. 2-wire connection (neutral conductor not required) Optimised for dimming of retrofit LED lamps (LEDi). For dimmable Retrofit-LEDs (LEDi). For dimmable Retrofit-LEDs (LEDi) with conventional or electronic transformers. For incandescent lamps, 230 V tungsten halogen lamps, low-voltage halogen lamps with conventional or electronic transformers and dimmable energy-saving halogen lamps. Mix operaton of LEDi with conventional loads possible. Via mode switch adjustable between leading edge control and trailing edge control. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, + 10% / - 10% Rated frequency: 50 Hz/60 Hz Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 250 W/VA (non-LED loads). Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 R,L,C LEDi		
	6523 U-102-500	2CKA006512A0335	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Also applicable for 1gang 2way installations.
[5)] Provided with terminal for net disconnection devices.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[7)] Recommendation: Please use loads and types of one producer.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3) 4) 5) 6)] **Flush-mounted, LED, 2-100 W** Touch dimmer. 2-wire connection (neutral conductor not required) Neutral conductor optionally connectable (recommended for the connection of low loads < 10 W/VA). Optimised for dimming of retrofit LED lamps (LEDi). For incandescent lamps, 230V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers and dimmable halogen energy-saving lamps. Mix operaton of LEDi with conventional loads possible. With adjustable minimum brightness. The minimum brightness for the leading edge control can be adjusted using the potentiometer. The potentiometer at the left limit stop corresponds with the trailing edge control mode. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. With light-level memory and minimum brightness memory. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Without control cover. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 200 W/VA (non-LED loads). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 R,L,C LEDi		
	6526 U-500	2CKA006512A0323	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Recommendation: Please use loads and types of one producer.
[6)] In connection with 6810-21x-101 and 6800-xx-104 (M) only suitable for switching retrofit LEDs (for 2-conductor connection).

	Busch-rotary dimmer [1) 2) 3) 4)] **flush mounted, R, 60-600 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps and 230 V tungsten halogen lamps. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 600 W IEC 60669-2-1, British Standard EN 60669-2-1 R,L		
	2250 U-500	2CKA006515A0848	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] Also applicable for 1gang 2way installations.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Provided with terminal for net disconnection devices.

Busch-dynasty®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1) 2) 3) 4) 5)]
flush mounted, RL, 20-500 W
With rotary control, 2way On-Off switching and soft-catch.
Leading Edge control.
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
With adjustable minimum brightness.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 20 - 500 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	2247 U-500	2CKA006512A0302	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-rotary dimmer [1) 2) 3) 4) 5) 6)]
UP, RL, 200-700 W
With rotary control, 2way On-Off switching and soft-catch.
Leading Edge control.
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
Short-circuit-proof, overload-protected.
With adjustable minimum brightness.
Without cover plate.
Without claws.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 200 - 700 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6520 U-500	2CKA006520A0227	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[6)] Should be mounted in a seperate wallbox.

Busch-2gang switch/rotary dimmer [1) 2) 3)]
flush mounted, RL, 60-400 W
1 channel designed as dimmer.
1 channel designed as switch contact (1gang 2way contact element)
with leading edge control
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
With adjustable minimum brightness.
Without cover plate.
Rated current 6A (changeover contact switch output).
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 60 - 400 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6517 U-101-500	2CKA006517A0018	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Can be used to replace a 2gang 1way switch.

Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1) 2) 3) 4) 5) 6)]
flush mounted, RC, 40-420 W
With rotary control, soft-catch and with trailing edge control.
For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers.
Low-noise, short-circuit-proof, overload-protected.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 40 - 420 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6513 U-102	2CKA006513A0568	1/10
	6513 U-102-500	2CKA006513A0586	1/10

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-rotary dimmer [1) 2) 3) 4) 5) 6)]
flush mounted, RC, 40-550 W
With rotary control, soft-catch and with trailing edge control.
For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers.
Low-noise, short-circuit-proof, overload-protected.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 40 - 550 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6519 U	2CKA006519A0011	1

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-dynasty®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5)] **flush mounted, RLC, 60-420 W** with soft-catch With intelligence for universal operation. For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Short-circuit-proof, overload-protected. Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible. Operation via rotary-type remote control 6592 U possible, Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 60 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6591 U-101-500	2CKA006513A0588	1/10

[1)] Illuminable with neon lamp 3855. Neon lamp included in delivery with cover plate.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In the case of conventional transformers, take ~20% transformer loss into account.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Cannot be combined with a 2way switch.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer, extension [1) 2)] **flush mounted** for connection to 6591 U-101, To be used with Busch-Dimmer®, MDRC 6583. with soft-catch A maximum of 5 multi-way extensions can be connected to a 6591U-101, Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz		
	6592 U-500	2CKA006513A0590	1

[1)] Control elements 2115-xxx and 6540-xxx.
[2)] Required for illuminating the N-connection control element.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4)] **flush mounted, 1-10V** With rotary control. For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For LED control via control gears Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	2112 U-101-500	2CKA006599A2873	1/10

[1)] Non-illuminable.
[2)] Use cover plates 2115 J-.../2115-.../6540-... .
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Making-current limiters have to be provided in case of too high making currents.

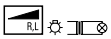
Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1)] **flush mounted, DALI** For DALI broadcast service (via central telegram). For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With rotary control and ON/OFF push operation. Fool proved. Brightness power-on level and backround brightness level adjustable, buffered. With integrated LED illumination for orientation. Color of orientation light adjustable (18 presets and OFF). Up to 5 potentiometers are connectable in parallel. Max. current consumption: 15 mA. Not suitable for combining with other DALI sensors or central units of other manufacturers. An additional DALI power supply is needed, e.g. by Tridonic, Philips, Helvar or 2117/11 U. Max. DALI-cable length: 300 m (1,5 - 2,5 mm²). Without cover plate. Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C		
	2117 U-500	2CKA006599A2987	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1)] **flush mounted, DALI, with internal power supply** For DALI broadcast service (via central telegram). With integrated DALI power adaptor. For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With rotary control and ON/OFF push operation. With electronic short-circuit protection. With electronic overload protection. Brightness power-on level and backround brightness level adjustable, buffered. With integrated LED illumination for orientation. Color of orientation light adjustable (18 presets and OFF). Up to 5 potentiometers are connectable in parallel. Up to 3 potentiometers are connectable in parallel in active mode. Not suitable for combining with other DALI sensors or central units of other manufacturers. DALI-voltage: 15,5 V= Rated current: max. 75 mA Power consumption: < 2,5 W Number of DALI-units: 37 in case of one active power-potentiometer in case of three active power-potentiometer in parallel connection: 111 Active mode: the potentiometer is supporting the necessary control circuit for other DALI-devices. Passive mode: the potentiometer is suitable as additional operation point. Max. DALI-cable length: 300 m (1,5 - 2,5 mm²). Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C		
	2117/11 U-500	2CKA006599A2988	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

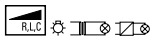
Busch-dynasty®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2)] **flush mounted, RL, 25-500 W** With light-level memory and leading edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. Compatible with control covers 6543-xxx-10x. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Parallel operation of several transformers and/or incandescents lamps possible. Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 25 - 500 W/VA IEC 60669-2-1, British Standard EN 60669-2-1 		
	6560 U-101-500	2CKA006560A1207	1/10

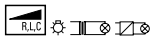
[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch touch-dimmer range [1) 2) 3) 4)] **flush mounted, RC, 45-315 W** For switching and dimming 2 independent devices. With trailing edge control. 2gang 1way For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with electronic transformers. Compatible with control covers 6545-xxx. Without cover, without cover plate. Outputs: 2 independent dimmer channels. Rated power: 40-315 W/VA per channel. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz IEC 60669-2-1, British Standard EN 60669-2-1 		
	6565 U-500	2CKA006565A0057	1/10

[1)] Not suitable with conventional transformers.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Does not provide an extension input.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3) 4)] **flush mounted, RLC, 60-420 W** With light-level memory and intelligence for universal operation. Selectable Soft-ON/OFF function and memory function. Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible. For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Short-circuit-proof, overload-protected. With touch control. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Without control cover. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1 		
	6593 U-500	2CKA006590A0171	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In conjunction with 6800-xxx-104 (M) a Soft Off can be adjusted.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Dimmer®, capacity booster [1)] **flush mounted, RLC, 200-315 W** The control is effected by a Busch-Universal master dimmer 6593 U or Busch-Universal rotary dimmer 6591U-101 For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Can only be installed in conjunction with a cover plate 2114-xxx and 6541-xxx. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 200 - 315 W/VA IEC 60669-2-1, British Standard EN 60669-2-1 		
	6594 U-500	2CKA006590A0172	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-dynasty®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3)] **flush mounted, 1-10V** 3 wire connection (neutral conductor required). For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). For LED control via control gears Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6550 U-101-500	2CKA006550A0042	1

[1)] Non-illuminable.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3)] With integrated making-current limiter.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1)] **with rotary knob, with indication lamp** Elevated knob. For Busch-Dimmer®. For inserts 2112 U-101/2116(/11) U/ 2117(/11) U/2247 U/2250 U/6513 U-102/6517 U-10x/6519 U/6520 U/6523 U(10x) /6591 U-10x and 6592 U.		
anthracite	**6540-81-102**	2CKA006599A2950	10
ivory white	**6540-82-102**	2CKA006599A2951	10/100
antique brass [2)]	**6540-840-102-500**	2CKA006599A3022	10

[1)] Replacement neon lamp, Art. No. 3855.
[2)] Real metal surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Control element [1) 2) 3)] **with neon lamp** Can be combined with LED dimmer 6524 U, and 6526 U, Busch-Universal touch-type controller 6550 U-10x, Busch-Memory touch dimmer 6560 U-101, Busch-Universal-Dimmer® 6593 U, Busch-Universal relay insert 6401 U-10x, Busch-Universal 2gang insert 6402 U.		
anthracite	**6543-81-101**	2CKA006599A2881	1/10
ivory white	**6543-82-101**	2CKA006599A2831	1/10
antique brass [4)]	**6543-840-101-500**	2CKA006599A3023	1/10

[1)] Compatible with previous type 6543-xxx.
[2)] Touch-type Controller 6550 U-xxx non-illuminable.
[3)] Replacement neon lamp 3857.
[4)] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Control element [1)] **with neon lamp** Combinable with Busch-Memory 2gang dimmer 6565 U.		
anthracite	**6545-81**	2CKA006599A2906	1/10
ivory white	**6545-82**	2CKA006599A2907	1/10
antique brass [2)]	**6545-840-500**	2CKA006599A3024	1/10

[1)] Replacement neon lamp 3857.
[2)] Real metal surface refined by hand.

Busch-dynasty®

Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch 2-wire insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 40 - 300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6815 U	2CKA006800A2270	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Output cannot be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch relay mechanism [1) 2) 3)] 3 wire connection (neutral conductor required). For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer. Rated power: 2300 W/VA Suitable for: 230 V halogen lamps Rated power: 1200 W Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.5 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6816 U-500	2CKA006800A2621	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Output can be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal relay switch insert 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog 180 FP sensor for All Weather 44 6800-3x-102C. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For comfort timer control element 6455-101-500. For Busch-Remote control IR control cover 6067-xxx-10x. For control cover with control lamp 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): -25 °C to 55 °C British Standard EN 60669-2-1		
	6401 U-102-500	2CKA006401A0049	1/10
	Busch-Universal 2gang 1way insert 3 wire connection (neutral conductor required). For the serial switch operating mode: 2 separate outputs, 2 separate extension inputs. For operation mode timer: output 1 (eg lighting), output 2: ON/Off delay in dependence of output 1 (eg fan control). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For control cover 6430-xxx-10x and 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6402 U-500	2CKA006401A0051	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	neon lamp 3855, one neon lamp is supplied together with control cover plates 6540-2x.		

Busch-dynasty®

Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog relay mechanism 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated power: 700 W/VA Temperature range (Device): 0 °C to 55 °C British Standard EN 60669-2-1		
	6812 U-101-500	2CKA006800A2160	1/10
	Busch-Watchdog MOS-Fet Insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 60 - 420 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6804 U-101-500	2CKA006800A2219	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Requires an NIS international socket, E-No. 372507676.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog extension insert [1)] 3 wire connection (neutral conductor required). For extending Busch-Watchdog 180 flush-mounted and Busch-Watchdog Presence tech installations. For combination with relay insert 6401 U-102 and 6402 U. For combination with MOS-Fet insert 6804 U-101. For combination with Dimmer insert 6593 U and 6550 U-101. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Control/Signal outputs: 1, electronic output, potential-bound Temperature range (Device): 0 °C to 35 °C		
	6805 U-500	2CKA006800A2161	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Not combinable with relay switch insert 6812 U-101.

Busch-dynasty®

Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1) 2)] **with multi-lens** For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 15 m, lateral: 5 m, Mounting height: 2.5 m Detection range 2: frontal: 10 m, lateral: 2.5 m, Mounting height: 1.2 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
anthracite	**6800-81-104M**	2CKA006800A2269	1
ivory white	**6800-82-104M**	2CKA006800A2100	1
antique brass [3)]	**6800-840-104M-500**	2CKA006800A2730	1

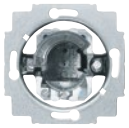
[1)] installation: slide switch top.
[2)] Please order the respective flush-mounted insert separately.
[3)] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch control element [1)] **with neon lamp** For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
anthracite	**6815-81**	2CKA006800A2284	1/10
ivory white	**6815-82**	2CKA006800A2285	1/10
antique brass [2)]	**6815-840-500**	2CKA006800A2731	1/10

[1)] Please order the respective flush-mounted insert separately.
[2)] Plastic surface refined by hand.

Busch-dynasty®

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	**Key Switch Insert** [1) 2) 3)] **breaking circuit, 1-pole** For profile semi-cylindrical lock. In switched-on and switched-off status the key can be pulled out in the central position, respectively. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	2733 USL-101	2CKA001101A0914	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

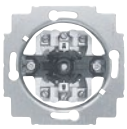
[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Use the cylindrical lock according to the enclosed drawing.
[3)] See profile semi-cylindrical lock.

	Blind switch insert [1) 2)] With interlock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	SP, switch **2000/4 US-500**	2CKA001012A2197	10/100
	SP, push switch **2020/4 US-500**	2CKA001413A1103	10/100

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] These blind switches/push buttons safely prevent a switch-over of the running direction being carried out too quickly.

	Blind switch insert [1) 2)] With rotary knob/switch and push switch. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1, British Standard EN 60669-1		
	DP [3)] **2712 U**	2CKA001101A0534	10
	SP, N, E **2713 U**	2CKA001101A0542	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

	**Blind switch insert** [1) 2)] With rotary knob/push button. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	DP [3)] **2722 U**	2CKA001101A0559	10
	SP, N, E **2723 U**	2CKA001101A0567	10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

	Blind switch/push-switch [1) 2) 3) 4)] For profile semi-cylindrical lock/switch and push-switch. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	DP [5)] **2712 USL-101**	2CKA001101A0872	10
	SP, N, E **2713 USL-101**	2CKA001101A0880	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	Blind switch insert [1) 2) 3) 4)] For profile semi-cylindrical lock/push-button. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 A British Standard EN 60669-1, IEC60669-1		
	DP [5)] **2722 USL-101**	2CKA001101A0898	10
	SP, N, E **2723 USL-101**	2CKA001101A0906	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	DIN profile-semi cylindrical lock Acc. to German Standard DIN 18252. Total length 40 mm for blind switches and push switches For inserts 2712/2713/2722/2723/2733 USL-101 and 2712/2733 SLW-5x.		
	different lock mechanism, with 3 keys **0520 PZ-VS**	2CKA000470A0013	1/100
	lock mechanism, with 3 keys **0521 PZ-GS**	2CKA000470A0021	1/100

Busch-dynasty®

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Comfort blind insert [1) 2) 3)] **with memory and positioning function** For the manual and automatic control of roller blinds. The roller blind moves to the position set using the turn knob. Executes the individually programmed switching commands (UP/DOWN) in a 24-hour rhythm. Suitable for roller blind drives with mechanical or electronic limit switch shut-off. Suitable for operation without neutral conductor. Without an extension input. Power reserve of 45 minutes (maintenance-free as capacitor). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 1.3 A, cos ϕ 0.5 Rated power: 300 VA Temperature range (Device): 0 °C to 35 °C		
	6419 U	2CKA006410A0390	1/10

[1)] Pertinent cover plates 6436-xx.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.
[3)] Only suitable for single unit control.

	Basic blind insert [1) 2)] Suitable for blind and roller blind drives with mechanical or electronic limit switch shut-off. Suitable for operation without neutral conductor. Without an extension input. For control cover 6430-xx-xxx. For standard timer control element 6456-101. Running time: 3 min Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 3 A, cos ϕ 0.5 Rated power: 690 VA Temperature range (Device): 0 °C to 35 °C		
	6418 U-500	2CKA006410A0376	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] N-conductor connection required for operation with control cover 6430-7x, illuminated.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Blind control II switch insert [1)] Suitable for blind, roller blind and awning drives with mechanical or electronic limit switch shut-off. With two 230 V multi-way input terminals (Up/Down) for group control. With operating mode switch for the following modes: normal, louvre, base station, position. With party function (disables the local control unit) in combination with Busch-Blind control II control cover 6430-xx-xxx, 6066-xx-xxx. Wind alarm, cleaning functions can be accommodated via extension input. For control cover 6430-xx-xxx. For IR control element 6066-xx-xxx. For comfort timer control element 6455-101-500. Running time: 3 min Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 3 A, cos ϕ 0.5 Rated power: 690 VA Control/Signal outputs: 2 Temperature range (Device): 0 °C to 35 °C		
	6411 U-101	2CKA006410A0377	1/10

[1)] Compatible with types 6411 U/x.

	Burglar alert sensor For insert 6411U/S-101. With 4 m connecting cable.		
	6413-500	2CKA006410A0349	10
	Brightness sensor For insert 6411U/S-101. With 2 m connecting cable. Measuring range: 15-50,000 lux.		
	6414-101	2CKA006410A0389	1/10
	Sun sensor For insert 6411U/S-101. Measuring range: 5-50,000 lux.		
	6482	2CKA006410A0203	1

Busch-dynasty®

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty

Busch-Short-time timer insert [1]
countdown timer
For time-programmed switching of electrical consumers.
With control cover, without cover plate.
Minimum timer time: 1 second.
Maximum timer time: 9:59:59 hours.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Outputs: 1x Normally open contact
Rated current: 10 A, cos ϕ 1
Rated power: 2300 VA
Temperature range (Device): 0 °C to 35 °C
IEC 60669-2-1, British Standard EN 60669-2-1

	6465 U-101-500	2CKA006410A0393	1/10

Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.
neon indicator:	not applicable

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Rocker
with marking
As cover for flush-mounted blind control switch/push switch.
For inserts 2000/4 and 2020/4 US.

anthracite	**1785 JA-81**	2CKA001751A2934	10
ivory white	**1785 JA-82**	2CKA001751A2748	10
antique brass [1]	**1785 JA-840-500**	2CKA001751A3120	10

[1] Real metal surface refined by hand.

Cover plate
with rotary control, with marking
As cover for flush-mounted blind control switch/push switch.
For inserts 2712 U, 2713 U and 2722 U, 2723 U.

anthracite	**1740-81**	2CKA001710A3623	10
ivory white	**1740-82**	2CKA001710A3154	10
antique brass [1]	**1740-840-500**	2CKA001710A4089	1/10

[1] Real metal surface refined by hand.

Control element
For Busch-Blind control II insert 6411 U-101, 6411 U/S-101.
For basic blind insert 6418 U.
For Busch-Universal 2gang 1way insert 6402 U.

anthracite	**6430-81-102**	2CKA006430A0284	1/10
ivory white	**6430-82-102**	2CKA006430A0264	1/10
antique brass [1]	**6430-840-102-500**	2CKA006430A0407	1/10

[1] Real metal surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty

Cover plate [1]
with rotary knob
For comfort blinds insert 6419 U.

anthracite	**6436-81**	2CKA006430A0387	10
ivory white	**6436-82**	2CKA006430A0356	10
antique brass [2]	**6436-840-500**	2CKA006430A0406	1/10

[1] Continuous lighting of the turn knob possible using glow lamp 3855. Not included in delivery. Neutral wire required for operation with neon lamp.
[2] Real metal surface refined by hand.

Standard timer control element [1]
For manual and time-controlled switching of blinds and roller blinds.
With dusk to dawn program including (Astro-program)
Individual Astro adjustment and Astro blocking time.
The controlled devices can be manually operated at any time.
Simple setting via high-resolution display with background illumination.
With preset switching times/date/time.
Factory-set switching times can be individually adjusted.
Automatic switchover from summer time to winter time (switch-off function).
Switching times/programme are safely stored in the event of a mains power failure.
Power reserve for time and date > 10 years.
Simple toggling between manual/automatic/vacation modes.
Programming possible only with control element attached and energized.
2 switching times per day can be user-defined for each day of the week.
Astro switching times and switching times can be combined.
For basic blind insert 6418 U.
Temperature range (Device): 0 °C to 35 °C

	6456-101	2CKA006410A0398	1/10

[1] See respective cover plates 6435-xx.

Busch-dynasty®

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Comfort timer control element [1] For manual and time-controlled switching of blinds, roller blinds, awnings, lighting and other electrical devices. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Combined with Busch-Blind control II insert 6411 U/S-101, sun protection and twilight function. Freely adjustable temperature and brightness-dependent sun protection function. Freely adjustable twilight function. User-adjustable running times for blinds and air conditioning. Programming possible only with control element attached and energized. 6 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. When combined with LED dimmer 6524 U, Busch-Universal master dimmer insert 6593 U or Busch-Memory touch-type controller 6550 U-101, the brightness of the lighting can be adjusted for each ON switching time. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal relay switch insert 6401 U-102. For Busch-Universal master dimmer insert 6593 U. For LED dimmer insert 6524 U and 6526 U. For Busch-Memory touch-type controller 6550 U-101. Temperature range (Device): 0 °C to 35 °C		
	6455-101-500	2CKA006410A0399	1/10

[1] See respective cover plates 6435-xx.

Product	Article-No.	Order-No.	Pack/Qty
	Time switch mechanism 16 A [1] [2] **DP, break contact for staircases, exterior lighting, fans, etc.** Running time: 15 min For time-programmed switching of electrical consumers. Rated voltage: 230 V~, +10 % / -10 % Rated current: 16 A, cos ϕ 0.25		
	1070 U	2CKA001043A0025	1/10

[1] For screw-fixing only
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Time switch mechanism 16 A [1] [2] **DP, break contact for staircases, exterior lighting, fans, etc.** Running time: 120 min For time-programmed switching of electrical consumers. Rated voltage: 230 V~, +10 % / -10 % Rated current: 16 A, cos ϕ 0.25		
	1071 U	2CKA001043A0124	1

[1] For screw-fixing only
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Cover plate For comfort timer control element 6455-101-500. For standard timer control element 6456-101. For room thermostats 1098 U-101 and 1098 UF-101. For short-time timer 6465 U-101. For Busch-CO2 sensor 1091 U-500.		
anthracite	**6435-81**	2CKA006430A0303	10
ivory white	**6435-82**	2CKA006430A0304	10
antique brass [1]	**6435-840-500**	2CKA006430A0405	10

[1] Plastic surface refined by hand.

Busch-dynasty®
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1) 2)] With screw-type terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
antique brass anthracite	**23 EUCKS-845-507**	2CKA002011A6247	10
antique brass ivory white	**23 EUCKS-848-507**	2CKA002011A6245	10

[1)] Increased shock protection.
[2)] Real metal surface refined by hand.

	SCHUKO® socket outlet [1) 2)] **shuttered** With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
antique brass anthracite	**20 EUCKS-845-500**	2CKA002013A5401	10
antique brass ivory white	**20 EUCKS-848-500**	2CKA002013A5398	10/100

[1)] Increased shock protection.
[2)] Real metal surface refined by hand.

	SCHUKO® USB socket outlet [1) 2) 3)] **shuttered** With screwless terminals. DP (2 P + E) For supply and support of mobile devices via USB-cable. With USB female connector type A. With electronic short-circuit protection. With electronic overload protection. Simultaneous charging via USB connection and use of the SCHUKO® socket outlet. Rated voltage: 250 V~ Secondary: 5 V-, +5 % / -5 % Rated frequency: 50 Hz Suitable for: SCHUKO® socket outlet Rated current: 16 A Suitable for: USB connection Rated current: 700 mA Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm Mounting depth: 35 mm		
anthracite	**20 EUCBUSB-81-500**	2CKA002011A6176	1
ivory white	**20 EUCBUSB-82-500**	2CKA002011A6177	1
antique brass [4)]	**20 EUCBUSB-840-500**	2CKA002011A6246	1

[1)] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2)] No data transfer.
[3)] Use dust cover 2098 when cleaning the device.
[4)] Plastic surface refined by hand.

	SCHUKO® socket outlet steplight® [1)] **With night orientation light** with separate connection cables for switch contact. with LED, Shuttered. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUCBLI-82**	2CKA002013A5292	1
antique brass [2)]	**20 EUCBLI-840-500**	2CKA002013A5399	1

[1)] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2)] Plastic surface refined by hand.

	SCHUKO® socket outlet **with hinged lid** With screwless terminals. DP (2 P + E) Hinged lid notches when opened. Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUK-82**	2CKA002018A1465	10
antique brass [1)]	**20 EUK-840-500**	2CKA002018A1515	10

[1)] Real metal surface refined by hand.

	Socket outlet [1) 2)] **with earthing pin** With screw-type terminals. Shuttered. Suitable for the countries: Belgium, Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~		
antique brass anthracite	**23 MUCKS-845-500**	2CKA002017A0891	10
antique brass ivory white	**23 MUCKS-848-500**	2CKA002017A0889	10

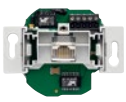
[1)] Socket outlet with integrated child protection.
Replaces the usual term"...with child protection".
[2)] Real metal surface refined by hand.

	13 A Switched socket outlet 1gang With screw-type terminals. SP switched Without claws. Only for mounting in VDE flush-mounted wallboxes CFB 122 and CFBM 122. Rated voltage: 250 V~ Rated current: 13 A BS 1363: part2		
anthracite	**2190 EUC-81**	2CKA002190A0216	10/100
ivory white	**2190 EUC-82**	2CKA002190A0213	10/100
antique brass [1)]	**2190 EUC-840-500**	2CKA002190A0222	10

[1)] Surface painted.

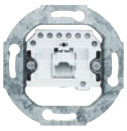
Busch-dynasty®

Data communication

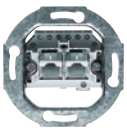
Product	Article-No.	Order-No.	Pack/Qty
	**WLAN access point, flush-mounted** [1) 2)] **power supply from mains power** Operation as WLAN access point for the connection of WLAN terminal devices to the LAN. Operation as WLAN repeater for extending the transmission range of a WLAN. Operation as WLAN adapter for integrating Ethernet terminal devices into a WLAN. Supports WLAN standards IEEE 802.11b/g/n with 2.4 GHz; integrated WLAN antenna. Backward connection of an Ethernet cable via screw terminals (10/100 Mbit/s). Front-side Ethernet connection via a RJ45 socket (10/100 Mbit/s). The three connections (WLAN, Ethernet/screw terminals and Ethernet/RJ45)can be used in parallel via the integrated switch. Power supply via 2-pole connecting terminal. Nominal voltage: 100 - 240 V~ For mounting in commercially available deep flush-mounted and hollow-wall boxes. Rated frequency: 50 Hz - 60 Hz		
	8186/31-101-500	2CKA008100A0359	1

[1)] Suitable for cover plate 1803-xxx.
[2)] Not to be mounted in SM box 1701-xxx, 1702-xxx, 1703-xxx.

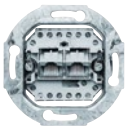
	Reset magnet For resetting WLAN access point UP 8186/31-101 and WLAN access point PoE UP 8186/41 to the factory settings.		
	8186/11-500	2CKA008100A0361	1

	**Universal data connection unit, cat. 3** [1)] **1gang** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0213-500	2CKA000230A1549	10/100

[1)] Suitable for cover plate 1803-xxx.

	**Universal data connection box with down-leading outlet** [1)] **2gang internally parallel connected** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0214	2CKA000230A0235	10/100
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	**Universal data connection box with down-leading outlet** [1)] **2 x outlets, 8/8-pole** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0215	2CKA000230A0243	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

	UAE connection unit, RJ45, cat. 6e, shielded [1)] **1gang** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0216-102	2CKA000230A0465	1/10

[1)] Suitable for cover plate 1803-xxx.

Busch-dynasty®

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	UAE connection unit, RJ45, cat. 6e, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0217-102	2CKA000230A0467	1/10

[1] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **1gang** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0218/11-101	2CKA000230A0409	1/10

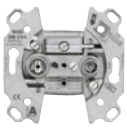
[1] Suitable for cover plate 1803-xxx.

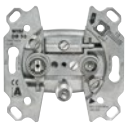
Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For trunk systems, flush-mounted wall boxes and underfloor systems. For wires of AWG 24-22. Without claws. Mounting depth: 31 mm.		
	0218/12-101	2CKA000230A0411	1/10

[1] Suitable for cover plate 1803-02-xxx.

	Universal data connection box 8(6)/ telephone unit 6F+N - connection box [1] **2 x 6-pole** with straight outlet, with screw contacts, Universal data-connection boxes: RJ 11/12, ISDN capable Cat. 3 in acc. with IEC 603-7/German Standard DIN EN 60603-7, Telecommunication outlet (telephone unit): for 1 telephone, 1 auxiliary device or 1 data transmission unit, With claw.		
white	**UAE 8(6)TAE 6 F+N**	2CKA000230A0381	10/100

[1] Suitable for cover plate 2539-xxx, 1766-xxx and 1746-2xx-FN.

	**Satellite co-axial outlets 2 connectors/dead-end feeder** Broadband technology 5-2.400 MHz For DVB-T, satellite and broad-band cable systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0230-101	2CKA000230A0250	10/100

	**Satellite co-axial outlets Radio/TV/SAT 3gang dead-end feeder** Broadband technology 47-2.150 MHz. SAT connection designed as screwable F-male plug. with remote feed via F-bush For DVB-T and broadband-cable-systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0232-101-500	2CKA000230A0463	10/100

Busch-dynasty®

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Terminating resistor 75 Ohm		
	0239	2CKA000230A0201	10/100
	Mounting plate [1) 2)] **with green insert** For 2 modular jack inserts. For systems: CommScope (AVAYA / AT&T / Lucent Technologies), GigaSPEED, PowerSUM, 360 GS 10E bis MGS 600-BK, M1 BH-xx, MPS 100E-xx. With R&M adapter R310694 suitable for R&M connection modules R305111, R305112, R305113 and R305114. Pitch dimensions: (WxH) approx. 16.9 x 17.9 mm. Without claws.		
	1810	2CKA001753A8048	10/100
	1810-500	2CKA001753A9974	10/100
	Mounting plate [1) 2)] **with red insert** For 2 modular jack inserts. Suitable for Art. Nos. 0210, 0211 and 0219-101. For systems: AMP / tyco Electronics, BTR, EFB, Krone, Panduit, Quante, Radiall, Setec, Dr.-Ing. Sieger, Telena, Thomas & Betts For Telegärtner AMJ/UMJ connection modules/ couplings. For 2 fiber optic modules of the following types: 3M-Volition, Krone, mvk. Pitch dimensions: (WxH) approx. 14.8 x 19.4 mm. Without claws.		
	1812-500	2CKA001753A9972	10/100
	Mounting plate [1) 2)] **with black insert** For MTRJ or 2 modular jack inserts. For systems: Ackermann, AMP / tyco Electronics (Slim Line (SL) -SM 2gang/switches: 110Connect Jacks, Toolless Jacks / Standard 110Connect Jacks), Brand-Rex, CombiNet, EFB Electronic, Telena. For 2 fiber optic modules of the following types: AMP / tyco Electronics MTRJ. Pitch dimensions: (WxH) approx. 14.8 x 20.4 mm. Without claws.		
	1814-500	2CKA001753A9973	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

Product	Article-No.	Order-No.	Pack/Qty
	Mounting plate [1) 2)] **with blue insert** For 2 modular jack inserts. For system: ITT Cannon RJ45 Cat. 5 type 808 RJ45 Mark III. Pitch dimensions: (WxH) approx. 16.0 x 11.0 mm. Without claws.		
	1816	2CKA001710A3100	10/100
	Mounting plate [1) 2)] **with orange base** For 2 modular jack inserts. For system: LexCom 150 and LexCom 250. Pitch dimensions: (WxH) approx. 15.4 x 15.4 mm. Without claws.		
	1819	2CKA001753A8056	10/100
	Mounting plate [1) 2)] **with grey base** For 2 modular jack inserts. For system: Panduit MiniCom (Cu. z. B. TX6 10 Gig Shielded Jack modules and fiber optic modules. Pitch dimensions: (WxH) approx. 15.9 x 18.7 mm. Without claws.		
	1820	2CKA001753A8057	10/100
	Flush-mounted assembly adapter For the accommodation of one or two universal modules 0219. For flush-mounted installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/12	2CKA000230A0395	1/10
	Channel assembly adapter For the accommodation of one or two universal modules 0219. For channel and under-floor installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/13	2CKA000230A0396	1/10

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Universal module, RJ 45, cat. 6a iso, shielded [1] **1gang** For installation in installation adapter 0219/12 or 0219/13. Also suited for mounting into cover plate 2561 and bases 1812, 1866 EB, and 1867 EB. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Cat. 6A according to ISO/IEC 11801: 2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Bend-radius optimised cable feed (30°). Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. For 8-pole plug RJ 45 only. Housing made from diecast zinc. With integrated dust-protection cap (can be removed if necessary). With insulation displacement connection For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems.		
	0219-101	2CKA000230A0413	1/10

[1] With assembly adapters appropriate for telephone unit cover plates 2539-21x and 1766-xxx.

	Modular-Jack insert **6-pole Cat. 3 (AMP-No. 216000-2)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0210	2CKA000225A0078	10

	Modular-Jack insert **8-pole Cat. 3 (AMP-No. 216005-4)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0211	2CKA000225A0086	10

	Built-in jack For potential balancing jack cover plate and installation in cover plates. For devices of 19 mm diameter.		
	0471-0-0037	2CKA000471A0037	10

Product	Article-No.	Order-No.	Pack/Qty
	Potential balancing plug Suitable for plug 2095 UC-212 and built-in jack 0471-0-0037 acc. to German Standard DIN 42801. For potential balancing jack cover plate (connection up to 6 mm² crimped or soldered).		
	0299-0-0032	2CKA000299A0032	10

	Blank plate **with metal mounting plate**		
anthracite	**1742-81**	2CKA001710A3612	10
ivory white	**1742-82**	2CKA001710A3143	10
antique brass [1]	**1742-840-500**	2CKA001710A4080	10

[1] Real metal surface refined by hand.

	Cover plate [1] **with metal mounting plate** As cover for flex outlet, for cords up to 10.3 mm diameter. With strain relief (without terminal block).		
anthracite	**1749-81**	2CKA001710A3614	10
ivory white	**1749-82**	2CKA001710A3145	10
antique brass [2]	**1749-840-500**	2CKA001710A4081	10

[1] Cover plate can also be used individually as cover for telephone connector boxes (VDo).
[2] Real metal surface refined by hand.

	Cover plate [1] As cover for universal data connection boxes. Art.-No. 0213 (Cat 3/ISDN), 0216-101, 0218/11-101 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. For WLAN access points 8186/31 and 8186/41. Brand-Rex (WAEGV 8 EKR/EK). BTR (universal data connecting unit design and IAE design). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm.		
anthracite	**1803-81**	2CKA001710A3616	10
ivory white	**1803-82**	2CKA001710A3147	10
antique brass [2]	**1803-840-500**	2CKA001710A4082	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Real metal surface refined by hand.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **2gang** As cover for universal data connection boxes. Art. No. 0214, 0215 (Cat 3), 0220/12-507, 0221/12-507, 0218, 0217 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. Brand-Rex (WAEGV 8/8 EKR/EK). AMP (NETCONNECT 5E). BTR (E-DAT C6, E-DAT design, Universal data connecting unit design and IAE design). cti (cti-wire 2.8 Cat.6). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm.		
anthracite	**1803-02-81**	2CKA001710A3615	10
ivory white	**1803-02-82**	2CKA001710A3146	10
antique brass [2]	**1803-02-840-500**	2CKA001710A4083	1/10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Real metal surface refined by hand.

	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
anthracite	**1766-81**	2CKA001710A3613	10
ivory white	**1766-82**	2CKA001710A3144	10/100
antique brass [1]	**1766-840-500**	2CKA001710A4084	10

[1] Real metal surface refined by hand.

	Cover plate [1] [2] **as cover for standard Radio/TV/SAT socket outlets** With 2 connectors Acc. to German Standard DIN 45330. Radio/TV/SAT. With M3 fixing screw.		
anthracite	**1743-81**	2CKA001724A4252	10
ivory white	**1743-82**	2CKA001724A2758	10
antique brass [3]	**1743-840-500**	2CKA001724A4362	10

[1] Third opening can be knocked out.
[2] See inserts for satellite coaxial socket outlets.
[3] Real metal surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **with labelling field** For modular jack with slide entrance. To fit only Art. No. 1810, 1812, 1814, 1816, 1818, 1819 and 1820. Size of labelling field: 60 x 9 mm.		
anthracite	**1800-81**	2CKA001710A3627	10
ivory white	**1800-82**	2CKA001710A3158	10
antique brass [2]	**1800-840-500**	2CKA001710A4085	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Real metal surface refined by hand.

	Intermediate ring For fitting cover plates from the Busch-Duro 2000® SI and Reflex SI range.		
ivory white	**1747 SI-82**	2CKA001710A3862	10
antique brass [1]	**1747 SI-840-500**	2CKA001710A4079	10

[1] Plastic surface refined by hand.

	Cover plate **with hinged lid** For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc.		
anthracite	**1746-81**	2CKA001710A3618	10
ivory white	**1746-82**	2CKA001710A3149	10
antique brass [1]	**1746-840-500**	2CKA001710A4086	10

[1] Plastic surface refined by hand.

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-DigitalRadio [1) 2) 3) 4) 5)] RDS stereo radio alarm clock for flush-mounted installation. Reception frequency: 87.50 MHz - 108.00 MHz. With display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. For mono/stereo operation. 8 radio stations storable. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated antenna. With additional connection for external antenna. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 34 mm		
	8215 U-500	2CKA008200A0182	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Also combinable with built-in ceiling loudspeaker (8225 EB & 8226 EB) and HiFi built-in ceiling loudspeaker (8226/11 EB).
[4)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[5)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Radio iNet [1) 2) 3) 4)] WLAN Internet radio alarm clock for flush-mounted installation. For the reception of national and international radio stations via Internet. Radio station search possible via various genres. With high resolution graphic display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. Integrated web-server for configuration and control. Remote operation with smartphone via browser surface. UPnP replay function. It is controlled via smartphone. For mono/stereo operation. 8 radio stations storable. With time and date display. With alarm function. With short-time timer. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated WLAN antenna. WLAN standards: IEEE 802.11b / IEEE 802.11g. WLAN safety: WPA / WPA2. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 33 mm APP		
	8216 U-500	2CKA008200A0153	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[4)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

	Loudspeaker insert [1)] **5 cm (2")** For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U. For Busch Bluetooth receiver 8219 U. With broadband characteristics. With flat plug connector. Incl. speaker connection cable. Rated output: 2 W (RMS) Frequency response: 200 - 20,000 Hz Impedance: 4 Ohm Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
	8223 U-500	2CKA008200A0183	1/10

[1)] No claw. Screw-fixing via keyholes.

Busch-dynasty®

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Intercom amplifier insert [1) *)] **with display** Busch-AudioWorld® system amplifier. For individual volume control. For language announcements to 15 individual call zones. With additional broadcast function For switching between Busch-AudioWorld® system channel 1 and 2. For switching of the central radio channel. Optional deactivation of announcements (do not disturb). For mono/stereo operation. With noise control function. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With acoustic monitoring function (baby monitor). Permitted speaker impedance: 8 - 16 Ohm Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 36 mm		
anthracite	**8214 U**	2CKA008200A0119	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

	Amplifier insert [1) *)] For individual volume control. With switchover between radio and external music source. For switching of the central radio channel. For mono/stereo operation. With automatic loudness function. Optional automatic switch-off after 30 min. (Sleep function). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
anthracite	**8211 U**	2CKA008200A0010	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

	Audio input [1) *)] For feeding external music sources into the Busch-AudioWorld® public address system. For 1 stereo audio channel For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. MDRC amplifier 8208. Can be combined with Busch-DigitalRadio (8215 U) and Busch-Radio iNet (8216 U). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 34 mm		
anthracite	**8210 U**	2CKA008200A0108	1

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Insert [1)] For charging and supplying mobile terminal devices. With quick charging function for devices compatible with quickcharge. Makes possible fast charging of the mobile terminal device. Rated voltage: 100 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: Apple terminal device Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with USB-C connection Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with quick-charge support and USB-C connection Rated current: 2 A Output voltage: 9 V Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 32 mm		
NEW	Mounting depth: 32 mm		
	6473 U-500	2CKA006400A0039	1/10

[1)] No claw. Screw-fixing via keyholes.

	Busch-powerDock Charging cradle with Apple lightning connection [1)] For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with lightning connection. For iPhone 7 Plus, iPhone 7, iPhone SE, iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5. For iPod touch (6th generation), iPod touch (5th generation), iPod nano (7th generation). Suitable for use with protective covers certified by Apple. Temperature range (Device): 5 °C to 35 °C		
NEW	Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473-500	2CKA006400A0081	1/10

[1)] Not released for use with the iPad.

	Busch-powerDock Charging cradle with USB-C connection For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with USB-C connection. Temperature range (Device): 5 °C to 35 °C		
NEW	Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473/11-500	2CKA006400A0083	1/10

Busch-dynasty®

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	HDMI connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link high-definition digital audio and video data from e.g. SAT-receiver, DVD-/Blue-Ray-player to plasma-type, LCD- or-LED-TVs/screens. HDMI-type A, 3D-compatible. Fully HD ready (1920 x 1080 pixel). For 20-wire HDMI-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/31-500**	2CKA000230A0430	1
alpine white	**0261/32-500**	2CKA000230A0431	1
grey	**0261/33-500**	2CKA000230A0432	1

[1] Please follow the recommendations of the cable and device producers for the max. HDMI cable lengths.

	VGA connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link analogue video data between PCs and laptops to monitors or digital projectors etc. VGA-type: D-type, 15-pole. Fully HD ready (1920 x 1080 pixel). For 15-wire VGA-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/21-500**	2CKA000230A0424	1
alpine white	**0261/22-500**	2CKA000230A0425	1
grey	**0261/23-500**	2CKA000230A0426	1

[1] Please follow the recommendations of the cable and device producers for the max. VGA cable lengths.

Product	Article-No.	Order-No.	Pack/Qty
	USB connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link mobile devices like e.g. printer, scanner, USB-sticks or digital cameras etc. USB-type A, USB 2.0 compatible. For 5-wire USB- cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/11-500**	2CKA000230A0418	1
alpine white	**0261/12-500**	2CKA000230A0419	1
grey	**0261/13-500**	2CKA000230A0420	1

[1] Please follow the recommendations of the cable and device producers for the max. USB cable lengths.

	Communication adapter **for BNC-F Duct-jacks** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0262/11-500**	2CKA000230A0436	1
alpine white	**0262/12-500**	2CKA000230A0437	1
grey	**0262/13-500**	2CKA000230A0438	1

	F duct-jack **for communication adapter** For connection of antenna cables e.g.. for TVs with integrated TV-tuner and satellite receiver. With screw-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems.		
metal clad	**0262-500**	2CKA000230A0440	1

	Communication adapter **for Cinch-jacks** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0263/11-500**	2CKA000230A0444	1
alpine white	**0263/12-500**	2CKA000230A0445	1
grey	**0263/13-500**	2CKA000230A0446	1

Busch-dynasty®

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Cinch-jacks **for communication adapter** To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked white: audio , channel left. With soldering tag.		
alpine white	**0263/04-500**	2CKA000230A0451	1
	Cinch-jacks **for communication adapter** To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked black: audio , channel left. With soldering tag.		
black	**0263/05-500**	2CKA000230A0452	1
	Cinch-jacks **for communication adapter** To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked red: audio , channel left. With soldering tag.		
Red	**0263/06-500**	2CKA000230A0453	1
	Cinch-jacks **for communication adapter** For connecting analogue video devices, such as DVD players, hard disc recorders, video recorders or receivers. Marked yellow: audio , channel left. With soldering tag.		
yellow	**0263/07-500**	2CKA000230A0454	1
	Communication adapter **for Mini-jacks 3,5mm.** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0264/11-500**	2CKA000230A0458	1
alpine white	**0264/12-500**	2CKA000230A0459	1
grey	**0264/13-500**	2CKA000230A0460	1
	Mini-jack 3,5 mm **for communication adapter** For the connection of mobile terminal devices such as MP3 player (stereo), mobile telephone and smartphones. Audio-band 20Hz - 20kHz. With soldering tag.		
chrome gloss	**0264-500**	2CKA000230A0462	1

Product	Article-No.	Order-No.	Pack/Qty
	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
white	**0248/02-101**	2CKA000230A0402	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
alpine white	**0248/04-101-500**	2CKA000230A0464	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
anthracite	**0248/05-101**	2CKA000230A0404	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Cover plate For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U.		
anthracite	**8252-81**	2CKA008200A0050	10
ivory white	**8252-82**	2CKA008200A0051	10
antique brass [1]	**8252-840-500**	2CKA008200A0190	10

[1] Plastic surface refined by hand.

	Cover plate For loudspeaker insert 8223 U.		
anthracite	**8253-81**	2CKA008200A0078	1/10
ivory white	**8253-82**	2CKA008200A0079	1/10
antique brass [1]	**8253-840-500**	2CKA008200A0191	1/10

[1] Plastic surface refined by hand.

Busch-dynasty®

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
Cover plate For Busch Bluetooth receiver 8219 U.			
anthracite	**8255-81**	2CKA008200A0211	1
ivory white	**8255-82**	2CKA008200A0212	1
antique brass [1]	**8255-840-500**	2CKA008200A0221	1

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
Cover plate For USB charging station 6474 U. With protective function against lateral slipping of the mobile telephone. Suitable for devices with a maximum thickness of 18 mm. With frontal mounting option of connecting cable.			
anthracite	**6478-81-500**	2CKA006400A0013	1
ivory white	**6478-82-500**	2CKA006400A0015	1
antique brass [1]	**6478-840-500**	2CKA006400A0036	1

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
Cover plate for Busch-powerDock For Busch-powerDock charging cradles.			
NEW			
anthracite	**6477-81**	2CKA006400A0056	10
ivory white	**6477-82**	2CKA006400A0057	10
antique brass [1]	**6477-840-500**	2CKA006400A0061	10

[1] Plastic surface refined by hand.

Busch-dynasty®

Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1094 U-500	2CKA001032A0512	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, slide switch
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1095 U-500	2CKA001032A0514	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, 24 V
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 24 V~
Rated current: 1 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1096 U	2CKA001032A0485	1
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
1gang 2way
With fixing claws.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 5 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1097 U-500	2CKA001032A0513	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

Busch-dynasty®
Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, actual value indication
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1094 UTA	2CKA001032A0487	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UTA	2CKA001032A0488	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication, 24 V
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 24 V~
Rated current: 1 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1096 UTA	2CKA001032A0489	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat, e.g., Art. No. 6164/10 .
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, actual value indication
With actual value temperature display
Automatic controller calibration
With fixing claws.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 5 A
EN 60730-2-9, British Standard EN 60669-2-1

	1097 UTA	2CKA001032A0490	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1)]
NC contact, remote sensor
With remote sensor and thermal feedback
For underfloor heating.
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Adjusting range: +10 to +50° C.
Connecting cable: 1mm² to 2.5 mm²
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A, cos ϕ 1
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UF	2CKA001032A0497	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-dynasty®

Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Electrothermal Valve Drives with function indicator For the actuation of heaters and cooling ceilings in connection with conventional room temperature controllers (e.g., 1094 U) or KNX, or free@home heating/valve actuators (e.g., 6164/46, 6254/0.XX)). With function display (opened or closed). de-energized when closed Max. opening/closing time: 3.5 min For installing, a suitable valve adapter is required. Power input: 4 mA (approx. 1 W) Inrush current: < 550 mA (max. 100 ms) Connecting cable: 1.0 m (pluggable) Rated voltage: 230 V~ Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 54 Dimensions: (L x W x D): 59 mm x 45 mm x 53 mm		
	6164/10-102	2CKA006151A0257	1/100
	Cover plate for room thermostat For room thermostats 1094 U-500/UF, 1097 U-500/UF.		
anthracite	**1794-81**	2CKA001710A3629	10
ivory white	**1794-82**	2CKA001710A3543	10
antique brass [1]	**1794-840-500**	2CKA001710A4087	10
	Cover plate for room thermostat With sliding switch for nightly room temperature reduction. to activate nighttime mode and reduction of room temperature by 4K, for thermostats 1095 U-500, 1096 U and 1095 UF.		
anthracite	**1795-81**	2CKA001710A3630	10
ivory white	**1795-82**	2CKA001710A3568	10
antique brass [1]	**1795-840-500**	2CKA001710A4088	10

[1] Plastic surface refined by hand.

LED light

Product	Article-No.	Order-No.	Pack/Qty
	Info light unit [1] [2] Size of information field 43 x 43 mm. Long service life of the lighting element (LEDs). Homogeneous backlighting of the information field. Rated voltage: 230 V~		
	2062 U	2CKA001511A0115	1/10

[1] Use relay inserts when switching through movement sensors or comfort switches.
[2] For switching the LED flush mounted insert use switches without orientation light only.

	Cover plate [1] [2] As cover for flush-mounted info light. For insert 2062 U. Size of information field 43 x 43 mm.		
anthracite	**1716-81**	2CKA001731A1921	1
ivory white	**1716-82**	2CKA001731A1922	1
antique brass [3]	**1716-840-500**	2CKA001731A2025	1

[1] Included with the cover are 46 different text labels and symbols.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3] Plastic surface refined by hand.

Busch-dynasty®

WaveLINE control elements

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **1-channel** 1gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 1 radio channel can be operated or up to 2 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6731-82-500**	2CKA006730A0032	1/10
antique brass [3)]	**6731-840-500**	2CKA006730A0094	1

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **2-channel** 2gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 2 radio channels can be operated or up to 4 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6732-82-500**	2CKA006730A0033	1/10
antique brass [3)]	**6732-840-500**	2CKA006730A0095	1

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Plastic surface refined by hand.

Covers for Busch-Welcome®

Product	Article-No.	Order-No.	Pack/Qty
	Cover plates For indoor audio station with display. Protection class (Device): IP 30 Temperature range (Device): -5 °C to 40 °C		
anthracite	**83260-81-500**	2CKA008300A0220	1/18
antique brass [1)]	**83260-840-500**	2CKA008300A0365	1/10

[1)] Plastic surface refined by hand.

Busch-dynasty®

KNX control elements

Product	Article-No.	Order-No.	Pack/Qty
	Control element, 1/2gang [1) 2)] **multi-function/colour concept** For ABB i-bus® KNX 6120/12-101, 6120/13. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Push switch function: switching / dimming / blind / sending values / scenes etc. Transparent labelling sheet with standard symbols included in delivery. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: rocker switch left/right Display elements: Two LED per rocker via separate communication object for status (Red/ Green/ OFF) or orientation light. Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm		
anthracite	**6125/02-81-500**	2CKA006115A0216	1
ivory white	**6125/02-82-500**	2CKA006115A0217	1
antique brass [3)]	**6125/02-840-500**	2CKA006115A0452	1

[1)] For software and description please check the current Online-Catalogue.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Control element, 2/4gang [1) 2)] **multi-function/colour concept** For ABB i-bus® KNX 6120/12-101, 6120/13. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Push switch function: switching / dimming / blind / sending values / scenes etc. Transparent labelling sheet with standard symbols included in delivery. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: rocker switch left/right Display elements: Two LED per rocker via separate communication object for status (Red/ Green/ OFF) or orientation light. Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm		
anthracite	**6126/02-81-500**	2CKA006116A0206	1
ivory white	**6126/02-82-500**	2CKA006116A0207	1
antique brass [3)]	**6126/02-840-500**	2CKA006116A0227	1

[1)] For software and description please check the current Online-Catalogue.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Control element, 2/4gang, with RTC [1) 2) 3)] **multi-function/colour concept** With labelling field. For ABB i-bus® KNX bus coupler 6120/12-101, 6120/13. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/ value sender/light scenes/fan function). Rocker switch left/right (switching/dimming/blind/ value sender/light scenes/fan function). The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Transparent labelling sheet with standard symbols included in delivery. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts left/right, also for selecting setpoint and mode of operation. Display elements: LCD displaying operation mode, temperature, time and date Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm		
antique brass	**6128/01-840-500**	2CKA006134A0311	1

[1)] For software and description please check the current Online-Catalogue.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Control element, 4/8gang [1) 2)] **multi-function/colour concept** For ABB i-bus® KNX 6120/12-101, 6120/13. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Push switch function: switching / dimming / blind / sending values / scenes etc. Transparent labelling sheet with standard symbols included in delivery. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: rocker switch left/right Display elements: Two LED per rocker via separate communication object for status (Red/ Green/ OFF) or orientation light. Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm		
anthracite	**6127/02-81-500**	2CKA006117A0232	1
ivory white	**6127/02-82-500**	2CKA006117A0233	1
antique brass [3)]	**6127/02-840-500**	2CKA006117A0252	1

[1)] For software and description please check the current Online-Catalogue.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Plastic surface refined by hand.

Busch-dynasty®

KNX control elements

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog sensor 180 FM standard, select [1] with integrated bus coupler Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated KNX bus coupler. Control element: Setting via ETS application. Detection range: frontal: 6 m, lateral: 6 m Detection angle: 180 ° Brightness limit value: 1 Lux - 500 Lux Mounting height: 1.1 m Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 71 mm x 71 mm x 30 mm Position for installation: vertical		
anthracite	**6122/10-81-500**	2CKA006132A0376	1
ivory white	**6122/10-82-500**	2CKA006132A0377	1
antique brass [2]	**6122/10-840-500**	2CKA006132A0407	1

[1] For software and description please check the current Online-Catalogue.
[2] Plastic surface refined by hand.

free@home control elements

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **1gang, without printing** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 2gang push-button coupling unit (6108/06-500).		
anthracite	**SR-1-81**	2CKA006220A0137	10
ivory white	**SR-1-82**	2CKA006220A0516	10
antique brass [1]	**SR-1-840**	2CKA006220A0371	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **1gang, with "Light" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 2gang push-button coupling unit (6108/06-500).		
anthracite	**SRL-1-81**	2CKA006220A0140	10
ivory white	**SRL-1-82**	2CKA006220A0517	10
antique brass [1]	**SRL-1-840**	2CKA006220A0372	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **1gang, with "Blind" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 2gang push-button coupling unit (6108/06-500).		
anthracite	**SRB-1-81**	2CKA006220A0143	10
ivory white	**SRB-1-82**	2CKA006220A0518	10
antique brass [1]	**SRB-1-840**	2CKA006220A0373	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **1gang, with "Scene" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 2gang push-button coupling unit (6108/06-500).		
anthracite	**SRS-1-81**	2CKA006220A0146	10
ivory white	**SRS-1-82**	2CKA006220A0519	10
antique brass [1]	**SRS-1-840**	2CKA006220A0374	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **1gang, with "Dimmer" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 2gang push-button coupling unit (6108/06-500).		
anthracite	**SRD-1-81**	2CKA006220A0149	10
ivory white	**SRD-1-82**	2CKA006220A0520	10
antique brass [1]	**SRD-1-840**	2CKA006220A0375	10

[1] Plastic surface refined by hand.

Busch-dynasty®

free@home control elements

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **2gang left/right, without printing** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 4gang push-button coupling unit (6108/07).		
anthracite	**SR-2-81**	2CKA006220A0152	10
ivory white	**SR-2-82**	2CKA006220A0521	10
antique brass [1]	**SR-2-840**	2CKA006220A0376	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **2gang left, with "Light" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 4gang push-button coupling unit (6108/07).		
anthracite	**SRL-2-L-81**	2CKA006220A0155	10
ivory white	**SRL-2-L-82**	2CKA006220A0522	10
antique brass [1]	**SRL-2-L-840**	2CKA006220A0377	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **2gang left/right, "Blind" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 4gang push-button coupling unit (6108/07).		
anthracite	**SRB-2-81**	2CKA006220A0158	10
ivory white	**SRB-2-82**	2CKA006220A0523	10
antique brass [1]	**SRB-2-840**	2CKA006220A0378	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **2gang left, with "Scene" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 4gang push-button coupling unit (6108/07).		
anthracite	**SRS-2-L-81**	2CKA006220A0161	10
ivory white	**SRS-2-L-82**	2CKA006220A0524	10
antique brass [1]	**SRS-2-L-840**	2CKA006220A0379	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **2gang left, with "Dimmer" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 4gang push-button coupling unit (6108/07).		
anthracite	**SRD-2-L-81**	2CKA006220A0164	10
ivory white	**SRD-2-L-82**	2CKA006220A0525	10
antique brass [1]	**SRD-2-L-840**	2CKA006220A0380	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **2gang right, with "Light" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 4gang push-button coupling unit (6108/07).		
anthracite	**SRL-2-R-81**	2CKA006220A0167	10
ivory white	**SRL-2-R-82**	2CKA006220A0527	10
antique brass [1]	**SRL-2-R-840**	2CKA006220A0381	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **2gang right, with "Scene" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 4gang push-button coupling unit (6108/07).		
anthracite	**SRS-2-R-81**	2CKA006220A0173	10
ivory white	**SRS-2-R-82**	2CKA006220A0528	10
antique brass [1]	**SRS-2-R-840**	2CKA006220A0382	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **2gang right, with "Dimmer" icon** As cover for ABB-free@home® sensor units and sensor/actuator units As cover for KNX 4gang push-button coupling unit (6108/07).		
anthracite	**SRD-2-R-81**	2CKA006220A0258	10
ivory white	**SRD-2-R-82**	2CKA006220A0526	10
antique brass [1]	**SRD-2-R-840**	2CKA006220A0383	10

[1] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate **for room thermostat** As cover for ABB-free@home® room temperature controller 6224/2.0.		
anthracite	**CP-RTC-81**	2CKA006220A0179	10
ivory white	**CP-RTC-82**	2CKA006220A0529	10
antique brass [1]	**CP-RTC-840**	2CKA006220A0384	10

[1] Plastic surface refined by hand.

Busch-dynasty®

free@home control elements

Product	Article-No.	Order-No.	Pack/Qty
	Movement detector/switch actuator, 1gang [1) 2)] **for ABB-free@home®** With select lens for detection with animal access. For automatic switching of ABB-free@home® actuators dependent on movement and brightness. Switch-off delay of the actuator can be programmed via the web interface of the System Access Point. For switching 127 V~/230 V~ consumers. With integrated switch actuator. Switching function is available also without prior programming (pre-configured). Configuration can be changed later via the web interface (groups, scenes, etc.). The bus can be connected via enclosed terminal block. When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes. Bus voltage: 24 V Outputs: 1x Normally open contact, potential free Suitable for: ohmic Rated current: 10 A Output voltage: 230 V~ Rated power: 2300 W Suitable for: capacitive Rated current: 10 AX Rated power: 2300 VA Suitable for: inductive Rated current: 10 AX Rated power: 2300 VA Detection range: frontal: 6 m, lateral: 3 m Detection angle: 180 ° Brightness limit value: 1 Lux - 500 Lux Mounting height: 1.1 m - 1.3 m Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm Mounting depth: 32 mm Position for installation: vertical		
anthracite	**MSA-F-1.1.1-81**	2CKA006220A0215	1
ivory white	**MSA-F-1.1.1-82**	2CKA006220A0531	1
antique brass [3)]	**MSA-F-1.1.1-840**	2CKA006220A0386	1

[1)] Programming only with bus voltage applied via the web interface of the System Access Point.
[2)] Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current Online-Catalogue.
[3)] Plastic surface refined by hand.

Product	Article-No.	Order-No.	Pack/Qty
	Movement detector [1) 2)] **for ABB-free@home®** With select lens for detection with animal access. For automatic switching of ABB-free@home® actuators dependent on movement and brightness. Switch-off delay of the actuator can be programmed via the web interface of the System Access Point. The bus can be connected via enclosed terminal block. Bus voltage: 24 V Detection range: frontal: 6 m, lateral: 3 m Detection angle: 180 ° Brightness limit value: 1 Lux - 500 Lux Mounting height: 1.1 m - 1.3 m Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 71 mm x 71 mm x 30 mm Mounting depth: 9 mm Position for installation: vertical		
anthracite	**MD-F-1.0.1-81**	2CKA006220A0212	1
ivory white	**MD-F-1.0.1-82**	2CKA006220A0530	1
antique brass [3)]	**MD-F-1.0.1-840**	2CKA006220A0385	1

[1)] Programming only with bus voltage applied via the web interface of the System Access Point.
[2)] Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current Online-Catalogue.
[3)] Plastic surface refined by hand.

Busch-dynasty®

Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Extension of claws [1] For the installation of flush-mounted SCHUKO® socket outlets and also switches, push-buttons, etc. and deeply installed flush-mounted boxes.		
	2148	2CKA002148A0120	100

[1] Not suitable for types 2000/3 US, 2000/6/2 US, 2000/6/6 US-101 and double socket outlets

	Braille symbol self-adhesive (transparent) for cover 2506-xxx		
	light **2144 LI**	2CKA001714A0295	10/1000
	bell **2144 KI**	2CKA001714A0296	10/1000
	key **2144 TR**	2CKA001714A0297	10/1000

	Braille symbol **socket outlet** self-adhesive, transparent for SCHUKO® socket outlets with hinged lid 20 EUK-xxx		
	2144 ST	2CKA001714A0298	10/1000

	DIN A 4 labelling sheet [1] **plastic foil** Suitable for all to be labeled Busch-Jaeger devices. For laser printer. The text of the foil is printed via the Busch-Jaeger labeling service.		
translucent	**1799/02**	2CKA001799A0959	1
transparent	**1799/03**	2CKA001799A0960	1

[1] 1 piece = 1 sheet.

	RC suppressor For protection against the damage or destruction of electronic devices due to overvoltages. For wiring network-interconnected inductivities (e.g.. relay, protection, fluorescent lamps, transformers, etc.). Eliminates functional disturbances on electronic devices, e.g. automatic circuit reclosure (clocking) of a movement detector. Dimensions: diameter 25 mm, length 35 mm, length of the connecting cable approx. 100 mm. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz		
	6899	2CKA006899A0231	10

Product	Article-No.	Order-No.	Pack/Qty

Busch-dynasty®

Cover frames

Cover frame
1gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
anthracite	**1721-831-500**	2CKA001754A4605	10
ivory white	**1721-832-500**	2CKA001754A4600	10
polished brass decor anthracite [1]	**1721-833-500**	2CKA001754A4575	1
polished brass anthracite [1]	**1721-835-500**	2CKA001754A4565	1
polished brass decor ivory white [1]	**1721-836-500**	2CKA001754A4570	1
polished brass ivory white [1]	**1721-838-500**	2CKA001754A4560	1
antique brass decor anthracite [2]	**1721-843-500**	2CKA001754A4595	1
antique brass anthracite [2]	**1721-845-500**	2CKA001754A4585	1
antique brass decor ivory white [2]	**1721-846-500**	2CKA001754A4590	1
antique brass ivory white [2]	**1721-848-500**	2CKA001754A4580	1

[1] Real metal surface.
[2] Real metal surface refined by hand.

Cover frame
2gang frame
For vertical or horizontal installation.

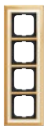
Product	Article-No.	Order-No.	Pack/Qty
anthracite	**1722-831-500**	2CKA001754A4606	10
ivory white	**1722-832-500**	2CKA001754A4601	10
polished brass decor anthracite [1]	**1722-833-500**	2CKA001754A4576	1
polished brass anthracite [1]	**1722-835-500**	2CKA001754A4566	1
polished brass decor ivory white [1]	**1722-836-500**	2CKA001754A4571	1
polished brass ivory white [1]	**1722-838-500**	2CKA001754A4561	1
antique brass decor anthracite [2]	**1722-843-500**	2CKA001754A4596	1
antique brass anthracite [2]	**1722-845-500**	2CKA001754A4586	1
antique brass decor ivory white [2]	**1722-846-500**	2CKA001754A4591	1
antique brass ivory white [2]	**1722-848-500**	2CKA001754A4581	1

[1] Real metal surface.
[2] Real metal surface refined by hand.

Cover frame
3gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
anthracite	**1723-831-500**	2CKA001754A4607	5
ivory white	**1723-832-500**	2CKA001754A4602	5
polished brass decor anthracite [1]	**1723-833-500**	2CKA001754A4577	1
polished brass anthracite [1]	**1723-835-500**	2CKA001754A4567	1
polished brass decor ivory white [1]	**1723-836-500**	2CKA001754A4572	1
polished brass ivory white [1]	**1723-838-500**	2CKA001754A4562	1
antique brass decor anthracite [2]	**1723-843-500**	2CKA001754A4597	1
antique brass anthracite [2]	**1723-845-500**	2CKA001754A4587	1
antique brass decor ivory white [2]	**1723-846-500**	2CKA001754A4592	1
antique brass ivory white [2]	**1723-848-500**	2CKA001754A4582	1

[1] Real metal surface.
[2] Real metal surface refined by hand.



Cover frame
4gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
anthracite	**1724-831-500**	2CKA001754A4608	1
ivory white	**1724-832-500**	2CKA001754A4603	1
polished brass decor anthracite [1]	**1724-833-500**	2CKA001754A4578	1
polished brass anthracite [1]	**1724-835-500**	2CKA001754A4568	1
polished brass decor ivory white [1]	**1724-836-500**	2CKA001754A4573	1
polished brass ivory white [1]	**1724-838-500**	2CKA001754A4563	1
antique brass decor anthracite [2]	**1724-843-500**	2CKA001754A4598	1
antique brass anthracite [2]	**1724-845-500**	2CKA001754A4588	1
antique brass decor ivory white [2]	**1724-846-500**	2CKA001754A4593	1
antique brass ivory white [2]	**1724-848-500**	2CKA001754A4583	1

[1] Real metal surface.
[2] Real metal surface refined by hand.

Busch-dynasty®
Cover frames

Product	**Article-No.**	Order-No.	Pack/Qty
	Cover frame **5gang frame** For vertical or horizontal installation.		
anthracite	**1725-831-500**	2CKA001754A4609	1
ivory white	**1725-832-500**	2CKA001754A4604	1
polished brass decor anthracite [1)]	**1725-833-500**	2CKA001754A4579	1
polished brass anthracite [1)]	**1725-835-500**	2CKA001754A4569	1
polished brass decor ivory white [1)]	**1725-836-500**	2CKA001754A4574	1
polished brass ivory white [1)]	**1725-838-500**	2CKA001754A4564	1
antique brass decor anthracite [2)]	**1725-843-500**	2CKA001754A4599	1
antique brass anthracite [2)]	**1725-845-500**	2CKA001754A4589	1
antique brass decor ivory white [2)]	**1725-846-500**	2CKA001754A4594	1
antique brass ivory white [2)]	**1725-848-500**	2CKA001754A4584	1

[1)] Real metal surface.
[2)] Real metal surface refined by hand.

pure stainless steel
Lasts a lifetime.

Fascinatingly bold straight lines in a time proof material. It is pure stainless steel. Fingerprints? It is impossible, thanks to the unique finishing. An accord of aesthetics, functions and durability. Absolute quality. Pure stainless steel is simply permanent.

01 Switch/push-switch
02 2gang-1way/2way switch
03 Busch-Blind control switch
04 Busch-Comfort switch
05 20A double pole switch with marking and indicator

Colour: stainless steel

Materials
The series is surface-coated in a special manufacturing process. This means that fingerprints or other greasy spots are reduced to a minimum (anti-fingerprint).

ANTI FINGERPRINT

pure stainless steel

Selected functions.

01

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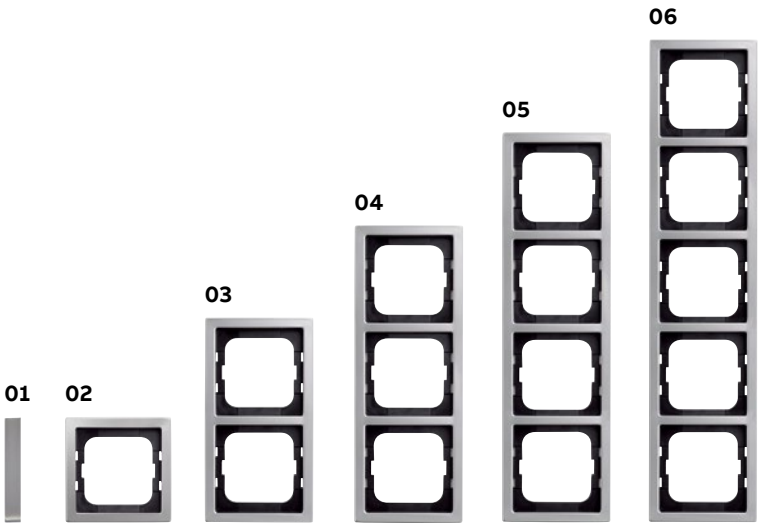
01 Rocker switch 1gang
02 Rocker switch 2gang
03 Busch Universal Rotary Dimmer
04 Touch dimmer
05 Busch-Comfort switch
06 Busch-steplight®
07 Busch-Protector® SCHUKO® socket outlet with overvoltage protection
08 SCHUKO® USB socket outlet
09 Socket outlet with earthing pin
10 Switched socket outlet BS standard
11 Blind switch with rotary knob
12 Busch-Blind control switch with semi-cylindrical lock
13 Busch-Blind comfort switch
14 Comfort timer
15 Room thermostat with display
16 Busch-AudioWorld® Busch-Radio iNet
17 Loudspeaker insert
18 Antenna socket for radio/TV/satellite
19 Universal data connection box
20 Stereo loudspeaker connecting box
21 KNX sensor, for more KNX products see part 12 of the catalogue - Intelligent Building Solutions

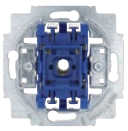


1 to 5gang cover frame for horizontal and vertical installation.
01 Side view, 11 mm x 80 mm
02 80 mm x 80 mm
03 80 mm x 151 mm
04 80 mm x 222 mm
05 80 mm x 293 mm
06 80 mm x 364 mm

For more information about light switch ranges visit ABB global web sites.

pure stainless steel

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism** [1] Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way **2000/6 US-500**	2CKA001012A2198	10/100
	2gang 1way **2000/5 US-500**	2CKA001012A1150	10/100
	DP, 1gang 2way **2000/6/2 US**	2CKA001012A0954	10
	1gang intermediate **2000/7 US-500**	2CKA001012A2199	10/100
	DP, 1gang 1way **2000/2 US-500**	2CKA001012A2196	10/100
	SP, 1gang 1way switch **2000/1 US-500**	2CKA001012A2059	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker Switch Mechanism [1] **2gang 2way** With screwless terminals. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	2000/6/6US-101-500	2CKA001011A0928	10/100

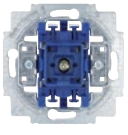
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker Switch Mechanism [1] [2] **DP, 1gang 1way** For switching high loads. Rated voltage: 250 V~ Rated current: 16 AX IEC 60669-1		
	2000/2 US-101-500	2CKA001012A2193	10/100

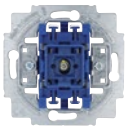
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Also for switching SCHUKO® socket outlets.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker Switch Mechanism [1] [2] **3-pole, 1gang 1way switch** Rated voltage: 400 V~ Rated current: 16 AX IEC 60669-1		
	2000/3 US	2CKA001011A0816	10

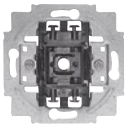
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] With screw-type terminals. Non-illuminable.

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism** [1] With neon lamp 8338-1. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way [2] **2000/6 USGL-500**	2CKA001012A2194	10/100
	2gang 1way **2000/5 USGL**	2CKA001012A1135	10

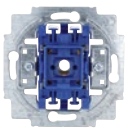
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism, control** [1] [2] [3] With neon lamp. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way with N-terminal **2000/6 USK-500**	2CKA001022A0659	10/100
	DP, 1gang 1way **2000/2 UK**	2CKA001022A0656	10

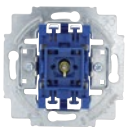
[1] With 1 mA neon lamp.
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3] Illuminable by using lamps 8360, 8362, 8363, 8365, 8366, and 8367 and LED inserts.

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US	2CKA001413A0475	10/100
	2020 US-500	2CKA001413A0574	10/100

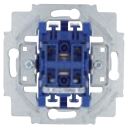
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With 2 independent signalling contacts. Rated voltage: 250 V~ Inputs: 1 Outputs: 1 Rated current: 10 A IEC 60669-1		
	2020 US-201	2CKA001413A0483	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] [2] [3] **SP, with normally open contact (operating current)** With illumination. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 USGL-500	2CKA001413A1106	10/100

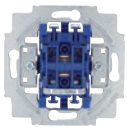
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.
[3] For relay and touch dimmer applications.

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] With one input terminal and 2 actuating covers. Rated voltage: 250 V~ Inputs: 1 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-500	2CKA001413A1105	10/100

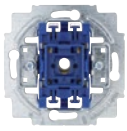
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

pure stainless steel

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] **2 x SP, 2 normally open contact** 2 normally open contacts. Rated voltage: 250 V~ Inputs: 2 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-101	2CKA001413A0509	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] **SP, 1gang 2way** Can be wired for normally open contacts (stand-by current) or normally closed contacts (operating current). With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US-206-500	2CKA001413A1104	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker For flush-mounted switch 1g1w, 1g2w, intermediate, push switch. Material stainless steel. Anti fingerprint.		
stainless steel	**1786-866-500**	2CKA001751A3077	10/100

Product	Article-No.	Order-No.	Pack/Qty
	Rocker For flush-mounted switch 2g 1w, 2g push switch. Material stainless steel. Anti fingerprint.		
stainless steel	**1785-866-500**	2CKA001751A3087	10/100

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **with small red spherical cap** As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way. Material stainless steel. Anti fingerprint.		
stainless steel	**1789-866**	2CKA001751A2957	10/100

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small transparent lens** With symbol. As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way. Material stainless steel. Anti fingerprint.		
stainless steel	**1789 LI-866**	2CKA001751A2958	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small transparent lens** With key symbol. For flush-mounted push switch. Material stainless steel. Anti fingerprint.		
stainless steel	**1789 TR-866**	2CKA001751A2960	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small transparent lens** With bell symbol. For flush-mounted push switch. Material stainless steel. Anti fingerprint.		
stainless steel	**1789 KI-866**	2CKA001751A2959	10

Product	Article-No.	Order-No.	Pack/Qty
	Rocker [1] [2] **with labelling field** With pilot lamp for uniform illumination of the labelling field. For flush-mounted switch 1g1w, 1g2w, intermediate, push switch. Size of labelling field: 59.7 x 11.7 mm. Surface painted.		
stainless steel	**1764 NLI-866**	2CKA001731A1953	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Illumination using neon lamp 8353 or incandescent lamp 8344-1 and LED inserts.

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small red spherical cap** With imprint "0" and "I". As cover for 2-pole or 3-pole flush-mounted on-off switch and 2-pole control on-off switch. Material stainless steel. Anti fingerprint.		
stainless steel	**1788-866**	2CKA001751A2961	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small red spherical cap** With marking "Heizung". As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way. As cover for 2-pole or 3-pole flush-mounted on-off switch and 2-pole control on-off switch. Material stainless steel. Anti fingerprint.		
stainless steel	**1789 H-866**	2CKA001751A2963	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking For flush-mounted switch 1g1w, 1g2w, intermediate, push switch. DO NOT DISTURB Material stainless steel. Anti fingerprint.		
stainless steel	**1786/11-866**	2CKA001751A3002	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking For flush-mounted switch 2g 1w, 2g push switch. DO NOT DISTURB MAKE UP ROOM Material stainless steel. Anti fingerprint.		
stainless steel	**1785/11-866**	2CKA001751A2996	10

pure stainless steel

Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Card switch 10 A [1] **SP, with normally open contact (operating current)** Illuminable. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	2025 U	2CKA001012A1713	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
delivery form:	Adapter plate APBS to be ordered separate.		

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Cover plate For card switch. For insert 2025 U. Suitable for cards sized 54 x 86 mm. The inner part of the cover plate is made of light-conducting plastic, so that the card slot is illuminated. Material stainless steel. Anti fingerprint.		
stainless steel	**1792-866**	2CKA001710A3757	10

	Pull switch [1] **SP, with normally open contact (operating current)** With 2-metre pull cord, red handle, and red neon indicator. Rated voltage: 250 V~ Rated current: 10 A		
	2020/01 US	2CKA001413A1077	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Pull switch [1] **SP, break contact** With 2-metre pull cord, red handle, and red neon indicator. Rated voltage: 250 V~ Rated current: 10 A		
	2020/10 US	2CKA001413A1076	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **open for red pull switch neon indicator** For pull switch 2020/xx US. Material stainless steel. Anti fingerprint.		
stainless steel	**1720-866**	2CKA001731A1954	10

	Three-step rotary switch [1] **SP, with zero position** With zero position. Rated voltage: 250 V~ Rated current: 16 A		
	2710 U	2CKA001101A0918	1/10

[1] Install only in conjunction with wall boxes ø 60 mm.

	Three-step rotary switch [1] **SP, without zero position** Without zero position. Rated voltage: 250 V~ Rated current: 16 A		
	2710/1 U	2CKA001101A0919	1/10

[1] Install only in conjunction with wall boxes ø 60 mm.

	Cover plate **with rotary control, with marking** As cover for flush mounted three-step rotary switch. With zero position. For insert 2710 U. Material stainless steel. Anti fingerprint.		
stainless steel	**2542 DR/01-866**	2CKA001710A3758	10

	Cover plate **with rotary control, with marking** As cover for flush mounted three-step rotary switch. Without zero position. For insert 2710/1 U. Material stainless steel. Anti fingerprint.		
stainless steel	**2542 DR/02-866**	2CKA001710A3759	10

pure stainless steel
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6) 7)] **Flush-mounted, LED, 2-100 W** With rotary control, two-way switch and soft-catch. 2-wire connection (neutral conductor not required) Optimised for dimming of retrofit LED lamps (LEDi). For dimmable Retrofit-LEDs (LEDi). For dimmable Retrofit-LEDs (LEDi) with conventional or electronic transformers. For incandescent lamps, 230 V tungsten halogen lamps, low-voltage halogen lamps with conventional or electronic transformers and dimmable energy-saving halogen lamps. Mix operaton of LEDi with conventional loads possible. Via mode switch adjustable between leading edge control and trailing edge control. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, + 10% / - 10% Rated frequency: 50 Hz/60 Hz Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 250 W/VA (non-LED loads). Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 		
	6523 U-102-500	2CKA006512A0335	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Also applicable for 1gang 2way installations.
[5)] Provided with terminal for net disconnection devices.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[7)] Recommendation: Please use loads and types of one producer.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3) 4) 5) 6)] **Flush-mounted, LED, 2-100 W** Touch dimmer. 2-wire connection (neutral conductor not required) Neutral conductor optionally connectable (recommended for the connection of low loads < 10 W/VA) Optimised for dimming of retrofit LED lamps (LEDi). For incandescent lamps, 230V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers and dimmable halogen energy-saving lamps. Mix operaton of LEDi with conventional loads possible. With adjustable minimum brightness. The minimum brightness for the leading edge control can be adjusted using the potentiometer. The potentiometer at the left limit stop corresponds with the trailing edge control mode. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. With light-level memory and minimum brightness memory. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Without control cover. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 200 W/VA (non-LED loads). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 		
	6526 U-500	2CKA006512A0323	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Recommendation: Please use loads and types of one producer.
[6)] In connection with 6810-21x-101 and 6800-xx-104 (M) only suitable for switching retrofit LEDs (for 2-conductor connection).

	Busch-rotary dimmer [1) 2) 3) 4)] **flush mounted, R, 60-600 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps and 230 V tungsten halogen lamps. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 600 W IEC 60669-2-1, British Standard EN 60669-2-1 		
	2250 U-500	2CKA006515A0848	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] Also applicable for 1gang 2way installations.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Provided with terminal for net disconnection devices.

pure stainless steel

Dimmers

Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1) 2) 3) 4) 5)]
flush mounted, RL, 20-500 W
With rotary control, 2way On-Off switching and soft-catch.
Leading Edge control.
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
With adjustable minimum brightness.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 20 - 500 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	2247 U-500	2CKA006512A0302	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-rotary dimmer [1) 2) 3) 4) 5) 6)]
UP, RL, 200-700 W
With rotary control, 2way On-Off switching and soft-catch.
Leading Edge control.
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
Short-circuit-proof, overload-protected.
With adjustable minimum brightness.
Without cover plate.
Without claws.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 200 - 700 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6520 U-500	2CKA006520A0227	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[6)] Should be mounted in a seperate wallbox.

Busch-2gang switch/rotary dimmer [1) 2) 3)]
flush mounted, RL, 60-400 W
1 channel designed as dimmer.
1 channel designed as switch contact (1gang 2way contact element) with leading edge control
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
With adjustable minimum brightness.
Without cover plate.
Rated current 6A (changeover contact switch output).
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 60 - 400 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6517 U-101-500	2CKA006517A0018	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Can be used to replace a 2gang 1way switch.

Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1) 2) 3) 4) 5) 6)]
flush mounted, RC, 40-420 W
With rotary control, soft-catch and with trailing edge control.
For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers.
Low-noise, short-circuit-proof, overload-protected.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 40 - 420 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6513 U-102	2CKA006513A0568	1/10
	6513 U-102-500	2CKA006513A0586	1/10

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-rotary dimmer [1) 2) 3) 4) 5) 6)]
flush mounted, RC, 40-550 W
With rotary control, soft-catch and with trailing edge control.
For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers.
Low-noise, short-circuit-proof, overload-protected.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 40 - 550 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6519 U	2CKA006519A0011	1

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

pure stainless steel
Dimmers

Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1) 2) 3) 4) 5)]
flush mounted, RLC, 60-420 W
with soft-catch
With intelligence for universal operation.
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers.
Short-circuit-proof, overload-protected.
Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible.
Operation via rotary-type remote control 6592 U possible,
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Rated power: 60 - 420 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6591 U-101-500	2CKA006513A0588	1/10

[1)] Illuminable with neon lamp 3855. Neon lamp included in delivery with cover plate.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In the case of conventional transformers, take ~20% transformer loss into account.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Cannot be combined with a 2way switch.

Busch-rotary dimmer, extension [1) 2)]
flush mounted
for connection to 6591 U-101,
To be used with Busch-Dimmer®, MDRC 6583.
with soft-catch
A maximum of 5 multi-way extensions can be connected to a 6591U-101,
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz

	6592 U-500	2CKA006513A0590	1

[1)] Control elements 2115-xxx and 6540-xxx.
[2)] Required for illuminating the N-connection control element.

Busch-rotary dimmer [1) 2) 3) 4)]
flush mounted, 1-10V
With rotary control.
For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC.
For LED control via control gears
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Rated power: 700 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	2112 U-101-500	2CKA006599A2873	1/10

[1)] Non-illuminable.
[2)] Use cover plates 2115 J-.../2115-.../6540-... .
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Making-current limiters have to be provided in case of too high making currents.

Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1)]
flush mounted, DALI
For DALI broadcast service (via central telegram).
For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface.
With rotary control and ON/OFF push operation.
Fool proved.
Brightness power-on level and backround brightness level adjustable, buffered.
With integrated LED illumination for orientation.
Color of orientation light adjustable (18 presets and OFF).
Up to 5 potentiometers are connectable in parallel.
Max. current consumption: 15 mA.
Not suitable for combining with other DALI sensors or central units of other manufacturers.
An additional DALI power supply is needed, e.g. by Tridonic, Philips, Helvar or 2117/11 U.
Max. DALI-cable length: 300 m (1,5 - 2,5 mm²).
Without cover plate.
Protection class (Device): IP 20
Temperature range (Device): 0 °C to 35 °C

	2117 U-500	2CKA006599A2987	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-rotary dimmer [1)]
flush mounted, DALI, with internal power supply
For DALI broadcast service (via central telegram).
With integrated DALI power adaptor.
For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface.
With rotary control and ON/OFF push operation.
With electronic short-circuit protection.
With electronic overload protection.
Brightness power-on level and backround brightness level adjustable, buffered.
With integrated LED illumination for orientation.
Color of orientation light adjustable (18 presets and OFF).
Up to 5 potentiometers are connectable in parallel.
Up to 3 potentiometers are connectable in parallel in active mode.
Not suitable for combining with other DALI sensors or central units of other manufacturers.
DALI-voltage: 15,5 V=
Rated current: max. 75 mA
Power consumption: < 2,5 W
Number of DALI-units:
37 in case of one active power-potentiometer
in case of three active power-potentiometer in parallel connection: 111
Active mode: the potentiometer is supporting the necessary control circuit for other DALI-devices.
Passive mode: the potentiometer is suitable as additional operation point.
Max. DALI-cable length: 300 m (1,5 - 2,5 mm²).
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 20
Temperature range (Device): 0 °C to 35 °C

	2117/11 U-500	2CKA006599A2988	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

pure stainless steel
Dimmers

Product	Article-No.	Order-No.	Pack/Qty

Busch-touch dimmer [1) 2)]
flush mounted, RL, 25-500 W
With light-level memory and leading edge control.
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
Compatible with control covers 6543-xxx-10x.
Operation also possible via conventional push buttons (2020 US, 2021/6 UK).
Parallel operation of several transformers and/or incandescents lamps possible.
Without control cover.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Rated power: 25 - 500 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6560 U-101-500	2CKA006560A1207	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch touch-dimmer range [1) 2) 3) 4)]
flush mounted, RC, 45-315 W
For switching and dimming 2 independent devices.
With trailing edge control.
2gang 1way
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with electronic transformers.
Compatible with control covers 6545-xxx.
Without cover, without cover plate.
Outputs: 2 independent dimmer channels.
Rated power: 40-315 W/VA per channel.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
IEC 60669-2-1, British Standard EN 60669-2-1

	6565 U-500	2CKA006565A0057	1/10

[1)] Not suitable with conventional transformers.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Does not provide an extension input.

Product	Article-No.	Order-No.	Pack/Qty

Busch-touch dimmer [1) 2) 3) 4)]
flush mounted, RLC, 60-420 W
With light-level memory and intelligence for universal operation.
Selectable Soft-ON/OFF function and memory function.
Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible.
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers.
Short-circuit-proof, overload-protected.
With touch control.
Operation also possible via conventional push buttons (2020 US, 2021/6 UK).
Without control cover.
For control cover with control lamp 6543-xxx-10x.
For Busch-Remote control IR control cover 6066-xxx-10x.
For comfort timer control element 6455-101-500.
For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101.
For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M.
For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx.
Combinable with Busch-Watchdog extension insert 6805 U.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 60 - 420 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6593 U-500	2CKA006590A0171	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In conjunction with 6800-xxx-104 (M) a Soft Off can be adjusted.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-Dimmer®, capacity booster [1)]
flush mounted, RLC, 200-315 W
The control is effected by a Busch-Universal master dimmer 6593 U or Busch-Universal rotary dimmer 6591U-101
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers.
Can only be installed in conjunction with a cover plate 2114-xxx and 6541-xxx.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 200 - 315 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6594 U-500	2CKA006590A0172	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

pure stainless steel

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3)] **flush mounted, 1-10V** 3 wire connection (neutral conductor required). For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). For LED control via control gears Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6550 U-101-500	2CKA006550A0042	1

[1)] Non-illuminable.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3)] With integrated making-current limiter.

	Cover plate [1)] **with rotary knob, with indication lamp** Elevated knob. For Busch-Dimmer®. For inserts 2112 U-101/2116(/11) U/ 2117(/11) U/2247 U/2250 U/6513 U-102/6517 U-10x/6519 U/6520 U/6523 U(10x) /6591 U-10x and 6592 U. Material stainless steel. Anti fingerprint.		
stainless steel	**6540-866-102**	2CKA006599A2959	10/100

[1)] Replacement neon lamp, Art. No. 3855.

Product	Article-No.	Order-No.	Pack/Qty
	Control element [1) 2) 3)] **with neon lamp** Can be combined with LED dimmer 6524 U, and 6526 U, Busch-Universal touch-type controller 6550 U-10x, Busch-Memory touch dimmer 6560 U-101, Busch-Universal-Dimmer® 6593 U, Busch-Universal relay insert 6401 U-10x, Busch-Universal 2gang insert 6402 U. Surface painted.		
stainless steel	**6543-866-101**	2CKA006599A2926	1/10

[1)] Compatible with previous type 6543-xxx.
[2)] Touch-type Controller 6550 U-xxx non-illuminable.
[3)] Replacement neon lamp 3857.

	Control element [1)] **with neon lamp** Combinable with Busch-Memory 2gang dimmer 6565 U. Material stainless steel. Anti fingerprint.		
stainless steel	**6545-866**	2CKA006599A2927	1/10

[1)] Replacement neon lamp 3857.

	Cover plate **for cooling element** For Busch-Universal master dimmer power module 6594 U. For room temperature controller object range 6108/0x and base for blind cover 6930/01. Surface painted.		
stainless steel	**6541-866**	2CKA006599A2924	10

	IR control element [1)] **with marking, illuminated** For LED dimmer insert 6524 U and 6526 U.. For Busch-Universal master dimmer insert 6593 U. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal 2gang 1way insert 6402 U. for Busch-Universal touch-type controller 6550 U-101 Manual operation on-site and remote control via IR remote control (6010-25) or wall-mounted transmitter (6020-xx/6021-xx) possible. Surface painted.		
stainless steel	**6066-866**	2CKA006020A1389	1/10

[1)] Touch-type Controller 6550 U-101 non-illuminable.

	IR control element **with marking, illuminated** For Busch-Universal relay switch insert 6401 U-10x and Busch-Universal 2gang 1way insert 6402 U. Manual operation on-site and remote control via IR remote control (6010-25) or wall-mounted transmitter (6020-xx/6021-xx) possible. Surface painted.		
stainless steel	**6067-866**	2CKA006020A1390	1/10

pure stainless steel

Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch 2-wire insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch--unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 40 - 300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6815 U	2CKA006800A2270	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Output cannot be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch relay mechanism [1) 2) 3)] 3 wire connection (neutral conductor required). For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch--unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer. Rated power: 2300 W/VA Suitable for: 230 V halogen lamps Rated power: 1200 W Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.5 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6816 U-500	2CKA006800A2621	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Output can be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal relay switch insert 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog 180 FP sensor for All Weather 44 6800-3x-102C. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For comfort timer control element 6455-101-500. For Busch-Remote control IR control cover 6067-xxx-10x. For control cover with control lamp 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): -25 °C to 55 °C British Standard EN 60669-2-1		
	6401 U-102-500	2CKA006401A0049	1/10
	Busch-Universal 2gang 1way insert 3 wire connection (neutral conductor required). For the serial switch operating mode: 2 separate outputs, 2 separate extension inputs. For operation mode timer: output 1 (eg lighting), output 2: ON/Off delay in dependence of output 1 (eg fan control). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For control cover 6430-xxx-10x and 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6402 U-500	2CKA006401A0051	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	neon lamp 3855, one neon lamp is supplied together with control cover plates 6540-2x.		

pure stainless steel

Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog relay mechanism 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor (Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated power: 700 W/VA Temperature range (Device): 0 °C to 55 °C British Standard EN 60669-2-1		
	6812 U-101-500	2CKA006800A2160	1/10
	Busch-Watchdog MOS-Fet Insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 60 - 420 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6804 U-101-500	2CKA006800A2219	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Requires an NIS international socket, E-No. 372507676.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog extension insert [1)] 3 wire connection (neutral conductor required). For extending Busch-Watchdog 180 flush-mounted and Busch-Watchdog Presence tech installations. For combination with relay insert 6401 U-102 and 6402 U. For combination with MOS-Fet insert 6804 U-101. For combination with Dimmer insert 6593 U and 6550 U-101. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Control/Signal outputs: 1, electronic output, potential-bound Temperature range (Device): 0 °C to 35 °C		
	6805 U-500	2CKA006800A2161	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Not combinable with relay switch insert 6812 U-101.

	Busch-Watchdog 180 flush-mounted comfort sensor II [1) 2)] **with select-lens** For automatic switching of devices dependent on motion and brightness. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
stainless steel	**6800-866-104**	2CKA006800A2343	1

[1)] Please order the respective flush-mounted insert separately.
[2)] Surface painted.

pure stainless steel

Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1) 2) 3)] **with multi-lens** For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Surface painted. Detection range: frontal: 15 m, lateral: 5 m, Mounting height: 2.5 m Detection range 2: frontal: 10 m, lateral: 2.5 m, Mounting height: 1.2 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
stainless steel	**6800-866-104M**	2CKA006800A2344	1

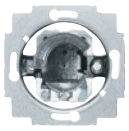
[1)] installation: slide switch top.
[2)] Please order the respective flush-mounted insert separately.
[3)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch control element [1)] **with neon lamp** For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switchon, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motioncontrolled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Surface painted. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux, Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
stainless steel	**6815-866**	2CKA006800A2345	10/10

[1)] Please order the respective flush-mounted insert separately.

pure stainless steel

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	**Key Switch Insert** [1) 2) 3)] **breaking circuit, 1-pole** For profile semi-cylindrical lock. In switched-on and switched-off status the key can be pulled out in the central position, respectively. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	2733 USL-101	2CKA001101A0914	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

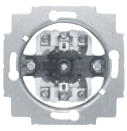
[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Use the cylindrical lock according to the enclosed drawing.
[3)] See profile semi-cylindrical lock.

	Blind switch insert [1) 2)] With interlock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	SP, switch **2000/4 US-500**	2CKA001012A2197	10/100
	SP, push switch **2020/4 US-500**	2CKA001413A1103	10/100

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] These blind switches/push buttons safely prevent a switch-over of the running direction being carried out too quickly.

	Blind switch insert [1) 2)] With rotary knob/switch and push switch. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1, British Standard EN 60669-1		
	DP [3)] **2712 U**	2CKA001101A0534	10
	SP, N, E **2713 U**	2CKA001101A0542	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

Product	Article-No.	Order-No.	Pack/Qty
	**Blind switch insert** [1) 2)] With rotary knob/push button. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	DP [3)] **2722 U**	2CKA001101A0559	10
	SP, N, E **2723 U**	2CKA001101A0567	10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

	Blind switch/push-switch [1) 2) 3) 4)] For profile semi-cylindrical lock/switch and push-switch. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	DP [5)] **2712 USL-101**	2CKA001101A0872	10
	SP, N, E **2713 USL-101**	2CKA001101A0880	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	Blind switch insert [1) 2) 3) 4)] For profile semi-cylindrical lock/push-button. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 A British Standard EN 60669-1, IEC60669-1		
	DP [5)] **2722 USL-101**	2CKA001101A0898	10
	SP, N, E **2723 USL-101**	2CKA001101A0906	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	DIN profile-semi cylindrical lock Acc. to German Standard DIN 18252. Total length 40 mm for blind switches and push switches For inserts 2712/2713/2722/2723/2733 USL-101 and 2712/2733 SLW-5x.		
	different lock mechanism, with 3 keys **0520 PZ-VS**	2CKA000470A0013	1/100
	lock mechanism, with 3 keys **0521 PZ-GS**	2CKA000470A0021	1/100

pure stainless steel

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty

Comfort blind insert [1) 2) 3)]
with memory and positioning function
For the manual and automatic control of roller blinds.
The roller blind moves to the position set using the turn knob.
Executes the individually programmed switching commands (UP/DOWN) in a 24-hour rhythm.
Suitable for roller blind drives with mechanical or electronic limit switch shut-off.
Suitable for operation without neutral conductor.
Without an extension input.
Power reserve of 45 minutes (maintenance-free as capacitor).
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Outputs: 2x Normally open contact
Rated current: 1.3 A, cos ϕ 0.5
Rated power: 300 VA
Temperature range (Device): 0 °C to 35 °C

	6419 U	2CKA006410A0390	1/10

[1)] Pertinent cover plates 6436-xx.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.
[3)] Only suitable for single unit control.

Basic blind insert [1) 2)]
Suitable for blind and roller blind drives with mechanical or electronic limit switch shut-off.
Suitable for operation without neutral conductor.
Without an extension input.
For control cover 6430-xx-xxx.
For standard timer control element 6456-101.
Running time: 3 min
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Outputs: 2x Normally open contact
Rated current: 3 A, cos ϕ 0.5
Rated power: 690 VA
Temperature range (Device): 0 °C to 35 °C

	6418 U-500	2CKA006410A0376	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] N-conductor connection required for operation with control cover 6430-7x, illuminated.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.

Product	Article-No.	Order-No.	Pack/Qty

Busch-Blind control II switch insert [1)]
Suitable for blind, roller blind and awning drives with mechanical or electronic limit switch shut-off.
With two 230 V multi-way input terminals (Up/Down) for group control.
With operating mode switch for the following modes: normal, louvre, base station, position.
With party function (disables the local control unit) in combination with Busch-Blind control II control cover 6430-xx-xxx, 6066-xx-xxx.
Wind alarm, cleaning functions can be accommodated via extension input.
For control cover 6430-xx-xxx.
For IR control element 6066-xx-xxx.
For comfort timer control element 6455-101-500.
Running time: 3 min
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Outputs: 2x Normally open contact
Rated current: 3 A, cos ϕ 0.5
Rated power: 690 VA
Control/Signal outputs: 2
Temperature range (Device): 0 °C to 35 °C

	6411 U-101	2CKA006410A0377	1/10

[1)] Compatible with types 6411 U/x.

Burglar alert sensor
For insert 6411U/S-101.
With 4 m connecting cable.

	6413-500	2CKA006410A0349	10

Brightness sensor
For insert 6411U/S-101.
With 2 m connecting cable.
Measuring range: 15-50,000 lux.

	6414-101	2CKA006410A0389	1/10

Sun sensor
For insert 6411U/S-101.
Measuring range: 5-50,000 lux.

	6482	2CKA006410A0203	1

pure stainless steel

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Short-time timer insert [1] **countdown timer** For time-programmed switching of electrical consumers. With control cover, without cover plate. Minimum timer time: 1 second. Maximum timer time: 9:59:59 hours. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact Rated current: 10 A, cos ϕ 1 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1		
	6465 U-101-500	2CKA006410A0393	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **with marking** As cover for flush-mounted blind control switch/push switch. For inserts 2000/4 and 2020/4 US. Material stainless steel. Anti fingerprint.		
stainless steel	**1785 JA-866**	2CKA001751A2964	10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate **with rotary control, with marking** As cover for flush-mounted blind control switch/push switch. For inserts 2712 U, 2713 U and 2722 U, 2723 U. Material stainless steel. Anti fingerprint.		
stainless steel	**1740-866**	2CKA001710A3748	10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **with labelling field** With marking. For half-cylindrical type switches and blind control switch/pushswitch. For inserts 2733 USL-101 and 2712 USL-101, 2713 USL-101, 2722 USL-101, 2723 USL-101. Surface painted.		
stainless steel	**1755 SL/PZ-866-101**	2CKA001710A3749	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Control element For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For basic blind insert 6418 U. For Busch-Universal 2gang 1way insert 6402 U. Surface painted.		
stainless steel	**6430-866-102**	2CKA006430A0343	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] [2] **with rotary knob** For comfort blinds insert 6419 U. Surface painted.		
stainless steel	**6436-866**	2CKA006430A0362	10

[1] Continuous lighting of the turn knob possible using glow lamp 3855. Not included in delivery. Neutral wire required for operation with neon lamp.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Standard timer control element [1] For manual and time-controlled switching of blinds and roller blinds. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Programming possible only with control element attached and energized. 2 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. For basic blind insert 6418 U. Temperature range (Device): 0 °C to 35 °C		
	6456-101	2CKA006410A0398	1/10

[1] See respective cover plates 6435-xx.

pure stainless steel

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Comfort timer control element [1] For manual and time-controlled switching of blinds, roller blinds, awnings, lighting and other electrical devices. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Combined with Busch-Blind control II insert 6411 U/S-101, sun protection and twilight function. Freely adjustable temperature and brightness-dependent sun protection function. Freely adjustable twilight function. User-adjustable running times for blinds and air conditioning. Programming possible only with control element attached and energized. 6 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. When combined with LED dimmer 6524 U, Busch-Universal master dimmer insert 6593 U or Busch-Memory touch-type controller 6550 U-101, the brightness of the lighting can be adjusted for each ON switching time. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal relay switch insert 6401 U-102. For Busch-Universal master dimmer insert 6593 U. For LED dimmer insert 6524 U and 6526 U. For Busch-Memory touch-type controller 6550 U-101. Temperature range (Device): 0 °C to 35 °C		
	6455-101-500	2CKA006410A0399	1/10

[1] See respective cover plates 6435-xx.

Product	Article-No.	Order-No.	Pack/Qty
	Time switch mechanism 16 A [1] [2] **DP, break contact for staircases, exterior lighting, fans, etc.** Running time: 15 min For time-programmed switching of electrical consumers. Rated voltage: 230 V~, +10 % / -10 % Rated current: 16 A, cos ϕ 0.25		
	1070 U	2CKA001043A0025	1/10

[1] For screw-fixing only
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Time switch mechanism 16 A [1] [2] **DP, break contact for staircases, exterior lighting, fans, etc.** Running time: 120 min For time-programmed switching of electrical consumers. Rated voltage: 230 V~, +10 % / -10 % Rated current: 16 A, cos ϕ 0.25		
	1071 U	2CKA001043A0124	1

[1] For screw-fixing only
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Cover plate [1] For comfort timer control element 6455-101-500. For standard timer control element 6456-101. For room thermostats 1098 U-101 and 1098 UF-101. For short-time timer 6465 U-101. For Busch-CO2 sensor 1091 U-500. Surface painted.		
stainless steel	**6435-866**	2CKA006430A0344	10

[1] See respective cover plates 6435-xx.

pure stainless steel

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet With screwless terminals. DP (2 P + E) Material stainless steel. Anti fingerprint. Rated voltage: 250 V~ Rated current: 16 A		
stainless steel	**20 EUC-866-500**	2CKA002011A6212	10/100
	SCHUKO® socket outlet [1] **shuttered** With screwless terminals. DP (2 P + E) Material stainless steel. Anti fingerprint. Rated voltage: 250 V~ Rated current: 16 A		
stainless steel	**20 EUCKS-866-500**	2CKA002013A5374	10/100

[1] Increased shock protection.

	SCHUKO® USB socket outlet [1] [2] [3] **shuttered** With screwless terminals. DP (2 P + E) For supply and support of mobile devices via USB-cable. With USB female connector type A. With electronic short-circuit protection. With electronic overload protection. Simultaneous charging via USB connection and use of the SCHUKO® socket outlet. Surface painted. Rated voltage: 250 V~ Secondary: 5 V-, +5 % / -5 % Rated frequency: 50 Hz Suitable for: SCHUKO® socket outlet Rated current: 16 A Suitable for: USB connection Rated current: 700 mA Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm Mounting depth: 35 mm		
stainless steel	**20 EUCBUSB-866-500**	2CKA002011A6184	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] No data transfer.
[3] Use dust cover 2098 when cleaning the device.

	SCHUKO® socket outlet [1] **with labelling field** DP (2 P + E) Size of labelling field: 60 x 9 mm. Material stainless steel. Anti fingerprint. Rated voltage: 250 V~ Rated current: 16 A		
stainless steel	**20 EUN-866**	2CKA002011A3851	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] [2] **with marking "EDV"** With screwless terminals. DP (2 P + E) Shuttered. Material stainless steel. Anti fingerprint. Rated voltage: 250 V~ Rated current: 16 A		
stainless steel	**20 EUCKS/DV-866**	2CKA002013A5277	10

[1] ./.
[2] Increased shock protection

	Busch-Protector® SCHUKO® socket outlet [1] **with overvoltage protection** DP (2 P + E) With integrated and external signalling contact. ISN = 5 kA Device protection for technical sensitive equipment such as computer, entertainment electronics and building management systems. Effectively reduces overvoltage peaks occurring between the subdistribution switch board and SCHUKO® socket outlet. Arrestor test class: classification Type 2 Material stainless steel. Anti fingerprint. Rated voltage: 250 V~ Secondary: 250 V~ Rated current: 16 A		
stainless steel	**2310EUGL/VA-866-11**	2CKA002011A3853	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.

	SCHUKO® socket outlet [1] **with LED control light** Shuttered. DP (2 P + E) With transparent lens. LED colour green. Material stainless steel. Anti fingerprint. Rated voltage: 250 V~		
NEW stainless steel	**20 EUCBL-866**	2CKA002013A5289	10

[1] Resistant to aggressive media, e.g. ammonia, benzine, oils, greases, alcohol, cleansing agents, in normal concentrations.

	SCHUKO® socket outlet **with hinged lid** With screwless terminals. DP (2 P + E) Hinged lid notches when opened. Rated voltage: 250 V~ Rated current: 16 A		
stainless steel	**20 EUK-866**	2CKA002018A1490	10

pure stainless steel

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Shaver socket outlet For installation into FM 2gang wall box 3030 and 3031. Rated voltage: 240 V, +10 % / -10 % Output voltage: 115 V, +10 % / -10 % Secondary: 240 V, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 20 VA		
	2332 UJBS-866	2CKA002130A0293	1
	Flush-mounting wall box, 2gang For shaver socket outlet 2332 UJBS-8xx. Dimensions: (L x W x D): 135 mm x 75 mm x 47 mm		
	3030	2CKA001741A0067	4
	Flush-mounting cavity wall box, 2gang For shaver socket outlet 2332 UJBS-8xx. Dimensions: (L x W x D): 142 mm x 82 mm x 45 mm		
	3031	2CKA001741A0068	4
	Socket outlet cover frame shuttered For socket outlet insert 20 M-500. Material stainless steel. Anti fingerprint.		
stainless steel	**2399 UCKS-866**	2CKA002099A0243	10/100
	13 A Switched socket outlet 1gang With screw-type terminals. SP switched Without claws. Only for mounting in VDE flush-mounted wallboxes CFB 122 and CFBM 122. Rated voltage: 250 V~ Rated current: 13 A BS 1363: part2		
stainless steel	**2190 EUC-866**	2CKA002190A0217	10/100
	Chinese socket outlet, 10 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 10 A		
stainless steel	delivery on request **2193 EUC/10-866-500**		

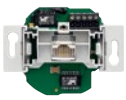
Product	Article-No.	Order-No.	Pack/Qty
	Chinese socket outlet, 16 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 16 A		
stainless steel	delivery on request **2193 EUC/16-866-500**		
	Chinese and Euro American socket outlet, 10 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 10 A		
stainless steel	delivery on request **2195 EUC/10-866-500**		
	International socket outlet 13A [1] 1gang With screw-type terminals. Without claws. Rated voltage: 250 V~ Rated current: 13 A		
stainless steel	delivery on request **2197 EUC-866-500**		

[1] Usage may be restricted in certain countries.

	Euro American socket outlet with earth, 16 A 1gang With screw-type terminals. Without claws. Rated voltage: 250 V~ Rated current: 16 A		
stainless steel	delivery on request **2196 EUC-866-500**		

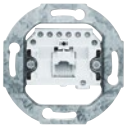
pure stainless steel

Data communication

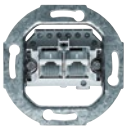
Product	Article-No.	Order-No.	Pack/Qty
	**WLAN access point, flush-mounted** [1) 2)] **power supply from mains power** Operation as WLAN access point for the connection of WLAN terminal devices to the LAN. Operation as WLAN repeater for extending the transmission range of a WLAN. Operation as WLAN adapter for integrating Ethernet terminal devices into a WLAN. Supports WLAN standards IEEE 802.11b/g/n with 2.4 GHz; integrated WLAN antenna. Backward connection of an Ethernet cable via screw terminals (10/100 Mbit/s). Front-side Ethernet connection via a RJ45 socket (10/100 Mbit/s). The three connections (WLAN, Ethernet/screw terminals and Ethernet/RJ45)can be used in parallel via the integrated switch. Power supply via 2-pole connecting terminal. Nominal voltage: 100 - 240 V~ For mounting in commercially available deep flush-mounted and hollow-wall boxes. Rated frequency: 50 Hz - 60 Hz		
	8186/31-101-500	2CKA008100A0359	1

[1)] Suitable for cover plate 1803-xxx.
[2)] Not to be mounted in SM box 1701-xxx, 1702-xxx, 1703-xxx.

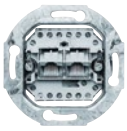
	Reset magnet For resetting WLAN access point UP 8186/31-101 and WLAN access point PoE UP 8186/41 to the factory settings.		
	8186/11-500	2CKA008100A0361	1

	**Universal data connection unit, cat. 3** [1)] **1gang** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0213-500	2CKA000230A1549	10/100

[1)] Suitable for cover plate 1803-xxx.

	**Universal data connection box with down-leading outlet** [1)] **2gang internally parallel connected** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0214	2CKA000230A0235	10/100
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	**Universal data connection box with down-leading outlet** [1)] **2 x outlets, 8/8-pole** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0215	2CKA000230A0243	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

	UAE connection unit, RJ45, cat. 6e, shielded [1)] **1gang** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0216-102	2CKA000230A0465	1/10

[1)] Suitable for cover plate 1803-xxx.

pure stainless steel

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	UAE connection unit, RJ45, cat. 6e, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0217-102	2CKA000230A0467	1/10

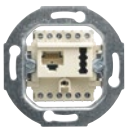
[1] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **1gang** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0218/11-101	2CKA000230A0409	1/10

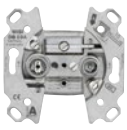
[1] Suitable for cover plate 1803-xxx.

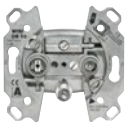
Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For trunk systems, flush-mounted wall boxes and underfloor systems. For wires of AWG 24-22. Without claws. Mounting depth: 31 mm.		
	0218/12-101	2CKA000230A0411	1/10

[1] Suitable for cover plate 1803-02-xxx.

	**Universal data connection box 8(6)/ telephone unit 6F+N - connection box** [1] **2 x 6-pole** with straight outlet, with screw contacts, Universal data-connection boxes: RJ 11/12, ISDN capable Cat. 3 in acc. with IEC 603-7/German Standard DIN EN 60603-7, Telecommunication outlet (telephone unit): for 1 telephone, 1 auxiliary device or 1 data transmission unit. With claw.		
white	**UAE 8(6)TAE 6 F+N**	2CKA000230A0381	10/100

[1] Suitable for cover plate 2539-xxx, 1766-xxx and 1746-2xx-FN.

	**Satellite co-axial outlets 2 connectors/dead-end feeder** Broadband technology 5-2.400 MHz For DVB-T, satellite and broad-band cable systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0230-101	2CKA000230A0250	10/100

	**Satellite co-axial outlets Radio/TV/SAT 3gang dead-end feeder** Broadband technology 47-2.150 MHz. SAT connection designed as screwable F-male plug. with remote feed via F-bush For DVB-T and broadband-cable-systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0232-101-500	2CKA000230A0463	10/100

pure stainless steel

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Terminating resistor 75 Ohm		
	0239	2CKA000230A0201	10/100
	Mounting plate [1) 2)] **with green insert** For 2 modular jack inserts. For systems: CommScope (AVAYA / AT&T / Lucent Technologies), GigaSPEED, PowerSUM, 360 GS 10E bis MGS 600-BK, M1 BH-xx, MPS 100E-xx. With R&M adapter R310694 suitable for R&M connection modules R305111, R305112, R305113 and R305114. Pitch dimensions: (WxH) approx. 16.9 x 17.9 mm. Without claws.		
	1810	2CKA001753A8048	10/100
	1810-500	2CKA001753A9974	10/100
	Mounting plate [1) 2)] **with red insert** For 2 modular jack inserts. Suitable for Art. Nos. 0210, 0211 and 0219-101. For systems: AMP / tyco Electronics, BTR, EFB, Krone, Panduit, Quante, Radiall, Setec, Dr.-Ing. Sieger, Telena, Thomas & Betts For Telegärtner AMJ/UMJ connection modules/ couplings. For 2 fiber optic modules of the following types: 3M-Volition, Krone, mvk. Pitch dimensions: (WxH) approx. 14.8 x 19.4 mm. Without claws.		
	1812-500	2CKA001753A9972	10/100
	Mounting plate [1) 2)] **with black insert** For MTRJ or 2 modular jack inserts. For systems: Ackermann, AMP / tyco Electronics (Slim Line (SL) -SM 2gang/switches: 110Connect Jacks, Toolless Jacks / Standard 110Connect Jacks), Brand-Rex, CombiNet, EFB Electronic, Telena. For 2 fiber optic modules of the following types: AMP / tyco Electronics MTRJ. Pitch dimensions: (WxH) approx. 14.8 x 20.4 mm. Without claws.		
	1814-500	2CKA001753A9973	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

Product	Article-No.	Order-No.	Pack/Qty
	Mounting plate [1) 2)] **with blue insert** For 2 modular jack inserts. For system: ITT Cannon RJ45 Cat. 5 type 808 RJ45 Mark III. Pitch dimensions: (WxH) approx. 16.0 x 11.0 mm. Without claws.		
	1816	2CKA001710A3100	10/100
	Mounting plate [1) 2)] **with orange base** For 2 modular jack inserts. For system: LexCom 150 and LexCom 250. Pitch dimensions: (WxH) approx. 15.4 x 15.4 mm. Without claws.		
	1819	2CKA001753A8056	10/100
	Mounting plate [1) 2)] **with grey base** For 2 modular jack inserts. For system: Panduit MiniCom (Cu. z. B. TX6 10 Gig Shielded Jack modules and fiber optic modules. Pitch dimensions: (WxH) approx. 15.9 x 18.7 mm. Without claws.		
	1820	2CKA001753A8057	10/100
	Flush-mounted assembly adapter For the accommodation of one or two universal modules 0219. For flush-mounted installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/12	2CKA000230A0395	1/10
	Channel assembly adapter For the accommodation of one or two universal modules 0219. For channel and under-floor installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/13	2CKA000230A0396	1/10

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

pure stainless steel

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Universal module, RJ 45, cat. 6a iso, shielded [1] **1gang** For installation in installation adapter 0219/12 or 0219/13. Also suited for mounting into cover plate 2561 and bases 1812, 1866 EB, and 1867 EB. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Cat. 6A according to ISO/IEC 11801: 2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Bend-radius optimised cable feed (30°). Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. For 8-pole plug RJ 45 only. Housing made from diecast zinc. With integrated dust-protection cap (can be removed if necessary). With insulation displacement connection For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems.		
	0219-101	2CKA000230A0413	1/10

[1] With assembly adapters appropriate for telephone unit cover plates 2539-21x and 1766-xxx.

	Modular-Jack insert **6-pole Cat. 3 (AMP-No. 216000-2)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0210	2CKA000225A0078	10

	Modular-Jack insert **8-pole Cat. 3 (AMP-No. 216005-4)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0211	2CKA000225A0086	10

	Built-in jack For potential balancing jack cover plate and installation in cover plates. For devices of 19 mm diameter.		
	0471-0-0037	2CKA000471A0037	10

Product	Article-No.	Order-No.	Pack/Qty
	Potential balancing plug Suitable for plug 2095 UC-212 and built-in jack 0471-0-0037 acc. to German Standard DIN 42801. For potential balancing jack cover plate (connection up to 6 mm² crimped or soldered).		
	0299-0-0032	2CKA000299A0032	10

	Blank plate **with metal mounting plate** Material stainless steel. Anti fingerprint.			
stainless steel	**1742-866**	2CKA001710A3751	10	

	Cover plate [1] **with metal mounting plate** As cover for flex outlet, for cords up to 10.3 mm diameter. With strain relief (without terminal block). Material stainless steel. Anti fingerprint.			
stainless steel	**1749-866**	2CKA001710A3752	10	

[1] Cover plate can also be used individually as cover for telephone connector boxes (VDo).

	Cover plate [1] As cover for universal data connection boxes. Art.-No. 0213 (Cat 3/ISDN), 0216-101, 0218/11-101 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. For WLAN access points 8186/31 and 8186/41. Brand-Rex (WAEGV 8 EKR/EK). BTR (universal data connecting unit design and IAE design). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm. Material stainless steel. Anti fingerprint.			
stainless steel	**1803-866**	2CKA001710A3763	10/100	

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Cover plate [1] **2gang** As cover for universal data connection boxes. Art. No. 0214, 0215 (Cat 3), 0220/12-507, 0221/12-507, 0218, 0217 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. Brand-Rex (WAEGV 8/8 EKR/EK). AMP (NETCONNECT 5E). BTR (E-DAT C6, E-DAT design, Universal data connecting unit design and IAE design). cti (cti-wire 2.8 Cat.6). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm. Material stainless steel. Anti fingerprint.			
stainless steel	**1803-02-866**	2CKA001710A3764	10/100	

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

pure stainless steel

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE). Material stainless steel. Anti fingerprint.		
stainless steel	**1766-866**	2CKA001710A3765	10/100
	Cover plate As cover for telephone connector boxes (VDo). Can be knocked out for single or double connection. Material stainless steel. Anti fingerprint.		
stainless steel	**1745-866**	2CKA001710A3766	10
	Cover plate [1) 2)] **as cover for standard Radio/TV/SAT socket outlets** With 2 connectors Acc. to German Standard DIN 45330. Radio/TV/SAT. With M3 fixing screw. Material stainless steel. Anti fingerprint.		
stainless steel	**1743-866**	2CKA001724A4271	10/100

[1)] Third opening can be knocked out.
[2)] See inserts for satellite coaxial socket outlets.

	Cover plate [1)] **with labelling field** For modular jack with slide entrance. To fit only Art. No. 1810, 1812, 1814, 1816, 1818, 1819 and 1820. Size of labelling field: 60 x 9 mm. Material stainless steel. Anti fingerprint.		
stainless steel	**1800-866**	2CKA001710A3767	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Cover plate For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc. Surface painted.		
stainless steel	**1746/10-866**	2CKA001710A3768	10
	Cover plate With hinged lid For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc. Surface painted.		
stainless steel	**1746-866**	2CKA001710A3769	10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate **with metal mounting plate** For covering universal data communication connectors and circular connectors with screwed plug M 16x0.75 (installable in insert) in accordance with DIN 41524, 41529, 45322, 45327, 45328 and 45329. Knock-out openings 6, 8, 18 mm. Material stainless steel. Anti fingerprint.		
stainless steel	**1748-866**	2CKA001710A3760	10
	Cover plate **with metal mounting plate** As cover for BNC and TNC sockets. Knock-out openings 6, 8, 18 mm. Material stainless steel. Anti fingerprint.		
stainless steel	**1750-866**	2CKA001710A3770	10
	Equipotential socket outlet **2gang** Without claws. For connecting wires up to 1 x 6 mm² and 4 x 2.5 mm². IEC 60601-1:2005; DIN EN 60601 (VDE 0750-1): July 2007 Connection bolts German Standard DIN 42801. Surface painted.		
stainless steel	**2095 UC-866**	2CKA002495A0090	10
	Cover plate **with metal mounting plate** With screw-type terminal. Fixed with central locknut. As cover for pilot devices with a diameter of 22.5 mm Without claws. Surface painted.		
stainless steel	**2533-84**	2CKA001724A4256	10
	Cover plate [1)] **with metal mounting plate** for communication devices. With labelling field 60.2 x 10.2 mm. Without claws. Surface painted.		
stainless steel	**1758-866**	2CKA001724A4272	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

pure stainless steel

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-DigitalRadio [1) 2) 3) 4) 5)] RDS stereo radio alarm clock for flush-mounted installation. Reception frequency: 87.50 MHz - 108.00 MHz. With display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. For mono/stereo operation. 8 radio stations storable. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated antenna. With additional connection for external antenna. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 34 mm		
	8215 U-500	2CKA008200A0182	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Also combinable with built-in ceiling loudspeaker (8225 EB & 8226 EB) and HiFi built-in ceiling loudspeaker (8226/11 EB).
[4)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[5)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Radio iNet [1) 2) 3) 4)] WLAN Internet radio alarm clock for flush-mounted installation. For the reception of national and international radio stations via Internet. Radio station search possible via various genres. With high resolution graphic display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. Integrated web-server for configuration and control. Remote operation with smartphone via browser surface. UPnP replay function. It is controlled via smartphone. For mono/stereo operation. 8 radio stations storable. With time and date display. With alarm function. With short-time timer. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated WLAN antenna. WLAN standards: IEEE 802.11b / IEEE 802.11g. WLAN safety: WPA / WPA2. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 33 mm APP		
	8216 U-500	2CKA008200A0153	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[4)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

	Loudspeaker insert [1)] **5 cm (2")** For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U. For Busch Bluetooth receiver 8219 U. With broadband characteristics. With flat plug connector. Incl. speaker connection cable. Rated output: 2 W (RMS) Frequency response: 200 - 20,000 Hz Impedance: 4 Ohm Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
	8223 U-500	2CKA008200A0183	1/10

[1)] No claw. Screw-fixing via keyholes.

pure stainless steel

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Intercom amplifier insert [1) *)] **with display** Busch-AudioWorld® system amplifier. For individual volume control. For language announcements to 15 individual call zones. With additional broadcast function For switching between Busch-AudioWorld® system channel 1 and 2. For switching of the central radio channel. Optional deactivation of announcements (do not disturb). For mono/stereo operation. With noise control function. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With acoustic monitoring function (baby monitor). Permitted speaker impedance: 8 - 16 Ohm Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 36 mm		
anthracite	**8214 U**	2CKA008200A0119	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

	Amplifier insert [1) *)] For individual volume control. With switchover between radio and external music source. For switching of the central radio channel. For mono/stereo operation. With automatic loudness function. Optional automatic switch-off after 30 min. (Sleep function). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
anthracite	**8211 U**	2CKA008200A0010	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

	Audio input [1) *)] For feeding external music sources into the Busch-AudioWorld® public address system. For 1 stereo audio channel For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. MDRC amplifier 8208. Can be combined with Busch-DigitalRadio (8215 U) and Busch-Radio iNet (8216 U). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 34 mm		
anthracite	**8210 U**	2CKA008200A0108	1

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

Product	Article-No.	Order-No.	Pack/Qty
	HDMI connection unit [1)] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link high-definition digital audio and video data from e.g. SAT-receiver, DVD-/Blue-Ray-player to plasma-type, LCD- or-LED-TVs/screens. HDMI-type A, 3D-compatible. Fully HD ready (1920 x 1080 pixel). For 20-wire HDMI-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/31-500**	2CKA000230A0430	1
alpine white	**0261/32-500**	2CKA000230A0431	1
grey	**0261/33-500**	2CKA000230A0432	1

[1)] Please follow the recommendations of the cable and device producers for the max. HDMI cable lengths.

	VGA connection unit [1)] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link analogue video data between PCs and laptops to monitors or digital projectors etc. VGA-type: D-type, 15-pole. Fully HD ready (1920 x 1080 pixel). For 15-wire VGA-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/21-500**	2CKA000230A0424	1
alpine white	**0261/22-500**	2CKA000230A0425	1
grey	**0261/23-500**	2CKA000230A0426	1

[1)] Please follow the recommendations of the cable and device producers for the max. VGA cable lengths.

pure stainless steel

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	USB connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link mobile devices like e.g. printer, scanner, USB-sticks or digital cameras etc. USB-type A, USB 2.0 compatible. For 5-wire USB- cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/11-500**	2CKA000230A0418	1
alpine white	**0261/12-500**	2CKA000230A0419	1
grey	**0261/13-500**	2CKA000230A0420	1

[1] Please follow the recommendations of the cable and device producers for the max. USB cable lengths.

	Communication adapter for BNC-F Duct-jacks Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0262/11-500**	2CKA000230A0436	1
alpine white	**0262/12-500**	2CKA000230A0437	1
grey	**0262/13-500**	2CKA000230A0438	1

	F duct-jack for communication adapter For connection of antenna cables e.g.. for TVs with integrated TV-tuner and satellite receiver. With screw-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems.		
metal clad	**0262-500**	2CKA000230A0440	1

	Communication adapter for Cinch-jacks Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0263/11-500**	2CKA000230A0444	1
alpine white	**0263/12-500**	2CKA000230A0445	1
grey	**0263/13-500**	2CKA000230A0446	1

Product	Article-No.	Order-No.	Pack/Qty
	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked white: audio , channel left. With soldering tag.		
alpine white	**0263/04-500**	2CKA000230A0451	1

	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked black: audio , channel left. With soldering tag.		
black	**0263/05-500**	2CKA000230A0452	1

	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked red: audio , channel left. With soldering tag.		
Red	**0263/06-500**	2CKA000230A0453	1

	Cinch-jacks for communication adapter For connecting analogue video devices, such as DVD players, hard disc recorders, video recorders or receivers. Marked yellow: audio , channel left. With soldering tag.		
yellow	**0263/07-500**	2CKA000230A0454	1

	Communication adapter for Mini-jacks 3,5mm. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0264/11-500**	2CKA000230A0458	1
alpine white	**0264/12-500**	2CKA000230A0459	1
grey	**0264/13-500**	2CKA000230A0460	1

	Mini-jack 3,5 mm for communication adapter For the connection of mobile terminal devices such as MP3 player (stereo), mobile telephone and smartphones. Audio-band 20Hz - 20kHz. With soldering tag.		
chrome gloss	**0264-500**	2CKA000230A0462	1

pure stainless steel

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
white	**0248/02-101**	2CKA000230A0402	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
alpine white	**0248/04-101-500**	2CKA000230A0464	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
anthracite	**0248/05-101**	2CKA000230A0404	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Cover plate [1] [*] For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. For audio input 8210 U. For loudspeaker insert 8221 U. Surface painted.		
stainless steel	**8251-866**	2CKA008200A0040	10

[1] Surface painted.
[*] Phase-out type

	Cover plate [1] For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U. Surface painted.		
stainless steel	**8252-866**	2CKA008200A0059	10

[1] Surface painted.

	Cover plate [1] For loudspeaker insert 8223 U. Surface painted.		
stainless steel	**8253-866**	2CKA008200A0087	1/10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE). Material stainless steel. Anti fingerprint.		
stainless steel	**1766-866**	2CKA001710A3765	10/100

	Cover plate **with metal mounting plate** With fixing claws. loudspeaker inserts and cover. Conductor cross-sections up to 4 mm² rigid. With screw-type terminals. Material stainless steel. Anti fingerprint.		
stainless steel	**1751-866**	2CKA001723A0255	10

	Cover plate **with rotary control, with marking** As a cover for volume controllers. Suitable for the "LR 15 mono BJ UP" devices of WHD. Material stainless steel. Anti fingerprint.		
stainless steel	**1740 DR/03-866**	2CKA001710A3812	10

	Cover plate [1] For Busch Bluetooth receiver 8219 U. Surface painted.		
stainless steel	**8255-866**	2CKA008200A0219	1

[1] Surface painted.

pure stainless steel

Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1094 U-500	2CKA001032A0512	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, slide switch
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1095 U-500	2CKA001032A0514	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, 24 V
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 24 V~
Rated current: 1 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1096 U	2CKA001032A0485	1
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
1gang 2way
With fixing claws.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 5 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1097 U-500	2CKA001032A0513	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

pure stainless steel

Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, actual value indication
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1094 UTA	2CKA001032A0487	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UTA	2CKA001032A0488	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication, 24 V
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 24 V~
Rated current: 1 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1096 UTA	2CKA001032A0489	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat, e.g., Art. No. 6164/10 .
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, actual value indication
With actual value temperature display
Automatic controller calibration
With fixing claws.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 5 A
EN 60730-2-9, British Standard EN 60669-2-1

	1097 UTA	2CKA001032A0490	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized“ design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, setpoint indication, timer
With change-over contact.
Easy adjustment using menu and text-based display.
4 switching times per day can be user-defined for each day of the week.
With fixing claws.
Automatic summer/wintertime switch-over
Power reserve > 10 hours.
To fit cover plate 6435-xxx.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
NEW EN 60730-2-9

	1098 U-101	2CKA001032A0508	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized“ design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

pure stainless steel
Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1]
NC contact, remote sensor
With remote sensor and thermal feedback
For underfloor heating.
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Adjusting range: +10 to +50° C.
Connecting cable: 1mm² to 2.5 mm²
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A, cos ϕ 1
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UF	2CKA001032A0497	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Room thermostat, flush-mounted [1] [2]
Change-over contact, setpoint indication, timer, remote sensor
With change-over contact.
Easy adjustment using menu and text-based display.
4 switching times per day can be user-defined for each day of the week.
With fixing claws.
Automatic summer/wintertime switch-over
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Power reserve > 10 hours
To fit cover plate 6435-xxx.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A
Temperature range (Device): 10 °C to 50 °C
NEW EN 60730-2-9

	1098 UF-101	2CKA001032A0509	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.

Electrothermal Valve Drives with function indicator
For the actuation of heaters and cooling ceilings in connection with conventional room temperature controllers (e.g., 1094 U) or KNX, or free@home heating/valve actuators (e.g., 6164/46, 6254/0.XX)).
With function display (opened or closed).
de-energized when closed
Max. opening/closing time: 3.5 min
For installing, a suitable valve adapter is required.
Power input: 4 mA (approx. 1 W)
Inrush current: < 550 mA (max. 100 ms)
Connecting cable: 1.0 m (pluggable)
Rated voltage: 230 V~
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 54
Dimensions: (L x W x D): 59 mm x 45 mm x 53 mm

	6164/10-102	2CKA006151A0257	1/100

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1] [2] [3]
2 NC contacts, heating/cooling
With separate connection (230 V~) for external switchover between heating or cooling.
Switch contact opens when the set temperature is reached.
With fixing claws.
Nominal current: 10 A heating
Nominal current: 5 A cooling
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1099 UHK	2CKA001032A0515	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1] [2] [3]
2 NC contacts, heating/cooling, sliding switch
With built-in sliding switch for switchover between cooling or heating.
Switch contact opens when the set temperature is reached.
With fixing claws.
Nominal current: 10 A heating
Nominal current: 5 A cooling
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1099 UHKEA	2CKA001032A0516	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3] Switching temperature difference: ± 0.5 K.

Cover plate for room thermostat
For room thermostats 1094 U, 1097 U.
Surface painted.

stainless steel	**1794-866**	2CKA001710A3755	10

Cover plate for room thermostat
With sliding switch for nightly room temperature reduction.
to activate nighttime mode and reduction of room temperature by 4K, for thermostats 1095 U, 1096 U and 1095 UF.
Surface painted.

stainless steel	**1795-866**	2CKA001710A3756	10

pure stainless steel

Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for room thermostat For room thermostats 1094 U, 1097 U. Surface painted.		
stainless steel	**1794 TA-866**	2CKA001710A3761	10
	Cover plate for room thermostat With sliding switch for nightly room temperature reduction. For room thermostats 1095 UTA, 1096 UTA. Surface painted.		
stainless steel	**1795 TA-866**	2CKA001710A3762	10
	Cover plate [1] For comfort timer control element 6455-101-500. For standard timer control element 6456-101. For room thermostats 1098 U-101 and 1098 UF-101. For short-time timer 6465 U-101. For Busch-CO2 sensor 1091 U-500. Surface painted.		
stainless steel	**6435-866**	2CKA006430A0344	10
	Cover plate for room thermostat For room temperature controller 1099 UHK. Surface painted.		
stainless steel	**1795 HK-866**	2CKA001710A4018	10
	Cover plate for room thermostat For room temperature controller 1099 UHKEA. With sliding switch for switchover between cooling or heating. Surface painted.		
stainless steel	**1795 HKEA-866**	2CKA001710A4050	10

[1] Surface painted.

LED light

Product	Article-No.	Order-No.	Pack/Qty
	Info light unit [1] [2] Size of information field 43 x 43 mm. Long service life of the lighting element (LEDs). Homogeneous backlighting of the information field. Rated voltage: 230 V~		
	2062 U	2CKA001511A0115	1/10

[1] Use relay inserts when switching through movement sensors or comfort switches.
[2] For switching the LED flush mounted insert use switches without orientation light only.

	Cover plate [1] [2] As cover for flush-mounted info light. For insert 2062 U. Size of information field 43 x 43 mm. Surface painted.		
stainless steel	**1716-866**	2CKA001731A1955	1

[1] Included with the cover are 46 different text labels and symbols.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

pure stainless steel

WaveLINE control elements

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2) 3)] **1-channel** 1gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 1 radio channel can be operated or up to 2 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Surface painted. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 VProtection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
stainless steel	**6731-866-500**	2CKA006730A0041	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2) 3)] **2-channel** 2gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 2 radio channels can be operated or up to 4 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Surface painted. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 VProtection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
stainless steel	**6732-866-500**	2CKA006730A0042	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2) 3)] **4-channel** 4gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 4 radio channels can be operated or up to 8 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Surface painted. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 VProtection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
stainless steel	**6733-866-500**	2CKA006730A0043	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	WaveLINE LED display [1) 2) 3)] For status display of window handle positions: open = red, closed = green, tilted = yellow. Direct onsite operation possible for switching / dimming an electrical device depending on the flush-mounted insert. 4 individual LED display channels. Up to 8 WaveLine transmitters can be taught-in on each LED display channel. Up to 8 WaveLine transmitters can be taught-in on onsite operation. After a power cut all LED-Display channels light in red. The cyclic telegram repeat of the WaveLINE window position sensor 6720-xxx sensor automatically updates the window open state. Status display for depleted WaveLINE transmitter battery. Status display for faulty transmission link and defective WaveLINE transmitter. User-friendly start-up without PC / software. Printed labelling sheet with 8 different inlay sheets. For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-Watchdog 220 WaveLINE 6747 AGM. For Busch-Universal relay switch insert 6404 U. For universal dimmer switch insert 6595 U. Free-field range: approx. 100 m. Send/receive frequency: 868 MHz. Surface painted. Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm		
stainless steel	**6730-866**	2CKA006730A0023	1

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Surface painted.
[3)] Surface painted.

pure stainless steel

Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Extension of claws [1] For the installation of flush-mounted SCHUKO® socket outlets and also switches, push-buttons, etc. and deeply installed flush-mounted boxes.		
	2148	2CKA002148A0120	100

[1] Not suitable for types 2000/3 US, 2000/6/2 US, 2000/6/6 US-101 and double socket outlets

	Braille symbol self-adhesive (transparent) for cover 2506-xxx		
	light **2144 LI**	2CKA001714A0295	10/1000
	bell **2144 KI**	2CKA001714A0296	10/1000
	key **2144 TR**	2CKA001714A0297	10/1000

	Braille symbol **socket outlet** self-adhesive, transparent for SCHUKO® socket outlets with hinged lid 20 EUK-xxx		
	2144 ST	2CKA001714A0298	10/1000

	DIN A 4 labelling sheet [1] **plastic foil** Suitable for all to be labeled Busch-Jaeger devices. For laser printer. The text of the foil is printed via the Busch-Jaeger labeling service.		
translucent	**1799/02**	2CKA001799A0959	1
transparent	**1799/03**	2CKA001799A0960	1

[1] 1 piece = 1 sheet.

	RC suppressor For protection against the damage or destruction of electronic devices due to overvoltages. For wiring network-interconnected inductivities (e.g.. relay, protection, fluorescent lamps, transformers, etc.). Eliminates functional disturbances on electronic devices, e.g. automatic circuit reclosure (clocking) of a movement detector. Dimensions: diameter 25 mm, length 35 mm, length of the connecting cable approx. 100 mm. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz		
	6899	2CKA006899A0231	10

Cover frames

Product	Article-No.	Order-No.	Pack/Qty
	Cover frame [1] **1gang frame** Material stainless steel. Anti fingerprint.		
stainless steel	**1721-866K-500**	2CKA001754A4500	10/100

[1] Suitable for installation in trunking systems with 80 mm conduit.

	Cover frame [1] **2gang frame** For vertical or horizontal installation. Material stainless steel. Anti fingerprint.		
stainless steel	**1722-866K-500**	2CKA001754A4501	10/100

[1] Suitable for installation in trunking systems with 80 mm conduit.

	Cover frame [1] **3gang frame** For vertical or horizontal installation. Material stainless steel. Anti fingerprint.		
stainless steel	**1723-866K**	2CKA001754A4319	10

[1] Suitable for installation in trunking systems with 80 mm conduit.

	Cover frame [1] **4gang frame** For vertical or horizontal installation. Material stainless steel. Anti fingerprint.		
stainless steel	**1724-866K**	2CKA001754A4320	1

[1] Suitable for installation in trunking systems with 80 mm conduit.

	Cover frame [1] **5gang frame** For vertical or horizontal installation. Material stainless steel. Anti fingerprint.		
stainless steel	**1725-866K**	2CKA001754A4321	1

[1] Suitable for installation in trunking systems with 80 mm conduit.

solo®
Touching beauty.

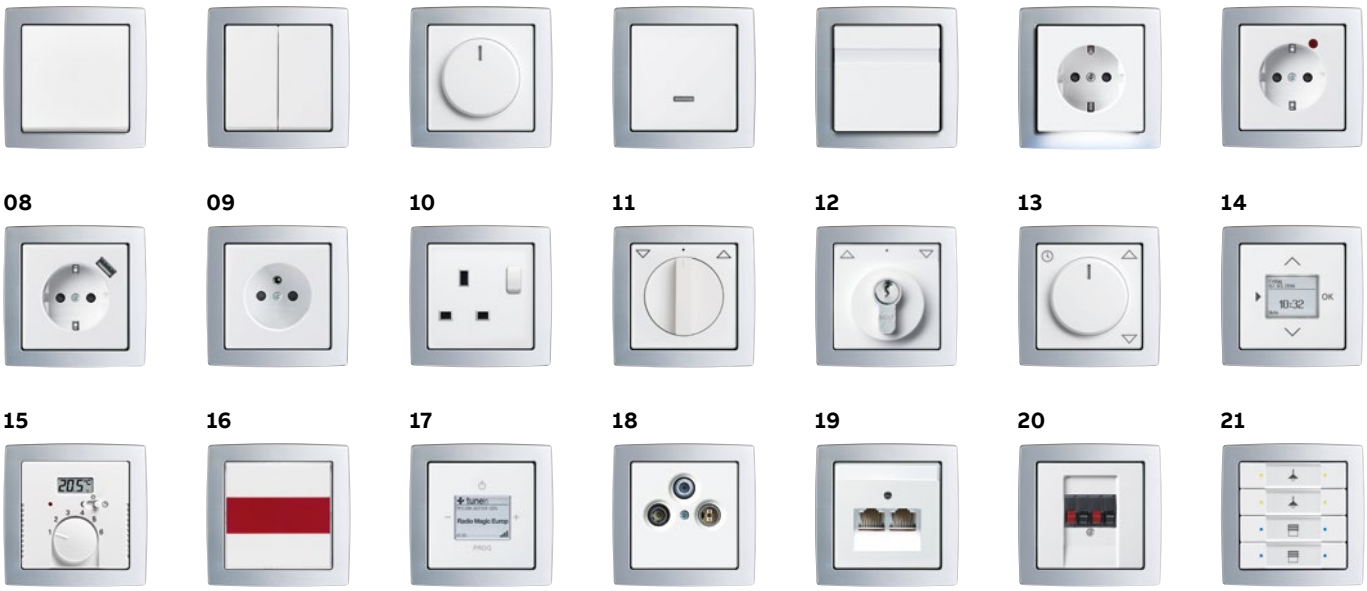
Delicate shades of the cover-plates and cool chrome come together. Natural attraction. They make a harmonious unit. Let solo® switches and socket outlets shine. They will become a significant design piece of any interior. Beauty which touches every day.

01 studio white (similar to RAL 9016) / chrome matt
02 ivory (similar to RAL 9013) / chrome matt
03 grey mettallic / chrome gloss
04 studio white (similar to RAL 9016) / studio white

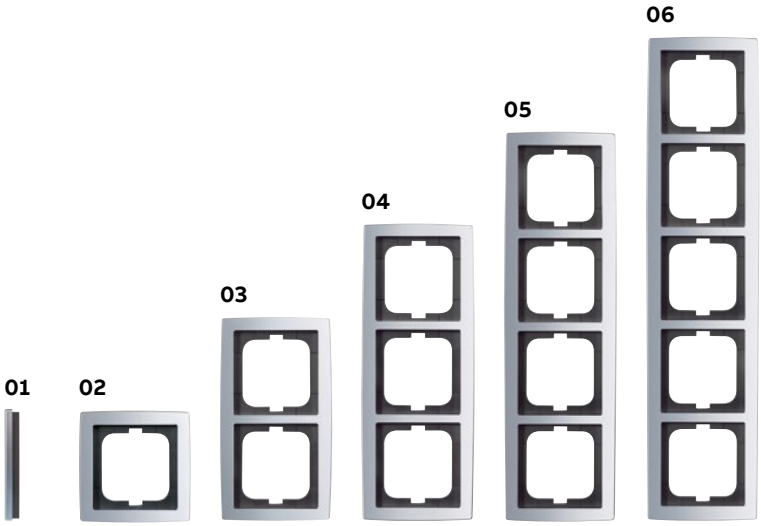
Materials
Cover: thermoplastic cover (PC), impact-proof and fracture-resistant, UV-resistant, free of PVC and halogen.

solo®

Selected functions.



01 Rocker switch 1gang
02 Rocker switch 2gang
03 Busch Universal Rotary Dimmer
04 Touch dimmer
05 Busch-Comfort switch
06 Busch-steplight®
07 Busch-Protector® SCHUKO® socket outlet with overvoltage protection
08 SCHUKO® USB socket outlet
09 Socket outlet with earthing pin
10 Switched socket outlet BS standard
11 Blind switch with rotary knob
12 Busch-Blind control switch with semi-cylindrical lock
13 Busch-Blind comfort switch
14 Comfort timer
15 Room thermostat with display
16 Busch-Infoline® alarm insert
17 Busch-AudioWorld® Busch-Radio iNet
18 Antenna socket for radio/TV/satellite
19 Universal data connection box
20 Stereo loudspeaker connecting box
21 KNX sensor, for more KNX products see part 12 of the catalogue - Intelligent Building Solutions

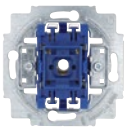


1 to 5gang cover frame for horizontal and vertical installation.
01 Side view, 11 mm x 87 mm
02 87 mm x 87 mm
03 87 mm x 157 mm
04 87 mm x 228 mm
05 87 mm x 299 mm
06 87 mm x 370 mm

For more information about light switch ranges visit ABB global web sites.

solo®

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism** [1] Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way **2000/6 US-500**	2CKA001012A2198	10/100
	2gang 1way **2000/5 US-500**	2CKA001012A1150	10/100
	DP, 1gang 2way **2000/6/2 US**	2CKA001012A0954	10
	1gang intermediate **2000/7 US-500**	2CKA001012A2199	10/100
	DP, 1gang 1way **2000/2 US-500**	2CKA001012A2196	10/100
	SP, 1gang 1way switch **2000/1 US-500**	2CKA001012A2059	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker Switch Mechanism [1] **2gang 2way** With screwless terminals. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	2000/6/6US-101-500	2CKA001011A0928	10/100

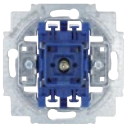
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker Switch Mechanism [1] [2] **DP, 1gang 1way** For switching high loads. Rated voltage: 250 V~ Rated current: 16 AX IEC 60669-1		
	2000/2 US-101-500	2CKA001012A2193	10/100

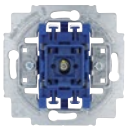
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Also for switching SCHUKO® socket outlets.

	Rocker Switch Mechanism [1] [2] **3-pole, 1gang 1way switch** Rated voltage: 400 V~ Rated current: 16 AX IEC 60669-1		
	2000/3 US	2CKA001011A0816	10

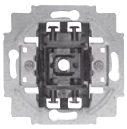
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] With screw-type terminals. Non-illuminable.

	**Rocker Switch Mechanism** [1] With neon lamp 8338-1. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way [2] **2000/6 USGL-500**	2CKA001012A2194	10/100
	2gang 1way **2000/5 USGL**	2CKA001012A1135	10

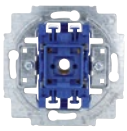
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism, control** [1] [2] [3] With neon lamp. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way with N-terminal **2000/6 USK-500**	2CKA001022A0659	10/100
	DP, 1gang 1way **2000/2 UK**	2CKA001022A0656	10

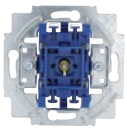
[1] With 1 mA neon lamp.
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3] Illuminable by using lamps 8360, 8362, 8363, 8365, 8366, and 8367 and LED inserts.

	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US	2CKA001413A0475	10/100
	2020 US-500	2CKA001413A0574	10/100

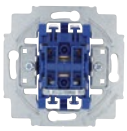
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With 2 independent signalling contacts. Rated voltage: 250 V~ Inputs: 1 Outputs: 1 Rated current: 10 A IEC 60669-1		
	2020 US-201	2CKA001413A0483	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] [2] [3] **SP, with normally open contact (operating current)** With illumination. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 USGL-500	2CKA001413A1106	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.
[3] For relay and touch dimmer applications.

	**Push-switch mechanism** [1] With one input terminal and 2 actuating covers. Rated voltage: 250 V~ Inputs: 1 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-500	2CKA001413A1105	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

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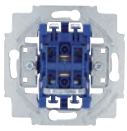
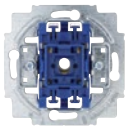
Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] **2 x SP, 2 normally open contact** 2 normally open contacts. Rated voltage: 250 V~ Inputs: 2 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-101	2CKA001413A0509	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] **SP, 1gang 2way** Can be wired for normally open contacts (stand-by current) or normally closed contacts (operating current). With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US-206-500	2CKA001413A1104	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker For flush-mounted switch 1g1w, 1g2w, intermediate, push switch.		
ivory white	**1786-82-500**	2CKA001751A3083	10/100
studio white	**1786-84-500**	2CKA001751A3074	10/100
grey metallic [1]	**1786-803-500**	2CKA001751A3093	10/100

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker For flush-mounted switch 2g 1w, 2g push switch.		
ivory white	**1785-82**	2CKA001751A2744	10/100
studio white	**1785-84-500**	2CKA001751A3076	10/100
grey metallic [1]	**1785-803**	2CKA001751A3018	10/100

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **with small red spherical cap** As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way.		
ivory white	**1789-82**	2CKA001751A2813	10
studio white	**1789-84-500**	2CKA001751A3091	10/100
grey metallic [1]	**1789-803**	2CKA001751A3013	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small transparent lens** With symbol. As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way.		
ivory white	**1789 LI-82**	2CKA001751A2745	10
studio white	**1789 LI-84-500**	2CKA001751A3084	10/100
grey metallic [1]	**1789 LI-803**	2CKA001751A3014	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small transparent lens** With key symbol. For flush-mounted push switch.		
ivory white	**1789 TR-82**	2CKA001751A2747	10
studio white	**1789 TR-84**	2CKA001751A2755	10
grey metallic [1]	**1789 TR-803**	2CKA001751A3016	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small transparent lens** With bell symbol. For flush-mounted push switch.		
ivory white	**1789 KI-82**	2CKA001751A2746	10
studio white	**1789 KI-84**	2CKA001751A2754	10
grey metallic [1]	**1789 KI-803**	2CKA001751A3015	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker [1] [2] **with labelling field** With pilot lamp for uniform illumination of the labelling field. For flush-mounted switch 1g1w, 1g2w, intermediate, push switch. Size of labelling field: 59.7 x 11.7 mm.		
ivory white	**1764 NLI-82**	2CKA001731A1876	10
studio white	**1764 NLI-84**	2CKA001731A1877	10/100
grey metallic [3]	**1764 NLI-803**	2CKA001731A1975	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Illumination using neon lamp 8353 or incandescent lamp 8344-1 and LED inserts.
[3] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small red spherical cap** With imprint "0" and "I". As cover for 2-pole or 3-pole flush-mounted on-off switch and 2-pole control on-off switch.		
ivory white	**1788-82**	2CKA001751A2742	10
studio white	**1788-84**	2CKA001751A2750	10/100
grey metallic [1]	**1788-803**	2CKA001751A3017	10

[1] Surface painted.

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Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small red spherical cap** With marking "Heizung". As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way. As cover for 2-pole or 3-pole flush-mounted on-off switch and 2-pole control on-off switch.		
ivory white	**1789 H-82**	2CKA001751A2743	10
studio white	**1789 H-84**	2CKA001751A2751	10
grey metallic [1]	**1789 H-803**	2CKA001751A3019	10

[1] Surface painted.

	Card switch 10 A [1] **SP, with normally open contact (operating current)** Illuminable. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	2025 U	2CKA001012A1713	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
delivery form:	Adapter plate APBS to be ordered separate.		

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Cover plate For card switch. For insert 2025 U. Suitable for cards sized 54 x 86 mm. The inner part of the cover plate is made of light-conducting plastic, so that the card slot is illuminated.		
ivory white	**1792-82**	2CKA001710A3640	10
studio white	**1792-84**	2CKA001710A3641	10

	Pull switch [1] **SP, with normally open contact (operating current)** With 2-metre pull cord, red handle, and red neon indicator. Rated voltage: 250 V~ Rated current: 10 A		
	2020/01 US	2CKA001413A1077	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Pull switch [1] **SP, break contact** With 2-metre pull cord, red handle, and red neon indicator. Rated voltage: 250 V~ Rated current: 10 A		
	2020/10 US	2CKA001413A1076	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **open for red pull switch neon indicator** For pull switch 2020/xx US.		
ivory white	**1720-82**	2CKA001731A1915	10
studio white	**1720-84**	2CKA001731A1916	10

	Three-step rotary switch [1] **SP, with zero position** With zero position. Rated voltage: 250 V~ Rated current: 16 A		
	2710 U	2CKA001101A0918	1/10

[1] Install only in conjunction with wall boxes ø 60 mm.

	Three-step rotary switch [1] **SP, without zero position** Without zero position. Rated voltage: 250 V~ Rated current: 16 A		
	2710/1 U	2CKA001101A0919	1/10

[1] Install only in conjunction with wall boxes ø 60 mm.

	Cover plate **with rotary control, with marking** As cover for flush mounted three-step rotary switch. With zero position. For insert 2710 U.		
ivory white	**2542 DR/01-82**	2CKA001710A3645	10
studio white	**2542 DR/01-84**	2CKA001710A3646	10

	Cover plate **with rotary control, with marking** As cover for flush mounted three-step rotary switch. Without zero position. For insert 2710/1 U.		
ivory white	**2542 DR/02-82**	2CKA001710A3650	10
studio white	**2542 DR/02-84**	2CKA001710A3651	10

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Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1) 2) 3) 4) 5) 6) 7)]
Flush-mounted, LED, 2-100 W
With rotary control, two-way switch and soft-catch.
2-wire connection (neutral conductor not required)
Optimised for dimming of retrofit LED lamps (LEDi).
For dimmable Retrofit-LEDs (LEDi).
For dimmable Retrofit-LEDs (LEDi) with conventional or electronic transformers.
For incandescent lamps, 230 V tungsten halogen lamps, low-voltage halogen lamps with conventional or electronic transformers and dimmable energy-saving halogen lamps.
Mix operaton of LEDi with conventional loads possible.
Via mode switch adjustable between leading edge control and trailing edge control.
Low-noise level by MOSFET transistors.
With electronic short-circuit protection.
With electronic overload protection.
With adjustable minimum brightness.
Without cover plate.
Rated voltage: 230 V~, + 10% / - 10%
Rated frequency: 50 Hz/60 Hz
Nominal power: 2 - 100 W/VA (retrofit LED loads).
Nominal power: 10 - 250 W/VA (non-LED loads).
Protection class (Device): IP 20
Temperature range (Device): 0 °C to 35 °C
IEC 60669-2-1, British Standard EN 60669-2-1

R,L,C LEDi

	6523 U-102-500	2CKA006512A0335	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Also applicable for 1gang 2way installations.
[5)] Provided with terminal for net disconnection devices.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[7)] Recommendation: Please use loads and types of one producer.

Product	Article-No.	Order-No.	Pack/Qty

Busch-touch dimmer [1) 2) 3) 4) 5) 6)]
Flush-mounted, LED, 2-100 W
Touch dimmer.
2-wire connection (neutral conductor not required)
Neutral conductor optionally connectable (recommended for the connection of low loads < 10 W/VA).
Optimised for dimming of retrofit LED lamps (LEDi).
For incandescent lamps, 230V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers and dimmable halogen energy-saving lamps.
Mix operaton of LEDi with conventional loads possible.
With adjustable minimum brightness.
The minimum brightness for the leading edge control can be adjusted using the potentiometer.
The potentiometer at the left limit stop corresponds with the trailing edge control mode.
Low-noise level by MOSFET transistors.
With electronic short-circuit protection.
With electronic overload protection.
With light-level memory and minimum brightness memory.
Operation also possible via conventional push buttons (2020 US, 2021/6 UK).
Without control cover.
For control cover with control lamp 6543-xxx-10x.
For Busch-Remote control IR control cover 6066-xxx-10x.
For comfort timer control element 6455-101-500.
For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx.
Nominal power: 2 - 100 W/VA (retrofit LED loads).
Nominal power: 10 - 200 W/VA (non-LED loads).
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 20
Temperature range (Device): 0 °C to 35 °C
IEC 60669-2-1, British Standard EN 60669-2-1

R,L,C LEDi

	6526 U-500	2CKA006512A0323	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Recommendation: Please use loads and types of one producer.
[6)] In connection with 6810-21x-101 and 6800-xx-104 (M) only suitable for switching retrofit LEDs (for 2-conductor connection).

Busch-rotary dimmer [1) 2) 3) 4)]
flush mounted, R, 60-600 W
With rotary control, 2way On-Off switching and soft-catch.
Leading Edge control.
For incandescent lamps and 230 V tungsten halogen lamps.
With adjustable minimum brightness.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 60 - 600 W
IEC 60669-2-1, British Standard EN 60669-2-1

R,L

	2250 U-500	2CKA006515A0848	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] Also applicable for 1gang 2way installations.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Provided with terminal for net disconnection devices.

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Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5)] **flush mounted, RL, 20-500 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 20 - 500 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	2247 U-500	2CKA006512A0302	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **UP, RL, 200-700 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. Short-circuit-proof, overload-protected. With adjustable minimum brightness. Without cover plate. Without claws. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 200 - 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6520 U-500	2CKA006520A0227	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[6)] Should be mounted in a seperate wallbox.

	Busch-2gang switch/rotary dimmer [1) 2) 3)] **flush mounted, RL, 60-400 W** 1 channel designed as dimmer. 1 channel designed as switch contact (1gang 2way contact element) with leading edge control For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. With adjustable minimum brightness. Without cover plate. Rated current 6A (changeover contact switch output). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 400 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6517 U-101-500	2CKA006517A0018	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Can be used to replace a 2gang 1way switch.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **flush mounted, RC, 40-420 W** With rotary control, soft-catch and with trailing edge control. For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers. Low-noise, short-circuit-proof, overload-protected. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 40 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6513 U-102	2CKA006513A0568	1/10
	6513 U-102-500	2CKA006513A0586	1/10

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **flush mounted, RC, 40-550 W** With rotary control, soft-catch and with trailing edge control. For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers. Low-noise, short-circuit-proof, overload-protected. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 40 - 550 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6519 U	2CKA006519A0011	1

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

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Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5)] **flush mounted, RLC, 60-420 W** with soft-catch With intelligence for universal operation. For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Short-circuit-proof, overload-protected. Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible. Operation via rotary-type remote control 6592 U possible, Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 60 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6591 U-101-500	2CKA006513A0588	1/10

[1)] Illuminable with neon lamp 3855. Neon lamp included in delivery with cover plate.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In the case of conventional transformers, take ~20% transformer loss into account.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Cannot be combined with a 2way switch.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer, extension [1) 2)] **flush mounted** for connection to 6591 U-101, To be used with Busch-Dimmer®, MDRC 6583. with soft-catch A maximum of 5 multi-way extensions can be connected to a 6591U-101, Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz		
	6592 U-500	2CKA006513A0590	1

[1)] Control elements 2115-xxx and 6540-xxx.
[2)] Required for illuminating the N-connection control element.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4)] **flush mounted, 1-10V** With rotary control. For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For LED control via control gears Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	2112 U-101-500	2CKA006599A2873	1/10

[1)] Non-illuminable.
[2)] Use cover plates 2115 J-.../2115-.../6540-... .
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Making-current limiters have to be provided in case of too high making currents.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1)] **flush mounted, DALI** For DALI broadcast service (via central telegram). For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With rotary control and ON/OFF push operation. Fool proved. Brightness power-on level and backround brightness level adjustable, buffered. With integrated LED illumination for orientation. Color of orientation light adjustable (18 presets and OFF). Up to 5 potentiometers are connectable in parallel. Max. current consumption: 15 mA. Not suitable for combining with other DALI sensors or central units of other manufacturers. An additional DALI power supply is needed, e.g. by Tridonic, Philips, Helvar or 2117/11 U. Max. DALI-cable length: 300 m (1,5 - 2,5 mm²). Without cover plate. Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C		
	2117 U-500	2CKA006599A2987	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1)] **flush mounted, DALI, with internal power supply** For DALI broadcast service (via central telegram). With integrated DALI power adaptor. For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With rotary control and ON/OFF push operation. With electronic short-circuit protection. With electronic overload protection. Brightness power-on level and backround brightness level adjustable, buffered. With integrated LED illumination for orientation. Color of orientation light adjustable (18 presets and OFF). Up to 5 potentiometers are connectable in parallel. Up to 3 potentiometers are connectable in parallel in active mode. Not suitable for combining with other DALI sensors or central units of other manufacturers. DALI-voltage: 15,5 V= Rated current: max. 75 mA Power consumption: < 2,5 W Number of DALI-units: 37 in case of one active power-potentiometer in case of three active power-potentiometer in parallel connection: 111 Active mode: the potentiometer is supporting the necessary control circuit for other DALI-devices. Passive mode: the potentiometer is suitable as additional operation point. Max. DALI-cable length: 300 m (1,5 - 2,5 mm²). Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C		
	2117/11 U-500	2CKA006599A2988	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

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Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2)] **flush mounted, RL, 25-500 W** With light-level memory and leading edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. Compatible with control covers 6543-xxx-10x. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Parallel operation of several transformers and/or incandescents lamps possible. Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 25 - 500 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6560 U-101-500	2CKA006560A1207	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch touch-dimmer range [1) 2) 3) 4)] **flush mounted, RC, 45-315 W** For switching and dimming 2 independent devices. With trailing edge control. 2gang 1way For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with electronic transformers. Compatible with control covers 6545-xxx. Without cover, without cover plate. Outputs: 2 independent dimmer channels. Rated power: 40-315 W/VA per channel. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz IEC 60669-2-1, British Standard EN 60669-2-1		
	6565 U-500	2CKA006565A0057	1/10

[1)] Not suitable with conventional transformers.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Does not provide an extension input.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3) 4)] **flush mounted, RLC, 60-420 W** With light-level memory and intelligence for universal operation. Selectable Soft-ON/OFF function and memory function. Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible. For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Short-circuit-proof, overload-protected. With touch control. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Without control cover. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6593 U-500	2CKA006590A0171	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In conjunction with 6800-xxx-104 (M) a Soft Off can be adjusted.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Dimmer®, capacity booster [1)] **flush mounted, RLC, 200-315 W** The control is effected by a Busch-Universal master dimmer 6593 U or Busch-Universal rotary dimmer 6591U-101 For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Can only be installed in conjunction with a cover plate 2114-xxx and 6541-xxx. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 200 - 315 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6594 U-500	2CKA006590A0172	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

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Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3)] **flush mounted, 1-10V** 3 wire connection (neutral conductor required). For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). For LED control via control gears Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6550 U-101-500	2CKA006550A0042	1

[1)] Non-illuminable.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3)] With integrated making-current limiter.

	Cover plate [1)] **with rotary knob, with indication lamp** Elevated knob. For Busch-Dimmer®. For inserts 2112 U-101/2116(/11) U/ 2117(/11) U/2247 U/2250 U/6513 U-102/6517 U-10x/6519 U/6520 U/6523 U(10x) /6591 U-10x and 6592 U.		
ivory white	**6540-82-102**	2CKA006599A2951	10/100
studio white	**6540-84-102-500**	2CKA006599A3009	10/100
grey metallic [2)]	**6540-803-102**	2CKA006599A2980	10

[1)] Replacement neon lamp, Art. No. 3855.
[2)] Surface painted.

	Control element [1) 2) 3)] **with neon lamp** Can be combined with LED dimmer 6524 U, and 6526 U, Busch-Universal touch-type controller 6550 U-10x, Busch-Memory touch dimmer 6560 U-101, Busch-Universal-Dimmer® 6593 U, Busch-Universal relay insert 6401 U-10x, Busch-Universal 2gang insert 6402 U.		
ivory white	**6543-82-101**	2CKA006599A2831	1/10
studio white	**6543-84-101-500**	2CKA006599A3010	1/10
grey metallic [4)]	**6543-803-101**	2CKA006599A2942	1/10

[1)] Compatible with previous type 6543-xxx.
[2)] Touch-type Controller 6550 U-xxx non-illuminable.
[3)] Replacement neon lamp 3857.
[4)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Control element [1)] **with neon lamp** Combinable with Busch-Memory 2gang dimmer 6565 U.		
ivory white	**6545-82**	2CKA006599A2907	1/10
studio white	**6545-84**	2CKA006599A2908	1/10
grey metallic [2)]	**6545-803**	2CKA006599A2943	1/10

[1)] Replacement neon lamp 3857.
[2)] Surface painted.

	Cover plate **for cooling element** For Busch-Universal master dimmer power module 6594 U. For room temperature controller object range 6108/0x and base for blind cover 6930/01.		
ivory white	**6541-82**	2CKA006599A2832	10
studio white	**6541-84**	2CKA006599A2835	10
grey metallic [1)]	**6541-803**	2CKA006599A2940	10

[1)] Surface painted.

	IR control element [1)] **with marking, illuminated** For LED dimmer insert 6524 U and 6526 U. For Busch-Universal master dimmer insert 6593 U. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal 2gang 1way insert 6402 U. for Busch-Universal touch-type controller 6550 U-101 Manual operation on-site and remote control via IR remote control (6010-25) or wall-mounted transmitter (6020-xx/6021-xx) possible.		
ivory white	**6066-82**	2CKA006020A1332	1/10
studio white	**6066-84**	2CKA006020A1334	1/10
grey metallic [1)]	**6066-803**	2CKA006020A1395	1/10

[1)] Touch-type Controller 6550 U-101 non-illuminable.
[2)] Surface painted.

	IR control element **with marking, illuminated** For Busch-Universal relay switch insert 6401 U-10x and Busch-Universal 2gang 1way insert 6402 U. Manual operation on-site and remote control via IR remote control (6010-25) or wall-mounted transmitter (6020-xx/6021-xx) possible.		
ivory white	**6067-82**	2CKA006020A1333	1
studio white	**6067-84**	2CKA006020A1335	1
grey metallic [1)]	**6067-803**	2CKA006020A1396	1/10

[1)] Surface painted.

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch 2-wire insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 40 - 300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6815 U	2CKA006800A2270	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Output cannot be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch relay mechanism [1) 2) 3)] 3 wire connection (neutral conductor required). For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer. Rated power: 2300 W/VA Suitable for: 230 V halogen lamps Rated power: 1200 W Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.5 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6816 U-500	2CKA006800A2621	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Output can be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal relay switch insert 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog 180 FP sensor for All Weather 44 6800-3x-102C. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For comfort timer control element 6455-101-500. For Busch-Remote control IR control cover 6067-xxx-10x. For control cover with control lamp 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): -25 °C to 55 °C British Standard EN 60669-2-1		
	6401 U-102-500	2CKA006401A0049	1/10
	Busch-Universal 2gang 1way insert 3 wire connection (neutral conductor required). For the serial switch operating mode: 2 separate outputs, 2 separate extension inputs. For operation mode timer: output 1 (eg lighting), output 2: ON/Off delay in dependence of output 1 (eg fan control). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For control cover 6430-xxx-10x and 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6402 U-500	2CKA006401A0051	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	neon lamp 3855, one neon lamp is supplied together with control cover plates 6540-2x.		

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog relay mechanism 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated power: 700 W/VA Temperature range (Device): 0 °C to 55 °C British Standard EN 60669-2-1		
	6812 U-101-500	2CKA006800A2160	1/10
	Busch-Watchdog MOS-Fet Insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 60 - 420 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6804 U-101-500	2CKA006800A2219	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Requires an NIS international socket, E-No. 372507676.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog extension insert [1)] 3 wire connection (neutral conductor required). For extending Busch-Watchdog 180 flush-mounted and Busch-Watchdog Presence tech installations. For combination with relay insert 6401 U-102 and 6402 U. For combination with MOS-Fet insert 6804 U-101. For combination with Dimmer insert 6593 U and 6550 U-101. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Control/Signal outputs: 1, electronic output, potential-bound Temperature range (Device): 0 °C to 35 °C		
	6805 U-500	2CKA006800A2161	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Not combinable with relay switch insert 6812 U-101.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1)] **with select-lens** For automatic switching of devices dependent on motion and brightness. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
ivory white	**6800-82-104**	2CKA006800A2099	1/10
studio white	**6800-84-104**	2CKA006800A2101	1/10
grey metallic [2)]	**6800-803-104**	2CKA006800A2484	1

[1)] Please order the respective flush-mounted insert separately.
[2)] Surface painted.

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1) 2)] **with multi-lens** For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 15 m, lateral: 5 m, Mounting height: 2.5 m Detection range 2: frontal: 10 m, lateral: 2.5 m, Mounting height: 1.2 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
ivory white	**6800-82-104M**	2CKA006800A2100	1
studio white	**6800-84-104M**	2CKA006800A2102	1/10
grey metallic [3)]	**6800-803-104M**	2CKA006800A2485	1

[1)] installation: slide switch top.
[2)] Please order the respective flush-mounted insert separately.
[3)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch control element [1)] **with neon lamp** For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
ivory white	**6815-82**	2CKA006800A2285	1/10
studio white	**6815-84**	2CKA006800A2286	1/10
grey metallic [2)]	**6815-803**	2CKA006800A2481	1/10

[1)] Please order the respective flush-mounted insert separately.
[2)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For proximity switch 6406 U.		
ivory white	**6476-82**	2CKA006470A0003	10
studio white	**6476-84**	2CKA006470A0004	10

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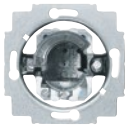
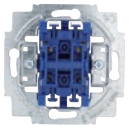
Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	**Key Switch Insert** [1) 2) 3)] **breaking circuit, 1-pole** For profile semi-cylindrical lock. In switched-on and switched-off status the key can be pulled out in the central position, respectively. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	2733 USL-101	2CKA001101A0914	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

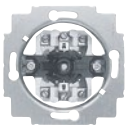
[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Use the cylindrical lock according to the enclosed drawing.
[3)] See profile semi-cylindrical lock.

	**Blind switch insert** [1) 2)] With interlock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	SP, switch **2000/4 US-500**	2CKA001012A2197	10/100
	SP, push switch **2020/4 US-500**	2CKA001413A1103	10/100

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] These blind switches/push buttons safely prevent a switch-over of the running direction being carried out too quickly.

	Blind switch insert [1) 2)] With rotary knob/switch and push switch. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1, British Standard EN 60669-1		
	DP [3)] **2712 U**	2CKA001101A0534	10
	SP, N, E **2713 U**	2CKA001101A0542	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

Product	Article-No.	Order-No.	Pack/Qty
	**Blind switch insert** [1) 2)] With rotary knob/push button. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	DP [3)] **2722 U**	2CKA001101A0559	10
	SP, N, E **2723 U**	2CKA001101A0567	10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

	Blind switch/push-switch [1) 2) 3) 4)] For profile semi-cylindrical lock/switch and push-switch. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	DP [5)] **2712 USL-101**	2CKA001101A0872	10
	SP, N, E **2713 USL-101**	2CKA001101A0880	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	Blind switch insert [1) 2) 3) 4)] For profile semi-cylindrical lock/push-button. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 A British Standard EN 60669-1, IEC60669-1		
	DP [5)] **2722 USL-101**	2CKA001101A0898	10
	SP, N, E **2723 USL-101**	2CKA001101A0906	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	DIN profile-semi cylindrical lock Acc. to German Standard DIN 18252. Total length 40 mm for blind switches and push switches For inserts 2712/2713/2722/2723/2733 USL-101 and 2712/2733 SLW-5x.		
	different lock mechanism, with 3 keys **0520 PZ-VS**	2CKA000470A0013	1/100
	lock mechanism, with 3 keys **0521 PZ-GS**	2CKA000470A0021	1/100

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Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Comfort blind insert [1) 2) 3)] **with memory and positioning function** For the manual and automatic control of roller blinds. The roller blind moves to the position set using the turn knob. Executes the individually programmed switching commands (UP/DOWN) in a 24-hour rhythm. Suitable for roller blind drives with mechanical or electronic limit switch shut-off. Suitable for operation without neutral conductor. Without an extension input. Power reserve of 45 minutes (maintenance-free as capacitor). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 1.3 A, cos ϕ 0.5 Rated power: 300 VA Temperature range (Device): 0 °C to 35 °C		
	6419 U	2CKA006410A0390	1/10

[1)] Pertinent cover plates 6436-xx.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.
[3)] Only suitable for single unit control.

	Basic blind insert [1) 2)] Suitable for blind and roller blind drives with mechanical or electronic limit switch shut-off. Suitable for operation without neutral conductor. Without an extension input. For control cover 6430-xx-xxx. For standard timer control element 6456-101. Running time: 3 min Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 3 A, cos ϕ 0.5 Rated power: 690 VA Temperature range (Device): 0 °C to 35 °C		
	6418 U-500	2CKA006410A0376	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] N-conductor connection required for operation with control cover 6430-7x, illuminated.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Blind control II switch insert [1)] Suitable for blind, roller blind and awning drives with mechanical or electronic limit switch shut-off. With two 230 V multi-way input terminals (Up/Down) for group control. With operating mode switch for the following modes: normal, louvre, base station, position. With party function (disables the local control unit) in combination with Busch-Blind control II control cover 6430-xx-xxx, 6066-xx-xxx. Wind alarm, cleaning functions can be accommodated via extension input. For control cover 6430-xx-xxx. For IR control element 6066-xx-xxx. For comfort timer control element 6455-101-500. Running time: 3 min Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 3 A, cos ϕ 0.5 Rated power: 690 VA Control/Signal outputs: 2 Temperature range (Device): 0 °C to 35 °C		
	6411 U-101	2CKA006410A0377	1/10

[1)] Compatible with types 6411 U/x.

	Burglar alert sensor For insert 6411U/S-101. With 4 m connecting cable.		
	6413-500	2CKA006410A0349	10
	Brightness sensor For insert 6411U/S-101. With 2 m connecting cable. Measuring range: 15-50,000 lux.		
	6414-101	2CKA006410A0389	1/10
	Sun sensor For insert 6411U/S-101. Measuring range: 5-50,000 lux.		
	6482	2CKA006410A0203	1

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Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Short-time timer insert [1] **countdown timer** For time-programmed switching of electrical consumers. With control cover, without cover plate. Minimum timer time: 1 second. Maximum timer time: 9:59:59 hours. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact Rated current: 10 A, cos ϕ 1 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1		
	6465 U-101-500	2CKA006410A0393	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **with marking** As cover for flush-mounted blind control switch/push switch. For inserts 2000/4 and 2020/4 US.		
ivory white	**1785 JA-82**	2CKA001751A2748	10
studio white	**1785 JA-84-500**	2CKA001751A3088	10/100
grey metallic [1]	**1785 JA-803**	2CKA001751A3020	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate **with rotary control, with marking** As cover for flush-mounted blind control switch/push switch. For inserts 2712 U, 2713 U and 2722 U, 2723 U.		
ivory white	**1740-82**	2CKA001710A3154	10
studio white	**1740-84**	2CKA001710A3172	10/100
grey metallic [1]	**1740-803**	2CKA001710A3840	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **with labelling field** With marking. For half-cylindrical type switches and blind control switch/push-switch. For inserts 2733 USL-101 and 2712 USL-101, 2713 USL-101, 2722 USL-101, 2723 USL-101.		
ivory white	**1755 SL/PZ-82-101**	2CKA001710A3157	10
studio white	**1755 SL/PZ-84-101**	2CKA001710A3175	10
grey metallic [2]	**1755 SL/PZ-803-101**	2CKA001710A3841	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Control element For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For basic blind insert 6418 U. For Busch-Universal 2gang 1way insert 6402 U.		
ivory white	**6430-82-102**	2CKA006430A0327	1/10
studio white	**6430-84-102-500**	2CKA006430A0400	1/10
grey metallic [1]	**6430-803-102**	2CKA006430A0350	1/10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **with rotary knob** For comfort blinds insert 6419 U.		
ivory white	**6436-82**	2CKA006430A0356	10
studio white	**6436-84**	2CKA006430A0358	10
grey metallic [2]	**6436-803**	2CKA006430A0360	10

[1] Continuous lighting of the turn knob possible using glow lamp 3855.
Not included in delivery. Neutral wire required for operation with neon lamp.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Standard timer control element [1] For manual and time-controlled switching of blinds and roller blinds. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Programming possible only with control element attached and energized. 2 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. For basic blind insert 6418 U. Temperature range (Device): 0 °C to 35 °C		
	6456-101	2CKA006410A0398	1/10

[1] See respective cover plates 6435-xx.

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Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Comfort timer control element [1] For manual and time-controlled switching of blinds, roller blinds, awnings, lighting and other electrical devices. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Combined with Busch-Blind control II insert 6411 U/S-101, sun protection and twilight function. Freely adjustable temperature and brightness-dependent sun protection function. Freely adjustable twilight function. User-adjustable running times for blinds and air conditioning. Programming possible only with control element attached and energized. 6 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. When combined with LED dimmer 6524 U, Busch-Universal master dimmer insert 6593 U or Busch-Memory touch-type controller 6550 U-101, the brightness of the lighting can be adjusted for each ON switching time. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal relay switch insert 6401 U-102. For Busch-Universal master dimmer insert 6593 U. For LED dimmer insert 6524 U and 6526 U. For Busch-Memory touch-type controller 6550 U-101. Temperature range (Device): 0 °C to 35 °C		
	6455-101-500	2CKA006410A0399	1/10

[1] See respective cover plates 6435-xx.

Product	Article-No.	Order-No.	Pack/Qty
	Time switch mechanism 16 A [1] [2] **DP, break contact for staircases, exterior lighting, fans, etc.** Running time: 15 min For time-programmed switching of electrical consumers. Rated voltage: 230 V~, +10 % / -10 % Rated current: 16 A, cos ϕ 0.25		
	1070 U	2CKA001043A0025	1/10

[1] For screw-fixing only
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Time switch mechanism 16 A [1] [2] **DP, break contact for staircases, exterior lighting, fans, etc.** Running time: 120 min For time-programmed switching of electrical consumers. Rated voltage: 230 V~, +10 % / -10 % Rated current: 16 A, cos ϕ 0.25		
	1071 U	2CKA001043A0124	1

[1] For screw-fixing only
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Cover plate For comfort timer control element 6455-101-500. For standard timer control element 6456-101. For room thermostats 1098 U-101 and 1098 UF-101. For short-time timer 6465 U-101. For Busch-CO2 sensor 1091 U-500.		
ivory white	**6435-82**	2CKA006430A0304	10
grey metallic [1]	**6435-803**	2CKA006430A0351	10

[1] Surface painted.

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Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUC-82-500**	2CKA002011A6214	10/100
studio white	**20 EUC-84-500**	2CKA002011A6207	10/100
grey metallic [1]	**20 EUC-803-500**	2CKA002011A6216	10/100

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] **shuttered** With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUCKS-82**	2CKA002013A5244	10/100
ivory white	**20 EUCKS-82-500**	2CKA002013A5376	10/100
studio white	**20 EUCKS-84-500**	2CKA002013A5372	10/100
grey metallic [2]	**20 EUCKS-803**	2CKA002013A5297	10/100

[1] Increased shock protection.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® USB socket outlet [1] [2] [3] **shuttered** With screwless terminals. DP (2 P + E) For supply and support of mobile devices via USB-cable. With USB female connector type A. With electronic short-circuit protection. With electronic overload protection. Simultaneous charging via USB connection and use of the SCHUKO® socket outlet. Rated voltage: 250 V~ Secondary: 5 V-, +5 % / -5 % Rated frequency: 50 Hz Suitable for: SCHUKO® socket outlet Rated current: 16 A Suitable for: USB connection Rated current: 700 mA Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm Mounting depth: 35 mm		
ivory white	**20 EUCBUSB-82-500**	2CKA002011A6177	1
studio white	**20 EUCBUSB-84-500**	2CKA002011A6179	1/10
grey metallic [4]	**20 EUCBUSB-803-500**	2CKA002011A6180	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] No data transfer.
[3] Use dust cover 2098 when cleaning the device.
[4] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet steplight® [1] [2] **With night orientation light** with separate connection cables for switch contact. with LED, Shuttered. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUCBLI-82**	2CKA002013A5292	1
studio white	**20 EUCBLI-84**	2CKA002013A5294	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] Resistant to aggressive media, e.g. ammonia, benzine, oils, greases, alcohol, cleansing agents, in normal concentrations.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] **with labelling field** DP (2 P + E) Size of labelling field: 60 x 9 mm. Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUN-82**	2CKA002011A3726	10
studio white	**20 EUN-84-500**	2CKA002011A6209	10/100
grey metallic [1]	**20 EUN-803**	2CKA002011A3876	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] **with marking "EDV"** With screwless terminals. DP (2 P + E) Shuttered. Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUCKS/DV-82**	2CKA002013A5267	10
studio white	**20 EUCKS/DV-84**	2CKA002013A5268	10

[1] Increased shock protection.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Protector® SCHUKO® socket outlet [1] **with overvoltage protection** DP (2 P + E) With integrated and external signalling contact. ISN = 5 kA Device protection for technical sensitive such as computer, entertainment electronics and building management systems. Effectively reduces overvoltage peaks occurring between the sub-distribution switch board and SCHUKO® socket outlet. Arrestor test class: classification Type 2 Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**2310 EUGL/VA-82-11**	2CKA002011A3831	1
studio white	**2310 EUGL/VA-84-11**	2CKA002011A3833	1
grey metallic [2]	**2310EUGL/VA-803-11**	2CKA002011A3877	1
red RAL 3003	**2310 EUGL/VA-12-82**	2CKA002011A3878	1/10

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] Surface painted.

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Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
NEW	**SCHUKO® socket outlet** [1] **with LED control light** Shuttered. DP (2 P + E) With transparent lens. LED colour green. Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUCBL-82**	2CKA002013A5284	10
studio white	**20 EUCBL-84**	2CKA002013A5286	10

[1] Resistant to aggressive media, e.g. ammonia, benzine, oils, greases, alcohol, cleansing agents, in normal concentrations.

	SCHUKO® socket outlet with hinged lid With screwless terminals. DP (2 P + E) Hinged lid notches when opened. Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUK-82**	2CKA002018A1465	10
studio white	**20 EUK-84-500**	2CKA002018A1509	10/100
grey metallic [1]	**20 EUK-803**	2CKA002018A1493	10

[1] Surface painted.

	SCHUKO® socket outlet with marking With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
green RAL 6018	**20 EUC-13-82**	2CKA002011A3722	10
orange RAL 2004	**20 EUC-14-82**	2CKA002011A3723	10

	FI-SCHUKOMAT, SCHUKO® socket outlet (RCD) [1] [2] [3] **with earth leakage circuit breaker** Shuttered. DP cut off (P,N) Without PE monitoring. With connecting conductor and protection of downstream socket outlets. Rated actuating current: 30 mA. Release time: ≤ 30 ms. Short-circuit strength: 3000 A (with 25 A GL fuse). Current surge strength: 250 A (8/20) µs. With fixing claws. Rated frequency: 45-60 Hz. Rated voltage: 230 V~ Rated current: 16 A Protection class (Device): IP 20 Temperature range (Device): -25 °C to 40 °C		
ivory white	**3120 EUCKS-82**	2CKA003116A0655	1
studio white	**3120 EUCKS-84**	2CKA003116A0656	1
ivory white	**3120 EUCB-82**	2CKA003116A0661	1
studio white	**3120 EUCB-84**	2CKA003116A0662	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] Protective measure according to VDE 0100; can be proven or checked using the Profitest 0100S testing device, for example.
[3] Increased shock protection .

Product	Article-No.	Order-No.	Pack/Qty
	Buschmat® FI - Insert [1] **with earth leakage breaker with connecting conductor** Protection of downstream consumers. Rated actuating current: 30 mA. Release time: ≤ 30 ms. Short-circuit strength: 3000 A (with 25 A GL fuse). Current surge strength: 250 A (8/20) µs. DP cut off (P,N) Without claw fixation. Rated frequency: 45-60 Hz. Rated voltage: 230 V~ Rated current: 16 A Protection class (Device): IP 20 Temperature range (Device): -25 °C to 40 °C		
ivory white	**3151 UC-82**	2CKA003117A0005	1/10
studio white	**3151 UC-84**	2CKA003117A0006	1/10

[1] Protective measure according to VDE 0100; can be proven or checked using the Profitest 0100S testing device, for example.

	Shaver socket outlet For installation into FM 2gang wall box 3030 and 3031. Rated voltage: 240 V, +10 % / -10 % Output voltage: 115 V, +10 % / -10 % Secondary: 240 V, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 20 VA		
ivory white	**2332 UJBS-82**	2CKA002130A0290	1
studio white	**2332 UJBS-84**	2CKA002130A0292	1

	Flush-mounting wall box, 2gang For shaver socket outlet 2332 UJBS-8xx. Dimensions: (L x W x D): 135 mm x 75 mm x 47 mm		
	3030	2CKA001741A0067	4

	Flush-mounting wall box, 2gang For shaver socket outlet 2332 UJBS-8xx. Dimensions: (L x W x D): 142 mm x 82 mm x 45 mm		
	3031	2CKA001741A0068	4

	13 A Switched socket outlet 1gang With screw-type terminals. SP switched Without claws. Only for mounting in VDE flush-mounted wallboxes CFB 122 and CFBM 122. Rated voltage: 250 V~ Rated current: 13 A BS 1363: part2		
ivory white	**2190 EUC-82**	2CKA002190A0213	10/100
studio white	**2190 EUC-84**	2CKA002190A0215	10/100

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Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	European/American socket outlet, 10A 2gang With screw-type terminals. SP switched Without claws. Rated voltage: 250 V~ Rated current: 10 A		
ivory white	delivery on request **2192-02 UC-82-500**		
studio white	delivery on request **2192-02 UC-84-500**		
	Socket outlet cover frame shuttered For socket outlet insert 20 M-500. Rated voltage: 250 V~		
ivory white	**2399 UCKS-82**	2CKA002099A0211	10
studio white	**2399 UCKS-84**	2CKA002099A0214	10
purple *)	**2399 UCKS-87**	2CKA002099A0218	10
grey metallic 1)	**2399 UCKS-803**	2CKA002099A0253	10
yellow	**2399 UCKS-815**	2CKA002099A0254	10
	Socket outlet with earthing pin With screwless terminals. Suitable for the countries like Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 MUC-82-500**	2CKA002017A0785	10/100
studio white	**20 MUC-84-500**	2CKA002017A0786	10/100
	Socket outlet 1) **with earthing pin** With screwless terminals. Shuttered. Suitable for the countries like Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 MUCKS-82-500**	2CKA002017A0806	10
studio white	**20 MUCKS-84-500**	2CKA002017A0807	10
grey metallic 2)	**20 MUCKS-803-500**	2CKA002017A0852	10
yellow	**20 MUCKS-815-500**	2CKA002017A0853	10

1) Surface painted.
*) Phase-out type.

1) Socket outlet with integrated child protection.
Replaces the usual term"...with child protection".
2) Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Chinese socket outlet, 10 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 10 A		
ivory white	delivery on request **2193 EUC/10-82-500**		
studio white	delivery on request **2193 EUC/10-84-500**		
	Chinese socket outlet, 16 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 16 A		
studio white	delivery on request **2193 EUC/16-84-500**		
	Chinese and Euro American socket outlet, 10 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 10 A		
ivory white	delivery on request **2195 EUC/10-82-500**		
studio white	delivery on request **2195 EUC/10-84-500**		
	International socket outlet 13A 1) 1gang With screw-type terminals. Without claws. Rated voltage: 250 V~ Rated current: 13 A		
ivory white	delivery on request **2197 EUC-82-500**		
studio white	delivery on request **2197 EUC-84-500**		
	Euro American socket outlet with earth, 16 A 1gang With screw-type terminals. Without claws. Rated voltage: 250 V~ Rated current: 16 A		
ivory white	delivery on request **2196 EUC-82-500**		
studio white	delivery on request **2196 EUC-84-500**		

1) Usage may be restricted in certain countries.

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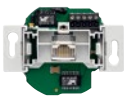
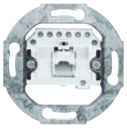
Data communication

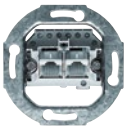
Product	Article-No.	Order-No.	Pack/Qty
	**WLAN access point, flush-mounted** [1) 2)] **power supply from mains power** Operation as WLAN access point for the connection of WLAN terminal devices to the LAN. Operation as WLAN repeater for extending the transmission range of a WLAN. Operation as WLAN adapter for integrating Ethernet terminal devices into a WLAN. Supports WLAN standards IEEE 802.11b/g/n with 2.4 GHz; integrated WLAN antenna. Backward connection of an Ethernet cable via screw terminals (10/100 Mbit/s). Front-side Ethernet connection via a RJ45 socket (10/100 Mbit/s). The three connections (WLAN, Ethernet/screw terminals and Ethernet/RJ45)can be used in parallel via the integrated switch. Power supply via 2-pole connecting terminal. Nominal voltage: 100 - 240 V~ For mounting in commercially available deep flush-mounted and hollow-wall boxes. Rated frequency: 50 Hz - 60 Hz		
	8186/31-101-500	2CKA008100A0359	1

[1)] Suitable for cover plate 1803-xxx.
[2)] Not to be mounted in SM box 1701-xxx, 1702-xxx, 1703-xxx.

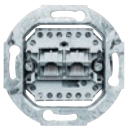
	Reset magnet For resetting WLAN access point UP 8186/31-101 and WLAN access point PoE UP 8186/41 to the factory settings.		
	8186/11-500	2CKA008100A0361	1

	**Universal data connection unit, cat. 3** [1)] **1gang** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0213-500	2CKA000230A1549	10/100

[1)] Suitable for cover plate 1803-xxx.

	**Universal data connection box with down-leading outlet** [1)] **2gang internally parallel connected** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0214	2CKA000230A0235	10/100
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	**Universal data connection box with down-leading outlet** [1)] **2 x outlets, 8/8-pole** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0215	2CKA000230A0243	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

	UAE connection unit, RJ45, cat. 6e, shielded [1)] **1gang** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0216-102	2CKA000230A0465	1/10

[1)] Suitable for cover plate 1803-xxx.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	UAE connection unit, RJ45, cat. 6e, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0217-102	2CKA000230A0467	1/10

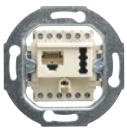
[1] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **1gang** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0218/11-101	2CKA000230A0409	1/10

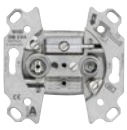
[1] Suitable for cover plate 1803-xxx.

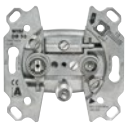
Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For trunk systems, flush-mounted wall boxes and underfloor systems. For wires of AWG 24-22. Without claws. Mounting depth: 31 mm.		
	0218/12-101	2CKA000230A0411	1/10

[1] Suitable for cover plate 1803-02-xxx.

	**Universal data connection box 8(6)/ telephone unit 6F+N - connection box** [1] **2 x 6-pole** with straight outlet, with screw contacts, Universal data-connection boxes: RJ 11/12, ISDN capable Cat. 3 in acc. with IEC 603-7/German Standard DIN EN 60603-7, Telecommunication outlet (telephone unit): for 1 telephone, 1 auxiliary device or 1 data transmission unit, With claw.		
white	**UAE 8(6)TAE 6 F+N**	2CKA000230A0381	10/100

[1] Suitable for cover plate 2539-xxx, 1766-xxx and 1746-2xx-FN.

	**Satellite co-axial outlets 2 connectors/dead-end feeder** Broadband technology 5-2.400 MHz For DVB-T, satellite and broad-band cable systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0230-101	2CKA000230A0250	10/100

	**Satellite co-axial outlets Radio/TV/SAT 3gang dead-end feeder** Broadband technology 47-2.150 MHz. SAT connection designed as screwable F-male plug. with remote feed via F-bush For DVB-T and broadband-cable-systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0232-101-500	2CKA000230A0463	10/100

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Terminating resistor 75 Ohm		
	0239	2CKA000230A0201	10/100
	Mounting plate [1) 2)] **with green insert** For 2 modular jack inserts. For systems: CommScope (AVAYA / AT&T / Lucent Technologies), GigaSPEED, PowerSUM, 360 GS 10E bis MGS 600-BK, M1 BH-xx, MPS 100E-xx. With R&M adapter R310694 suitable for R&M connection modules R305111, R305112, R305113 and R305114. Pitch dimensions: (WxH) approx. 16.9 x 17.9 mm. Without claws.		
	1810	2CKA001753A8048	10/100
	1810-500	2CKA001753A9974	10/100
	Mounting plate [1) 2)] **with red insert** For 2 modular jack inserts. Suitable for Art. Nos. 0210, 0211 and 0219-101. For systems: AMP / tyco Electronics, BTR, EFB, Krone, Panduit, Quante, Radiall, Setec, Dr.-Ing. Sieger, Telena, Thomas & Betts For Telegärtner AMJ/UMJ connection modules/ couplings. For 2 fiber optic modules of the following types: 3M-Volition, Krone, mvk. Pitch dimensions: (WxH) approx. 14.8 x 19.4 mm. Without claws.		
	1812-500	2CKA001753A9972	10/100
	Mounting plate [1) 2)] **with black insert** For MTRJ or 2 modular jack inserts. For systems: Ackermann, AMP / tyco Electronics (Slim Line (SL) -SM 2gang/switches: 110Connect Jacks, Toolless Jacks / Standard 110Connect Jacks), Brand-Rex, CombiNet, EFB Electronic, Telena. For 2 fiber optic modules of the following types: AMP / tyco Electronics MTRJ. Pitch dimensions: (WxH) approx. 14.8 x 20.4 mm. Without claws.		
	1814-500	2CKA001753A9973	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

Product	Article-No.	Order-No.	Pack/Qty
	Mounting plate [1) 2)] **with blue insert** For 2 modular jack inserts. For system: ITT Cannon RJ45 Cat. 5 type 808 RJ45 Mark III. Pitch dimensions: (WxH) approx. 16.0 x 11.0 mm. Without claws.		
	1816	2CKA001710A3100	10/100
	Mounting plate [1) 2)] **with orange base** For 2 modular jack inserts. For system: LexCom 150 and LexCom 250. Pitch dimensions: (WxH) approx. 15.4 x 15.4 mm. Without claws.		
	1819	2CKA001753A8056	10/100
	Mounting plate [1) 2)] **with grey base** For 2 modular jack inserts. For system: Panduit MiniCom (Cu. z. B. TX6 10 Gig Shielded Jack modules and fiber optic modules. Pitch dimensions: (WxH) approx. 15.9 x 18.7 mm. Without claws.		
	1820	2CKA001753A8057	10/100
	Flush-mounted assembly adapter For the accommodation of one or two universal modules 0219. For flush-mounted installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/12	2CKA000230A0395	1/10
	Channel assembly adapter For the accommodation of one or two universal modules 0219. For channel and under-floor installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/13	2CKA000230A0396	1/10

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Universal module, RJ 45, cat. 6a iso, shielded [1] **1gang** For installation in installation adapter 0219/12 or 0219/13. Also suited for mounting into cover plate 2561 and bases 1812, 1866 EB, and 1867 EB. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Cat. 6A according to ISO/IEC 11801: 2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Bend-radius optimised cable feed (30°). Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. For 8-pole plug RJ 45 only. Housing made from diecast zinc. With integrated dust-protection cap (can be removed if necessary). With insulation displacement connection For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems.		
	0219-101	2CKA000230A0413	1/10

[1] With assembly adapters appropriate for telephone unit cover plates 2539-21x and 1766-xxx.

	Modular-Jack insert **6-pole Cat. 3 (AMP-No. 216000-2)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0210	2CKA000225A0078	10

	Modular-Jack insert **8-pole Cat. 3 (AMP-No. 216005-4)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0211	2CKA000225A0086	10

	Built-in jack For potential balancing jack cover plate and installation in cover plates. For devices of 19 mm diameter.		
	0471-0-0037	2CKA000471A0037	10

Product	Article-No.	Order-No.	Pack/Qty
	Potential balancing plug Suitable for plug 2095 UC-212 and built-in jack 0471-0-0037 acc. to German Standard DIN 42801. For potential balancing jack cover plate (connection up to 6 mm² crimped or soldered).		
	0299-0-0032	2CKA000299A0032	10

	Blank plate **with metal mounting plate**		
ivory white	**1742-82**	2CKA001710A3143	10
studio white	**1742-84-500**	2CKA001710A3991	10/100
grey metallic [1]	**1742-803**	2CKA001710A3843	10

[1] Surface painted.

	Cover plate [1] **with metal mounting plate** As cover for flex outlet, for cords up to 10.3 mm diameter. With strain relief (without terminal block).		
ivory white	**1749-82**	2CKA001710A3145	10
studio white	**1749-84**	2CKA001710A3163	10/100
grey metallic [2]	**1749-803**	2CKA001710A3844	10

[1] Cover plate can also be used individually as cover for telephone connector boxes (VDo).
[2] Surface painted.

	Cover plate [1] As cover for universal data connection boxes. Art.-No. 0213 (Cat 3/ISDN), 0216-101, 0218/11-101 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. For WLAN access points 8186/31 and 8186/41. Brand-Rex (WAEGV 8 EKR/EK). BTR (universal data connecting unit design and IAE design). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm.		
ivory white	**1803-82**	2CKA001710A3147	10
studio white	**1803-84-500**	2CKA001710A1550	10/100
grey metallic [2]	**1803-803**	2CKA001710A3852	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **2gang** As cover for universal data connection boxes. Art. No. 0214, 0215 (Cat 3), 0220/12-507, 0221/12-507, 0218, 0217 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. Brand-Rex (WAEGV 8/8 EKR/EK). AMP (NETCONNECT 5E). BTR (E-DAT C6, E-DAT design, Universal data connecting unit design and IAE design). cti (cti-wire 2.8 Cat.6). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm.		
ivory white	**1803-02-82**	2CKA001710A3146	10
studio white	**1803-02-84-500**	2CKA001710A1551	10/100
grey metallic [2]	**1803-02-803**	2CKA001710A3853	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
ivory white	**1766-82**	2CKA001710A3144	10/100
studio white	**1766-84-500**	2CKA001710A3992	10/100
grey metallic [1]	**1766-803**	2CKA001710A3854	10

[1] Surface painted.

	Cover plate As cover for telephone connector boxes (VDo). Can be knocked out for single or double connection.		
ivory white	**1745-82**	2CKA001710A3155	10
studio white	**1745-84**	2CKA001710A3173	10
grey metallic [1]	**1745-803**	2CKA001710A3855	10

[1] Surface painted.

	Cover plate [1] [2] **as cover for standard Radio/TV/SAT socket outlets** With 2 connectors Acc. to German Standard DIN 45330. Radio/TV/SAT. With M3 fixing screw.		
ivory white	**1743-82**	2CKA001724A2758	10
studio white	**1743-84-500**	2CKA001724A4332	10/100
grey metallic [3]	**1743-803**	2CKA001724A4291	10

[1] Third opening can be knocked out.
[2] See inserts for satellite coaxial socket outlets.
[3] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **with labelling field** For modular jack with slide entrance. To fit only Art. No. 1810, 1812, 1814, 1816, 1818, 1819 and 1820. Size of labelling field: 60 x 9 mm.		
ivory white	**1800-82**	2CKA001710A3158	10
studio white	**1800-84-500**	2CKA001710A3990	10/100
grey metallic [2]	**1800-803**	2CKA001710A3856	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

	Cover plate For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc.		
ivory white	**1746/10-82**	2CKA001710A3521	10
studio white	**1746/10-84-500**	2CKA001710A3993	10/100
grey metallic [1]	**1746/10-803**	2CKA001710A3857	10

	Intermediate ring For fitting cover plates from the Busch-Duro 2000® SI and Reflex SI range.		
ivory white	**1747 SI-82**	2CKA001710A3862	10
studio white	**1747 SI-84**	2CKA001710A3863	10

	Cover plate with hinged lid For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc.		
ivory white	**1746-82**	2CKA001710A3149	10
studio white	**1746-84**	2CKA001710A3167	10
grey metallic [1]	**1746-803**	2CKA001710A3858	10

[1] Surface painted.

	Cover plate with metal mounting plate For covering universal data communication connectors and circular connectors with screwed plug M 16x0.75 (installable in insert) in accordance with DIN 41524, 41529, 45322, 45327, 45328 and 45329. Knock-out openings 6, 8, 18 mm.		
ivory white	**1748-82**	2CKA001710A3655	10
studio white	**1748-84**	2CKA001710A3656	10
grey metallic [1]	**1748-803**	2CKA001710A3851	10

[1] Surface painted.

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Product	Article-No.	Order-No.	Pack/Qty
	Cover plate **with metal mounting plate** As cover for BNC and TNC sockets. Knock-out openings 6, 8, 18 mm.		
ivory white	**1750-82**	2CKA001710A3148	10
studio white	**1750-84**	2CKA001710A3166	10
grey metallic [1]	**1750-803**	2CKA001710A3859	10

[1] Surface painted.

	Equipotential socket outlet **2gang** Without claws. For connecting wires up to 1 x 6 mm² and 4 x 2.5 mm². IEC 60601-1:2005; DIN EN 60601 (VDE 0750-1): July 2007 Connection bolts German Standard DIN 42801.		
ivory white	**2095 UC-82**	2CKA002495A0085	10
studio white	**2095 UC-84**	2CKA002495A0086	10

	Cover plate **with metal mounting plate** With screw-type terminal. Fixed with central locknut. As cover for pilot devices with a diameter of 22.5 mm Without claws.		
ivory white	**2533-82**	2CKA001724A4255	10
studio white	**2533-84**	2CKA001724A4256	10

	Cover plate [1] **with metal mounting plate** for communication devices. With labelling field 60.2 x 10.2 mm. Without claws.		
ivory white	**1758-82**	2CKA001724A2759	10
studio white	**1758-84**	2CKA001724A2761	10/100
grey metallic [2]	**1758-803**	2CKA001724A4292	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-DigitalRadio [1) 2) 3) 4) 5)] RDS stereo radio alarm clock for flush-mounted installation. Reception frequency: 87.50 MHz - 108.00 MHz. With display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. For mono/stereo operation. 8 radio stations storable. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated antenna. With additional connection for external antenna. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 34 mm		
	8215 U-500	2CKA008200A0182	1/10

[1] No claw. Screw-fixing via keyholes.
[2] Matching loudspeaker insert 8223 U.
[3] Also combinable with built-in ceiling loudspeaker (8225 EB & 8226 EB) and HiFi built-in ceiling loudspeaker (8226/11 EB).
[4] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[5] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Radio iNet [1) 2) 3) 4)] WLAN Internet radio alarm clock for flush-mounted installation. For the reception of national and international radio stations via Internet. Radio station search possible via various genres. With high resolution graphic display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. Integrated web-server for configuration and control. Remote operation with smartphone via browser surface. UPnP replay function. It is controlled via smartphone. For mono/stereo operation. 8 radio stations storable. With time and date display. With alarm function. With short-time timer. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated WLAN antenna. WLAN standards: IEEE 802.11b / IEEE 802.11g. WLAN safety: WPA / WPA2. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 33 mm APP		
	8216 U-500	2CKA008200A0153	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[4)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

Product	Article-No.	Order-No.	Pack/Qty
	Loudspeaker insert [1)] **5 cm (2")** For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U. For Busch Bluetooth receiver 8219 U. With broadband characteristics. With flat plug connector. Incl. speaker connection cable. Rated output: 2 W (RMS) Frequency response: 200 - 20,000 Hz Impedance: 4 Ohm Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
	8223 U-500	2CKA008200A0183	1/10

[1)] No claw. Screw-fixing via keyholes.

Product	Article-No.	Order-No.	Pack/Qty
	Intercom amplifier insert [1) *)] **with display** Busch-AudioWorld® system amplifier. For individual volume control. For language announcements to 15 individual call zones. With additional broadcast function For switching between Busch-AudioWorld® system channel 1 and 2. For switching of the central radio channel. Optional deactivation of announcements (do not disturb). For mono/stereo operation. With noise control function. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With acoustic monitoring function (baby monitor). Permitted speaker impedance: 8 - 16 Ohm Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 36 mm		
anthracite	**8214 U**	2CKA008200A0119	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

	Amplifier insert [1) *)] For individual volume control. With switchover between radio and external music source. For switching of the central radio channel. For mono/stereo operation. With automatic loudness function. Optional automatic switch-off after 30 min. (Sleep function). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
anthracite	**8211 U**	2CKA008200A0010	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

	Audio input [1) *)] For feeding external music sources into the Busch-AudioWorld® public address system. For 1 stereo audio channel For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. MDRC amplifier 8208. Can be combined with Busch-DigitalRadio (8215 U) and Busch-Radio iNet (8216 U). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 34 mm		
anthracite	**8210 U**	2CKA008200A0108	1

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Insert [1] For charging and supplying mobile terminal devices. With quick charging function for devices compatible with quickcharge. Makes possible fast charging of the mobile terminal device. Rated voltage: 100 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: Apple terminal device Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with USB-C connection Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with quick-charge support and USB-C connection Rated current: 2 A Output voltage: 9 V Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 32 mm NEW Mounting depth: 32 mm		
	6473 U-500	2CKA006400A0039	1/10

[1] No claw. Screw-fixing via keyholes.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Charging cradle with Apple lightning connection [1] For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with lightning connection. For iPhone 7 Plus, iPhone 7, iPhone SE, iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5. For iPod touch (6th generation), iPod touch (5th generation), iPod nano (7th generation). Suitable for use with protective covers certified by Apple. Temperature range (Device): 5 °C to 35 °C NEW Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473-500	2CKA006400A0081	1/10

[1] Not released for use with the iPad.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Charging cradle with USB-C connection For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with USB-C connection. Temperature range (Device): 5 °C to 35 °C NEW Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473/11-500	2CKA006400A0083	1/10

Product	Article-No.	Order-No.	Pack/Qty
	HDMI connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link high-definition digital audio and video data from e.g. SAT-receiver, DVD-/Blue-Ray-player to plasma-type, LCD- or-LED-TVs/screens. HDMI-type A, 3D-compatible. Fully HD ready (1920 x 1080 pixel). For 20-wire HDMI-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/31-500**	2CKA000230A0430	1
alpine white	**0261/32-500**	2CKA000230A0431	1
grey	**0261/33-500**	2CKA000230A0432	1

[1] Please follow the recommendations of the cable and device producers for the max. HDMI cable lengths.

Product	Article-No.	Order-No.	Pack/Qty
	VGA connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link analogue video data between PCs and laptops to monitors or digital projectors etc. VGA-type: D-type, 15-pole. Fully HD ready (1920 x 1080 pixel). For 15-wire VGA-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/21-500**	2CKA000230A0424	1
alpine white	**0261/22-500**	2CKA000230A0425	1
grey	**0261/23-500**	2CKA000230A0426	1

[1] Please follow the recommendations of the cable and device producers for the max. VGA cable lengths.

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	USB connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link mobile devices like e.g. printer, scanner, USB-sticks or digital cameras etc. USB-type A, USB 2.0 compatible. For 5-wire USB- cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/11-500**	2CKA000230A0418	1
alpine white	**0261/12-500**	2CKA000230A0419	1
grey	**0261/13-500**	2CKA000230A0420	1

[1] Please follow the recommendations of the cable and device producers for the max. USB cable lengths.

	Communication adapter for BNC-F Duct-jacks Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0262/11-500**	2CKA000230A0436	1
alpine white	**0262/12-500**	2CKA000230A0437	1
grey	**0262/13-500**	2CKA000230A0438	1

	F duct-jack for communication adapter For connection of antenna cables e.g.. for TVs with integrated TV-tuner and satellite receiver. With screw-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems.		
metal clad	**0262-500**	2CKA000230A0440	1

	Communication adapter for Cinch-jacks Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0263/11-500**	2CKA000230A0444	1
alpine white	**0263/12-500**	2CKA000230A0445	1
grey	**0263/13-500**	2CKA000230A0446	1

Product	Article-No.	Order-No.	Pack/Qty
	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked white: audio , channel left. With soldering tag.		
alpine white	**0263/04-500**	2CKA000230A0451	1

	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked black: audio , channel left. With soldering tag.		
black	**0263/05-500**	2CKA000230A0452	1

	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked red: audio , channel left. With soldering tag.		
Red	**0263/06-500**	2CKA000230A0453	1

	Cinch-jacks for communication adapter For connecting analogue video devices, such as DVD players, hard disc recorders, video recorders or receivers. Marked yellow: audio , channel left. With soldering tag.		
yellow	**0263/07-500**	2CKA000230A0454	1

	Communication adapter for Mini-jacks 3,5mm. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0264/11-500**	2CKA000230A0458	1
alpine white	**0264/12-500**	2CKA000230A0459	1
grey	**0264/13-500**	2CKA000230A0460	1

	Mini-jack 3,5 mm for communication adapter For the connection of mobile terminal devices such as MP3 player (stereo), mobile telephone and smartphones. Audio-band 20Hz - 20kHz. With soldering tag.		
chrome gloss	**0264-500**	2CKA000230A0462	1

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
white	**0248/02-101**	2CKA000230A0402	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
alpine white	**0248/04-101-500**	2CKA000230A0464	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
anthracite	**0248/05-101**	2CKA000230A0404	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Cover plate [*] For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. For audio input 8210 U. For loudspeaker insert 8221 U.		
ivory white	**8251-82**	2CKA008200A0032	10
studio white	**8251-84**	2CKA008200A0033	10
grey metallic [1]	**8251-803**	2CKA008200A0105	10

[1] Surface painted.
[*] Phase-out type

	Cover plate For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U.		
ivory white	**8252-82**	2CKA008200A0051	10
studio white	**8252-84**	2CKA008200A0053	10
grey metallic [1]	**8252-803**	2CKA008200A0112	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For loudspeaker insert 8223 U.		
ivory white	**8253-82**	2CKA008200A0079	1/10
studio white	**8253-84**	2CKA008200A0081	1/10
grey metallic [1]	**8253-803**	2CKA008200A0115	1/10

[1] Surface painted.

	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
ivory white	**1766-82**	2CKA001710A3144	10/100
studio white	**1766-84-500**	2CKA001710A3992	10/100
grey metallic [1]	**1766-803**	2CKA001710A3854	10

[1] Surface painted.

	Cover plate with metal mounting plate With fixing claws. loudspeaker inserts and cover. Conductor cross-sections up to 4 mm² rigid. With screw-type terminals.		
ivory white	**1751-82**	2CKA001723A0239	10
studio white	**1751-84**	2CKA001723A0240	10/100
grey metallic [1]	**1751-803**	2CKA001723A0257	10

[1] Surface painted.

	Cover plate For Busch Bluetooth receiver 8219 U.		
ivory white	**8255-82**	2CKA008200A0212	1
studio white	**8255-84**	2CKA008200A0214	1/10
grey metallic [1]	**8255-803**	2CKA008200A0215	1

[1] Surface painted.

	Cover plate for Busch-powerDock For Busch-powerDock charging cradles.		
NEW			
ivory white	**6477-82**	2CKA006400A0057	10
studio white	**6477-84**	2CKA006400A0059	10
grey metallic [1]	**6477-803**	2CKA006400A0060	10

[1] Surface painted.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact** Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 10 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1094 U-500	2CKA001032A0512	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact, slide switch** With built-in slide switch and control lamp for nightly reduction of 4 K. Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 10 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1095 U-500	2CKA001032A0514	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact, sliding switch, 24 V** With built-in slide switch and control lamp for nightly reduction of 4 K. Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 24 V~ Rated current: 1 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1096 U	2CKA001032A0485	1
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **1gang 2way** With fixing claws. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 5 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1097 U-500	2CKA001032A0513	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, actual value indication
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1094 UTA	2CKA001032A0487	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UTA	2CKA001032A0488	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication, 24 V
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 24 V~
Rated current: 1 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1096 UTA	2CKA001032A0489	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat, e.g., Art. No. 6164/10 .
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, actual value indication
With actual value temperature display
Automatic controller calibration
With fixing claws.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 5 A
EN 60730-2-9, British Standard EN 60669-2-1

	1097 UTA	2CKA001032A0490	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized“ design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, setpoint indication, timer
With change-over contact.
Easy adjustment using menu and text-based display.
4 switching times per day can be user-defined for each day of the week.
With fixing claws.
Automatic summer/wintertime switch-over
Power reserve > 10 hours.
To fit cover plate 6435-xxx.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
NEW EN 60730-2-9

	1098 U-101	2CKA001032A0508	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized“ design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1]
NC contact, remote sensor
With remote sensor and thermal feedback
For underfloor heating.
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Adjusting range: +10 to +50° C.
Connecting cable: 1mm² to 2.5 mm²
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A, cos ϕ 1
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UF	2CKA001032A0497	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Room thermostat, flush-mounted [1] [2]
Change-over contact, setpoint indication, timer, remote sensor
With change-over contact.
Easy adjustment using menu and text-based display.
4 switching times per day can be user-defined for each day of the week.
With fixing claws.
Automatic summer/wintertime switch-over
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Power reserve > 10 hours
To fit cover plate 6435-xxx.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A
Temperature range (Device): 10 °C to 50 °C
NEW
EN 60730-2-9

	1098 UF-101	2CKA001032A0509	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.

Electrothermal Valve Drives with function indicator
For the actuation of heaters and cooling ceilings in connection with conventional room temperature controllers (e.g., 1094 U) or KNX, or free@home heating/valve actuators (e.g., 6164/46, 6254/0.XX)).
With function display (opened or closed).
de-energized when closed
Max. opening/closing time: 3.5 min
For installing, a suitable valve adapter is required.
Power input: 4 mA (approx. 1 W)
Inrush current: < 550 mA (max. 100 ms)
Connecting cable: 1.0 m (pluggable)
Rated voltage: 230 V~
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 54
Dimensions: (L x W x D): 59 mm x 45 mm x 53 mm

	6164/10-102	2CKA006151A0257	1/100

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1] [2] [3]
2 NC contacts, heating/cooling
With separate connection (230 V~) for external switchover between heating or cooling.
Switch contact opens when the set temperature is reached.
With fixing claws.
Nominal current: 10 A heating
Nominal current: 5 A cooling
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1099 UHK	2CKA001032A0515	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1] [2] [3]
2 NC contacts, heating/cooling, sliding switch
With built-in sliding switch for switchover between cooling or heating.
Switch contact opens when the set temperature is reached.
With fixing claws.
Nominal current: 10 A heating
Nominal current: 5 A cooling
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1099 UHKEA	2CKA001032A0516	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3] Switching temperature difference: ± 0.5 K.

Cover plate for room thermostat
For room thermostats 1094 U/UF, 1097 U/UF.

ivory white	**1794-82**	2CKA001710A3543	10
studio white	**1794-84**	2CKA001710A3544	10
grey metallic [1]	**1794-803**	2CKA001710A3847	10

[1] Surface painted.

Cover plate for room thermostat
With sliding switch for nightly room temperature reduction.
to activate nighttime mode and reduction of room temperature by 4K, for thermostats 1095 U, 1096 U and 1095 UF.

ivory white	**1795-82**	2CKA001710A3568	10
studio white	**1795-84**	2CKA001710A3569	10
grey metallic [1]	**1795-803**	2CKA001710A3848	10

[1] Surface painted.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for room thermostat For room thermostats 1094 UTA, 1097 UTA.		
ivory white	**1794 TA-82**	2CKA001710A3696	10
studio white	**1794 TA-84**	2CKA001710A3698	10
grey metallic [1]	**1794 TA-803**	2CKA001710A3849	10

[1] Surface painted.

	Cover plate for room thermostat With sliding switch for nightly room temperature reduction. For room thermostats 1095 UTA, 1096 UTA.		
ivory white	**1795 TA-82**	2CKA001710A3723	10
studio white	**1795 TA-84**	2CKA001710A3725	10
grey metallic [1]	**1795 TA-803**	2CKA001710A3850	10

[1] Surface painted.

	Cover plate For comfort timer control element 6455-101-500. For standard timer control element 6456-101. For room thermostats 1098 U-101 and 1098 UF-101. For short-time timer 6465 U-101. For Busch-CO2 sensor 1091 U-500.		
ivory white	**6435-82**	2CKA006430A0304	10
grey metallic [1]	**6435-803**	2CKA006430A0351	10

	Cover plate for room thermostat For room temperature controller 1099 UHK.		
ivory white	**1795 HK-82**	2CKA001710A4015	10
studio white	**1795 HK-84**	2CKA001710A4017	10

	Cover plate for room thermostat For room temperature controller 1099 UHKEA. With sliding switch for switchover between cooling or heating.		
ivory white	**1795 HKEA-82**	2CKA001710A4047	10
studio white	**1795 HKEA-84**	2CKA001710A4049	10
grey metallic [1]	**1795 HKEA-803**	2CKA001710A4044	10

[1] Surface painted.

LED light

Product	Article-No.	Order-No.	Pack/Qty
	Info light unit [1] [2] Size of information field 43 x 43 mm. Long service life of the lighting element (LEDs). Homogeneous backlighting of the information field. Rated voltage: 230 V~		
	2062 U	2CKA001511A0115	1/10

[1] Use relay inserts when switching through movement sensors or comfort switches.
[2] For switching the LED flush mounted insert use switches without orientation light only.

	Cover plate [1] [2] As cover for flush-mounted info light. For insert 2062 U. Size of information field 43 x 43 mm.		
ivory white	**1716-82**	2CKA001731A1922	1
studio white	**1716-84**	2CKA001731A1923	1
grey metallic [3]	**1716-803**	2CKA001731A1976	1

[1] Included with the cover are 46 different text labels and symbols.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3] Surface painted.

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WaveLINE control elements

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **1-channel** 1gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 1 radio channel can be operated or up to 2 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6731-82-500**	2CKA006730A0032	1/10
aluminium silver [3)]	**6731-83-500**	2CKA006730A0035	1/10
studio white	**6731-84-500**	2CKA006730A0038	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **2-channel** 2gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 2 radio channels can be operated or up to 4 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6732-82-500**	2CKA006730A0033	1/10
studio white	**6732-84-500**	2CKA006730A0039	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **4-channel** 4gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 4 radio channels can be operated or up to 8 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6733-82-500**	2CKA006730A0034	1/10
studio white	**6733-84-500**	2CKA006730A0040	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	WaveLINE LED display [1)] For status display of window handle positions: open = red, closed = green, tilted = yellow. Direct onsite operation possible for switching / dimming an electrical device depending on the flush-mounted insert. 4 individual LED display channels. Up to 8 WaveLine transmitters can be taught-in on each LED display channel. Up to 8 WaveLine transmitters can be taught-in on onsite operation. After a power cut all LED-Display channels light in red. The cyclic telegram repeat of the WaveLINE window position sensor 6720-xxx sensor automatically updates the window open state. Status display for depleted WaveLINE transmitter battery. Status display for faulty transmission link and defective WaveLINE transmitter. User-friendly start-up without PC / software. Printed labelling sheet with 8 different inlay sheets. For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-Watchdog 220 WaveLINE 6747 AGM. For Busch-Universal relay switch insert 6404 U. For universal dimmer switch insert 6595 U. Free-field range: approx. 100 m. Send/receive frequency: 868 MHz. Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm		
ivory white	**6730-82**	2CKA006730A0015	1
studio white	**6730-84**	2CKA006730A0017	1
grey metallic [2)]	**6730-803**	2CKA006730A0025	1
yellow	**6730-815**	2CKA006730A0024	1

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Surface painted.

solo®

Busch-Infoline®

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **1gang, with labelling field** With operating knob. For signal/cancel push-button 1520/1 UK. For monitoring unit 1511 U. For Busch-Leakage guard insert 1531 U. With labelling field 61 x 20 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1571 CN-84**	2CKA001582A0346	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and solo®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **2gang, with labelling field** With operating knob. For signal push-button insert 1520/1 UKZ. With labelling field 61 x 20 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1572 CN-84**	2CKA001582A0348	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and solo®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **with red and neutral light panel and labelling field** For Alarm Control Unit insert 1515 U-12. For Busch-Alarm signal insert 1563 U-12. For indication lamp insert 1564 U-1x. With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1573 CN-84**	2CKA001582A0350	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and solo®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **6gang, illuminable, with labelling field** For signal panel insert 1566 U. With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1575 CN-84**	2CKA001582A0353	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and solo®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **with labelling field** For power supply insert 1518 U. For relay insert 1539 U. For signal generator insert 1561 U-.... With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1576 CN-84**	2CKA001582A0355	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and solo®.

Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Extension of claws [1)] For the installation of flush-mounted SCHUKO® socket outlets and also switches, push-buttons, etc. and deeply installed flush-mounted boxes.		
	2148	2CKA002148A0120	100

[1)] Not suitable for types 2000/3 US, 2000/6/2 US, 2000/6/6 US-101 and double socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Braille symbol self-adhesive (transparent) for cover 2506-xxx		
	light **2144 LI**	2CKA001714A0295	10/1000
	bell **2144 KI**	2CKA001714A0296	10/1000
	key **2144 TR**	2CKA001714A0297	10/1000

Product	Article-No.	Order-No.	Pack/Qty
	Braille symbol **socket outlet** self-adhesive, transparent for SCHUKO® socket outlets with hinged lid 20 EUK-xxx		
	2144 ST	2CKA001714A0298	10/1000

Product	Article-No.	Order-No.	Pack/Qty
	DIN A 4 labelling sheet [1)] **plastic foil** Suitable for all to be labeled Busch-Jaeger devices. For laser printer. The text of the foil is printed via the Busch-Jaeger labeling service.		
translucent	**1799/02**	2CKA001799A0959	1
transparent	**1799/03**	2CKA001799A0960	1

[1)] 1 piece = 1 sheet.

Product	Article-No.	Order-No.	Pack/Qty
	RC suppressor For protection against the damage or destruction of electronic devices due to overvoltages. For wiring network-interconnected inductivities (e.g.. relay, protection, fluorescent lamps, transformers, etc.). Eliminates functional disturbances on electronic devices, e.g. automatic circuit reclosure (clocking) of a movement detector. Dimensions: diameter 25 mm, length 35 mm, length of the connecting cable approx. 100 mm. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz		
	6899	2CKA006899A0231	10

solo®
Cover frames

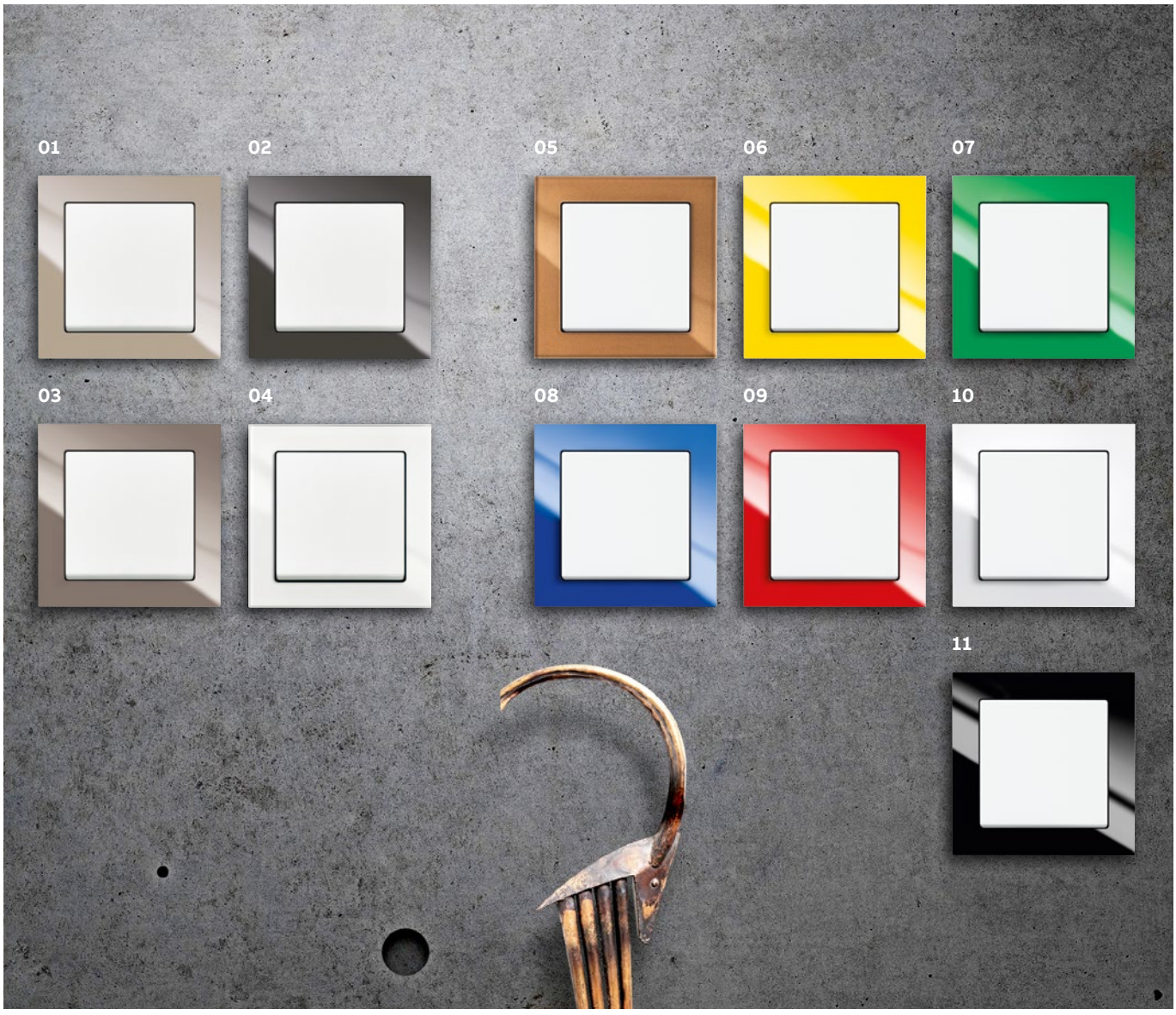
Product	Article-No.	Order-No.	Pack/Qty
	Cover frame [1] **1gang frame** For vertical or horizontal installation.		
chrome	**1721-80-500**	2CKA001754A4535	10/100
chrome gloss	**1721-80G-500**	2CKA001754A4538	10/100
studio white	**1721-84-500**	2CKA001754A4536	10/100
	Cover frame **2gang frame** For vertical or horizontal installation.		
chrome	**1722-80-500**	2CKA001754A4537	10/100
chrome gloss	**1722-80G**	2CKA001754A4327	10
studio white	**1722-84-500**	2CKA001754A4539	10/100
	Cover frame **3gang frame** For vertical or horizontal installation.		
chrome	**1723-80-500**	2CKA001754A4540	10/100
chrome gloss	**1723-80G**	2CKA001754A4328	10
studio white	**1723-84-500**	2CKA001754A4541	10/100
	Cover frame **4gang frame** For vertical or horizontal installation.		
chrome	**1724-80**	2CKA001754A4107	1
chrome gloss	**1724-80G**	2CKA001754A4329	1
studio white	**1724-84**	2CKA001754A4112	1
	Cover frame **5gang frame** For vertical or horizontal installation.		
chrome	**1725-80**	2CKA001754A4108	1
chrome gloss	**1725-80G**	2CKA001754A4330	1
studio white	**1725-84**	2CKA001754A4113	1

[1] Suitable for installation in trunking systems with 80 mm conduit.

solo®
Cover frames

Busch-axcent®
Individuality with an accent.

Express yourself. Enjoy freedom with bright colours and high gloss surfaces. Such choice brings joy. Each room can have accessories in a different colour, each room can have a different personality. Straight lines and bold edges perfectly correspond with the modern style of furnishing. Primary colours can be used as a colour-key for quick and efficient organisation of appliances and equipment.



01 studio white / maison-beige
02 studio white / château-black
03 studio white / entrée-grey
04 studio white / white glass
05 studio white / brown glass
06 studio white / yellow
07 studio white / green
08 studio white / blue
09 studio white / red
10 studio white / white
11 studio white / black

Materials
Cover: Thermoplastic cover (PC), impact-proof and fracture-resistant, UV-resistant, free of PVC and halogen.

Busch-axcent®

Selected functions.

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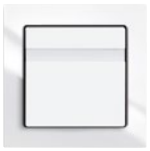

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01 Rocker switch 1gang
02 Rocker switch 2gang
03 Busch Universal Rotary Dimmer
04 Touch dimmer
05 Busch-Comfort switch
06 Busch-steplight®
07 Busch-Protector® SCHUKO® socket outlet with overvoltage protection
08 SCHUKO® USB socket outlet
09 Socket outlet with earthing pin
10 Switched socket outlet BS standard
11 Blind switch with rotary knob
12 Busch-Blind control switch with semi-cylindrical lock
13 Busch-Blind comfort switch
14 Comfort timer
15 Room thermostat with display
16 Busch-Infoline® alarm insert
17 Busch-AudioWorld® Busch-Radio iNet
18 Antenna socket for radio/TV/satellite
19 Universal data connection box
20 Stereo loudspeaker connecting box
21 KNX sensor, for more KNX products see part 12 of the catalogue - Intelligent Building Solutions

06

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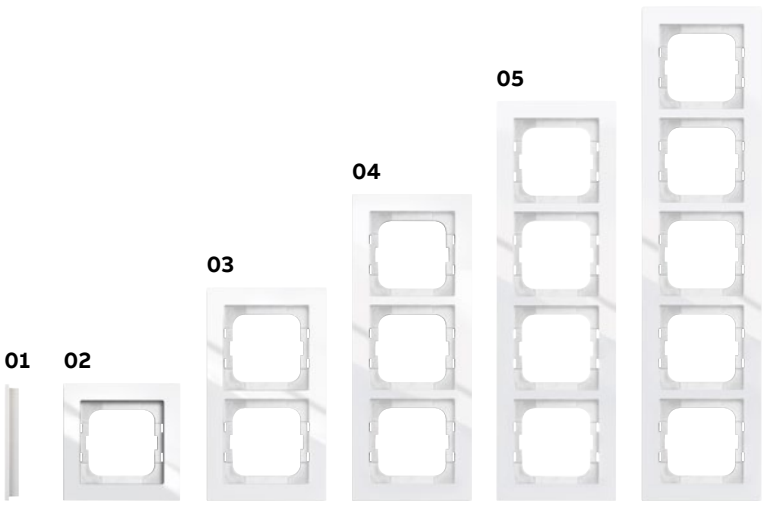
01 **02**

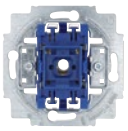


1 to 5gang cover frame for horizontal and vertical installation.
01 Side view, 11 mm x 91 mm
02 91 mm x 91 mm
03 91 mm x 162 mm
04 91 mm x 233 mm
05 91 mm x 304 mm
06 91 mm x 375 mm

For more information about light switch ranges visit ABB global web sites.

Busch-axcent®

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism** [1] Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way **2000/6 US-500**	2CKA001012A2198	10/100
	2gang 1way **2000/5 US-500**	2CKA001012A1150	10/100
	DP, 1gang 2way **2000/6/2 US**	2CKA001012A0954	10
	1gang intermediate **2000/7 US-500**	2CKA001012A2199	10/100
	DP, 1gang 1way **2000/2 US-500**	2CKA001012A2196	10/100
	SP, 1gang 1way switch **2000/1 US-500**	2CKA001012A2059	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker Switch Mechanism [1] **2gang 2way** With screwless terminals. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	2000/6/6US-101-500	2CKA001011A0928	10/100

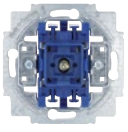
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker Switch Mechanism [1] [2] **DP, 1gang 1way** For switching high loads. Rated voltage: 250 V~ Rated current: 16 AX IEC 60669-1		
	2000/2 US-101-500	2CKA001012A2193	10/100

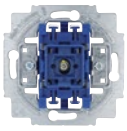
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Also for switching SCHUKO® socket outlets.

	Rocker Switch Mechanism [1] [2] **3-pole, 1gang 1way switch** Rated voltage: 400 V~ Rated current: 16 AX IEC 60669-1		
	2000/3 US	2CKA001011A0816	10

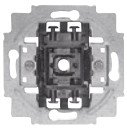
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] With screw-type terminals. Non-illuminable.

	**Rocker Switch Mechanism** [1] With neon lamp 8338-1. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way [2] **2000/6 USGL-500**	2CKA001012A2194	10/100
	2gang 1way **2000/5 USGL**	2CKA001012A1135	10

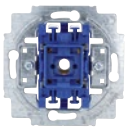
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism, control** [1] [2] [3] With neon lamp. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way with N-terminal **2000/6 USK-500**	2CKA001022A0659	10/100
	DP, 1gang 1way **2000/2 UK**	2CKA001022A0656	10

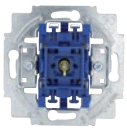
[1] With 1 mA neon lamp.
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3] Illuminable by using lamps 8360, 8362, 8363, 8365, 8366, and 8367 and LED inserts.

	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US	2CKA001413A0475	10/100
	2020 US-500	2CKA001413A0574	10/100

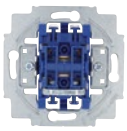
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With 2 independent signalling contacts. Rated voltage: 250 V~ Inputs: 1 Outputs: 1 Rated current: 10 A IEC 60669-1		
	2020 US-201	2CKA001413A0483	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] [2] [3] **SP, with normally open contact (operating current)** With illumination. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 USGL-500	2CKA001413A1106	10/100

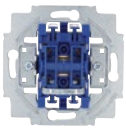
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.
[3] For relay and touch dimmer applications.

	**Push-switch mechanism** [1] With one input terminal and 2 actuating covers. Rated voltage: 250 V~ Inputs: 1 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-500	2CKA001413A1105	10/100

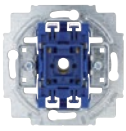
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-axcent®

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] **2 x SP, 2 normally open contact** 2 normally open contacts. Rated voltage: 250 V~ Inputs: 2 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-101	2CKA001413A0509	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] **SP, 1gang 2way** Can be wired for normally open contacts (stand-by current) or normally closed contacts (operating current). With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US-206-500	2CKA001413A1104	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker For flush-mounted switch 1g1w, 1g2w, intermediate, push switch.		
studio white	**1786-84-500**	2CKA001751A3074	10/100

	Rocker For flush-mounted switch 2g 1w, 2g push switch.		
studio white	**1785-84-500**	2CKA001751A3076	10/100

	Rocker **with small red spherical cap** As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way.		
studio white	**1789-84-500**	2CKA001751A3091	10/100

	Switch rocker with marking **with small transparent lens** With symbol. As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way.		
studio white	**1789 LI-84-500**	2CKA001751A3084	10/100

	Switch rocker with marking **with small transparent lens** With key symbol. For flush-mounted push switch.		
studio white	**1789 TR-84**	2CKA001751A2755	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking **with small transparent lens** With bell symbol. For flush-mounted push switch.		
studio white	**1789 KI-84**	2CKA001751A2754	10

	Rocker [1] [2] **with labelling field** With pilot lamp for uniform illumination of the labelling field. For flush-mounted switch 1g1w, 1g2w, intermediate, push switch. Size of labelling field: 59.7 x 11.7 mm.		
studio white	**1764 NLI-84**	2CKA001731A1877	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Illumination using neon lamp 8353 or incandescent lamp 8344-1 and LED inserts.

	Switch rocker with marking **with small red spherical cap** With imprint "0" and "I". As cover for 2-pole or 3-pole flush-mounted on-off switch and 2-pole control on-off switch.		
studio white	**1788-84**	2CKA001751A2750	10/100

	Switch rocker with marking **with small red spherical cap** With marking "Heizung". As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way. As cover for 2-pole or 3-pole flush-mounted on-off switch and 2-pole control on-off switch.		
studio white	**1789 H-84**	2CKA001751A2751	10

	Switch rocker with marking For flush-mounted switch 1g1w, 1g2w, intermediate, push switch. DO NOT DISTURB		
studio white	**1786/11-84**	2CKA001751A2998	10

	Switch rocker with marking For flush-mounted switch 2g 1w, 2g push switch. DO NOT DISTURB MAKE UP ROOM		
studio white	**1785/11-84**	2CKA001751A2992	10

Busch-axcent®

Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Card switch 10 A [1] **SP, with normally open contact (operating current)** Illuminable. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	2025 U	2CKA001012A1713	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
delivery form:	Adapter plate APBS to be ordered separate.		

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Cover plate For card switch. For insert 2025 U. Suitable for cards sized 54 x 86 mm. The inner part of the cover plate is made of light-conducting plastic, so that the card slot is illuminated.		
studio white	**1792-84**	2CKA001710A3641	10

	Pull switch [1] **SP, with normally open contact (operating current)** With 2-metre pull cord, red handle, and red neon indicator. Rated voltage: 250 V~ Rated current: 10 A		
	2020/01 US	2CKA001413A1077	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Pull switch [1] **SP, break contact** With 2-metre pull cord, red handle, and red neon indicator. Rated voltage: 250 V~ Rated current: 10 A		
	2020/10 US	2CKA001413A1076	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker **open for red pull switch neon indicator** For pull switch 2020/xx US.		
studio white	**1720-84**	2CKA001731A1916	10

Product	Article-No.	Order-No.	Pack/Qty
	Three-step rotary switch [1] **SP, with zero position** With zero position. Rated voltage: 250 V~ Rated current: 16 A		
	2710 U	2CKA001101A0918	1/10

[1] Install only in conjunction with wall boxes ø 60 mm.

	Three-step rotary switch [1] **SP, without zero position** Without zero position. Rated voltage: 250 V~ Rated current: 16 A		
	2710/1 U	2CKA001101A0919	1/10

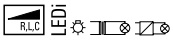
[1] Install only in conjunction with wall boxes ø 60 mm.

	Cover plate **with rotary control, with marking** As cover for flush mounted three-step rotary switch. With zero position. For insert 2710 U.		
studio white	**2542 DR/01-84**	2CKA001710A3646	10

	Cover plate **with rotary control, with marking** As cover for flush mounted three-step rotary switch. Without zero position. For insert 2710/1 U.		
studio white	**2542 DR/02-84**	2CKA001710A3651	10

Busch-axcent®

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6) 7)] **Flush-mounted, LED, 2-100 W** With rotary control, two-way switch and soft-catch. 2-wire connection (neutral conductor not required) Optimised for dimming of retrofit LED lamps (LEDi). For dimmable Retrofit-LEDs (LEDi). For dimmable Retrofit-LEDs (LEDi) with conventional or electronic transformers. For incandescent lamps, 230 V tungsten halogen lamps, low-voltage halogen lamps with conventional or electronic transformers and dimmable energy-saving halogen lamps. Mix operaton of LEDi with conventional loads possible. Via mode switch adjustable between leading edge control and trailing edge control. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, + 10% / - 10% Rated frequency: 50 Hz/60 Hz Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 250 W/VA (non-LED loads). Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 		
	6523 U-102-500	2CKA006512A0335	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Also applicable for 1gang 2way installations.
[5)] Provided with terminal for net disconnection devices.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[7)] Recommendation: Please use loads and types of one producer.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3) 4) 5) 6)] **Flush-mounted, LED, 2-100 W** Touch dimmer. 2-wire connection (neutral conductor not required) Neutral conductor optionally connectable (recommended for the connection of low loads < 10 W/VA). Optimised for dimming of retrofit LED lamps (LEDi). For incandescent lamps, 230V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers and dimmable halogen energy-saving lamps. Mix operaton of LEDi with conventional loads possible. With adjustable minimum brightness. The minimum brightness for the leading edge control can be adjusted using the potentiometer. The potentiometer at the left limit stop corresponds with the trailing edge control mode. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. With light-level memory and minimum brightness memory. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Without control cover. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 200 W/VA (non-LED loads). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 		
	6526 U-500	2CKA006512A0323	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Recommendation: Please use loads and types of one producer.
[6)] In connection with 6810-21x-101 and 6800-xx-104 (M) only suitable for switching retrofit LEDs (for 2-conductor connection).

	Busch-rotary dimmer [1) 2) 3) 4)] **flush mounted, R, 60-600 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps and 230 V tungsten halogen lamps. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 600 W IEC 60669-2-1, British Standard EN 60669-2-1 		
	2250 U-500	2CKA006515A0848	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] Also applicable for 1gang 2way installations.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Provided with terminal for net disconnection devices.

Busch-axcent®

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5)] **flush mounted, RL, 20-500 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 20 - 500 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	2247 U-500	2CKA006512A0302	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **UP, RL, 200-700 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. Short-circuit-proof, overload-protected. With adjustable minimum brightness. Without cover plate. Without claws. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 200 - 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6520 U-500	2CKA006520A0227	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[6)] Should be mounted in a seperate wallbox.

	Busch-2gang switch/rotary dimmer [1) 2) 3)] **flush mounted, RL, 60-400 W** 1 channel designed as dimmer. 1 channel designed as switch contact (1gang 2way contact element) with leading edge control For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. With adjustable minimum brightness. Without cover plate. Rated current 6A (changeover contact switch output). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 400 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6517 U-101-500	2CKA006517A0018	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Can be used to replace a 2gang 1way switch.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **flush mounted, RC, 40-420 W** With rotary control, soft-catch and with trailing edge control. For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers. Low-noise, short-circuit-proof, overload-protected. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 40 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6513 U-102	2CKA006513A0568	1/10
	6513 U-102-500	2CKA006513A0586	1/10

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **flush mounted, RC, 40-550 W** With rotary control, soft-catch and with trailing edge control. For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers. Low-noise, short-circuit-proof, overload-protected. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 40 - 550 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6519 U	2CKA006519A0011	1

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-axcent®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5)] **flush mounted, RLC, 60-420 W** with soft-catch With intelligence for universal operation. For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Short-circuit-proof, overload-protected. Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible. Operation via rotary-type remote control 6592 U possible, Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 60 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6591 U-101-500	2CKA006513A0588	1/10

[1)] Illuminable with neon lamp 3855. Neon lamp included in delivery with cover plate.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In the case of conventional transformers, take ~20% transformer loss into account.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Cannot be combined with a 2way switch.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer, extension [1) 2)] **flush mounted** for connection to 6591 U-101, To be used with Busch-Dimmer®, MDRC 6583. with soft-catch A maximum of 5 multi-way extensions can be connected to a 6591U-101, Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz		
	6592 U-500	2CKA006513A0590	1

[1)] Control elements 2115-xxx and 6540-xxx.
[2)] Required for illuminating the N-connection control element.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4)] **flush mounted, 1-10V** With rotary control. For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For LED control via control gears Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	2112 U-101-500	2CKA006599A2873	1/10

[1)] Non-illuminable.
[2)] Use cover plates 2115 J-.../2115-.../6540-... .
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Making-current limiters have to be provided in case of too high making currents.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1)] **flush mounted, DALI** For DALI broadcast service (via central telegram). For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With rotary control and ON/OFF push operation. Fool proved. Brightness power-on level and backround brightness level adjustable, buffered. With integrated LED illumination for orientation. Color of orientation light adjustable (18 presets and OFF). Up to 5 potentiometers are connectable in parallel. Max. current consumption: 15 mA. Not suitable for combining with other DALI sensors or central units of other manufacturers. An additional DALI power supply is needed, e.g. by Tridonic, Philips, Helvar or 2117/11 U. Max. DALI-cable length: 300 m (1,5 - 2,5 mm²). Without cover plate. Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C		
	2117 U-500	2CKA006599A2987	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1)] **flush mounted, DALI, with internal power supply** For DALI broadcast service (via central telegram). With integrated DALI power adaptor. For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With rotary control and ON/OFF push operation. With electronic short-circuit protection. With electronic overload protection. Brightness power-on level and backround brightness level adjustable, buffered. With integrated LED illumination for orientation. Color of orientation light adjustable (18 presets and OFF). Up to 5 potentiometers are connectable in parallel. Up to 3 potentiometers are connectable in parallel in active mode. Not suitable for combining with other DALI sensors or central units of other manufacturers. DALI-voltage: 15,5 V= Rated current: max. 75 mA Power consumption: < 2,5 W Number of DALI-units: 37 in case of one active power-potentiometer in case of three active power-potentiometer in parallel connection: 111 Active mode: the potentiometer is supporting the necessary control circuit for other DALI-devices. Passive mode: the potentiometer is suitable as additional operation point. Max. DALI-cable length: 300 m (1,5 - 2,5 mm²). Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C		
	2117/11 U-500	2CKA006599A2988	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-axcent®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty

Busch-touch dimmer [1) 2)]
flush mounted, RL, 25-500 W
With light-level memory and leading edge control.
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
Compatible with control covers 6543-xxx-10x.
Operation also possible via conventional push buttons (2020 US, 2021/6 UK).
Parallel operation of several transformers and/or incandescents lamps possible.
Without control cover.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Rated power: 25 - 500 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6560 U-101-500	2CKA006560A1207	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch touch-dimmer range [1) 2) 3) 4)]
flush mounted, RC, 45-315 W
For switching and dimming 2 independent devices.
With trailing edge control.
2gang 1way
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with electronic transformers.
Compatible with control covers 6545-xxx.
Without cover, without cover plate.
Outputs: 2 independent dimmer channels.
Rated power: 40-315 W/VA per channel.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
IEC 60669-2-1, British Standard EN 60669-2-1

	6565 U-500	2CKA006565A0057	1/10

[1)] Not suitable with conventional transformers.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Does not provide an extension input.

Busch-touch dimmer [1) 2) 3) 4)]
flush mounted, RLC, 60-420 W
With light-level memory and intelligence for universal operation.
Selectable Soft-ON/OFF function and memory function.
Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible.
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers.
Short-circuit-proof, overload-protected.
With touch control.
Operation also possible via conventional push buttons (2020 US, 2021/6 UK).
Without control cover.
For control cover with control lamp 6543-xxx-10x.
For Busch-Remote control IR control cover 6066-xxx-10x.
For comfort timer control element 6455-101-500.
For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101.
For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M.
For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx.
Combinable with Busch-Watchdog extension insert 6805 U.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 60 - 420 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6593 U-500	2CKA006590A0171	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In conjunction with 6800-xxx-104 (M) a Soft Off can be adjusted.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-Dimmer®, capacity booster [1)]
flush mounted, RLC, 200-315 W
The control is effected by a Busch-Universal master dimmer 6593 U or Busch-Universal rotary dimmer 6591U-101
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers.
Can only be installed in conjunction with a cover plate 2114-xxx and 6541-xxx.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 200 - 315 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6594 U-500	2CKA006590A0172	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-axcent®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3)] **flush mounted, 1-10V** 3 wire connection (neutral conductor required). For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). For LED control via control gears Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6550 U-101-500	2CKA006550A0042	1

[1)] Non-illuminable.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3)] With integrated making-current limiter.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1)] **with rotary knob, with indication lamp** Elevated knob. For Busch-Dimmer®. For inserts 2112 U-101/2116(/11) U/ 2117(/11) U/2247 U/2250 U/6513 U-102/6517 U-10x/6519 U/6520 U/6523 U(10x) /6591 U-10x and 6592 U.		
studio white	**6540-84-102-500**	2CKA006599A3009	10/100

[1)] Replacement neon lamp, Art. No. 3855.

	Control element [1) 2) 3)] **with neon lamp** Can be combined with LED dimmer 6524 U, and 6526 U, Busch-Universal touch-type controller 6550 U-10x, Busch-Memory touch dimmer 6560 U-101, Busch-Universal-Dimmer® 6593 U, Busch-Universal relay insert 6401 U-10x, Busch-Universal 2gang insert 6402 U.		
studio white	**6543-84-101-500**	2CKA006599A3010	1/10

[1)] Compatible with previous type 6543-xxx.
[2)] Touch-type Controller 6550 U-xxx non-illuminable.
[3)] Replacement neon lamp 3857.

	Control element [1)] **with neon lamp** Combinable with Busch-Memory 2gang dimmer 6565 U.		
studio white	**6545-84**	2CKA006599A2908	1/10

[1)] Replacement neon lamp 3857.

	Cover plate **for cooling element** For Busch-Universal master dimmer power module 6594 U. For room temperature controller object range 6108/0x and base for blind cover 6930/01.		
studio white	**6541-84**	2CKA006599A2835	10

	IR control element [1)] **with marking, illuminated** For LED dimmer insert 6524 U and 6526 U. For Busch-Universal master dimmer insert 6593 U. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal 2gang 1way insert 6402 U. for Busch-Universal touch-type controller 6550 U-101 Manual operation on-site and remote control via IR remote control (6010-25) or wall-mounted transmitter (6020-xx/6021-xx) possible.		
studio white	**6066-84**	2CKA006020A1334	1/10

[1)] Touch-type Controller 6550 U-101 non-illuminable.

	IR control element **with marking, illuminated** For Busch-Universal relay switch insert 6401 U-10x and Busch-Universal 2gang 1way insert 6402 U. Manual operation on-site and remote control via IR remote control (6010-25) or wall-mounted transmitter (6020-xx/6021-xx) possible.		
studio white	**6067-84**	2CKA006020A1335	1

Busch-axcent®

Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch 2-wire insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 40 - 300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6815 U	2CKA006800A2270	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Output cannot be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch relay mechanism [1) 2) 3)] 3 wire connection (neutral conductor required). For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer. Rated power: 2300 W/VA Suitable for: 230 V halogen lamps Rated power: 1200 W Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.5 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6816 U-500	2CKA006800A2621	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Output can be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal relay switch insert 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog 180 FP sensor for All Weather 44 6800-3x-102C. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For comfort timer control element 6455-101-500. For Busch-Remote control IR control cover 6067-xxx-10x. For control cover with control lamp 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): -25 °C to 55 °C British Standard EN 60669-2-1		
	6401 U-102-500	2CKA006401A0049	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal 2gang 1way insert 3 wire connection (neutral conductor required). For the serial switch operating mode: 2 separate outputs, 2 separate extension inputs. For operation mode timer: output 1 (eg lighting), output 2: ON/Off delay in dependence of output 1 (eg fan control). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For control cover 6430-xxx-10x and 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6402 U-500	2CKA006401A0051	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	neon lamp 3855, one neon lamp is supplied together with control cover plates 6540-2x.		

Busch-axcent®

Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog relay mechanism 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated power: 700 W/VA Temperature range (Device): 0 °C to 55 °C British Standard EN 60669-2-1		
	6812 U-101-500	2CKA006800A2160	1/10
	Busch-Watchdog MOS-Fet Insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 60 - 420 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6804 U-101-500	2CKA006800A2219	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Requires an NIS international socket, E-No. 372507676.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog extension insert [1)] 3 wire connection (neutral conductor required). For extending Busch-Watchdog 180 flush-mounted and Busch-Watchdog Presence tech installations. For combination with relay insert 6401 U-102 and 6402 U. For combination with MOS-Fet insert 6804 U-101. For combination with Dimmer insert 6593 U and 6550 U-101. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Control/Signal outputs: 1, electronic output, potential-bound Temperature range (Device): 0 °C to 35 °C		
	6805 U-500	2CKA006800A2161	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Not combinable with relay switch insert 6812 U-101.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1)] **with select-lens** For automatic switching of devices dependent on motion and brightness. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
studio white	**6800-84-104**	2CKA006800A2101	1/10

[1)] Please order the respective flush-mounted insert separately.

Busch-axcent®

Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1) 2)] **with multi-lens** For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 15 m, lateral: 5 m, Mounting height: 2.5 m Detection range 2: frontal: 10 m, lateral: 2.5 m, Mounting height: 1.2 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
studio white	**6800-84-104M**	2CKA006800A2102	1/10

[1)] installation: slide switch top.
[2)] Please order the respective flush-mounted insert separately.

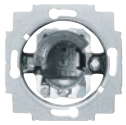
Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch control element [1)] **with neon lamp** For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
studio white	**6815-84**	2CKA006800A2286	1/10

[1)] Please order the respective flush-mounted insert separately.

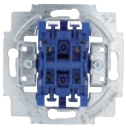
Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For proximity switch 6406 U.		
studio white	**6476-84**	2CKA006470A0004	10

Busch-axcent®

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	**Key Switch Insert** [1) 2) 3)] **breaking circuit, 1-pole** For profile semi-cylindrical lock. In switched-on and switched-off status the key can be pulled out in the central position, respectively. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	2733 USL-101	2CKA001101A0914	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

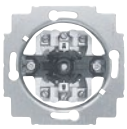
[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Use the cylindrical lock according to the enclosed drawing.
[3)] See profile semi-cylindrical lock.

	**Blind switch insert** [1) 2)] With interlock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	SP, switch **2000/4 US-500**	2CKA001012A2197	10/100
	SP, push switch **2020/4 US-500**	2CKA001413A1103	10/100

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] These blind switches/push buttons safely prevent a switch-over of the running direction being carried out too quickly.

	Blind switch insert [1) 2)] With rotary knob/switch and push switch. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1, British Standard EN 60669-1		
	DP [3)] **2712 U**	2CKA001101A0534	10
	SP, N, E **2713 U**	2CKA001101A0542	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

	**Blind switch insert** [1) 2)] With rotary knob/push button. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	DP [3)] **2722 U**	2CKA001101A0559	10
	SP, N, E **2723 U**	2CKA001101A0567	10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

	Blind switch/push-switch [1) 2) 3) 4)] For profile semi-cylindrical lock/switch and push-switch. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	DP [5)] **2712 USL-101**	2CKA001101A0872	10
	SP, N, E **2713 USL-101**	2CKA001101A0880	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	Blind switch insert [1) 2) 3) 4)] For profile semi-cylindrical lock/push-button. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 A British Standard EN 60669-1, IEC60669-1		
	DP [5)] **2722 USL-101**	2CKA001101A0898	10
	SP, N, E **2723 USL-101**	2CKA001101A0906	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	DIN profile-semi cylindrical lock Acc. to German Standard DIN 18252. Total length 40 mm for blind switches and push switches For inserts 2712/2713/2722/2723/2733 USL-101 and 2712/2733 SLW-5x.		
	different lock mechanism, with 3 keys **0520 PZ-VS**	2CKA000470A0013	1/100
	lock mechanism, with 3 keys **0521 PZ-GS**	2CKA000470A0021	1/100

Busch-axcent®

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Comfort blind insert [1) 2) 3)] **with memory and positioning function** For the manual and automatic control of roller blinds. The roller blind moves to the position set using the turn knob. Executes the individually programmed switching commands (UP/DOWN) in a 24-hour rhythm. Suitable for roller blind drives with mechanical or electronic limit switch shut-off. Suitable for operation without neutral conductor. Without an extension input. Power reserve of 45 minutes (maintenance-free as capacitor). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 1.3 A, cos ϕ 0.5 Rated power: 300 VA Temperature range (Device): 0 °C to 35 °C		
	6419 U	2CKA006410A0390	1/10

[1)] Pertinent cover plates 6436-xx.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.
[3)] Only suitable for single unit control.

	Basic blind insert [1) 2)] Suitable for blind and roller blind drives with mechanical or electronic limit switch shut-off. Suitable for operation without neutral conductor. Without an extension input. For control cover 6430-xx-xxx. For standard timer control element 6456-101. Running time: 3 min Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 3 A, cos ϕ 0.5 Rated power: 690 VA Temperature range (Device): 0 °C to 35 °C		
	6418 U-500	2CKA006410A0376	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] N-conductor connection required for operation with control cover 6430-7x, illuminated.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Blind control II switch insert [1)] Suitable for blind, roller blind and awning drives with mechanical or electronic limit switch shut-off. With two 230 V multi-way input terminals (Up/Down) for group control. With operating mode switch for the following modes: normal, louvre, base station, position. With party function (disables the local control unit) in combination with Busch-Blind control II control cover 6430-xx-xxx, 6066-xx-xxx. Wind alarm, cleaning functions can be accommodated via extension input. For control cover 6430-xx-xxx. For IR control element 6066-xx-xxx. For comfort timer control element 6455-101-500. Running time: 3 min Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 3 A, cos ϕ 0.5 Rated power: 690 VA Control/Signal outputs: 2 Temperature range (Device): 0 °C to 35 °C		
	6411 U-101	2CKA006410A0377	1/10

[1)] Compatible with types 6411 U/x.

	Burglar alert sensor For insert 6411U/S-101. With 4 m connecting cable.		
	6413-500	2CKA006410A0349	10
	Brightness sensor For insert 6411U/S-101. With 2 m connecting cable. Measuring range: 15-50,000 lux.		
	6414-101	2CKA006410A0389	1/10
	Sun sensor For insert 6411U/S-101. Measuring range: 5-50,000 lux.		
	6482	2CKA006410A0203	1

Busch-axcent®

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Rocker **with marking** As cover for flush-mounted blind control switch/push switch. For inserts 2000/4 and 2020/4 US.		
studio white	**1785 JA-84-500**	2CKA001751A3088	10/100
	Cover plate **with rotary control, with marking** As cover for flush-mounted blind control switch/push switch. For inserts 2712 U, 2713 U and 2722 U, 2723 U.		
studio white	**1740-84**	2CKA001710A3172	10/100
	Cover plate [1] **with labelling field** With marking. For half-cylindrical type switches and blind control switch/push-switch. For inserts 2733 USL-101 and 2712 USL-101, 2713 USL-101, 2722 USL-101, 2723 USL-101.		
studio white	**1755 SL/PZ-84-101**	2CKA001710A3175	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Control element For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For basic blind insert 6418 U. For Busch-Universal 2gang 1way insert 6402 U.		
studio white	**6430-84-102-500**	2CKA006430A0400	1/10
	Cover plate [1] **with rotary knob** For comfort blinds insert 6419 U.		
studio white	**6436-84**	2CKA006430A0358	10

[1] Continuous lighting of the turn knob possible using glow lamp 3855. Not included in delivery. Neutral wire required for operation with neon lamp.

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
studio white	**20 EUC-84-500**	2CKA002011A6207	10/100
	SCHUKO® socket outlet [1] **shuttered** With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
studio white	**20 EUCKS-84-500**	2CKA002013A5372	10/100

[1] Increased shock protection.

	SCHUKO® USB socket outlet [1] [2] [3] **shuttered** With screwless terminals. DP (2 P + E) For supply and support of mobile devices via USB-cable. With USB female connector type A. With electronic short-circuit protection. With electronic overload protection. Simultaneous charging via USB connection and use of the SCHUKO® socket outlet. Rated voltage: 250 V~ Secondary: 5 V-, +5 % / -5 % Rated frequency: 50 Hz Suitable for: SCHUKO® socket outlet Rated current: 16 A Suitable for: USB connection Rated current: 700 mA Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm Mounting depth: 35 mm		
studio white	**20 EUCBUSB-84-500**	2CKA002011A6179	1/10

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] No data transfer.
[3] Use dust cover 2098 when cleaning the device.

	SCHUKO® socket outlet steplight® [1] [2] **With night orientation light** with separate connection cables for switch contact. with LED, Shuttered. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
studio white	**20 EUCBLI-84**	2CKA002013A5294	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] Resistant to aggressive media, e.g. ammonia, benzine, oils, greases, alcohol, cleansing agents, in normal concentrations.

Busch-axcent®

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] **with labelling field** DP (2 P + E) Size of labelling field: 60 x 9 mm. Rated voltage: 250 V~ Rated current: 16 A		
studio white	**20 EUN-84-500**	2CKA002011A6209	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	SCHUKO® socket outlet [1] **with marking "EDV"** With screwless terminals. DP (2 P + E) Shuttered. Rated voltage: 250 V~ Rated current: 16 A		
studio white	**20 EUCKS/DV-84**	2CKA002013A5268	10

[1] Increased shock protection .

	Busch-Protector® SCHUKO® socket outlet [1] **with overvoltage protection** DP (2 P + E) With integrated and external signalling contact. ISN = 5 kA Device protection for technical sensitive such as computer, entertainment electronics and building management systems. Effectively reduces overvoltage peaks occurring between the sub-distribution switch board and SCHUKO® socket outlet. Arrestor test class: classification Type 2 Rated voltage: 250 V~ Rated current: 16 A		
studio white	**2310 EUGL/VA-84-11**	2CKA002011A3833	1
red RAL 3003	**2310 EUGL/VA-12-82**	2CKA002011A3878	1/10

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.

	SCHUKO® socket outlet [1] **with LED control light** Shuttered. DP (2 P + E) With transparent lens. LED colour green. Rated voltage: 250 V~ Rated current: 16 A		
NEW			
studio white	**20 EUCBL-84**	2CKA002013A5286	10

[1] Resistant to aggressive media, e.g. ammonia, benzine, oils, greases, alcohol, cleansing agents, in normal concentrations.

	SCHUKO® socket outlet with hinged lid With screwless terminals. DP (2 P + E) Hinged lid notches when opened. Rated voltage: 250 V~ Rated current: 16 A		
studio white	**20 EUK-84-500**	2CKA002018A1509	10/100

Product	Article-No.	Order-No.	Pack/Qty
	FI-SCHUKOMAT, SCHUKO® socket outlet (RCD) [1] [2] [3] **with earth leakage circuit breaker** Shuttered. DP cut off (P,N) Without PE monitoring. With connecting conductor and protection of downstream socket outlets. Rated actuating current: 30 mA. Release time: ≤ 30 ms. Short-circuit strength: 3000 A (with 25 A GL fuse). Current surge strength: 250 A (8/20) µs. With fixing claws. Rated frequency: 45-60 Hz. Rated voltage: 230 V~ Rated current: 16 A Protection class (Device): IP 20 Temperature range (Device): -25 °C to 40 °C		
studio white	**3120 EUCKS-84**	2CKA003116A0656	1
studio white	**3120 EUCB-84**	2CKA003116A0662	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] Protective measure according to VDE 0100; can be proven or checked using the Profitest 0100S testing device, for example.
[3] Increased shock protection .

	Buschmat® FI - Insert [1] **with earth leakage breaker with connecting conductor** Protection of downstream consumers. Rated actuating current: 30 mA. Release time: ≤ 30 ms. Short-circuit strength: 3000 A (with 25 A GL fuse). Current surge strength: 250 A (8/20) µs. DP cut off (P,N) Without claw fixation. Rated frequency: 45-60 Hz. Rated voltage: 230 V~ Rated current: 16 A Protection class (Device): IP 20 Temperature range (Device): -25 °C to 40 °C		
studio white	**3151 UC-84**	2CKA003117A0006	1/10

[1] Protective measure according to VDE 0100; can be proven or checked using the Profitest 0100S testing device, for example.

	Shaver socket outlet For installation into FM 2gang wall box 3030 and 3031. Rated voltage: 240 V, +10 % / -10 % Output voltage: 115 V, +10 % / -10 % Secondary: 240 V, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 20 VA		
studio white	**2332 UJBS-84**	2CKA002130A0292	1

	Flush-mounting wall box, 2gang For shaver socket outlet 2332 UJBS-8xx. Dimensions: (L x W x D): 135 mm x 75 mm x 47 mm		
	3030	2CKA001741A0067	4

	Flush-mounting wall box, 2gang For shaver socket outlet 2332 UJBS-8xx. Dimensions: (L x W x D): 142 mm x 82 mm x 45 mm		
	3031	2CKA001741A0068	4

Busch-axcent®
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	13 A Switched socket outlet 1gang With screw-type terminals. SP switched Without claws. Only for mounting in VDE flush-mounted wallboxes CFB 122 and CFBM 122. Rated voltage: 250 V~ Rated current: 13 A BS 1363: part2		
studio white	**2190 EUC-84**	2CKA002190A0215	10/100
	European/American socket outlet, 10A 2gang With screw-type terminals. SP switched Without claws. Rated voltage: 250 V~ Rated current: 10 A		
studio white	delivery on request **2192-02 UC-84-500**		
	Socket outlet cover frame shuttered For socket outlet insert 20 M-504. Rated voltage: 250 V~		
studio white	**2399 UCKS-84**	2CKA002099A0214	10
	Socket outlet with earthing pin With screwless terminals. Suitable for the countries like Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 MUC-82-500**	2CKA002017A0785	10/100
studio white	**20 MUC-84-500**	2CKA002017A0786	10/100
	Socket outlet [1] **with earthing pin** With screwless terminals. Shuttered. Suitable for the countries like Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 MUCKS-82-500**	2CKA002017A0806	10
studio white	**20 MUCKS-84-500**	2CKA002017A0807	10

[1] Socket outlet with integrated child protection.
Replaces the usual term"...with child protection".

Product	Article-No.	Order-No.	Pack/Qty
	Chinese socket outlet, 10 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 10 A		
studio white	delivery on request **2193 EUC/10-84-500**		
	Chinese socket outlet, 16 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 16 A		
studio white	delivery on request **2193 EUC/16-84-500**		
	Chinese and Euro American socket outlet, 10 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 10 A		
studio white	delivery on request **2195 EUC/10-84-500**		
	International socket outlet 13A [1] 1gang With screw-type terminals. Without claws. Rated voltage: 250 V~ Rated current: 13 A		
studio white	delivery on request **2197 EUC-84-500**		

[1] Usage may be restricted in certain countries.

Product	Article-No.	Order-No.	Pack/Qty
	Euro American socket outlet with earth, 16 A 1gang With screw-type terminals. Without claws. Rated voltage: 250 V~ Rated current: 16 A		
studio white	delivery on request **2196 EUC-84-500**		

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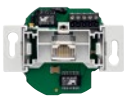
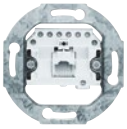
Data communication

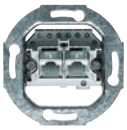
Product	Article-No.	Order-No.	Pack/Qty
	**WLAN access point, flush-mounted** [1) 2)] **power supply from mains power** Operation as WLAN access point for the connection of WLAN terminal devices to the LAN. Operation as WLAN repeater for extending the transmission range of a WLAN. Operation as WLAN adapter for integrating Ethernet terminal devices into a WLAN. Supports WLAN standards IEEE 802.11b/g/n with 2.4 GHz; integrated WLAN antenna. Backward connection of an Ethernet cable via screw terminals (10/100 Mbit/s). Front-side Ethernet connection via a RJ45 socket (10/100 Mbit/s). The three connections (WLAN, Ethernet/screw terminals and Ethernet/RJ45)can be used in parallel via the integrated switch. Power supply via 2-pole connecting terminal. Nominal voltage: 100 - 240 V~ For mounting in commercially available deep flush-mounted and hollow-wall boxes. Rated frequency: 50 Hz - 60 Hz		
	8186/31-101-500	2CKA008100A0359	1

[1)] Suitable for cover plate 1803-xxx.
[2)] Not to be mounted in SM box 1701-xxx, 1702-xxx, 1703-xxx.

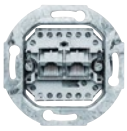
	Reset magnet For resetting WLAN access point UP 8186/31-101 and WLAN access point PoE UP 8186/41 to the factory settings.		
	8186/11-500	2CKA008100A0361	1

	**Universal data connection unit, cat. 3** [1)] **1gang** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0213-500	2CKA000230A1549	10/100

[1)] Suitable for cover plate 1803-xxx.

	**Universal data connection box with down-leading outlet** [1)] **2gang internally parallel connected** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0214	2CKA000230A0235	10/100
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	**Universal data connection box with down-leading outlet** [1)] **2 x outlets, 8/8-pole** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0215	2CKA000230A0243	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

	UAE connection unit, RJ45, cat. 6e, shielded [1)] **1gang** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0216-102	2CKA000230A0465	1/10

[1)] Suitable for cover plate 1803-xxx.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	UAE connection unit, RJ45, cat. 6e, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0217-102	2CKA000230A0467	1/10

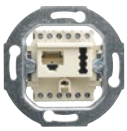
[1] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **1gang** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0218/11-101	2CKA000230A0409	1/10

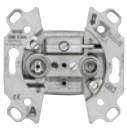
[1] Suitable for cover plate 1803-xxx.

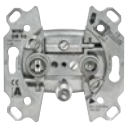
Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For trunk systems, flush-mounted wall boxes and underfloor systems. For wires of AWG 24-22. Without claws. Mounting depth: 31 mm.		
	0218/12-101	2CKA000230A0411	1/10

[1] Suitable for cover plate 1803-02-xxx.

	**Universal data connection box 8(6)/ telephone unit 6F+N - connection box** [1] **2 x 6-pole** with straight outlet, with screw contacts, Universal data-connection boxes: RJ 11/12, ISDN capable Cat. 3 in acc. with IEC 603-7/German Standard DIN EN 60603-7, Telecommunication outlet (telephone unit): for 1 telephone, 1 auxiliary device or 1 data transmission unit, With claw.		
white	**UAE 8(6)TAE 6 F+N**	2CKA000230A0381	10/100

[1] Suitable for cover plate 2539-xxx, 1766-xxx and 1746-2xx-FN.

	**Satellite co-axial outlets 2 connectors/dead-end feeder** Broadband technology 5-2.400 MHz For DVB-T, satellite and broad-band cable systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0230-101	2CKA000230A0250	10/100

	**Satellite co-axial outlets Radio/TV/SAT 3gang dead-end feeder** Broadband technology 47-2.150 MHz. SAT connection designed as screwable F-male plug. with remote feed via F-bush For DVB-T and broadband-cable-systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0232-101-500	2CKA000230A0463	10/100

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Terminating resistor 75 Ohm		
	0239	2CKA000230A0201	10/100
	Mounting plate [1) 2)] **with green insert** For 2 modular jack inserts. For systems: CommScope (AVAYA / AT&T / Lucent Technologies), GigaSPEED, PowerSUM, 360 GS 10E bis MGS 600-BK, M1 BH-xx, MPS 100E-xx. With R&M adapter R310694 suitable for R&M connection modules R305111, R305112, R305113 and R305114. Pitch dimensions: (WxH) approx. 16.9 x 17.9 mm. Without claws.		
	1810	2CKA001753A8048	10/100
	1810-500	2CKA001753A9974	10/100
	Mounting plate [1) 2)] **with red insert** For 2 modular jack inserts. Suitable for Art. Nos. 0210, 0211 and 0219-101. For systems: AMP / tyco Electronics, BTR, EFB, Krone, Panduit, Quante, Radiall, Setec, Dr.-Ing. Sieger, Telena, Thomas & Betts For Telegärtner AMJ/UMJ connection modules/ couplings. For 2 fiber optic modules of the following types: 3M-Volition, Krone, mvk. Pitch dimensions: (WxH) approx. 14.8 x 19.4 mm. Without claws.		
	1812-500	2CKA001753A9972	10/100
	Mounting plate [1) 2)] **with black insert** For MTRJ or 2 modular jack inserts. For systems: Ackermann, AMP / tyco Electronics (Slim Line (SL) -SM 2gang/switches: 110Connect Jacks, Toolless Jacks / Standard 110Connect Jacks), Brand-Rex, CombiNet, EFB Electronic, Telena. For 2 fiber optic modules of the following types: AMP / tyco Electronics MTRJ. Pitch dimensions: (WxH) approx. 14.8 x 20.4 mm. Without claws.		
	1814-500	2CKA001753A9973	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

Product	Article-No.	Order-No.	Pack/Qty
	Mounting plate [1) 2)] **with blue insert** For 2 modular jack inserts. For system: ITT Cannon RJ45 Cat. 5 type 808 RJ45 Mark III. Pitch dimensions: (WxH) approx. 16.0 x 11.0 mm. Without claws.		
	1816	2CKA001710A3100	10/100
	Mounting plate [1) 2)] **with orange base** For 2 modular jack inserts. For system: LexCom 150 and LexCom 250. Pitch dimensions: (WxH) approx. 15.4 x 15.4 mm. Without claws.		
	1819	2CKA001753A8056	10/100
	Mounting plate [1) 2)] **with grey base** For 2 modular jack inserts. For system: Panduit MiniCom (Cu. z. B. TX6 10 Gig Shielded Jack modules and fiber optic modules. Pitch dimensions: (WxH) approx. 15.9 x 18.7 mm. Without claws.		
	1820	2CKA001753A8057	10/100
	Flush-mounted assembly adapter For the accommodation of one or two universal modules 0219. For flush-mounted installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/12	2CKA000230A0395	1/10
	Channel assembly adapter For the accommodation of one or two universal modules 0219. For channel and under-floor installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/13	2CKA000230A0396	1/10

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Universal module, RJ 45, cat. 6a iso, shielded [1] **1gang** For installation in installation adapter 0219/12 or 0219/13. Also suited for mounting into cover plate 2561 and bases 1812, 1866 EB, and 1867 EB. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Cat. 6A according to ISO/IEC 11801: 2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Bend-radius optimised cable feed (30°). Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. For 8-pole plug RJ 45 only. Housing made from diecast zinc. With integrated dust-protection cap (can be removed if necessary). With insulation displacement connection For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems.		
	0219-101	2CKA000230A0413	1/10

[1] With assembly adapters appropriate for telephone unit cover plates 2539-21x and 1766-xxx.

	Modular-Jack insert **6-pole Cat. 3 (AMP-No. 216000-2)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0210	2CKA000225A0078	10

	Modular-Jack insert **8-pole Cat. 3 (AMP-No. 216005-4)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0211	2CKA000225A0086	10

	Built-in jack For potential balancing jack cover plate and installation in cover plates. For devices of 19 mm diameter.		
	0471-0-0037	2CKA000471A0037	10

Product	Article-No.	Order-No.	Pack/Qty
	Potential balancing plug Suitable for plug 2095 UC-212 and built-in jack 0471-0-0037 acc. to German Standard DIN 42801. For potential balancing jack cover plate (connection up to 6 mm² crimped or soldered).		
	0299-0-0032	2CKA000299A0032	10

	Blank plate **with metal mounting plate**		
studio white	**1742-84-500**	2CKA001710A3991	10/100

	Cover plate [1] **with metal mounting plate** As cover for flex outlet, for cords up to 10.3 mm diameter. With strain relief (without terminal block).		
studio white	**1749-84**	2CKA001710A3163	10/100

[1] Cover plate can also be used individually as cover for telephone connector boxes (VDo).

	Cover plate [1] As cover for universal data connection boxes. Art.-No. 0213 (Cat 3/ISDN), 0216-101, 0218/11-101 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. For WLAN access points 8186/31 and 8186/41. Brand-Rex (WAEGV 8 EKR/EK). BTR (universal data connecting unit design and IAE design). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm.		
studio white	**1803-84-500**	2CKA001710A1550	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Cover plate [1] **2gang** As cover for universal data connection boxes. Art. No. 0214, 0215 (Cat 3), 0220/12-507, 0221/12-507, 0218, 0217 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. Brand-Rex (WAEGV 8/8 EKR/EK). AMP (NETCONNECT 5E). BTR (E-DAT C6, E-DAT design, Universal data connecting unit design and IAE design). cti (cti-wire 2.8 Cat.6). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm.		
studio white	**1803-02-84-500**	2CKA001710A1551	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
studio white	**1766-84-500**	2CKA001710A3992	10/100
	Cover plate As cover for telephone connector boxes (VDo). Can be knocked out for single or double connection.		
studio white	**1745-84**	2CKA001710A3173	10
	Cover plate [1) 2)] **as cover for standard Radio/TV/SAT socket outlets** With 2 connectors Acc. to German Standard DIN 45330. Radio/TV/SAT. With M3 fixing screw.		
studio white	**1743-84-500**	2CKA001724A4332	10/100

[1)] Third opening can be knocked out.
[2)] See inserts for satellite coaxial socket outlets.

	Cover plate [1)] **with labelling field** For modular jack with slide entrance. To fit only Art. No. 1810, 1812, 1814, 1816, 1818, 1819 and 1820. Size of labelling field: 60 x 9 mm.		
studio white	**1800-84-500**	2CKA001710A3990	10/100

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Cover plate For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc.		
studio white	**1746/10-84-500**	2CKA001710A3993	10/100
	Intermediate ring For fitting cover plates from the Busch-Duro 2000® SI and Reflex SI range.		
studio white	**1747 SI-84**	2CKA001710A3863	10
	Cover plate **with hinged lid** For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc.		
studio white	**1746-84**	2CKA001710A3167	10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate **with metal mounting plate** For covering universal data communication connectors and circular connectors with screwed plug M 16x0.75 (installable in insert) in accordance with DIN 41524, 41529, 45322, 45327, 45328 and 45329. Knock-out openings 6, 8, 18 mm.		
studio white	**1748-84**	2CKA001710A3656	10
	Cover plate **with metal mounting plate** As cover for BNC and TNC sockets. Knock-out openings 6, 8, 18 mm.		
studio white	**1750-84**	2CKA001710A3166	10
	Equipotential socket outlet **2gang** Without claws. For connecting wires up to 1 x 6 mm² and 4 x 2.5 mm². IEC 60601-1:2005; DIN EN 60601 (VDE 0750-1): July 2007 Connection bolts German Standard DIN 42801.		
studio white	**2095 UC-84**	2CKA002495A0086	10
	Cover plate **with metal mounting plate** With screw-type terminal. Fixed with central locknut. As cover for pilot devices with a diameter of 22.5 mm Without claws.		
studio white	**2533-84**	2CKA001724A4256	10
	Cover plate [1)] **with metal mounting plate** for communication devices. With labelling field 60.2 x 10.2 mm. Without claws.		
studio white	**1758-84**	2CKA001724A2761	10/100

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-DigitalRadio [1) 2) 3) 4) 5)] RDS stereo radio alarm clock for flush-mounted installation. Reception frequency: 87.50 MHz - 108.00 MHz. With display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. For mono/stereo operation. 8 radio stations storable. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated antenna. With additional connection for external antenna. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 34 mm		
	8215 U-500	2CKA008200A0182	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Also combinable with built-in ceiling loudspeaker (8225 EB & 8226 EB) and HiFi built-in ceiling loudspeaker (8226/11 EB).
[4)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[5)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Radio iNet [1) 2) 3) 4)] WLAN Internet radio alarm clock for flush-mounted installation. For the reception of national and international radio stations via Internet. Radio station search possible via various genres. With high resolution graphic display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. Integrated web-server for configuration and control. Remote operation with smartphone via browser surface. UPnP replay function. It is controlled via smartphone. For mono/stereo operation. 8 radio stations storable. With time and date display. With alarm function. With short-time timer. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated WLAN antenna. WLAN standards: IEEE 802.11b / IEEE 802.11g. WLAN safety: WPA / WPA2. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 33 mm APP		
	8216 U-500	2CKA008200A0153	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[4)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

	Loudspeaker insert [1)] **5 cm (2")** For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U. For Busch Bluetooth receiver 8219 U. With broadband characteristics. With flat plug connector. Incl. speaker connection cable. Rated output: 2 W (RMS) Frequency response: 200 - 20,000 Hz Impedance: 4 Ohm Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
	8223 U-500	2CKA008200A0183	1/10

[1)] No claw. Screw-fixing via keyholes.

Busch-axcent®

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Intercom amplifier insert [1) *)] **with display** Busch-AudioWorld® system amplifier. For individual volume control. For language announcements to 15 individual call zones. With additional broadcast function For switching between Busch-AudioWorld® system channel 1 and 2. For switching of the central radio channel. Optional deactivation of announcements (do not disturb). For mono/stereo operation. With noise control function. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With acoustic monitoring function (baby monitor). Permitted speaker impedance: 8 - 16 Ohm Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 36 mm		
anthracite	**8214 U**	2CKA008200A0119	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

	Amplifier insert [1) *)] For individual volume control. With switchover between radio and external music source. For switching of the central radio channel. For mono/stereo operation. With automatic loudness function. Optional automatic switch-off after 30 min. (Sleep function). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
anthracite	**8211 U**	2CKA008200A0010	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

	Audio input [1) *)] For feeding external music sources into the Busch-AudioWorld® public address system. For 1 stereo audio channel For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. MDRC amplifier 8208. Can be combined with Busch-DigitalRadio (8215 U) and Busch-Radio iNet (8216 U). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 34 mm		
anthracite	**8210 U**	2CKA008200A0108	1

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Insert [1)] For charging and supplying mobile terminal devices. With quick charging function for devices compatible with quickcharge. Makes possible fast charging of the mobile terminal device. Rated voltage: 100 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: Apple terminal device Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with USB-C connection Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with quick-charge support and USB-C connection Rated current: 2 A Output voltage: 9 V Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 32 mm		
NEW	Mounting depth: 32 mm		
	6473 U-500	2CKA006400A0039	1/10

[1)] No claw. Screw-fixing via keyholes.

	Busch-powerDock Charging cradle with Apple lightning connection [1)] For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with lightning connection. For iPhone 7 Plus, iPhone 7, iPhone SE, iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5. For iPod touch (6th generation), iPod touch (5th generation), iPod nano (7th generation). Suitable for use with protective covers certified by Apple. Temperature range (Device): 5 °C to 35 °C		
NEW	Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473-500	2CKA006400A0081	1/10

[1)] Not released for use with the iPad.

	Busch-powerDock Charging cradle with USB-C connection For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with USB-C connection. Temperature range (Device): 5 °C to 35 °C		
NEW	Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473/11-500	2CKA006400A0083	1/10

Busch-axcent®

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	HDMI connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link high-definition digital audio and video data from e.g. SAT-receiver, DVD-/Blue-Ray-player to plasma-type, LCD- or-LED-TVs/screens. HDMI-type A, 3D-compatible. Fully HD ready (1920 x 1080 pixel). For 20-wire HDMI-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/31-500**	2CKA000230A0430	1
alpine white	**0261/32-500**	2CKA000230A0431	1
grey	**0261/33-500**	2CKA000230A0432	1

[1] Please follow the recommendations of the cable and device producers for the max. HDMI cable lengths.

	VGA connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link analogue video data between PCs and laptops to monitors or digital projectors etc. VGA-type: D-type, 15-pole. Fully HD ready (1920 x 1080 pixel). For 15-wire VGA-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/21-500**	2CKA000230A0424	1
alpine white	**0261/22-500**	2CKA000230A0425	1
grey	**0261/23-500**	2CKA000230A0426	1

[1] Please follow the recommendations of the cable and device producers for the max. VGA cable lengths.

Product	Article-No.	Order-No.	Pack/Qty
	USB connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link mobile devices like e.g. printer, scanner, USB-sticks or digital cameras etc. USB-type A, USB 2.0 compatible. For 5-wire USB- cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/11-500**	2CKA000230A0418	1
alpine white	**0261/12-500**	2CKA000230A0419	1
grey	**0261/13-500**	2CKA000230A0420	1

[1] Please follow the recommendations of the cable and device producers for the max. USB cable lengths.

	Communication adapter **for BNC-F Duct-jacks** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0262/11-500**	2CKA000230A0436	1
alpine white	**0262/12-500**	2CKA000230A0437	1
grey	**0262/13-500**	2CKA000230A0438	1

	F duct-jack **for communication adapter** For connection of antenna cables e.g.. for TVs with integrated TV-tuner and satellite receiver. With screw-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems.		
metal clad	**0262-500**	2CKA000230A0440	1

	Communication adapter **for Cinch-jacks** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0263/11-500**	2CKA000230A0444	1
alpine white	**0263/12-500**	2CKA000230A0445	1
grey	**0263/13-500**	2CKA000230A0446	1

Busch-axcent®

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked white: audio , channel left. With soldering tag.		
alpine white	**0263/04-500**	2CKA000230A0451	1
	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked black: audio , channel left. With soldering tag.		
black	**0263/05-500**	2CKA000230A0452	1
	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked red: audio , channel left. With soldering tag.		
Red	**0263/06-500**	2CKA000230A0453	1
	Cinch-jacks for communication adapter For connecting analogue video devices, such as DVD players, hard disc recorders, video recorders or receivers. Marked yellow: audio , channel left. With soldering tag.		
yellow	**0263/07-500**	2CKA000230A0454	1
	Communication adapter for Mini-jacks 3,5mm. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0264/11-500**	2CKA000230A0458	1
alpine white	**0264/12-500**	2CKA000230A0459	1
grey	**0264/13-500**	2CKA000230A0460	1
	Mini-jack 3,5 mm for communication adapter For the connection of mobile terminal devices such as MP3 player (stereo), mobile telephone and smartphones. Audio-band 20Hz - 20kHz. With soldering tag.		
chrome gloss	**0264-500**	2CKA000230A0462	1

Product	Article-No.	Order-No.	Pack/Qty
	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
white	**0248/02-101**	2CKA000230A0402	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
alpine white	**0248/04-101-500**	2CKA000230A0464	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
anthracite	**0248/05-101**	2CKA000230A0404	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Cover plate [*] For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. For audio input 8210 U. For loudspeaker insert 8221 U.		
studio white	**8251-84**	2CKA008200A0033	10

[*] Phase-out type

	Cover plate For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U.		
studio white	**8252-84**	2CKA008200A0053	10
	Cover plate For loudspeaker insert 8223 U.		
studio white	**8253-84**	2CKA008200A0081	1/10

Busch-axcent®

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
studio white	**1766-84-500**	2CKA001710A3992	10/100
	Cover plate **with metal mounting plate** With fixing claws. loudspeaker inserts and cover. Conductor cross-sections up to 4 mm² rigid. With screw-type terminals.		
studio white	**1751-84**	2CKA001723A0240	10/100
	Cover plate **with rotary control, with marking** As a cover for volume controllers. Suitable for the "LR 15 mono BJ UP" devices of WHD.		
studio white	**1740 DR/03-84**	2CKA001710A3808	10
	Cover plate For Busch Bluetooth receiver 8219 U.		
studio white	**8255-84**	2CKA008200A0214	1/10
	Cover plate for Busch-powerDock For Busch-powerDock charging cradles.		
NEW			
studio white	**6477-84**	2CKA006400A0059	10

Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact** Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 10 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1094 U-500	2CKA001032A0512	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

	Room thermostat, flush-mounted [1) 2) 3)] **NC contact, slide switch** With built-in slide switch and control lamp for nightly reduction of 4 K. Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 10 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1095 U-500	2CKA001032A0514	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Busch-axcent®

Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact, sliding switch, 24 V** With built-in slide switch and control lamp for nightly reduction of 4 K. Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 24 V~ Rated current: 1 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1096 U	2CKA001032A0485	1
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **1gang 2way** With fixing claws. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 5 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1097 U-500	2CKA001032A0513	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact, actual value indication** With actual value temperature display Automatic controller calibration Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 10 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1094 UTA	2CKA001032A0487	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact, sliding switch, actual value indication** With actual value temperature display Automatic controller calibration Switch contact opens when the set temperature is reached. With built-in slide switch and control lamp for nightly reduction of 4 K. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 10 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1095 UTA	2CKA001032A0488	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Busch-axcent®

Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication, 24 V
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 24 V~
Rated current: 1 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1096 UTA	2CKA001032A0489	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat, e.g., Art. No. 6164/10 .
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, actual value indication
With actual value temperature display
Automatic controller calibration
With fixing claws.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 5 A
EN 60730-2-9, British Standard EN 60669-2-1

	1097 UTA	2CKA001032A0490	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1)]
NC contact, remote sensor
With remote sensor and thermal feedback
For underfloor heating.
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Adjusting range: +10 to +50° C.
Connecting cable: 1mm² to 2.5 mm²
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A, cos ϕ 1
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UF	2CKA001032A0497	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty

Electrothermal Valve Drives with function indicator
For the actuation of heaters and cooling ceilings in connection with conventional room temperature controllers (e.g., 1094 U) or KNX, or free@home heating/valve actuators (e.g., 6164/46, 6254/0.XX)).
With function display (opened or closed).
de-energized when closed
Max. opening/closing time: 3.5 min
For installing, a suitable valve adapter is required.
Power input: 4 mA (approx. 1 W)
Inrush current: < 550 mA (max. 100 ms)
Connecting cable: 1.0 m (pluggable)
Rated voltage: 230 V~
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 54
Dimensions: (L x W x D): 59 mm x 45 mm x 53 mm

	6164/10-102	2CKA006151A0257	1/100

Room thermostat, flush-mounted [1) 2) 3)]
2 NC contacts, heating/cooling
With separate connection (230 V~) for external switchover between heating or cooling.
Switch contact opens when the set temperature is reached.
With fixing claws.
Nominal current: 10 A heating
Nominal current: 5 A cooling
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1099 UHK	2CKA001032A0515	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
2 NC contacts, heating/cooling, sliding switch
With built-in sliding switch for switchover between cooling or heating.
Switch contact opens when the set temperature is reached.
With fixing claws.
Nominal current: 10 A heating
Nominal current: 5 A cooling
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1099 UHKEA	2CKA001032A0516	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Busch-axcent®

Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for room thermostat For room thermostats 1094 U, 1097 U.		
studio white	**1794-84**	2CKA001710A3544	10
	Cover plate for room thermostat With sliding switch for nightly room temperature reduction. to activate nighttime mode and reduction of room temperature by 4K, for thermostats 1095 U, 1096 U and 1095 UF.		
studio white	**1795-84**	2CKA001710A3569	10
	Cover plate for room thermostat For room thermostats 1094 UTA, 1097 UTA.		
studio white	**1794 TA-84**	2CKA001710A3698	10
	Cover plate for room thermostat With sliding switch for nightly room temperature reduction. For room thermostats 1095 UTA, 1096 UTA.		
studio white	**1795 TA-84**	2CKA001710A3725	10
	Cover plate for room thermostat For room temperature controller 1099 UHK.		
studio white	**1795 HK-84**	2CKA001710A4017	10
	Cover plate for room thermostat For room temperature controller 1099 UHKEA. With sliding switch for switchover between cooling or heating.		
studio white	**1795 HKEA-84**	2CKA001710A4049	10

LED light

Product	Article-No.	Order-No.	Pack/Qty
	Info light unit [1) 2)] Size of information field 43 x 43 mm. Long service life of the lighting element (LEDs). Homogeneous backlighting of the information field. Rated voltage: 230 V~		
	2062 U	2CKA001511A0115	1/10

[1)] Use relay inserts when switching through movement sensors or comfort switches.
[2)] For switching the LED flush mounted insert use switches without orientation light only.

	Cover plate [1) 2)] As cover for flush-mounted info light. For insert 2062 U. Size of information field 43 x 43 mm.		
studio white	**1716-84**	2CKA001731A1923	1

[1)] Included with the cover are 46 different text labels and symbols.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Busch-axcent®

WaveLINE control elements

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1] [2] **1-channel** 1gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 1 radio channel can be operated or up to 2 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
studio white	**6731-84-500**	2CKA006730A0038	1/10

[1] Battery included in delivery.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1] [2] **2-channel** 2gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 2 radio channels can be operated or up to 4 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
studio white	**6732-84-500**	2CKA006730A0039	1/10

[1] Battery included in delivery.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1] [2] **4-channel** 4gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 4 radio channels can be operated or up to 8 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
studio white	**6733-84-500**	2CKA006730A0040	1/10

[1] Battery included in delivery.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	WaveLINE LED display [1] For status display of window handle positions: open = red, closed = green, tilted = yellow. Direct onsite operation possible for switching / dimming an electrical device depending on the flush-mounted insert. 4 individual LED display channels. Up to 8 WaveLine transmitters can be taught-in on each LED display channel. Up to 8 WaveLine transmitters can be taught-in on onsite operation. After a power cut all LED-Display channels light in red. The cyclic telegram repeat of the WaveLINE window position sensor 6720-xxx sensor automatically updates the window open state. Status display for depleted WaveLINE transmitter battery. Status display for faulty transmission link and defective WaveLINE transmitter. User-friendly start-up without PC / software. Printed labelling sheet with 8 different inlay sheets. For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-Watchdog 220 WaveLINE 6747 AGM. For Busch-Universal relay switch insert 6404 U. For universal dimmer switch insert 6595 U. Free-field range: approx. 100 m. Send/receive frequency: 868 MHz. Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm		
studio white	**6730-84**	2CKA006730A0017	1

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Busch-axcent®

Busch-Infoline®

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **1gang, with labelling field** With operating knob. For signal/cancel push-button 1520/1 UK. For monitoring unit 1511 U. For Busch-Leakage guard insert 1531 U. With labelling field 61 x 20 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1571 CN-84**	2CKA001582A0346	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

	Cover plate [1) 2)] **2gang, with labelling field** With operating knob. For signal push-button insert 1520/1 UKZ. With labelling field 61 x 20 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1572 CN-84**	2CKA001582A0348	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

	Cover plate [1) 2)] **with red and neutral light panel and labelling field** For Alarm Control Unit insert 1515 U-12. For Busch-Alarm signal insert 1563 U-12. For indication lamp insert 1564 U-1x. With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1573 CN-84**	2CKA001582A0350	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and Busch-axcent®.

	Cover plate [1) 2)] **6gang, illuminable, with labelling field** For signal panel insert 1566 U. With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1575 CN-84**	2CKA001582A0353	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

	Cover plate [1) 2)] **with labelling field** For power supply insert 1518 U. For relay insert 1539 U. For signal generator insert 1561 U-.... With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1576 CN-84**	2CKA001582A0355	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Extension of claws [1)] For the installation of flush-mounted SCHUKO® socket outlets and also switches, push-buttons, etc. and deeply installed flush-mounted boxes.		
	2148	2CKA002148A0120	100

[1)] Not suitable for types 2000/3 US, 2000/6/2 US, 2000/6/6 US-101 and double socket outlets

	Braille symbol self-adhesive (transparent) for cover 2506-xxx		
	light **2144 LI**	2CKA001714A0295	10/1000
	bell **2144 KI**	2CKA001714A0296	10/1000
	key **2144 TR**	2CKA001714A0297	10/1000

	Braille symbol **socket outlet** self-adhesive, transparent for SCHUKO® socket outlets with hinged lid 20 EUK-xxx		
	2144 ST	2CKA001714A0298	10/1000

	DIN A 4 labelling sheet [1)] **plastic foil** Suitable for all to be labeled Busch-Jaeger devices. For laser printer. The text of the foil is printed via the Busch-Jeager labeling service.		
translucent	**1799/02**	2CKA001799A0959	1
transparent	**1799/03**	2CKA001799A0960	1

[1)] 1 piece = 1 sheet.

	RC suppressor For protection against the damage or destruction of electronic devices due to overvoltages. For wiring network-interconnected inductivities (e.g.. relay, protection, fluorescent lamps, transformers, etc.). Eliminates functional disturbances on electronic devices, e.g. automatic circuit reclosure (clocking) of a movement detector. Dimensions: diameter 25 mm, length 35 mm, length of the connecting cable approx. 100 mm. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz		
	6899	2CKA006899A0231	10

Busch-axcent®

Tools

Product	Article-No.	Order-No.	Pack/Qty
	Mounting set Busch-axcent® flat [1) 2) 3) 4)] For flat flush-mounted installation, stonework Suitable for cover frame Busch-axcent® flat. Suitable for Busch-axcent® frames without carrier. Set consists of a flush-mounted box for brickwork 3040. With plastering moulding tool and positioning device. With integrated RFID-chip for easy detection. With vertically adjustable rotary ring. With Torx/slotted screws. With variable basement depth. Mounting boxes are combinable directly. With flex knockouts for cables or pipes. The boxes need to be plastered. Hole size : 82 mm		
	1gang **3048/10**	2CKA001740A0061	1
	2gang **3048/20**	2CKA001740A0062	1
	3gang **3048/30**	2CKA001740A0063	1
	4gang **3048/40**	2CKA001740A0064	1
	5gang **3048/50**	2CKA001740A0065	1

[1)] Not suitable for Busch-axcent® white glass.
[2)] Carrier needs to remove from Busch-axcent® cover frame.
[3)] RFID = Radio Frequency IDentification
[4)] Not suitable for fixing claws.

Product	Article-No.	Order-No.	Pack/Qty
	Mounting set Busch-axcent® flat [1) 2)] For flat flush-mounted installation, hollow wall Suitable for cover frame Busch-axcent® flat. Suitable for Busch-axcent® frames without carrier. For double planking. Set consists of a flush-mounted box for cavity walls 3050. With positioning device and adapter rings. Suitable for drywalls and plasterboards for 9,5 mm, 10 mm and 12,5 mm. With Torx/slotted screws. Mounting boxes are combinable directly. With flex knockouts for cables or pipes. Fast installation via cable strap latches. A 74 mm diameter moulding cutter with countersink is needed. Hole size : 74 mm		
	1gang **3058/10**	2CKA001740A0072	1
	2gang **3058/20**	2CKA001740A0073	1
	3gang **3058/30**	2CKA001740A0074	1
	4gang **3058/40**	2CKA001740A0075	1
	5gang **3058/50**	2CKA001740A0076	1

[1)] Not suitable for Busch-axcent® white glass.
[2)] Carrier needs to remove from Busch-axcent® cover frame.

Product	Article-No.	Order-No.	Pack/Qty
	Mounting set Busch-axcent® flat [1) 2)] For flat flush-mounted installation, concrete construction Suitable for cover frame Busch-axcent® flat. Suitable for Busch-axcent® frames without carrier. Suitable for prefabricated and in-situ concrete directly onto the formwork. Set consists of a flush-mounted box for concrete walls 3060. Delivered with a lid with distance positioning device. Fixing exclusively and directly to formwork by nailing or hot gluing. With Torx/slotted screws. Mounting boxes are combinable directly. With flex knockouts for pipes.		
	1gang **3068/10**	2CKA001740A0083	1
	2gang **3068/20**	2CKA001740A0084	1
	3gang **3068/30**	2CKA001740A0085	1
	4gang **3068/40**	2CKA001740A0086	1
	5gang **3068/50**	2CKA001740A0087	1

[1)] Not suitable for Busch-axcent® white glass.
[2)] Carrier needs to remove from Busch-axcent® cover frame.

Product	Article-No.	Order-No.	Pack/Qty
	RFID-Detector [1)] To recover of RFID-chips. Power supply: 9V alkaline cell (included in delivery).		
	3049	2CKA001740A0070	1

[1)] RFID = Radio Frequency IDentification.

Product	Article-No.	Order-No.	Pack/Qty
	Compensation rings for flush-mounted boxes For additional compensation for too deep mounted flush-mounted boxes. Adjustment height: 2,6 mm		
	3057	2CKA001740A0081	10

Busch-axcent®

Cover frames

Cover frame
1gang frame

Product	Article-No.	Order-No.	Pack/Qty
white glass	**1721-280**	2CKA001754A4437	1
black	**1721-281**	2CKA001754A4409	10
Brown glass	**1721-283**	2CKA001754A4543	1
studio white	**1721-284**	2CKA001754A4331	10
yellow	**1721-285**	2CKA001754A4334	10
green	**1721-286**	2CKA001754A4337	10
Red	**1721-287**	2CKA001754A4340	10
blue	**1721-288**	2CKA001754A4343	10
entrée-grey	**1721-291-500**	2CKA001754A4471	10/100
château-black	**1721-295-500**	2CKA001754A4491	10/100
maison-beige	**1721-299-500**	2CKA001754A4481	10/100

Cover frame
2gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
white glass	**1722-280**	2CKA001754A4438	1
black	**1722-281**	2CKA001754A4410	10
Brown glass	**1722-283**	2CKA001754A4544	1
studio white	**1722-284**	2CKA001754A4332	10
yellow	**1722-285**	2CKA001754A4335	10
green	**1722-286**	2CKA001754A4338	10
Red	**1722-287**	2CKA001754A4341	10
blue	**1722-288**	2CKA001754A4344	10
entrée-grey	**1722-291-500**	2CKA001754A4472	10/100
château-black	**1722-295-500**	2CKA001754A4492	10/100
maison-beige	**1722-299-500**	2CKA001754A4482	10/100

Cover frame
3gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
white glass	**1723-280**	2CKA001754A4439	1
black	**1723-281**	2CKA001754A4411	10
Brown glass	**1723-283**	2CKA001754A4545	1
studio white	**1723-284**	2CKA001754A4333	10
yellow	**1723-285**	2CKA001754A4336	10
green	**1723-286**	2CKA001754A4339	10
Red	**1723-287**	2CKA001754A4342	10
blue	**1723-288**	2CKA001754A4345	10
entrée-grey	**1723-291-500**	2CKA001754A4473	10
château-black	**1723-295-500**	2CKA001754A4493	10
maison-beige	**1723-299-500**	2CKA001754A4483	10

Cover frame
4gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
white glass	**1724-280**	2CKA001754A4440	1
black	**1724-281**	2CKA001754A4412	1
Brown glass	**1724-283**	2CKA001754A4546	1
studio white	**1724-284**	2CKA001754A4346	1
yellow	**1724-285**	2CKA001754A4348	1
green	**1724-286**	2CKA001754A4350	1
Red	**1724-287**	2CKA001754A4352	1
blue	**1724-288**	2CKA001754A4354	1
entrée-grey	**1724-291-500**	2CKA001754A4474	1
château-black	**1724-295-500**	2CKA001754A4494	1
maison-beige	**1724-299-500**	2CKA001754A4484	1

Cover frame
5gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
white glass	**1725-280**	2CKA001754A4441	1
black	**1725-281**	2CKA001754A4413	1
Brown glass	**1725-283**	2CKA001754A4547	1
studio white	**1725-284**	2CKA001754A4347	1
yellow	**1725-285**	2CKA001754A4349	1
green	**1725-286**	2CKA001754A4351	1
Red	**1725-287**	2CKA001754A4353	1
blue	**1725-288**	2CKA001754A4355	1
entrée-grey	**1725-291-500**	2CKA001754A4475	1
château-black	**1725-295-500**	2CKA001754A4495	1
maison-beige	**1725-299-500**	2CKA001754A4485	1

Busch-axcent®
Cover frames

Product	Article-No.	Order-No.	Pack/Qty
	Cover frame Busch-axcent® flat 1gang frame For flat flush mounting. Only suitable with Busch-axcent® flat mounting set. Without carrier.		
black	**1721-281/11**	2CKA001753A4126	10
studio white	**1721-284/11**	2CKA001753A4121	10
	Cover frame Busch-axcent® flat 2gang frame For flat flush mounting. Only suitable with Busch-axcent® flat mounting set. For vertical or horizontal installation.		
black	**1722-281/11**	2CKA001753A4127	10
studio white	**1722-284/11**	2CKA001753A4122	10
	Cover frame Busch-axcent® flat 3gang frame For flat flush mounting. Only suitable with Busch-axcent® flat mounting set. For vertical or horizontal installation.		
black	**1723-281/11**	2CKA001753A4128	10
studio white	**1723-284/11**	2CKA001753A4123	10
	Cover frame Busch-axcent® flat 4gang frame For flat flush mounting. Only suitable with Busch-axcent® flat mounting set. For vertical or horizontal installation.		
black	**1724-281/11**	2CKA001753A4129	1
studio white	**1724-284/11**	2CKA001753A4124	1
	Cover frame Busch-axcent® flat 5gang frame For flat flush mounting. Only suitable with Busch-axcent® flat mounting set. For vertical or horizontal installation.		
black	**1725-281/11**	2CKA001753A4130	1
studio white	**1725-284/11**	2CKA001753A4125	1

future® linear
Embrace the unknown.

Timeless design combined with functionality, make for the perfect wiring accessory. Clear straight lines and harmonious colours which will last forever. Light switch with a soft and velvety touch fascinates the senses. Perfectly matches a modern style of living. Endless delight.

01 anthracite
02 ivory white
03 aluminiumsilver
04 studio white
05 black matt*
06 white matt*

Materials
Cover: thermoplastic cover (PC), impact-proof and fracture-resistant, UV-resistant, free of PVC and halogen.

* Softtouch: stimulating colours with pleasant haptics and a hard-wearing surface.

future® linear

Selected functions.

01

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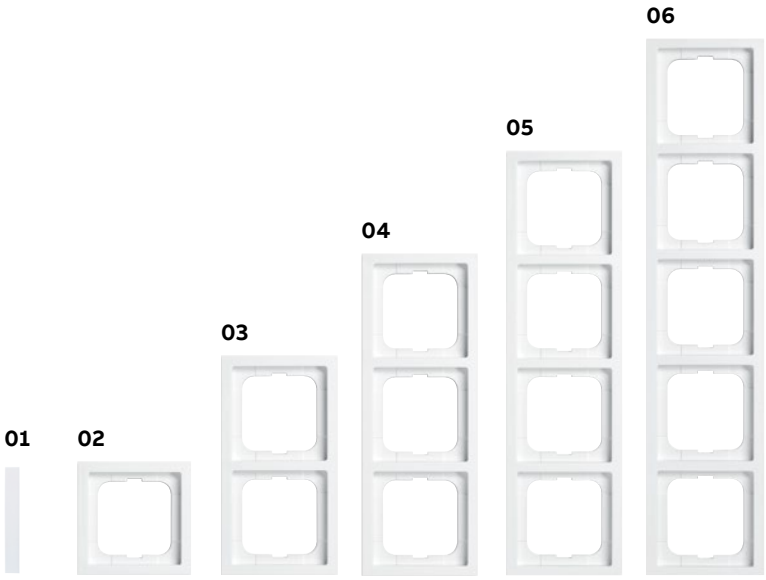
01 Rocker switch 1gang
02 Rocker switch 2gang
03 Busch Universal Rotary Dimmer
04 Touch dimmer
05 Busch-Comfort switch
06 Busch-steplight®
07 Busch-Protector® SCHUKO® socket outlet with overvoltage protection
08 SCHUKO® USB socket outlet
09 Socket outlet with earthing pin
10 Switched socket outlet BS standard
11 Blind switch with rotary knob
12 Busch-Blind control switch with semi-cylindrical lock
13 Busch-Blind comfort switch
14 Comfort timer
15 Room thermostat with display
16 Busch-Infoline® alarm insert
17 Busch-AudioWorld® Busch-Radio iNet
18 Antenna socket for radio/TV/satellite
19 Universal data connection box
20 Stereo loudspeaker connecting box
21 KNX sensor, for more KNX products see part 12 of the catalogue - Intelligent Building Solutions



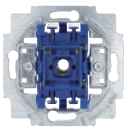
1 to 5gang cover frame
for horizontal and vertical installation.
01 Side view, 11 mm x 80 mm
02 80 mm x 80 mm
03 80 mm x 151 mm
04 80 mm x 222 mm
05 80 mm x 293 mm
06 80 mm x 364 mm

Cover frames for both horizontal and vertical installation in 1-4gang, are also avaiable with labelling field.
Colour: studio white

For more information about light switch ranges visit ABB global web sites.

future® linear

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism** [1] Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way **2000/6 US-500**	2CKA001012A2198	10/100
	2gang 1way **2000/5 US-500**	2CKA001012A1150	10/100
	DP, 1gang 2way **2000/6/2 US**	2CKA001012A0954	10
	1gang intermediate **2000/7 US-500**	2CKA001012A2199	10/100
	DP, 1gang 1way **2000/2 US-500**	2CKA001012A2196	10/100
	SP, 1gang 1way switch **2000/1 US-500**	2CKA001012A2059	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker Switch Mechanism [1] **2gang 2way** With screwless terminals. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	2000/6/6US-101-500	2CKA001011A0928	10/100

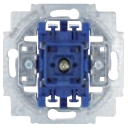
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker Switch Mechanism [1] [2] **DP, 1gang 1way** For switching high loads. Rated voltage: 250 V~ Rated current: 16 AX IEC 60669-1		
	2000/2 US-101-500	2CKA001012A2193	10/100

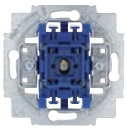
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Also for switching SCHUKO® socket outlets.

	Rocker Switch Mechanism [1] [2] **3-pole, 1gang 1way switch** Rated voltage: 400 V~ Rated current: 16 AX IEC 60669-1		
	2000/3 US	2CKA001011A0816	10

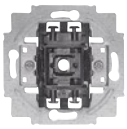
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] With screw-type terminals. Non-illuminable.

	**Rocker Switch Mechanism** [1] With neon lamp 8338-1. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way [2] **2000/6 USGL-500**	2CKA001012A2194	10/100
	2gang 1way **2000/5 USGL**	2CKA001012A1135	10

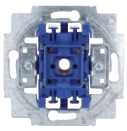
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker Switch Mechanism, control** [1] [2] [3] With neon lamp. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
	1gang 2way with N-terminal **2000/6 USK-500**	2CKA001022A0659	10/100
	DP, 1gang 1way **2000/2 UK**	2CKA001022A0656	10

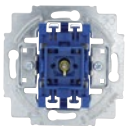
[1] With 1 mA neon lamp.
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3] Illuminable by using lamps 8360, 8362, 8363, 8365, 8366, and 8367 and LED inserts.

	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US	2CKA001413A0475	10/100
	2020 US-500	2CKA001413A0574	10/100

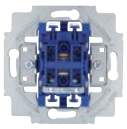
[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] **SP, with normally open contact (operating current)** With 2 independent signalling contacts. Rated voltage: 250 V~ Inputs: 1 Outputs: 1 Rated current: 10 A IEC 60669-1		
	2020 US-201	2CKA001413A0483	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] [2] [3] **SP, with normally open contact (operating current)** With illumination. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 USGL-500	2CKA001413A1106	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Replacement lamps 8360, 8362, and 8363 and LED inserts.
[3] For relay and touch dimmer applications.

	**Push-switch mechanism** [1] With one input terminal and 2 actuating covers. Rated voltage: 250 V~ Inputs: 1 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-500	2CKA001413A1105	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

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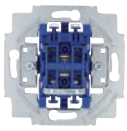
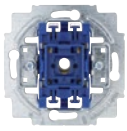
Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Push-switch mechanism** [1] **2 x SP, 2 normally open contact** 2 normally open contacts. Rated voltage: 250 V~ Inputs: 2 Outputs: 2x Normally open contact Rated current: 10 A IEC 60669-1		
	2020 US-205-101	2CKA001413A0509	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	**Push-switch mechanism** [1] **SP, 1gang 2way** Can be wired for normally open contacts (stand-by current) or normally closed contacts (operating current). With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
	2020 US-206-500	2CKA001413A1104	10/100

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker For flush-mounted switch 1g1w, 1g2w, intermediate, push switch.		
anthracite	**11786-81-500**	2CKA001751A3079	10/100
ivory white	**1786-82-500**	2CKA001751A3083	10/100
aluminium silver [1]	**1786-83-500**	2CKA001751A3075	10/100
studio white	**1786-84-500**	2CKA001751A3074	10/100
studio white, matt [1]	**1786-884-500**	2CKA001751A3089	10/100
black matt [1]	**1786-885-500**	2CKA001751A3094	10/100

[1] Surface painted.

	Rocker For flush-mounted switch 2g 1w, 2g push switch.		
anthracite	**785-81**	2CKA001751A2930	10
ivory white	**1785-82**	2CKA001751A2744	10/100
aluminium silver [1]	**1785-83-500**	2CKA001751A3092	10/100
studio white	**1785-84-500**	2CKA001751A3076	10/100
studio white, matt [1]	**1785-884**	2CKA001751A3024	10/100
black matt [1]	**1785-885**	2CKA001751A3038	10/100

[1] Surface painted.

	Rocker **with small red spherical cap** As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way.		
anthracite	**1789-81**	2CKA001751A2928	10
ivory white	**1789-82**	2CKA001751A2813	10
aluminium silver [1]	**1789-83**	2CKA001751A2945	10/100
studio white	**1789-84-500**	2CKA001751A3091	10/100
studio white, matt [1]	**1789-884**	2CKA001751A3033	10
black matt [1]	**1789-885**	2CKA001751A3047	10

[1] Surface painted.

	Switch rocker with marking **with small transparent lens** With symbol. As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way.		
anthracite	**1789 LI-81**	2CKA001751A2931	10
ivory white	**1789 LI-82**	2CKA001751A2745	10
aluminium silver [1]	**1789 LI-83**	2CKA001751A2951	10
studio white 1789	**LI-84-500**	2CKA001751A3084	10/100
studio white, matt [1]	**1789 LI-884**	2CKA001751A3031	10
black matt [1]	**1789 LI-885**	2CKA001751A3045	10

[1] Surface painted.

	Switch rocker with marking **with small transparent lens** With key symbol. For flush-mounted push switch.		
anthracite	**1789 TR-81**	2CKA001751A2933	10
ivory white	**1789 TR-82**	2CKA001751A2747	10
aluminium silver [1]	**1789 TR-83**	2CKA001751A2953	10
studio white	**1789 TR-84**	2CKA001751A2755	10
studio white, matt [1]	**1789 TR-884**	2CKA001751A3032	10
black matt [1]	**1789 TR-885**	2CKA001751A3046	10

[1] Surface painted.

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Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking with small transparent lens With bell symbol. For flush-mounted push switch.		
anthracite	**1789 KI-81**	2CKA001751A2932	10
ivory white	**1789 KI-82**	2CKA001751A2746	10
aluminium silver [1]	**1789 KI-83**	2CKA001751A2952	10
studio white	**1789 KI-84**	2CKA001751A2754	10
studio white, matt [1]	**1789 KI-884**	2CKA001751A3030	10
black matt [1]	**1789 KI-885**	2CKA001751A3044	10

[1] Surface painted.

	Rocker [1] [2] **with labelling field** With pilot lamp for uniform illumination of the labelling field. For flush-mounted switch 1g1w, 1g2w, intermediate, push switch. Size of labelling field: 59.7 x 11.7 mm.		
anthracite	**1764 NLI-81**	2CKA001731A1552	10
ivory white	**1764 NLI-82**	2CKA001731A1876	10
aluminium silver [3]	**1764 NLI-83**	2CKA001731A1948	10
studio white	**1764 NLI-84**	2CKA001731A1877	10/100
studio white, matt [3]	**1764 NLI-884**	2CKA001731A1985	10
black matt [3]	**1764 NLI-885**	2CKA001731A1982	10
red RAL 3003	**1764 NLI-12-82**	2CKA001731A1977	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Illumination using neon lamp 8353 or incandescent lamp 8344-1 and LED inserts.
[3] Surface painted.

	Switch rocker with marking with small red spherical cap With imprint "0" and "I". As cover for 2-pole or 3-pole flush-mounted on-off switch and 2-pole control on-off switch.		
anthracite	**1788-81**	2CKA001751A2927	10
ivory white	**1788-82**	2CKA001751A2742	10
aluminium silver [1]	**1788-83**	2CKA001751A2954	10
studio white	**1788-84**	2CKA001751A2750	10/100
studio white, matt [1]	**1788-884**	2CKA001751A3028	10
black matt [1]	**1788-885**	2CKA001751A3042	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Switch rocker with marking with small red spherical cap With marking "Heizung". As cover for flush-mounted 1gang 1way, 1gang 2way switch, intermediate switch, push-button and control switch 1gang 2way. As cover for 2-pole or 3-pole flush-mounted on-off switch and 2-pole control on-off switch.		
anthracite	**1789 H-81**	2CKA001751A2929	10
ivory white	**1789 H-82**	2CKA001751A2743	10
aluminium silver [1]	**1789 H-83**	2CKA001751A2955	10
studio white	**1789 H-84**	2CKA001751A2751	10
studio white, matt [1]	**1789 H-884**	2CKA001751A3029	10
black matt [1]	**1789 H-885**	2CKA001751A3043	10

[1] Surface painted.

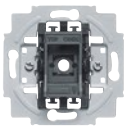
	Switch rocker with marking For flush-mounted switch 1g1w, 1g2w, intermediate, push switch. DO NOT DISTURB		
ivory white	**1786/11-82**	2CKA001751A2997	10
aluminium silver [1]	**1786/11-83**	2CKA001751A3001	10
studio white	**1786/11-84**	2CKA001751A2998	10
studio white, matt [1]	**1786/11-884**	2CKA001751A3026	10
black matt [1]	**1786/11-885**	2CKA001751A3040	10

[1] Surface painted.

	Switch rocker with marking For flush-mounted switch 2g 1w, 2g push switch. DO NOT DISTURB MAKE UP ROOM		
ivory white	**1785/11-82**	2CKA001751A2991	10
aluminium silver [1]	**1785/11-83**	2CKA001751A2995	10
studio white	**1785/11-84**	2CKA001751A2992	10
studio white, matt [1]	**1785/11-884**	2CKA001751A3023	10
black matt [1]	**1785/11-885**	2CKA001751A3037	10

[1] Surface painted.

future® linear
Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	**Card switch 10 A** [1] **SP, with normally open contact (operating current)** Illuminable. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	2025 U	2CKA001012A1713	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
delivery form:	Adapter plate APBS to be ordered separate.		

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Cover plate For card switch. For insert 2025 U. Suitable for cards sized 54 x 86 mm. The inner part of the cover plate is made of light-conducting plastic, so that the card slot is illuminated.		
anthracite	**1792-81**	2CKA001710A3639	10
ivory white	**1792-82**	2CKA001710A3640	10
aluminium silver [1]	**1792-83**	2CKA001710A3670	10
studio white	**1792-84**	2CKA001710A3641	10
studio white, matt [1]	**1792-884**	2CKA001710A3928	10
black matt [1]	**1792-885**	2CKA001710A3905	10

[1] Surface painted.

	Pull switch [1] **SP, with normally open contact (operating current)** With 2-metre pull cord, red handle, and red neon indicator. Rated voltage: 250 V~ Rated current: 10 A		
	2020/01 US	2CKA001413A1077	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073..

	Pull switch [1] **SP, break contact** With 2-metre pull cord, red handle, and red neon indicator. Rated voltage: 250 V~ Rated current: 10 A		
	2020/10 US	2CKA001413A1076	10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker **open for red pull switch neon indicator** For pull switch 2020/xx US.		
anthracite	**1720-81**	2CKA001731A1914	10
ivory white	**1720-82**	2CKA001731A1915	10
aluminium silver [1]	**1720-83**	2CKA001731A1949	10
studio white	**1720-84**	2CKA001731A1916	10
studio white, matt [1]	**1720-884**	2CKA001731A1979	10
black matt [1]	**1720-885**	2CKA001731A1981	10

[1] Surface painted.

	Three-step rotary switch [1] **SP, with zero position** With zero position. Rated voltage: 250 V~ Rated current: 16 A		
	2710 U	2CKA001101A0918	1/10

[1] Install only in conjunction with wall boxes ø 60 mm.

	Three-step rotary switch [1] **SP, without zero position** Without zero position. Rated voltage: 250 V~ Rated current: 16 A		
	2710/1 U	2CKA001101A0919	1/10

[1] Install only in conjunction with wall boxes ø 60 mm.

	Cover plate **with rotary control, with marking** As cover for flush mounted three-step rotary switch. With zero position. For insert 2710 U.		
ivory white	**2542 DR/01-82**	2CKA001710A3645	10
aluminium silver [1]	**2542 DR/01-83**	2CKA001710A3671	10
studio white	**2542 DR/01-84**	2CKA001710A3646	10
studio white, matt [1]	**2542 DR/01-884**	2CKA001710A3890	10
black matt [1]	**2542 DR/01-885**	2CKA001710A3913	10

[1] Surface painted.

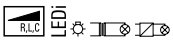
future® linear
Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate with rotary control, with marking As cover for flush mounted three-step rotary switch. Without zero position. For insert 2710/1 U.		
anthracite	**2542 DR/02-81**	2CKA001710A3649	10
ivory white	**2542 DR/02-82**	2CKA001710A3650	10
aluminium silver [1]	**2542 DR/02-83**	2CKA001710A3672	10
studio white	**2542 DR/02-84**	2CKA001710A3651	10
studio white, matt [1]	**2542 DR/02-884**	2CKA001710A3891	10
black matt [1]	**2542 DR/02-885**	2CKA001710A3914	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty

future® linear
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6) 7)] **Flush-mounted, LED, 2-100 W** With rotary control, two-way switch and soft-catch. 2-wire connection (neutral conductor not required) Optimised for dimming of retrofit LED lamps (LEDi). For dimmable Retrofit-LEDs (LEDi). For dimmable Retrofit-LEDs (LEDi) with conventional or electronic transformers. For incandescent lamps, 230 V tungsten halogen lamps, low-voltage halogen lamps with conventional or electronic transformers and dimmable energy-saving halogen lamps. Mix operaton of LEDi with conventional loads possible. Via mode switch adjustable between leading edge control and trailing edge control. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, + 10% / - 10% Rated frequency: 50 Hz/60 Hz Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 250 W/VA (non-LED loads). Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 		
	6523 U-102-500	2CKA006512A0335	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Also applicable for 1gang 2way installations.
[5)] Provided with terminal for net disconnection devices.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[7)] Recommendation: Please use loads and types of one producer.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3) 4) 5) 6)] **Flush-mounted, LED, 2-100 W** Touch dimmer. 2-wire connection (neutral conductor not required) Neutral conductor optionally connectable (recommended for the connection of low loads < 10 W/VA). Optimised for dimming of retrofit LED lamps (LEDi). For incandescent lamps, 230V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers and dimmable halogen energy-saving lamps. Mix operaton of LEDi with conventional loads possible. With adjustable minimum brightness. The minimum brightness for the leading edge control can be adjusted using the potentiometer. The potentiometer at the left limit stop corresponds with the trailing edge control mode. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. With light-level memory and minimum brightness memory. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Without control cover. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 200 W/VA (non-LED loads). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 		
	6526 U-500	2CKA006512A0323	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Recommendation: Please use loads and types of one producer.
[6)] In connection with 6810-21x-101 and 6800-xx-104 (M) only suitable for switching retrofit LEDs (for 2-conductor connection).

	Busch-rotary dimmer [1) 2) 3) 4)] **flush mounted, R, 60-600 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps and 230 V tungsten halogen lamps. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 600 W IEC 60669-2-1, British Standard EN 60669-2-1 		
	2250 U-500	2CKA006515A0848	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] Also applicable for 1gang 2way installations.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Provided with terminal for net disconnection devices.

future® linear
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5)] **flush mounted, RL, 20-500 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 20 - 500 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	2247 U-500	2CKA006512A0302	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **UP, RL, 200-700 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. Short-circuit-proof, overload-protected. With adjustable minimum brightness. Without cover plate. Without claws. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 200 - 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6520 U-500	2CKA006520A0227	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[6)] Should be mounted in a seperate wallbox.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-2gang switch/rotary dimmer [1) 2) 3)] **flush mounted, RL, 60-400 W** 1 channel designed as dimmer. 1 channel designed as switch contact (1gang 2way contact element) with leading edge control For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. With adjustable minimum brightness. Without cover plate. Rated current 6A (changeover contact switch output). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 400 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6517 U-101-500	2CKA006517A0018	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Can be used to replace a 2gang 1way switch.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **flush mounted, RC, 40-420 W** With rotary control, soft-catch and with trailing edge control. For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers. Low-noise, short-circuit-proof, overload-protected. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 40 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6513 U-102	2CKA006513A0568	1/10
	6513 U-102-500	2CKA006513A0586	1/10

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6)] **flush mounted, RC, 40-550 W** With rotary control, soft-catch and with trailing edge control. For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers. Low-noise, short-circuit-proof, overload-protected. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 40 - 550 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6519 U	2CKA006519A0011	1

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

future® linear
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5)] **flush mounted, RLC, 60-420 W** with soft-catch With intelligence for universal operation. For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Short-circuit-proof, overload-protected. Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible. Operation via rotary-type remote control 6592 U possible, Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 60 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6591 U-101-500	2CKA006513A0588	1/10

[1)] Illuminable with neon lamp 3855. Neon lamp included in delivery with cover plate.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In the case of conventional transformers, take ~20% transformer loss into account.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Cannot be combined with a 2way switch.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer, extension [1) 2)] **flush mounted** for connection to 6591 U-101, To be used with Busch-Dimmer®, MDRC 6583. with soft-catch A maximum of 5 multi-way extensions can be connected to a 6591U-101, Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz		
	6592 U-500	2CKA006513A0590	1

[1)] Control elements 2115-xxx and 6540-xxx.
[2)] Required for illuminating the N-connection control element.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4)] **flush mounted, 1-10V** With rotary control. For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For LED control via control gears Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	2112 U-101-500	2CKA006599A2873	1/10

[1)] Non-illuminable.
[2)] Use cover plates 2115 J-.../2115-.../6540-... .
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Making-current limiters have to be provided in case of too high making currents.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1)] **flush mounted, DALI** For DALI broadcast service (via central telegram). For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With rotary control and ON/OFF push operation. Fool proved. Brightness power-on level and backround brightness level adjustable, buffered. With integrated LED illumination for orientation. Color of orientation light adjustable (18 presets and OFF). Up to 5 potentiometers are connectable in parallel. Max. current consumption: 15 mA. Not suitable for combining with other DALI sensors or central units of other manufacturers. An additional DALI power supply is needed, e.g. by Tridonic, Philips, Helvar or 2117/11 U. Max. DALI-cable length: 300 m (1,5 - 2,5 mm²). Without cover plate. Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C		
	2117 U-500	2CKA006599A2987	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1)] **flush mounted, DALI, with internal power supply** For DALI broadcast service (via central telegram). With integrated DALI power adaptor. For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With rotary control and ON/OFF push operation. With electronic short-circuit protection. With electronic overload protection. Brightness power-on level and backround brightness level adjustable, buffered. With integrated LED illumination for orientation. Color of orientation light adjustable (18 presets and OFF). Up to 5 potentiometers are connectable in parallel. Up to 3 potentiometers are connectable in parallel in active mode. Not suitable for combining with other DALI sensors or central units of other manufacturers. DALI-voltage: 15,5 V= Rated current: max. 75 mA Power consumption: < 2,5 W Number of DALI-units: 37 in case of one active power-potentiometer in case of three active power-potentiometer in parallel connection: 111 Active mode: the potentiometer is supporting the necessary control circuit for other DALI-devices. Passive mode: the potentiometer is suitable as additional operation point. Max. DALI-cable length: 300 m (1,5 - 2,5 mm²). Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C		
	2117/11 U-500	2CKA006599A2988	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

future® linear
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2)] **flush mounted, RL, 25-500 W** With light-level memory and leading edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. Compatible with control covers 6543-xxx-10x. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Parallel operation of several transformers and/or incandescents lamps possible. Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 25 - 500 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6560 U-101-500	2CKA006560A1207	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch touch-dimmer range [1) 2) 3) 4)] **flush mounted, RC, 45-315 W** For switching and dimming 2 independent devices. With trailing edge control. 2gang 1way For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with electronic transformers. Compatible with control covers 6545-xxx. Without cover, without cover plate. Outputs: 2 independent dimmer channels. Rated power: 40-315 W/VA per channel. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz IEC 60669-2-1, British Standard EN 60669-2-1		
	6565 U-500	2CKA006565A0057	1/10

[1)] Not suitable with conventional transformers.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Does not provide an extension input.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3) 4)] **flush mounted, RLC, 60-420 W** With light-level memory and intelligence for universal operation. Selectable Soft-ON/OFF function and memory function. Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible. For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Short-circuit-proof, overload-protected. With touch control. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Without control cover. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6593 U-500	2CKA006590A0171	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In conjunction with 6800-xxx-104 (M) a Soft Off can be adjusted.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Dimmer®, capacity booster [1)] **flush mounted, RLC, 200-315 W** The control is effected by a Busch-Universal master dimmer 6593 U or Busch-Universal rotary dimmer 6591U-101 For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Can only be installed in conjunction with a cover plate 2114-xxx and 6541-xxx. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 200 - 315 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6594 U-500	2CKA006590A0172	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

future® linear
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3)] **flush mounted, 1-10V** 3 wire connection (neutral conductor required). For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). For LED control via control gears Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6550 U-101-500	2CKA006550A0042	1

[1)] Non-illuminable.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3)] With integrated making-current limiter.

	Cover plate [1)] **with rotary knob, with indication lamp** Elevated knob. For Busch-Dimmer®. For inserts 2112 U-101/2116(/11) U/ 2117(/11) U/2247 U/2250 U/6513 U-102/6517 U-10x/6519 U/6520 U/6523 U(10x) /6591 U-10x and 6592 U.		
anthracite	**6540-81-102**	2CKA006599A2950	10
ivory white	**6540-82-102**	2CKA006599A2951	10/100
aluminium silver [2)]	**6540-83-102**	2CKA006599A2952	10/100
studio white	**6540-84-102-500**	2CKA006599A3009	10/100
studio white, matt [2)]	**6540-884-102**	2CKA006599A2961	10/100
black matt [2)]	**6540-885-102**	2CKA006599A2966	10/100

[1)] Replacement neon lamp, Art. No. 3855.
[1)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Control element [1) 2) 3)] **with neon lamp** Can be combined with LED dimmer 6524 U, and 6526 U, Busch-Universal touch-type controller 6550 U-10x, Busch-Memory touch dimmer 6560 U-101, Busch-Universal-Dimmer® 6593 U, Busch-Universal relay insert 6401 U-10x, Busch-Universal 2gang insert 6402 U.		
anthracite	**6543-81-101**	2CKA006599A2881	1/10
ivory white	**6543-82-101**	2CKA006599A2831	1/10
aluminium silver [4)]	**6543-83-101**	2CKA006599A2887	1/10
studio white	**6543-84-101-500**	2CKA006599A3010	1/10
studio white, matt [4)]	**6543-884-101**	2CKA006599A2963	1/10
black matt [4)]	**6543-885-101**	2CKA006599A2968	1/10

[1)] Compatible with previous type 6543-xxx.
[2)] Touch-type Controller 6550 U-xxx non-illuminable.
[3)] Replacement neon lamp 3857.
[4)] Surface painted.

	Control element [1)] **with neon lamp** Combinable with Busch-Memory 2gang dimmer 6565 U.		
anthracite	**6545-81**	2CKA006599A2906	1/10
ivory white	**6545-82**	2CKA006599A2907	1/10
aluminium silver [2)]	**6545-83**	2CKA006599A2914	1/10
studio white	**6545-84**	2CKA006599A2908	1/10
studio white, matt [2)]	**6545-884**	2CKA006599A2964	1/10
black matt [2)]	**6545-885**	2CKA006599A2969	1/10

[1)] Replacement neon lamp 3857.
[2)] Surface painted.

	Cover plate **for cooling element** For Busch-Universal master dimmer power module 6594 U. For room temperature controller object range 6108/0x and base for blind cover 6930/01.		
anthracite	**6541-81**	2CKA006599A2882	10
ivory white	**6541-82**	2CKA006599A2832	10
aluminium silver [1)]	**6541-83**	2CKA006599A2885	10
studio white	**6541-84**	2CKA006599A2835	10
studio white, matt [1)]	**6541-884**	2CKA006599A2962	10
black matt [1)]	**6541-885**	2CKA006599A2967	10

[1)] Surface painted.

future® linear
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	IR control element [1] **with marking, illuminated** For LED dimmer insert 6524 U and 6526 U. For Busch-Universal master dimmer insert 6593 U. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal 2gang 1way insert 6402 U. for Busch-Universal touch-type controller 6550 U-101 Manual operation on-site and remote control via IR remote control (6010-25) or wall-mounted transmitter (6020-xx/6021-xx) possible.		
anthracite	**6066-81**	2CKA006020A1379	1/10
ivory white	**6066-82**	2CKA006020A1332	1/10
aluminium silver [2]	**6066-83**	2CKA006020A1383	1/10
studio white	**6066-84**	2CKA006020A1334	1/10
studio white, matt [2]	**6066-884**	2CKA006020A1397	1/10
black matt [2]	**6066-885**	2CKA006020A1399	1/10

[1] Touch-type Controller 6550 U-101 non-illuminable.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	IR control element with marking, illuminated For Busch-Universal relay switch insert 6401 U-10x and Busch-Universal 2gang 1way insert 6402 U. Manual operation on-site and remote control via IR remote control (6010-25) or wall-mounted transmitter (6020-xx/6021-xx) possible.		
anthracite	**6067-81**	2CKA006020A1380	1/10
ivory white	**6067-82**	2CKA006020A1333	1
aluminium silver [1]	**6067-83**	2CKA006020A1384	1/10
studio white	**6067-84**	2CKA006020A1335	1
studio white, matt [1]	**6067-884**	2CKA006020A1398	1/10
black matt [1]	**6067-885**	2CKA006020A1400	1/10

[1] Surface painted.

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch 2-wire insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 40 - 300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6815 U	2CKA006800A2270	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Output cannot be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch relay mechanism [1) 2) 3)] 3 wire connection (neutral conductor required). For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer. Rated power: 2300 W/VA Suitable for: 230 V halogen lamps Rated power: 1200 W Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.5 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6816 U-500	2CKA006800A2621	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Output can be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal relay switch insert 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog 180 FP sensor for All Weather 44 6800-3x-102C. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For comfort timer control element 6455-101-500. For Busch-Remote control IR control cover 6067-xxx-10x. For control cover with control lamp 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): -25 °C to 55 °C British Standard EN 60669-2-1		
	6401 U-102-500	2CKA006401A0049	1/10
	Busch-Universal 2gang 1way insert 3 wire connection (neutral conductor required). For the serial switch operating mode: 2 separate outputs, 2 separate extension inputs. For operation mode timer: output 1 (eg lighting), output 2: ON/Off delay in dependence of output 1 (eg fan control). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For control cover 6430-xxx-10x and 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6402 U-500	2CKA006401A0051	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	neon lamp 3855, one neon lamp is supplied together with control cover plates 6540-2x.		

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog relay mechanism 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated power: 700 W/VA Temperature range (Device): 0 °C to 55 °C British Standard EN 60669-2-1		
	6812 U-101-500	2CKA006800A2160	1/10
	Busch-Watchdog MOS-Fet Insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 60 - 420 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6804 U-101-500	2CKA006800A2219	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Requires an NIS international socket, E-No. 372507676.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog extension insert [1)] 3 wire connection (neutral conductor required). For extending Busch-Watchdog 180 flush-mounted and Busch-Watchdog Presence tech installations. For combination with relay insert 6401 U-102 and 6402 U. For combination with MOS-Fet insert 6804 U-101. For combination with Dimmer insert 6593 U and 6550 U-101. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Control/Signal outputs: 1, electronic output, potential-bound Temperature range (Device): 0 °C to 35 °C		
	6805 U-500	2CKA006800A2161	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Not combinable with relay switch insert 6812 U-101.

	Busch-Watchdog 180 flush-mounted comfort sensor II [1)] **with select-lens** For automatic switching of devices dependent on motion and brightness. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
anthracite	**6800-81-104**	2CKA006800A2268	1
ivory white	**6800-82-104**	2CKA006800A2099	1/10
aluminium silver [2)]	**6800-83-104**	2CKA006800A2325	1
studio white	**6800-84-104**	2CKA006800A2101	1/10
studio white, matt [2)]	**6800-884-104**	2CKA006800A2497	1
black matt [2)]	**6800-885-104**	2CKA006800A2506	1

[1)] Please order the respective flush-mounted insert separately.
[2)] Surface painted.

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1) 2)] **with multi-lens** For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 15 m, lateral: 5 m, Mounting height: 2.5 m Detection range 2: frontal: 10 m, lateral: 2.5 m, Mounting height: 1.2 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
anthracite	**6800-81-104M**	2CKA006800A2269	1
ivory white	**6800-82-104M**	2CKA006800A2100	1
aluminium silver [3)]	**6800-83-104M**	2CKA006800A2327	1
studio white	**6800-84-104M**	2CKA006800A2102	1/10
studio white, matt [3)]	**6800-884-104M**	2CKA006800A2498	1
black matt [3)]	**6800-885-104M**	2CKA006800A2500	1

[1)] installation: slide switch top.
[2)] Please order the respective flush-mounted insert separately.
[3)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch control element [1)] **with neon lamp** For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
anthracite	**6815-81**	2CKA006800A2284	1/10
ivory white	**6815-82**	2CKA006800A2285	1/10
aluminium silver [2)]	**6815-83**	2CKA006800A2342	1/10
studio white	**6815-84**	2CKA006800A2286	1/10
studio white, matt [2)]	**6815-884**	2CKA006800A2499	1/10
black matt [2)]	**6815-885**	2CKA006800A2501	1/10

[1)] Please order the respective flush-mounted insert separately.
[2)] Surface painted.

	Cover plate For proximity switch 6406 U.		
ivory white	**6476-82**	2CKA006470A0003	10
studio white	**6476-84**	2CKA006470A0004	10

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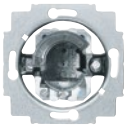
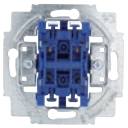
Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	**Key Switch Insert** [1) 2) 3)] **breaking circuit, 1-pole** For profile semi-cylindrical lock. In switched-on and switched-off status the key can be pulled out in the central position, respectively. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	2733 USL-101	2CKA001101A0914	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

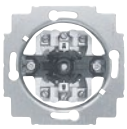
[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Use the cylindrical lock according to the enclosed drawing.
[3)] See profile semi-cylindrical lock.

	**Blind switch insert** [1) 2)] With interlock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	SP, switch **2000/4 US-500**	2CKA001012A2197	10/100
	SP, push switch **2020/4 US-500**	2CKA001413A1103	10/100

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] These blind switches/push buttons safely prevent a switch-over of the running direction being carried out too quickly.

	Blind switch insert [1) 2)] With rotary knob/switch and push switch. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1, British Standard EN 60669-1		
	DP [3)] **2712 U**	2CKA001101A0534	10
	SP, N, E **2713 U**	2CKA001101A0542	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		
delivery form:	Adapter plate APBS to be ordered separate.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

Product	Article-No.	Order-No.	Pack/Qty
	**Blind switch insert** [1) 2)] With rotary knob/push button. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	DP [3)] **2722 U**	2CKA001101A0559	10
	SP, N, E **2723 U**	2CKA001101A0567	10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Also suitable for controlling direct voltage drives.

	Blind switch/push-switch [1) 2) 3) 4)] For profile semi-cylindrical lock/switch and push-switch. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1, British Standard EN 60669-1		
	DP [5)] **2712 USL-101**	2CKA001101A0872	10
	SP, N, E **2713 USL-101**	2CKA001101A0880	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	Blind switch insert [1) 2) 3) 4)] For profile semi-cylindrical lock/push-button. Delivered without cylindrical lock. Rated voltage: 250 V~ Rated current: 10 A British Standard EN 60669-1, IEC60669-1		
	DP [5)] **2722 USL-101**	2CKA001101A0898	10
	SP, N, E **2723 USL-101**	2CKA001101A0906	10

[1)] For installation on British Standard wallboxes please use adapter plate APBS (6599-0-2813). (Depth of box 60 mm.)
[2)] Blind switches/push switches prevents fast change over between operating directions.
[3)] Use the cylindrical lock according to the enclosed drawing.
[4)] See semi-cylindrical lock.
[5)] Also suitable for controlling direct voltage drives.

	DIN profile-semi cylindrical lock Acc. to German Standard DIN 18252. Total length 40 mm for blind switches and push switches For inserts 2712/2713/2722/2723/2733 USL-101 and 2712/2733 SLW-5x.		
	different lock mechanism, with 3 keys **0520 PZ-VS**	2CKA000470A0013	1/100
	lock mechanism, with 3 keys **0521 PZ-GS**	2CKA000470A0021	1/100

future® linear

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Comfort blind insert [1) 2) 3)] **with memory and positioning function** For the manual and automatic control of roller blinds. The roller blind moves to the position set using the turn knob. Executes the individually programmed switching commands (UP/DOWN) in a 24-hour rhythm. Suitable for roller blind drives with mechanical or electronic limit switch shut-off. Suitable for operation without neutral conductor. Without an extension input. Power reserve of 45 minutes (maintenance-free as capacitor). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 1.3 A, cos ϕ 0.5 Rated power: 300 VA Temperature range (Device): 0 °C to 35 °C		
	6419 U	2CKA006410A0390	1/10

[1)] Pertinent cover plates 6436-xx.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.
[3)] Only suitable for single unit control.

Product	Article-No.	Order-No.	Pack/Qty
	Basic blind insert [1) 2)] Suitable for blind and roller blind drives with mechanical or electronic limit switch shut-off. Suitable for operation without neutral conductor. Without an extension input. For control cover 6430-xx-xxx. For standard timer control element 6456-101. Running time: 3 min Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 3 A, cos ϕ 0.5 Rated power: 690 VA Temperature range (Device): 0 °C to 35 °C		
	6418 U-500	2CKA006410A0376	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] N-conductor connection required for operation with control cover 6430-7x, illuminated.
[2)] N-conductor connection may be required for operation with blind and roller blind drives with electronic limit switch shut-off. If no N-conductor is available, capacitor set 6498 can be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Blind control II switch insert [1)] Suitable for blind, roller blind and awning drives with mechanical or electronic limit switch shut-off. With two 230 V multi-way input terminals (Up/Down) for group control. With operating mode switch for the following modes: normal, louvre, base station, position. With party function (disables the local control unit) in combination with Busch-Blind control II control cover 6430-xx-xxx, 6066-xx-xxx. Wind alarm, cleaning functions can be accommodated via extension input. For control cover 6430-xx-xxx. For IR control element 6066-xx-xxx. For comfort timer control element 6455-101-500. Running time: 3 min Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact Rated current: 3 A, cos ϕ 0.5 Rated power: 690 VA Control/Signal outputs: 2 Temperature range (Device): 0 °C to 35 °C		
	6411 U-101	2CKA006410A0377	1/10

[1)] Compatible with types 6411 U/x.

	Burglar alert sensor For insert 6411U/S-101. With 4 m connecting cable.		
	6413-500	2CKA006410A0349	10
	Brightness sensor For insert 6411U/S-101. With 2 m connecting cable. Measuring range: 15-50,000 lux.		
	6414-101	2CKA006410A0389	1/10
	Sun sensor For insert 6411U/S-101. Measuring range: 5-50,000 lux.		
	6482	2CKA006410A0203	1

future® linear

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Short-time timer insert [1] **countdown timer** For time-programmed switching of electrical consumers. With control cover, without cover plate. Minimum timer time: 1 second. Maximum timer time: 9:59:59 hours. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact Rated current: 10 A, cos ϕ 1 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1		
	6465 U-101-500	2CKA006410A0393	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

	Rocker **with marking** As cover for flush-mounted blind control switch/push switch. For inserts 2000/4 and 2020/4 US.		
anthracite	**1785 JA-81**	2CKA001751A2934	10
ivory white	**1785 JA-82**	2CKA001751A2748	10
aluminium silver [1]	**1785 JA-83**	2CKA001751A2944	10/100
studio white	**1785 JA-84-500**	2CKA001751A3088	10/100
studio white, matt [1]	**1785 JA-884**	2CKA001751A3022	10
black matt [1]	**1785 JA-885**	2CKA001751A3036	10

[1] Surface painted.

	Cover plate **with rotary control, with marking** As cover for flush-mounted blind control switch/push switch. For inserts 2712 U, 2713 U and 2722 U, 2723 U.		
anthracite	**1740-81**	2CKA001710A3623	10
ivory white	**1740-82**	2CKA001710A3154	10
aluminium silver [1]	**1740-83**	2CKA001710A3661	10
studio white	**1740-84**	2CKA001710A3172	10/100
studio white, matt [1]	**1740-884**	2CKA001710A3872	10
black matt [1]	**1740-885**	2CKA001710A3894	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **with labelling field** With marking. For half-cylindrical type switches and blind control switch/push-switch. For inserts 2733 USL-101 and 2712 USL-101, 2713 USL-101, 2722 USL-101, 2723 USL-101.		
anthracite	**1755 SL/PZ-81-101**	2CKA001710A3626	10
ivory white	**1755 SL/PZ-82-101**	2CKA001710A3157	10
aluminium silver [2]	**1755 SL/PZ-83-101**	2CKA001710A3662	10
studio white	**1755 SL/PZ-84-101**	2CKA001710A3175	10
studio white, matt [2]	**1755 SL/PZ-884-101**	2CKA001710A3925	10
black matt [2]	**1755 SL/PZ-885-101**	2CKA001710A3902	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

	Control element For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For basic blind insert 6418 U. For Busch-Universal 2gang 1way insert 6402 U.		
anthracite	**6430-81-102**	2CKA006430A0326	1/10
ivory white	**6430-82-102**	2CKA006430A0327	1/10
aluminium silver [1]	**6430-83-102**	2CKA006430A0328	1/10
studio white	**6430-84-102-500**	2CKA006430A0400	1/10
studio white, matt [1]	**6430-884-102**	2CKA006430A0385	1/10
black matt [1]	**6430-885-102**	2CKA006430A0386	1/10

[1] Surface painted.

	Cover plate [1] **with rotary knob** For comfort blinds insert 6419 U.		
anthracite	**6436-81**	2CKA006430A0387	10
ivory white	**6436-82**	2CKA006430A0356	10
aluminium silver [2]	**6436-83**	2CKA006430A0357	10
studio white	**6436-84**	2CKA006430A0358	10
studio white, matt [2]	**6436-884**	2CKA006430A0363	10
black matt [2]	**6436-885**	2CKA006430A0364	10

[1] Continuous lighting of the turn knob possible using glow lamp 3855.
Not included in delivery. Neutral wire required for operation with neon lamp.
[2] Surface painted.

future® linear

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Standard timer control element [1] For manual and time-controlled switching of blinds and roller blinds. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Programming possible only with control element attached and energized. 2 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. For basic blind insert 6418 U. Temperature range (Device): 0 °C to 35 °C		
	6456-101	2CKA006410A0398	1/10

[1] See respective cover plates 6435-xx.

Product	Article-No.	Order-No.	Pack/Qty
	Comfort timer control element [1] For manual and time-controlled switching of blinds, roller blinds, awnings, lighting and other electrical devices. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Combined with Busch-Blind control II insert 6411 U/S-101, sun protection and twilight function. Freely adjustable temperature and brightness-dependent sun protection function. Freely adjustable twilight function. User-adjustable running times for blinds and air conditioning. Programming possible only with control element attached and energized. 6 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. When combined with LED dimmer 6524 U, Busch-Universal master dimmer insert 6593 U or Busch-Memory touch-type controller 6550 U-101, the brightness of the lighting can be adjusted for each ON switching time. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal relay switch insert 6401 U-102. For Busch-Universal master dimmer insert 6593 U. For LED dimmer insert 6524 U and 6526 U. For Busch-Memory touch-type controller 6550 U-101. Temperature range (Device): 0 °C to 35 °C		
	6455-101-500	2CKA006410A0399	1/10

[1] See respective cover plates 6435-xx.

	Time switch mechanism 16 A [1] [2] **DP, break contact for staircases, exterior lighting, fans, etc.** Running time: 15 min For time-programmed switching of electrical consumers. Rated voltage: 230 V~, +10 % / -10 % Rated current: 16 A, cos ϕ 0.25		
	1070 U	2CKA001043A0025	1/10

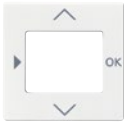
[1] For screw-fixing only
[2] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

future® linear

Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Time switch mechanism 16 A [1) 2)] **DP, break contact for staircases, exterior lighting, fans, etc.** Running time: 120 min For time-programmed switching of electrical consumers. Rated voltage: 230 V~, +10 % / -10 % Rated current: 16 A, cos ϕ 0.25		
	1071 U	2CKA001043A0124	1

[1)] For screw-fixing only
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	**Cover plate** For comfort timer control element 6455-101-500. For standard timer control element 6456-101. For room thermostats 1098 U-101 and 1098 UF-101. For short-time timer 6465 U-101. For Busch-CO2 sensor 1091 U-500.		
anthracite	**6435-81**	2CKA006430A0303	10
ivory white	**6435-82**	2CKA006430A0304	10
aluminium silver [1)]	**6435-83**	2CKA006430A0305	10
studio white, matt [1)]	**6435-884**	2CKA006430A0388	10
black matt [1)]	**6435-885**	2CKA006430A0389	10

[1)] Surface painted.

future® linear
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**20 EUC-81-500**	2CKA002011A6215	10/100
ivory white	**20 EUC-82-500**	2CKA002011A6214	10/100
aluminium silver [1]	**20 EUC-83-500**	2CKA002011A6213	10/100
studio white	**20 EUC-84-500**	2CKA002011A6207	10/100
studio white, matt	**20 EUC-884-500**	2CKA002011A6208	10/100
black matt [1]	**20 EUC-885-500**	2CKA002011A6211	10/100

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] **shuttered** With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**20 EUCKS-81**	2CKA002013A5265	10
ivory white	**20 EUCKS-82**	2CKA002013A5244	10/100
ivory white	**20 EUCKS-82-500**	2CKA002013A5376	10/100
aluminium silver 2)	**20 EUCKS-83-500**	2CKA002013A5375	10/100
studio white	**20 EUCKS-84-500**	2CKA002013A5372	10/100
studio white, matt	**20 EUCKS-884-500**	2CKA002013A5373	10/100

[1] Increased shock protection.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet **shuttered** With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
red RAL 3003	**20 EUCKS-12-82**	2CKA002013A5322	10

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® USB socket outlet [1] [2] [3] **shuttered** With screwless terminals. DP (2 P + E) For supply and support of mobile devices via USB-cable. With USB female connector type A. With electronic short-circuit protection. With electronic overload protection. Simultaneous charging via USB connection and use of the SCHUKO® socket outlet. Rated voltage: 250 V~ Secondary: 5 V-, +5 % / -5 % Rated frequency: 50 Hz Suitable for: SCHUKO® socket outlet Rated current: 16 A Suitable for: USB connection Rated current: 700 mA Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm Mounting depth: 35 mm		
anthracite	**20 EUCBUSB-81-500**	2CKA002011A6176	1
ivory white	**20 EUCBUSB-82-500**	2CKA002011A6177	1
aluminium silver [4]	**20 EUCBUSB-83-500**	2CKA002011A6178	1
studio white	**20 EUCBUSB-84-500**	2CKA002011A6179	1/10
studio white, matt [4]	**20 EUCBUSB-884-500**	2CKA002011A6182	1
black matt [4]	**20 EUCBUSB-885-500**	2CKA002011A6183	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] No data transfer.
[3] Use dust cover 2098 when cleaning the device.
[4] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet steplight® [1] [2] **With night orientation light** with separate connection cables for switch contact. with LED, Shuttered. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 EUCBLI-82**	2CKA002013A5292	1
aluminium silver [3]	**20 EUCBLI-83**	2CKA002013A5293	1
studio white	**20 EUCBLI-84**	2CKA002013A5294	1
studio white, matt [3]	**20 EUCBLI-884**	2CKA002013A5326	1
black matt [3]	**20 EUCBLI-885**	2CKA002013A5331	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] Resistant to aggressive media, e.g. ammonia, benzine, oils, greases, alcohol, cleansing agents, in normal concentrations.
[3] Surface painted.

future® linear
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] **with labelling field** DP (2 P + E) Size of labelling field: 60 x 9 mm. Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**20 EUN-81**	2CKA002011A3802	10
ivory white	**20 EUN-82**	2CKA002011A3726	10
aluminium silver [2]	**20 EUN-83**	2CKA002011A3810	10
studio white	**20 EUN-84-500**	2CKA002011A6209	10/100
studio white, matt [2]	**20 EUN-884**	2CKA002011A3881	10
black matt [2]	**20 EUN-885**	2CKA002011A3884	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] **with marking "EDV"** With screwless terminals. DP (2 P + E) Shuttered. Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**20 EUCKS/DV-81**	2CKA002013A5266	10
ivory white	**20 EUCKS/DV-82**	2CKA002013A5267	10
aluminium silver [2]	**20 EUCKS/DV-83**	2CKA002013A5273	10/100
studio white	**20 EUCKS/DV-84**	2CKA002013A5268	10
studio white, matt [2]	**20 EUCKS/DV-884**	2CKA002013A5327	10
black matt [2]	**20 EUCKS/DV-885**	2CKA002013A5332	10

[1] Increased shock protection .
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet with marking "EDV" With screwless terminals. DP (2 P + E) Shuttered. Rated voltage: 250 V~ Rated current: 16 A		
red RAL 3003	**20 EUCKS/DV-12-82**	2CKA002013A5325	10

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Protector® SCHUKO® socket outlet [1] **with overvoltage protection** DP (2 P + E) With integrated and external signalling contact. ISN = 5 kA Device protection for technical sensitive such as computer, entertainment electronics and building management systems. Effectively reduces overvoltage peaks occurring between the sub-distribution switch board and SCHUKO® socket outlet. Arrestor test class: classification Type 2 Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**2310 EUGL/VA-81-11**	2CKA002011A3830	1
ivory white	**2310 EUGL/VA-82-11**	2CKA002011A3831	1
aluminium silver [2]	**2310 EUGL/VA-83-11**	2CKA002011A3832	1
studio white	**2310 EUGL/VA-84-11**	2CKA002011A3833	1
studio white, matt [2]	**2310EUGL/VA-884-11**	2CKA002011A3882	1
black matt [2]	**2310EUGL/VA-885-11**	2CKA002011A3885	1
red RAL 3003	**2310 EUGL/VA-12-82**	2CKA002011A3878	1/10

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
NEW	**SCHUKO® socket outlet** [1] **with LED control light** Shuttered. DP (2 P + E) With transparent lens. LED colour green. Rated voltage: 250 V~ Rated current: 16 A		
	20 EUCBL-82	2CKA002013A5284	10
	20 EUCBL-83 [2]	2CKA002013A5285	10
	20 EUCBL-84	2CKA002013A5286	10
	20 EUCBL-884 [2]	2CKA002013A5336	10
	20 EUCBL-885 [2]	2CKA002013A5330	10

[1] Resistant to aggressive media, e.g. ammonia, benzine, oils, greases, alcohol, cleansing agents, in normal concentrations.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet with hinged lid With screwless terminals. DP (2 P + E) Hinged lid notches when opened. Rated voltage: 250 V~ Rated current: 16 A		
anthracite	**20 EUK-81**	2CKA002018A1486	10
ivory white	**20 EUK-82**	2CKA002018A1465	10
aluminium silver [1]	**20 EUK-83**	2CKA002018A1487	10
studio white	**20 EUK-84-500**	2CKA002018A1509	10/100
studio white, matt [1]	**20 EUK-884**	2CKA002018A1494	10
black matt [1]	**20 EUK-885**	2CKA002018A1495	10

[2] Surface painted.

future® linear
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	FI-SCHUKOMAT, SCHUKO® socket outlet (RCD) [1) 2) 3)] **with earth leakage circuit breaker** Shuttered. DP cut off (P,N) Without PE monitoring. With connecting conductor and protection of downstream socket outlets. Rated actuating current: 30 mA. Release time: ≤ 30 ms. Short-circuit strength: 3000 A (with 25 A GL fuse). Current surge strength: 250 A (8/20) µs. With fixing claws. Rated frequency: 45-60 Hz. Rated voltage: 230 V~ Rated current: 16 A Protection class (Device): IP 20 Temperature range (Device): -25 °C to 40 °C		
ivory white	**3120 EUCKS-82**	2CKA003116A0655	1
studio white	**3120 EUCKS-84**	2CKA003116A0656	1
studio white, matt [4)]	**3120 EUCKS-884**	2CKA003116A0657	1
ivory white	**3120 EUCB-82**	2CKA003116A0661	1
studio white	**3120 EUCB-84**	2CKA003116A0662	1

[1)] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2)] Protective measure according to VDE 0100; can be proven or checked using the Profitest 0100S testing device, for example.
[3)] Increased shock protection .
[4)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Buschmat® FI - Insert [1)] **with earth leakage breaker with connecting conductor** Protection of downstream consumers. Rated actuating current: 30 mA. Release time: ≤ 30 ms. Short-circuit strength: 3000 A (with 25 A GL fuse). Current surge strength: 250 A (8/20) µs. DP cut off (P,N) Without claw fixation. Rated frequency: 45-60 Hz. Rated voltage: 230 V~ Rated current: 16 A Protection class (Device): IP 20 Temperature range (Device): -25 °C to 40 °C		
ivory white	**3151 UC-82**	2CKA003117A0005	1/10
studio white	**3151 UC-84**	2CKA003117A0006	1/10

[1)] Protective measure according to VDE 0100; can be proven or checked using the Profitest 0100S testing device, for example.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet shuttered DP (2 P + E) With screwless terminals. Rated voltage: 250 V~ Rated current: 16 A		
green RAL 6018	**20 EUCKS-13-82**	2CKA002013A5323	10
orange RAL 2004	**20 EUCKS-14-82**	2CKA002013A5324	10

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet shuttered With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
green RAL 6018	**20 EUC-13-82**	2CKA002011A3722	10
orange RAL 2004	**20 EUC-14-82**	2CKA002011A3723	10

Product	Article-No.	Order-No.	Pack/Qty
	Shaver socket outlet For installation into FM 2gang wall box 3030 and 3031. Rated voltage: 240 V, +10 % / -10 % Output voltage: 115 V, +10 % / -10 % Secondary: 240 V, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 20 VA		
ivory	**2332 UJBS-82**	2CKA002130A0290	1
aluminium silver [1)]	**2332 UJBS-83**	2CKA002130A0291	1
studio white	**2332 UJBS-84**	2CKA002130A0292	1
studio white, matt [1)]	**2332 UJBS-884**	2CKA002130A0294	1
black matt [1)]	**2332 UJBS-885**	2CKA002130A0295	1

Product	Article-No.	Order-No.	Pack/Qty
	Flush-mounting wall box, 2gang For shaver socket outlet 2332 UJBS-8xx. Dimensions: (L x W x D): 135 mm x 75 mm x 47 mm		
	3030	2CKA001741A0067	4

Product	Article-No.	Order-No.	Pack/Qty
	Flush-mounting wall box, 2gang For shaver socket outlet 2332 UJBS-8xx. Dimensions: (L x W x D): 142 mm x 82 mm x 45 mm		
	3031	2CKA001741A0068	4

future® linear
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet cover frame shuttered For socket outlet insert 20 M-500. Rated voltage: 250 V~		
anthracite	**2399 UCKS-81**	2CKA002099A0216	10
ivory	**2399 UCKS-82**	2CKA002099A0211	10
aluminium silver [1]	**2399 UCKS-83**	2CKA002099A0241	10/100
studio white	**2399 UCKS-84**	2CKA002099A0214	10
studio white, matt [1]	**2399 UCKS-884**	2CKA002099A0255	10
black matt [1]	**2399 UCKS-885**	2CKA002099A0256	10/100

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet with earthing pin With screwless terminals. Suitable for the countries like Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 MUC-82-500**	2CKA002017A0785	10/100
studio white	**20 MUC-84-500**	2CKA002017A0786	10/100
studio white, matt [1]	**20 MUC-884-500**	2CKA002017A0859	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet [1] with earthing pin With screwless terminals. Shuttered. Suitable for the countries like Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
ivory white	**20 MUCKS-82-500**	2CKA002017A0806	10
studio white	**20 MUCKS-84-500**	2CKA002017A0807	10

[1] Socket outlet with integrated child protection.
Replaces the usual term"...with child protection".

Product	Article-No.	Order-No.	Pack/Qty
	13 A Switched socket outlet 1gang With screw-type terminals. SP switched Without claws. Only for mounting in VDE flush-mounted wallboxes CFB 122 and CFBM 122. Rated voltage: 250 V~ Rated current: 13 A BS 1363: part2		
anthracite	**2190 EUC-81**	2CKA002190A0216	10/100
ivory	**2190 EUC-82**	2CKA002190A0213	10/100
aluminium silver [1]	**2190 EUC-83**	2CKA002190A0214	10/100
studio white	**2190 EUC-84**	2CKA002190A0215	10/100
studio white, matt [1]	**2190 EUC-884**	2CKA002190A0218	10/100
black matt [1]	**2190 EUC-885**	2CKA002190A0219	10/100

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	European/American socket outlet, 10A 2gang With screw-type terminals. SP switched Without claws. Rated voltage: 250 V~ Rated current: 10 A		
anthracite	delivery on request **2192-02 UC-81-500**		
ivory white	delivery on request **2192-02 UC-82-500**		
aluminium silver [1]	delivery on request **2192-02 UC-83-500**		
studio white	delivery on request **2192-02 UC-84-500**		

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Chinese socket outlet, 10 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 10 A		
anthracite	delivery on request 2193 EUC/10-81-500		
ivory white	delivery on request 2193 EUC/10-82-500		
ivory white	delivery on request 2193 EUC/10-82-500		
aluminium silver [1]	delivery on request 2193 EUC-83-500		
studio white	delivery on request 2193 EUC/10-84-500		

[1] Surface painted.

future® linear
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Chinese socket outlet, 16 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 16 A		
anthracite	delivery on request **2193 EUC/16-81-500**		
ivory white	delivery on request **2196 EUC/16-82-500**		
aluminium silver [1]	delivery on request **2193 EUC/16-83-500**		
aluminium silver [1]	delivery on request **2193 EUC/16-83-500**		
studio white	delivery on request **2193 EUC/16-84-500**		

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Chinese and Euro American socket outlet, 10 A 1gang With screw-type terminals. Without claws. According to Chinese standard: GB 2099.1 Rated voltage: 250 V~ Rated current: 10 A		
anthracite	delivery on request **2195 EUC/10-81-500**		
ivory white	delivery on request **2195 EUC/10-82-500**		
aluminium silver [1]	delivery on request **2195 EUC/10-83-500**		
studio white	delivery on request **2195 EUC/10-84-500**		

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	International socket outlet 13A 1gang With screw-type terminals. Without claws. Rated voltage: 250 V~ Rated current: 13 A		
anthracite	delivery on request **2197 EUC-81-500**		
ivory white	delivery on request **2197 EUC-82-500**		
aluminium silver [1]	delivery on request **2197 EUC-83-500**		
studio white	delivery on request **2197 EUC-84-500**		

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Euro American socket outlet with earth, 16 A 1gang With screw-type terminals. Without claws. Rated voltage: 250 V~ Rated current: 16 A		
anthracite	delivery on request **2196 EUC-81-500**		
ivory white	delivery on request **2196 EUC-82-500**		
aluminium silver [1]	delivery on request **2196 EUC-83-500**		
studio white	delivery on request **2196 EUC-84-500**		

[1] Surface painted.

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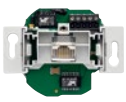
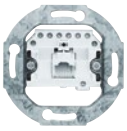
Data communication

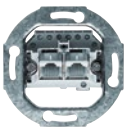
Product	Article-No.	Order-No.	Pack/Qty
	**WLAN access point, flush-mounted** [1) 2)] **power supply from mains power** Operation as WLAN access point for the connection of WLAN terminal devices to the LAN. Operation as WLAN repeater for extending the transmission range of a WLAN. Operation as WLAN adapter for integrating Ethernet terminal devices into a WLAN. Supports WLAN standards IEEE 802.11b/g/n with 2.4 GHz; integrated WLAN antenna. Backward connection of an Ethernet cable via screw terminals (10/100 Mbit/s). Front-side Ethernet connection via a RJ45 socket (10/100 Mbit/s). The three connections (WLAN, Ethernet/screw terminals and Ethernet/RJ45)can be used in parallel via the integrated switch. Power supply via 2-pole connecting terminal. Nominal voltage: 100 - 240 V~ For mounting in commercially available deep flush-mounted and hollow-wall boxes. Rated frequency: 50 Hz - 60 Hz		
	8186/31-101-500	2CKA008100A0359	1

[1)] Suitable for cover plate 1803-xxx.
[2)] Not to be mounted in SM box 1701-xxx, 1702-xxx, 1703-xxx.

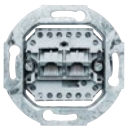
	Reset magnet For resetting WLAN access point UP 8186/31-101 and WLAN access point PoE UP 8186/41 to the factory settings.		
	8186/11-500	2CKA008100A0361	1

	**Universal data connection unit, cat. 3** [1)] **1gang** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0213-500	2CKA000230A1549	10/100

[1)] Suitable for cover plate 1803-xxx.

	**Universal data connection box with down-leading outlet** [1)] **2gang internally parallel connected** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0214	2CKA000230A0235	10/100
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

	**Universal data connection box with down-leading outlet** [1)] **2 x outlets, 8/8-pole** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0215	2CKA000230A0243	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1)] Suitable for cover plate 1803-02-xxx.

	UAE connection unit, RJ45, cat. 6e, shielded [1)] **1gang** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0216-102	2CKA000230A0465	1/10

[1)] Suitable for cover plate 1803-xxx.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	UAE connection unit, RJ45, cat. 6e, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0217-102	2CKA000230A0467	1/10

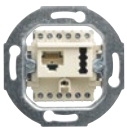
[1] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **1gang** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0218/11-101	2CKA000230A0409	1/10

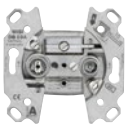
[1] Suitable for cover plate 1803-xxx.

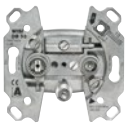
Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For trunk systems, flush-mounted wall boxes and underfloor systems. For wires of AWG 24-22. Without claws. Mounting depth: 31 mm.		
	0218/12-101	2CKA000230A0411	1/10

[1] Suitable for cover plate 1803-02-xxx.

	**Universal data connection box 8(6)/ telephone unit 6F+N - connection box** [1] **2 x 6-pole** with straight outlet, with screw contacts, Universal data-connection boxes: RJ 11/12, ISDN capable Cat. 3 in acc. with IEC 603-7/German Standard DIN EN 60603-7, Telecommunication outlet (telephone unit): for 1 telephone, 1 auxiliary device or 1 data transmission unit, With claw.		
white	**UAE 8(6)TAE 6 F+N**	2CKA000230A0381	10/100

[1] Suitable for cover plate 2539-xxx, 1766-xxx and 1746-2xx-FN.

	**Satellite co-axial outlets 2 connectors/dead-end feeder** Broadband technology 5-2.400 MHz For DVB-T, satellite and broad-band cable systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0230-101	2CKA000230A0250	10/100

	**Satellite co-axial outlets Radio/TV/SAT 3gang dead-end feeder** Broadband technology 47-2.150 MHz. SAT connection designed as screwable F-male plug. with remote feed via F-bush For DVB-T and broadband-cable-systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0232-101-500	2CKA000230A0463	10/100

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Terminating resistor 75 Ohm		
	0239	2CKA000230A0201	10/100
	Mounting plate [1) 2)] **with green insert** For 2 modular jack inserts. For systems: CommScope (AVAYA / AT&T / Lucent Technologies), GigaSPEED, PowerSUM, 360 GS 10E bis MGS 600-BK, M1 BH-xx, MPS 100E-xx. With R&M adapter R310694 suitable for R&M connection modules R305111, R305112, R305113 and R305114. Pitch dimensions: (WxH) approx. 16.9 x 17.9 mm. Without claws.		
	1810	2CKA001753A8048	10/100
	1810-500	2CKA001753A9974	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

	Mounting plate [1) 2)] **with red insert** For 2 modular jack inserts. Suitable for Art. Nos. 0210, 0211 and 0219-101. For systems: AMP / tyco Electronics, BTR, EFB, Krone, Panduit, Quante, Radiall, Setec, Dr.-Ing. Sieger, Telena, Thomas & Betts For Telegärtner AMJ/UMJ connection modules/ couplings. For 2 fiber optic modules of the following types: 3M-Volition, Krone, mvk. Pitch dimensions: (WxH) approx. 14.8 x 19.4 mm. Without claws.		
	1812-500	2CKA001753A9972	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

	Mounting plate [1) 2)] **with black insert** For MTRJ or 2 modular jack inserts. For systems: Ackermann, AMP / tyco Electronics (Slim Line (SL) -SM 2gang/switches: 110Connect Jacks, Toolless Jacks / Standard 110Connect Jacks), Brand-Rex, CombiNet, EFB Electronic, Telena. For 2 fiber optic modules of the following types: AMP / tyco Electronics MTRJ. Pitch dimensions: (WxH) approx. 14.8 x 20.4 mm. Without claws.		
	1814-500	2CKA001753A9973	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

Product	Article-No.	Order-No.	Pack/Qty
	Mounting plate [1) 2)] **with blue insert** For 2 modular jack inserts. For system: ITT Cannon RJ45 Cat. 5 type 808 RJ45 Mark III. Pitch dimensions: (WxH) approx. 16.0 x 11.0 mm. Without claws.		
	1816	2CKA001710A3100	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

	Mounting plate [1) 2)] **with orange base** For 2 modular jack inserts. For system: LexCom 150 and LexCom 250. Pitch dimensions: (WxH) approx. 15.4 x 15.4 mm. Without claws.		
	1819	2CKA001753A8056	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

	Mounting plate [1) 2)] **with grey base** For 2 modular jack inserts. For system: Panduit MiniCom (Cu. z. B. TX6 10 Gig Shielded Jack modules and fiber optic modules. Pitch dimensions: (WxH) approx. 15.9 x 18.7 mm. Without claws.		
	1820	2CKA001753A8057	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

	Flush-mounted assembly adapter For the accommodation of one or two universal modules 0219. For flush-mounted installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/12	2CKA000230A0395	1/10
	Channel assembly adapter For the accommodation of one or two universal modules 0219. For channel and under-floor installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/13	2CKA000230A0396	1/10

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Universal module, RJ 45, cat. 6a iso, shielded [1] **1gang** For installation in installation adapter 0219/12 or 0219/13. Also suited for mounting into cover plate 2561 and bases 1812, 1866 EB, and 1867 EB. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Cat. 6A according to ISO/IEC 11801: 2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Bend-radius optimised cable feed (30°). Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. For 8-pole plug RJ 45 only. Housing made from diecast zinc. With integrated dust-protection cap (can be removed if necessary). With insulation displacement connection For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems.		
	0219-101	2CKA000230A0413	1/10

[1] With assembly adapters appropriate for telephone unit cover plates 2539-21x and 1766-xxx.

	Modular-Jack insert **6-pole Cat. 3 (AMP-No. 216000-2)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0210	2CKA000225A0078	10

	Modular-Jack insert **8-pole Cat. 3 (AMP-No. 216005-4)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0211	2CKA000225A0086	10

	Built-in jack For potential balancing jack cover plate and installation in cover plates. For devices of 19 mm diameter.		
	0471-0-0037	2CKA000471A0037	10

Product	Article-No.	Order-No.	Pack/Qty
	Potential balancing plug Suitable for plug 2095 UC-212 and built-in jack 0471-0-0037 acc. to German Standard DIN 42801. For potential balancing jack cover plate (connection up to 6 mm² crimped or soldered).		
	0299-0-0032	2CKA000299A0032	10

	Blank plate **with metal mounting plate**		
anthracite	**1742-81**	2CKA001710A3612	10
ivory white	**1742-82**	2CKA001710A3143	10
aluminium silver [1]	**1742-83**	2CKA001710A3664	10
studio white	**1742-84-500**	2CKA001710A3991	10/100
studio white, matt [1]	**1742-884**	2CKA001710A3873	10/100
black matt [1]	**1742-885**	2CKA001710A3895	10

[1] Surface painted.

	Cover plate [1] **with metal mounting plate** As cover for flex outlet, for cords up to 10.3 mm diameter. With strain relief (without terminal block).		
anthracite	**1749-81**	2CKA001710A3614	10
ivory white	**1749-82**	2CKA001710A3145	10
aluminium silver [2]	**1749-83**	2CKA001710A3665	10
studio white	**1749-84**	2CKA001710A3163	10/100
studio white, matt [2]	**1749-884**	2CKA001710A3878	10
black matt [2]	**1749-885**	2CKA001710A3900	10

[1] Cover plate can also be used individually as cover for telephone connector boxes (VDo).
[2] Surface painted.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] As cover for universal data connection boxes. Art.-No. 0213 (Cat 3/ISDN), 0216-101, 0218/11-101 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. For WLAN access points 8186/31 and 8186/41. Brand-Rex (WAEGV 8 EKR/EK). BTR (universal data connecting unit design and IAE design). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm.		
anthracite	**1803-81**	2CKA001710A3616	10
ivory white	**1803-82**	2CKA001710A3147	10
aluminium silver [2]	**1803-83**	2CKA001710A3674	10
studio white	**1803-84-500**	2CKA001710A1550	10/100
studio white, matt [2]	**1803-884**	2CKA001710A3889	10
black matt [2]	**1803-885**	2CKA001710A3912	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **2gang** As cover for universal data connection boxes. Art. No. 0214, 0215 (Cat 3), 0220/12-507, 0221/12-507, 0218, 0217 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. Brand-Rex (WAEGV 8/8 EKR/EK). AMP (NETCONNECT 5E). BTR (E-DAT C6, E-DAT design, Universal data connecting unit design and IAE design). cti (cti-wire 2.8 Cat.6). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet. With labelling field. Size of labelling field: 60 x 9 mm.		
anthracite	**1803-02-81**	2CKA001710A3615	10
ivory white	**1803-02-82**	2CKA001710A3146	10
aluminium silver [2]	**1803-02-83**	2CKA001710A3610	10/100
studio white	**1803-02-84-500**	2CKA001710A1551	10/100
studio white, matt [2]	**1803-02-884**	2CKA001710A3888	10
black matt [2]	**1803-02-885**	2CKA001710A3911	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
anthracite	**1766-81**	2CKA001710A3613	10
ivory white	**1766-82**	2CKA001710A3144	10/100
aluminium silver [1]	**1766-83**	2CKA001710A3659	10/100
studio white	**1766-84-500**	2CKA001710A3992	10/100
studio white, matt [1]	**1766-884**	2CKA001710A3926	10
black matt [1]	**1766-885**	2CKA001710A3903	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate As cover for telephone connector boxes (VDo). Can be knocked out for single or double connection.		
anthracite	**1745-81**	2CKA001710A3624	10
ivory white	**1745-82**	2CKA001710A3155	10
aluminium silver [1]	**1745-83**	2CKA001710A3675	10
studio white	**1745-84**	2CKA001710A3173	10
studio white, matt [1]	**1745-884**	2CKA001710A3874	10
black matt [1]	**1745-885**	2CKA001710A3896	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] [2] **as cover for standard Radio/TV/SAT socket outlets** With 2 connectors Acc. to German Standard DIN 45330. Radio/TV/SAT. With M3 fixing screw.		
anthracite	**1743-81**	2CKA001724A4252	10
ivory white	**1743-82**	2CKA001724A2758	10
aluminium silver [3]	**1743-83**	2CKA001724A4262	10
studio white	**1743-84-500**	2CKA001724A4332	10/100
studio white, matt [3]	**1743-884**	2CKA001724A4293	10/100
black matt [3]	**1743-885**	2CKA001724A4298	10/100

[1] Third opening can be knocked out.
[2] See inserts for satellite coaxial socket outlets.
[3] Surface painted.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1] **with labelling field** For modular jack with slide entrance. To fit only Art. No. 1810, 1812, 1814, 1816, 1818, 1819 and 1820. Size of labelling field: 60 x 9 mm.		
anthracite	**1800-81**	2CKA001710A3627	10
ivory white	**1800-82**	2CKA001710A3158	10
aluminium silver [2]	**1800-83**	2CKA001710A3676	10
studio white	**1800-84-500**	2CKA001710A3990	10/100
studio white, matt [2]	**1800-884**	2CKA001710A3887	10
black matt [2]	**1800-885**	2CKA001710A3910	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc.		
anthracite	**1746/10-81**	2CKA001710A3628	10
ivory white	**1746/10-82**	2CKA001710A3521	10
aluminium silver [1]	**1746/10-83**	2CKA001710A3677	10
studio white	**1746/10-84-500**	2CKA001710A3993	10/100
studio white, matt [1]	**1746/10-884**	2CKA001710A3875	10
black matt [1]	**1746/10-885**	2CKA001710A3897	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Intermediate ring For fitting cover plates from the Busch-Duro 2000® SI and Reflex SI range.		
ivory white	**1747 SI-82**	2CKA001710A3862	10
studio white	**1747 SI-84**	2CKA001710A3863	10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate with hinged lid For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc.		
ivory white	**1746-82**	2CKA001710A3149	10
aluminium silver [1]	**1746-83**	2CKA001710A3678	10
studio white	**1746-84**	2CKA001710A3167	10
studio white, matt [1]	**1746-884**	2CKA001710A3876	10
black matt [1]	**1746-885**	2CKA001710A3898	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate with metal mounting plate For covering universal data communication connectors and circular connectors with screwed plug M 16x0.75 (installable in insert) in accordance with DIN 41524, 41529, 45322, 45327, 45328 and 45329. Knock-out openings 6, 8, 18 mm.		
anthracite	**1748-81**	2CKA001710A3654	10
ivory white	**1748-82**	2CKA001710A3655	10
aluminium silver [1]	**1748-83**	2CKA001710A3673	10
studio white	**1748-84**	2CKA001710A3656	10
studio white, matt [1]	**1748-884**	2CKA001710A3877	10
black matt [1]	**1748-885**	2CKA001710A3899	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate with metal mounting plate As cover for BNC and TNC sockets. Knock-out openings 6, 8, 18 mm.		
anthracite	**1750-81**	2CKA001710A3617	10
ivory white	**1750-82**	2CKA001710A3148	10
aluminium silver [1]	**1750-83**	2CKA001710A3679	10
studio white	**1750-84**	2CKA001710A3166	10
studio white, matt [1]	**1750-884**	2CKA001710A3879	10
black matt [1]	**1750-885**	2CKA001710A3901	10

[1] Surface painted.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Equipotential socket outlet 2gang Without claws. For connecting wires up to 1 x 6 mm² and 4 x 2.5 mm². IEC 60601-1:2005; DIN EN 60601 (VDE 0750-1): July 2007 Connection bolts German Standard DIN 42801.		
81 anthracite	**2095 UC-81**	2CKA002495A0084	10
82 ivory white	**2095 UC-82**	2CKA002495A0085	10
83 aluminium silver [1]	**2095 UC-83**	2CKA002495A0089	10
84 studio white	**2095 UC-84**	2CKA002495A0086	10
884 studio white, matt [1]	**2095 UC-884**	2CKA002495A0091	10

[1] Surface painted.

	Cover plate with metal mounting plate With screw-type terminal. Fixed with central locknut. As cover for pilot devices with a diameter of 22.5 mm Without claws.		
anthracite	**2533-81**	2CKA001724A4254	10
ivory white	**2533-82**	2CKA001724A4255	10
aluminium silver [1]	**2533-83**	2CKA001724A4261	10
studio white	**2533-84**	2CKA001724A4256	10
studio white, matt [1]	**2533-884**	2CKA001724A4296	10
black matt [1]	**2533-885**	2CKA001724A4301	10

[1] Surface painted.

	Cover plate [1] with metal mounting plate for communication devices. With labelling field 60.2 x 10.2 mm. Without claws.		
anthracite	**1758-81**	2CKA001724A4253	10
ivory white	**1758-82**	2CKA001724A2759	10
aluminium silver [2]	**1758-83**	2CKA001724A4263	10
studio white	**1758-84**	2CKA001724A2761	10/100
studio white, matt [2]	**1758-884**	2CKA001724A4307	10
black matt [2]	**1758-885**	2CKA001724A4299	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Surface painted.

Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-DigitalRadio [1) 2) 3) 4) 5)] RDS stereo radio alarm clock for flush-mounted installation. Reception frequency: 87.50 MHz - 108.00 MHz. With display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. For mono/stereo operation. 8 radio stations storable. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated antenna. With additional connection for external antenna. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 34 mm		
	8215 U-500	2CKA008200A0182	1/10

[1] No claw. Screw-fixing via keyholes.
[2] Matching loudspeaker insert 8223 U.
[3] Also combinable with built-in ceiling loudspeaker (8225 EB & 8226 EB) and HiFi built-in ceiling loudspeaker (8226/11 EB).
[4] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[5] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Radio iNet [1) 2) 3) 4)] WLAN Internet radio alarm clock for flush-mounted installation. For the reception of national and international radio stations via Internet. Radio station search possible via various genres. With high resolution graphic display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. Integrated web-server for configuration and control. Remote operation with smartphone via browser surface. UPnP replay function. It is controlled via smartphone. For mono/stereo operation. 8 radio stations storable. With time and date display. With alarm function. With short-time timer. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated WLAN antenna. WLAN standards: IEEE 802.11b / IEEE 802.11g. WLAN safety: WPA / WPA2. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 33 mm APP		
	8216 U-500	2CKA008200A0153	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[4)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

Product	Article-No.	Order-No.	Pack/Qty
	Loudspeaker insert [1)] **5 cm (2")** For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U. For Busch Bluetooth receiver 8219 U. With broadband characteristics. With flat plug connector. Incl. speaker connection cable. Rated output: 2 W (RMS) Frequency response: 200 - 20,000 Hz Impedance: 4 Ohm Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
	8223 U-500	2CKA008200A0183	1/10

[1)] No claw. Screw-fixing via keyholes.

Product	Article-No.	Order-No.	Pack/Qty
	Intercom amplifier insert [1) *)] **with display** Busch-AudioWorld® system amplifier. For individual volume control. For language announcements to 15 individual call zones. With additional broadcast function For switching between Busch-AudioWorld® system channel 1 and 2. For switching of the central radio channel. Optional deactivation of announcements (do not disturb). For mono/stereo operation. With noise control function. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With acoustic monitoring function (baby monitor). Permitted speaker impedance: 8 - 16 Ohm Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 36 mm		
anthracite	**8214 U**	2CKA008200A0119	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

Product	Article-No.	Order-No.	Pack/Qty
	Amplifier insert [1) *)] For individual volume control. With switchover between radio and external music source. For switching of the central radio channel. For mono/stereo operation. With automatic loudness function. Optional automatic switch-off after 30 min. (Sleep function). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 32 mm		
anthracite	**8211 U**	2CKA008200A0010	1/10

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

Product	Article-No.	Order-No.	Pack/Qty
	Audio input [1) *)] For feeding external music sources into the Busch-AudioWorld® public address system. For 1 stereo audio channel For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. MDRC amplifier 8208. Can be combined with Busch-DigitalRadio (8215 U) and Busch-Radio iNet (8216 U). Rated voltage: 15 V- Protection class (Device): IP 20, SELV Mounting depth: 34 mm		
anthracite	**8210 U**	2CKA008200A0108	1

[1)] No claw. Screw-fixing via keyholes.
[*)] Phase-out type

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
NEW	**Busch-powerDock complete set with lightning connector** [1) 2) 3)] Complete set ready to install for charging mobile terminal devices with Apple lightning connection. Makes possible fast charging of the mobile terminal device. For iPhone 7 Plus, iPhone 7, iPhone SE, iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5. For iPod touch (6th generation), iPod touch (5th generation), iPod nano (7th generation). Suitable for use with protective covers certified by Apple. Consisting of Busch-powerDock insert 6473 U. Consisting of Busch-powerDock charging cradle with lightning connection 6473. Consisting of the cover plate for the Busch-powerDock charging cradle. Consisting of 1gang future® linear cover frames. Rated voltage: 100 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: Apple terminal device Rated current: 2.1 A Output voltage: 5 VProtection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 81 mm x 81 mm x 74 mm Mounting depth: 32 mm Made for iPod iPhone		
studio white	**6480-84-500**	2CKA006400A0045	1

[1)] No claw. Screw-fixing via keyholes.
[2)] Not released for use with the iPad.
[3)] "Made for iPod" and "Made for iPhone" means that an electronic accessory has been specially designed for connection to an iPod or iPhone and meets the respective Apple performance specifications that have been confirmed by the designer. Apple is not responsible for the function of this device or its conformity with safety standards and regulatory standards.

Product	Article-No.	Order-No.	Pack/Qty
NEW	**Busch-powerDock Complete set with USB-C connection** [1)] Complete set ready to install for charging mobile terminal devices with USB-C connection. With quick charging function for devices compatible with quickcharge. Makes possible fast charging of the mobile terminal device. Consisting of Busch-powerDock insert 6473 U. Consisting of Busch-powerDock charging cradle with USB-C connection 6473/11. Consisting of the cover plate for the Busch-powerDock charging cradle. Consisting of 1gang future® linear cover frames. Rated voltage: 100 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: Terminal device with USB-C connection Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with quick-charge support and USB-C connection Rated current: 2 A Output voltage: 9 V Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 81 mm x 81 mm x 74 mm Mounting depth: 32 mm		
studio white	**6480/11-84-500**	2CKA006400A0047	1

[1)] No claw. Screw-fixing via keyholes.

Product	Article-No.	Order-No.	Pack/Qty
NEW	**Busch-powerDock Insert** [1)] For charging and supplying mobile terminal devices. With quick charging function for devices compatible with quickcharge. Makes possible fast charging of the mobile terminal device. Rated voltage: 100 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: Apple terminal device Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with USB-C connection Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with quick-charge support and USB-C connection Rated current: 2 A Output voltage: 9 V Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 32 mm Mounting depth: 32 mm		
	6473 U-500	2CKA006400A0039	1/10

[1)] No claw. Screw-fixing via keyholes.

Product	Article-No.	Order-No.	Pack/Qty
NEW	**Busch-powerDock Charging cradle with Apple lightning connection** [1)] For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with lightning connection. For iPhone 7 Plus, iPhone 7, iPhone SE, iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5. For iPod touch (6th generation), iPod touch (5th generation), iPod nano (7th generation). Suitable for use with protective covers certified by Apple. Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473-500	2CKA006400A0081	1/10

[1)] Not released for use with the iPad.

Product	Article-No.	Order-No.	Pack/Qty
NEW	**Busch-powerDock Charging cradle with USB-C connection** For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with USB-C connection. Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473/11-500	2CKA006400A0083	1/10

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	HDMI connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link high-definition digital audio and video data from e.g. SAT-receiver, DVD-/Blue-Ray-player to plasma-type, LCD- or-LED-TVs/screens. HDMI-type A, 3D-compatible. Fully HD ready (1920 x 1080 pixel). For 20-wire HDMI-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/31-500**	2CKA000230A0430	1
alpine white	**0261/32-500**	2CKA000230A0431	1
grey	**0261/33-500**	2CKA000230A0432	1

[1] Please follow the recommendations of the cable and device producers for the max. HDMI cable lengths.

	VGA connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link analogue video data between PCs and laptops to monitors or digital projectors etc. VGA-type: D-type, 15-pole. Fully HD ready (1920 x 1080 pixel). For 15-wire VGA-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/21-500**	2CKA000230A0424	1
alpine white	**0261/22-500**	2CKA000230A0425	1
grey	**0261/23-500**	2CKA000230A0426	1

[1] Please follow the recommendations of the cable and device producers for the max. VGA cable lengths.

Product	Article-No.	Order-No.	Pack/Qty
	USB connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link mobile devices like e.g. printer, scanner, USB-sticks or digital cameras etc. USB-type A, USB 2.0 compatible. For 5-wire USB- cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/11-500**	2CKA000230A0418	1
alpine white	**0261/12-500**	2CKA000230A0419	1
grey	**0261/13-500**	2CKA000230A0420	1

[1] Please follow the recommendations of the cable and device producers for the max. USB cable lengths.

	Communication adapter **for BNC-F Duct-jacks** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0262/11-500**	2CKA000230A0436	1
alpine white	**0262/12-500**	2CKA000230A0437	1
grey	**0262/13-500**	2CKA000230A0438	1

	F duct-jack **for communication adapter** For connection of antenna cables e.g.. for TVs with integrated TV-tuner and satellite receiver. With screw-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems.		
metal clad	**0262-500**	2CKA000230A0440	1

	Communication adapter **for Cinch-jacks** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0263/11-500**	2CKA000230A0444	1
alpine white	**0263/12-500**	2CKA000230A0445	1
grey	**0263/13-500**	2CKA000230A0446	1

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked white: audio , channel left. With soldering tag.		
alpine white	**0263/04-500**	2CKA000230A0451	1
	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked black: audio , channel left. With soldering tag.		
black	**0263/05-500**	2CKA000230A0452	1
	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked red: audio , channel left. With soldering tag.		
Red	**0263/06-500**	2CKA000230A0453	1
	Cinch-jacks for communication adapter For connecting analogue video devices, such as DVD players, hard disc recorders, video recorders or receivers. Marked yellow: audio , channel left. With soldering tag.		
yellow	**0263/07-500**	2CKA000230A0454	1
	Communication adapter for Mini-jacks 3,5mm. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0264/11-500**	2CKA000230A0458	1
alpine white	**0264/12-500**	2CKA000230A0459	1
grey	**0264/13-500**	2CKA000230A0460	1
	Mini-jack 3,5 mm for communication adapter For the connection of mobile terminal devices such as MP3 player (stereo), mobile telephone and smartphones. Audio-band 20Hz - 20kHz. With soldering tag.		
chrome gloss	**0264-500**	2CKA000230A0462	1

Product	Article-No.	Order-No.	Pack/Qty
	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
white	**0248/02-101**	2CKA000230A0402	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
alpine white	**0248/04-101-500**	2CKA000230A0464	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
anthracite	**0248/05-101**	2CKA000230A0404	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Cover plate [*] For amplifier insert 8211 U. For intercom amplifier inserts 8214 U. For audio input 8210 U. For loudspeaker insert 8221 U.		
anthracite	**8251-81**	2CKA008200A0031	10
ivory white	**8251-82**	2CKA008200A0032	10
aluminium silver [1]	**8251-83**	2CKA008200A0039	10
studio white	**8251-84**	2CKA008200A0033	10
studio white, matt [1]	**8251-884**	2CKA008200A0121	10
black matt [1]	**8251-885**	2CKA008200A0124	10

[1] Surface painted.
[*] Phase-out type

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U.		
anthracite	**8252-81**	2CKA008200A0050	10
ivory white	**8252-82**	2CKA008200A0051	10
aluminium silver [1]	**8252-83**	2CKA008200A0052	10
studio white	**8252-84**	2CKA008200A0053	10
studio white, matt [1]	**8252-884**	2CKA008200A0122	10
black matt [1]	**8252-885**	2CKA008200A0125	10

[1] Surface painted.

	Cover plate For loudspeaker insert 8223 U.		
anthracite	**8253-81**	2CKA008200A0078	1/10
ivory white	**8253-82**	2CKA008200A0079	1/10
aluminium silver [1]	**8253-83**	2CKA008200A0080	1/10
studio white	**8253-84**	2CKA008200A0081	1/10
studio white, matt [1]	**8253-884**	2CKA008200A0123	1/10
black matt [1]	**8253-885**	2CKA008200A0126	1/10

[1] Surface painted.

	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
anthracite	**1766-81**	2CKA001710A3613	10
ivory white	**1766-82**	2CKA001710A3144	10/100
aluminium silver [1]	**1766-83**	2CKA001710A3659	10/100
studio white	**1766-84-500**	2CKA001710A3992	10/100
studio white, matt [1]	**1766-884**	2CKA001710A3926	10
black matt [1]	**1766-885**	2CKA001710A3903	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate **with metal mounting plate** With fixing claws. loudspeaker inserts and cover. Conductor cross-sections up to 4 mm² rigid. With screw-type terminals.		
anthracite	**1751-81**	2CKA001723A0253	10
ivory white	**1751-82**	2CKA001723A0239	10
aluminium silver [1]	**1751-83**	2CKA001723A0254	10
studio white	**1751-84**	2CKA001723A0240	10/100
studio white, matt [1]	**1751-884**	2CKA001723A0260	10
black matt [1]	**1751-885**	2CKA001723A0259	10

[1] Surface painted.

	Cover plate For Busch Bluetooth receiver 8219 U.		
anthracite	**8255-81**	2CKA008200A0211	1
ivory white	**8255-82**	2CKA008200A0212	1
aluminium silver [1]	**8255-83**	2CKA008200A0213	1
studio white	**8255-84**	2CKA008200A0214	1/10
studio white, matt [1]	**8255-884**	2CKA008200A0217	1
black matt [1]	**8255-885**	2CKA008200A0218	1

[1] Surface painted.

	Cover plate for Busch-powerDock For Busch-powerDock charging cradles.		
NEW			
anthracite	**6477-81**	2CKA006400A0056	10
ivory white	**6477-82**	2CKA006400A0057	10
aluminium silver [1]	**6477-83**	2CKA006400A0058	10
studio white	**6477-84**	2CKA006400A0059	10
studio white, matt [1]	**6477-884**	2CKA006400A0062	10
black matt [1]	**6477-885**	2CKA006400A0063	10

[1] Surface painted.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact** Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 10 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1094 U-500	2CKA001032A0512	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact, slide switch** With built-in slide switch and control lamp for nightly reduction of 4 K. Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 10 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1095 U-500	2CKA001032A0514	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **NC contact, sliding switch, 24 V** With built-in slide switch and control lamp for nightly reduction of 4 K. Switch contact opens when the set temperature is reached. With fixing claws. Separate terminal to activate nighttime mode and reduction of room temperature by 4K. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 24 V~ Rated current: 1 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1096 U	2CKA001032A0485	1
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty
	Room thermostat, flush-mounted [1) 2) 3)] **1gang 2way** With fixing claws. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%. Rated voltage: 230 V~ Rated current: 5 A Temperature range (Device): 5 °C to 30 °C EN 60730-2-9, British Standard EN 60669-2-1		
	1097 U-500	2CKA001032A0513	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, actual value indication
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1094 UTA	2CKA001032A0487	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UTA	2CKA001032A0488	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3)] Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, sliding switch, actual value indication, 24 V
With actual value temperature display
Automatic controller calibration
Switch contact opens when the set temperature is reached.
With built-in slide switch and control lamp for nightly reduction of 4 K.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 24 V~
Rated current: 1 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1096 UTA	2CKA001032A0489	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo-valves, "closed when de-energized", are necessary for connection to thermostat, e.g., Art. No. 6164/10 .
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, actual value indication
With actual value temperature display
Automatic controller calibration
With fixing claws.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 5 A
EN 60730-2-9, British Standard EN 60669-2-1

	1097 UTA	2CKA001032A0490	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized“ design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, setpoint indication, timer
With change-over contact.
Easy adjustment using menu and text-based display.
4 switching times per day can be user-defined for each day of the week.
With fixing claws.
Automatic summer/wintertime switch-over
Power reserve > 10 hours.
To fit cover plate 6435-xxx.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
NEW EN 60730-2-9

	1098 U-101	2CKA001032A0508	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] Servo valves of "closed or open when de-energized“ design are required for the controller. E.g. article no. 6164/10-101.
[3)] Switching temperature difference: ± 0.5 K.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1]
NC contact, remote sensor
With remote sensor and thermal feedback
For underfloor heating.
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Adjusting range: +10 to +50° C.
Connecting cable: 1mm² to 2.5 mm²
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A, cos ϕ 1
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UF	2CKA001032A0497	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Room thermostat, flush-mounted [1] [2]
Change-over contact, setpoint indication, timer, remote sensor
With change-over contact.
Easy adjustment using menu and text-based display.
4 switching times per day can be user-defined for each day of the week.
With fixing claws.
Automatic summer/wintertime switch-over
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Power reserve > 10 hours
To fit cover plate 6435-xxx.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A
Temperature range (Device): 10 °C to 50 °C
NEW EN 60730-2-9

	1098 UF-101	2CKA001032A0509	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.

Product	Article-No.	Order-No.	Pack/Qty

Electrothermal Valve Drives with function indicator
For the actuation of heaters and cooling ceilings in connection with conventional room temperature controllers (e.g., 1094 U) or KNX, or free@home heating/valve actuators (e.g., 6164/46, 6254/0.XX)).
With function display (opened or closed).
de-energized when closed
Max. opening/closing time: 3.5 min
For installing, a suitable valve adapter is required.
Power input: 4 mA (approx. 1 W)
Inrush current: < 550 mA (max. 100 ms)
Connecting cable: 1.0 m (pluggable)
Rated voltage: 230 V~
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 54
Dimensions: (L x W x D): 59 mm x 45 mm x 53 mm

	6164/10-102	2CKA006151A0257	1/100

Room thermostat, flush-mounted [1] [2] [3]
2 NC contacts, heating/cooling
With separate connection (230 V~) for external switchover between heating or cooling.
Switch contact opens when the set temperature is reached.
With fixing claws.
Nominal current: 10 A heating
Nominal current: 5 A cooling
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1099 UHK	2CKA001032A0515	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
2) Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
3) Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1] [2] [3]
2 NC contacts, heating/cooling, sliding switch
With built-in sliding switch for switchover between cooling or heating.
Switch contact opens when the set temperature is reached.
With fixing claws.
Nominal current: 10 A heating
Nominal current: 5 A cooling
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1099 UHKEA	2CKA001032A0516	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2] Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
[3] Switching temperature difference: ± 0.5 K.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for room thermostat For room thermostats 1094 U, 1097 U.		
anthracite	**1794-81**	2CKA001710A3629	10
ivory white	**1794-82**	2CKA001710A3543	10
aluminium silver [1]	**1794-83**	2CKA001710A3668	10
studio white	**1794-84**	2CKA001710A3544	10
studio white, matt [1]	**1794-884**	2CKA001710A3884	10
black matt [1]	**1794-885**	2CKA001710A3907	10

[1] Surface painted.

	Cover plate for room thermostat With sliding switch for nightly room temperature reduction. to activate nighttime mode and reduction of room temperature by 4K, for thermostats 1095 U, 1096 U and 1095 UF.		
anthracite	**1795-81**	2CKA001710A3630	10
ivory white	**1795-82**	2CKA001710A3568	10
aluminium silver [1]	**1795-83**	2CKA001710A3669	10
studio white	**1795-84**	2CKA001710A3569	10
studio white, matt [1]	**1795-884**	2CKA001710A3886	10
black matt [1]	**1795-885**	2CKA001710A3909	10

[1] Surface painted.

	Cover plate for room thermostat For room thermostats 1094 UTA, 1097 UTA.		
anthracite	**1794 TA-81**	2CKA001710A3695	10
ivory white	**1794 TA-82**	2CKA001710A3696	10
aluminium silver [1]	**1794 TA-83**	2CKA001710A3697	10
studio white	**1794 TA-84**	2CKA001710A3698	10
studio white, matt [1]	**1794 TA-884**	2CKA001710A3883	10
black matt [1]	**1794 TA-885**	2CKA001710A3906	10

[1] Surface painted.

	Cover plate for room thermostat With sliding switch for nightly room temperature reduction. For room thermostats 1095 UTA, 1096 UTA.		
anthracite	**1795 TA-81**	2CKA001710A3722	10
ivory white	**1795 TA-82**	2CKA001710A3723	10
aluminium silver [1]	**1795 TA-83**	2CKA001710A3724	10
studio white	**1795 TA-84**	2CKA001710A3725	10
studio white, matt [1]	**1795 TA-884**	2CKA001710A3885	10
black matt [1]	**1795 TA-885**	2CKA001710A3908	10

[1] Surface painted.

	Cover plate For comfort timer control element 6455-101-500. For standard timer control element 6456-101. For room thermostats 1098 U-101 and 1098 UF-101. For short-time timer 6465 U-101. For Busch-CO2 sensor 1091 U-500.		
anthracite	**6435-81**	2CKA006430A0303	10
ivory white	**6435-82**	2CKA006430A0304	10
aluminium silver [1]	**6435-83**	2CKA006430A0305	10
studio white, matt [1]	**6435-884**	2CKA006430A0388	10
black matt [1]	**6435-885**	2CKA006430A0389	10

[1] Surface painted.

	Cover plate for room thermostat For room temperature controller 1099 UHK.		
anthracite	**1795 HK-81**	2CKA001710A4013	10
ivory white	**1795 HK-82**	2CKA001710A4015	10
aluminium silver [1]	**1795 HK-83**	2CKA001710A4016	10
studio white	**1795 HK-84**	2CKA001710A4017	10
studio white, matt [1]	**1795 HK-884**	2CKA001710A4019	10
black matt [1]	**1795 HK-885**	2CKA001710A4020	10

[1] Surface painted.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for room thermostat For room temperature controller 1099 UHKEA. With sliding switch for switchover between cooling or heating.		
anthracite	**1795 HKEA-81**	2CKA001710A4045	10
ivory white	**1795 HKEA-82**	2CKA001710A4047	10
aluminium silver [1]	**1795 HKEA-83**	2CKA001710A4048	10
studio white	**1795 HKEA-84**	2CKA001710A4049	10
studio white, matt [1]	**1795 HKEA-884**	2CKA001710A4051	10
black matt [1]	**1795 HKEA-885**	2CKA001710A4052	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty

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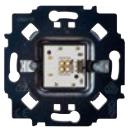
LED light

Product	Article-No.	Order-No.	Pack/Qty
	Flush-mounted LED insert [1) 2)] **Power module** For Busch-iceLight wall and ceiling module Type 2068/xx. High brightness, e.g. for the display of information. Colour temperature: 2,700 K (warm white) Not dimmable. Light intensity can be switched between 100% and 25% using front service switch. System power consumption: 5 W Rated voltage: 230 V~, + 10% / - 10% Current consumption of LED: 350 mA (secondary) Secondary: SELV Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 40 °C EN 62031/VDE 0715-5 of Jan. 2009		
	2067/11 U	2CKA001510A0001	1/10

[1)] Use relay inserts when switching through movement sensors or comfort switches.
[2)] For switching the LED flush mounted insert use switches without orientation light only.

	**Flush-mounted LED insert** [1) 2)] **Power module** For Busch-iceLight wall and ceiling module Type 2068/xx. High brightness, e.g. for the display of information. Colour temperature: 4,000 K (neutral white) Not dimmable. Light intensity can be switched between 100% and 25% using front service switch. System power consumption: 5 W Rated voltage: 230 V~, + 10% / - 10% Current consumption of LED: 350 mA (secondary) Secondary: SELV Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 40 °C EN 62031/VDE 0715-5 of Jan. 2009		
	2067/12 U	2CKA001510A0002	1/10

[1)] Use relay inserts when switching through movement sensors or comfort switches.
[2)] For switching the LED flush mounted insert use switches without orientation light only.

	Flush-mounted LED insert [1) 2)] **Night light** For Busch-iceLight wall and ceiling module Type 2068/xx. For low brightness (night light). Colour temperature: 3,000 K (warm white) Not dimmable. System power consumption: 0.15 W Rated voltage: 230 V~, + 10% / - 10% Current consumption of LED: 40 mA (secondary) Secondary: SELV Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 40 °C EN 62031/VDE 0715-5 of Jan. 2009		
	2067/13 U	2CKA001510A0012	1/10

[1)] Use relay inserts when switching through movement sensors or comfort switches.
[2)] For switching the LED flush mounted insert use switches without orientation light only.

Product	Article-No.	Order-No.	Pack/Qty
	Flush-mounted LED insert [1) 2)] **Night light** For Busch-iceLight wall and ceiling module Type 2068/xx. For low brightness (night light). Colour temperature 6,500 K (cold white) Not dimmable. System power consumption: 0.15 W Rated voltage: 230 V~, + 10% / - 10% Current consumption of LED: 40 mA (secondary) Secondary: SELV Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 40 °C EN 62031/VDE 0715-5 of Jan. 2009		
	2067/14 U	2CKA001510A0013	1/10

[1)] Use relay inserts when switching through movement sensors or comfort switches.
[2)] For switching the LED flush mounted insert use switches without orientation light only.

	Info light unit [1) 2)] Size of information field 43 x 43 mm. Long service life of the lighting element (LEDs). Homogeneous backlighting of the information field. Rated voltage: 230 V~		
	2062 U	2CKA001511A0115	1/10

[1)] Use relay inserts when switching through movement sensors or comfort switches.
[2)] For switching the LED flush mounted insert use switches without orientation light only.

	Cover plate [1) 2)] As cover for flush-mounted info light. For insert 2062 U. Size of information field 43 x 43 mm.		
anthracite	**1716-81**	2CKA001731A1921	1
ivory white	**1716-82**	2CKA001731A1922	1
aluminium silver [3)]	**1716-83**	2CKA001731A1950	1
studio white	**1716-84**	2CKA001731A1923	1
studio white, matt [3)]	**1716-884**	2CKA001731A1978	1
black matt [3)]	**1716-885**	2CKA001731A1980	1

[1)] Included with the cover are 46 different text labels and symbols.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Surface painted.

	Ceiling module solo/future® linear flush-type For ambient lightning. Light outlet downward. Flat construction type, almost flush with frame; combinable. Dimensions: (L x W x D): 63 mm x 63 mm x 9 mm		
	2068/22-84	2CKA001510A0017	1

future® linear

WaveLINE control elements

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **1-channel** 1gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 1 radio channel can be operated or up to 2 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6731-82-500**	2CKA006730A0032	1/10
aluminium silver [3)]	**6731-83-500**	2CKA006730A0035	1/10
studio white	**6731-84-500**	2CKA006730A0038	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **2-channel** 2gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 2 radio channels can be operated or up to 4 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6732-82-500**	2CKA006730A0033	1/10
aluminium silver [3)]	**6732-83-500**	2CKA006730A0036	1/10
studio white	**6732-84-500**	2CKA006730A0039	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Surface painted.

future® linear

WaveLINE control elements

Product	Article-No.	Order-No.	Pack/Qty
	Wall-mounted transmitter WaveLINE [1) 2)] **4-channel** 4gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 4 radio channels can be operated or up to 8 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery service life: typically 5 years, therefore practically maintenance-free. Automatic monitoring of battery life. Including fixing plate for mounting on smooth walls or on switch boxes. Control element: rocker switch left/right Display elements: LED to indicate the transmission Rated voltage: 3 V- Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm x 16 mm		
ivory white	**6733-82-500**	2CKA006730A0034	1/10
aluminium silver [3)]	**6733-83-500**	2CKA006730A0037	1/10
studio white	**6733-84-500**	2CKA006730A0040	1/10

[1)] Battery included in delivery.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	WaveLINE LED display [1)] For status display of window handle positions: open = red, closed = green, tilted = yellow. Direct onsite operation possible for switching / dimming an electrical device depending on the flush-mounted insert. 4 individual LED display channels. Up to 8 WaveLine transmitters can be taught-in on each LED display channel. Up to 8 WaveLine transmitters can be taught-in on onsite operation. After a power cut all LED-Display channels light in red. The cyclic telegram repeat of the WaveLINE window position sensor 6720-xxx sensor automatically updates the window open state. Status display for depleted WaveLINE transmitter battery. Status display for faulty transmission link and defective WaveLINE transmitter. User-friendly start-up without PC / software. Printed labelling sheet with 8 different inlay sheets. For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-Watchdog 220 WaveLINE 6747 AGM. For Busch-Universal relay switch insert 6404 U. For universal dimmer switch insert 6595 U. Free-field range: approx. 100 m. Send/receive frequency: 868 MHz. Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 63 mm x 63 mm		
anthracite	6730-81	2CKA006730A0014	1
ivory white	6730-82	2CKA006730A0015	1
aluminium silver [2)]	6730-83	2CKA006730A0016	1
studio white	6730-84	2CKA006730A0017	1
studio white, matt [2)]	6730-884	2CKA006730A0026	1
black matt [2)]	6730-885	2CKA006730A0027	1

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Surface painted.

future® linear

Busch-Infoline®

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **1gang, with labelling field** With operating knob. For signal/cancel push-button 1520/1 UK. For monitoring unit 1511 U. For Busch-Leakage guard insert 1531 U. With labelling field 61 x 20 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1571 CN-84**	2CKA001582A0346	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **2gang, with labelling field** With operating knob. For signal push-button insert 1520/1 UKZ. With labelling field 61 x 20 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1572 CN-84**	2CKA001582A0348	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **with red and neutral light panel and labelling field** For Alarm Control Unit insert 1515 U-12. For Busch-Alarm signal insert 1563 U-12. For indication lamp insert 1564 U-1x. With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1573 CN-84**	2CKA001582A0350	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **6gang, illuminable, with labelling field** For signal panel insert 1566 U. With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1575 CN-84**	2CKA001582A0353	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1) 2)] **with labelling field** For power supply insert 1518 U. For relay insert 1539 U. For signal generator insert 1561 U-.... With labelling field 61 x 61 mm. Protection class (Device): IP 20 Dimensions: (L x W x D): 63.5 mm x 63.5 mm x 11.1 mm		
studio white	**1576 CN-84**	2CKA001582A0355	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Can also be used for Busch-axcent®, solo®, and carat®.

Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Extension of claws [1)] For the installation of flush-mounted SCHUKO® socket outlets and also switches, push-buttons, etc. and deeply installed flush-mounted boxes.		
	2148	2CKA002148A0120	100

[1)] Not suitable for types 2000/3 US, 2000/6/2 US, 2000/6/6 US-101 and double socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Braille symbol self-adhesive (transparent) for cover 2506-xxx		
	light **2144 LI**	2CKA001714A0295	10/1000
	bell **2144 KI**	2CKA001714A0296	10/1000
	key **2144 TR**	2CKA001714A0297	10/1000

Product	Article-No.	Order-No.	Pack/Qty
	Braille symbol **socket outlet** self-adhesive, transparent for SCHUKO® socket outlets with hinged lid 20 EUK-xxx		
	2144 ST	2CKA001714A0298	10/1000

Product	Article-No.	Order-No.	Pack/Qty
	DIN A 4 labelling sheet [1)] **plastic foil** Suitable for all to be labeled Busch-Jaeger devices. For laser printer. The text of the foil is printed via the Busch-Jeager labeling service.		
translucent	**1799/02**	2CKA001799A0959	1
transparent	**1799/03**	2CKA001799A0960	1

[1)] 1 piece = 1 sheet.

Product	Article-No.	Order-No.	Pack/Qty
	RC suppressor For protection against the damage or destruction of electronic devices due to overvoltages. For wiring network-interconnected inductivities (e.g.. relay, protection, fluorescent lamps, transformers, etc.). Eliminates functional disturbances on electronic devices, e.g. automatic circuit reclosure (clocking) of a movement detector. Dimensions: diameter 25 mm, length 35 mm, length of the connecting cable approx. 100 mm. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz		
	6899	2CKA006899A0231	10

future® linear
Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Surface-mounting box Box for inserts and cover plates with cover frame. 1gang box		
anthracite	1701-81	2CKA001799A0895	10
ivory white	1701-82	2CKA001799A0896	10
aluminium silver [1]	1701-83	2CKA001799A0905	10
studio white	1701-84-500	2CKA001799A0982	10/100
studio white, matt [1]	1701-884	2CKA001799A0921	10
black matt [1]	1701-885	2CKA001799A0923	10
	2gang box		
anthracite	1702-81	2CKA001799A0900	10
ivory white	1702-82	2CKA001799A0901	10
aluminium silver [1]	1702-83	2CKA001799A0906	10
studio white	1702-84	2CKA001799A0902	10
studio white, matt [1]	1702-884	2CKA001799A0922	10
black matt [1]	1702-885	2CKA001799A0924	10
	3gang box		
anthracite	1703-81	2CKA001799A0915	1
ivory white	1703-82	2CKA001799A0916	1
aluminium silver [1]	1703-83	2CKA001799A0917	1
studio white	1703-84	2CKA001799A0918	1
studio white, matt [1]	1703-884	2CKA001799A0955	1
black matt [1]	1703-885	2CKA001799A0956	1

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cable entry for SM box Suitable for 1701-8x and 1702-8x. Trunking dimension: 15 x 15 mm to 19 x 19 mm.		
anthracite	2087-81	2CKA001761A1493	10
ivory white	2087-82	2CKA001761A1494	10
aluminium silver [1]	2087-83	2CKA001761A1504	10
studio white	2087-84	2CKA001761A1495	10

[1] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Cable entry for SM box Suitable for 1701-8x and 1702-8x.		
anthracite	2088-81	2CKA001761A1498	10
ivory white	2088-82	2CKA001761A1499	10
aluminium silver [1]	2088-83	2CKA001761A1505	10
studio white	2088-84	2CKA001761A1500	10

[1] Surface painted.

future® linear
Cover frames

future® linear Cover frame
1gang frame
With small corner radii for trunking systems.

Product	Article-No.	Order-No.	Pack/Qty
anthracite	**1721-181K**	2CKA001754A4240	10
ivory white	**1721-182K-500**	2CKA001754A4506	10/100
studio white	**1721-184K-500**	2CKA001754A4498	10/100
aluminium silver [1]	**1721-183K-500**	2CKA001754A4529	10/100
studio white, matt [1]	**1721-884K-500**	2CKA001754A4531	10/100
black matt [1]	**1721-885K-500**	2CKA001754A4532	10/100

[1] Surface painted.

future® linear Cover frame
2gang frame
With small corner radii for trunking systems.

Product	Article-No.	Order-No.	Pack/Qty
anthracite	**1722-181K**	2CKA001754A4241	10
ivory white	**1722-182K**	2CKA001754A4231	10
aluminium silver [1]	**1722-183K-500**	2CKA001754A4530	10/100
studio white	**1722-184K-500**	2CKA001754A4499	10/100
studio white, matt [1]	**1722-884K**	2CKA001754A4415	10
black matt	**1722-885K-500**	2CKA001754A4534	10/100

[1] Surface painted.

future® linear Cover frame
3gang frame
With small corner radii for trunking systems.

Product	Article-No.	Order-No.	Pack/Qty
anthracite	**1723-181K**	2CKA001754A4242	10
ivory white	**1723-182K**	2CKA001754A4232	10
aluminium silver [1]	**1723-183K-500**	2CKA001754A4533	10/100
studio white	**1723-184K-500**	2CKA001754A4502	10/100
studio white, matt [1]	**1723-884K**	2CKA001754A4416	10
black matt [1]	**1723-885K**	2CKA001754A4421	10/100

[1] Surface painted.

future® linear Cover frame
4gang frame
With small corner radii for trunking systems.

Product	Article-No.	Order-No.	Pack/Qty
anthracite	**1724-181K**	2CKA001754A4243	10
ivory white	**1724-182K**	2CKA001754A4233	10
aluminium silver [1]	**1724-183K**	2CKA001754A4309	10
studio white	**1724-184K**	2CKA001754A4238	10
studio white, matt [1]	**1724-884K**	2CKA001754A4417	10
black matt [1]	**1724-885K**	2CKA001754A4422	10

[1] Surface painted.

future® linear Cover frame
5gang frame
With small corner radii for trunking systems.

Product	Article-No.	Order-No.	Pack/Qty
anthracite	**1725-181K**	2CKA001754A4244	1
ivory white	**1725-182K**	2CKA001754A4234	1
aluminium silver [1]	**1725-183K**	2CKA001754A4310	1
studio white	**1725-184K-500**	2CKA001754A4517	1
studio white, matt [1]	**1725-884K**	2CKA001754A4418	1
black matt [1]	**1725-885K**	2CKA001754A4423	1

[1] Surface painted.

future® linear Cover frame
1gang frame
With small corner radii for trunking systems.

Product	Article-No.	Order-No.	Pack/Qty
red RAL 3003	**1721-12-182K**	2CKA001754A4371	10

future® linear Cover frame
2gang frame
FWith small corner radii for trunking systems.

Product	Article-No.	Order-No.	Pack/Qty
red RAL 3003	**1722-12-182K**	2CKA001754A4372	10

future® linear
Cover frames

Product	Article-No.	Order-No.	Pack/Qty
	future® linear Cover frame [1] **1gang frame** With labelling field and label holder. With small corner radii for trunking systems.		
studio white	**1721-184 NSK-500**	2CKA001754A4527	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	future® linear Cover frame [1] **2gang frame** With labelling field and label holder. With small corner radii for trunking systems. Vertical.		
studio white	**1722-184 NSK**	2CKA001754A4365	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	future® linear Cover frame [1] **3gang frame** With labelling field and label holder. With small corner radii for trunking systems. Vertical.		
studio white	**1723-184 NSK**	2CKA001754A4366	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	future® linear Cover frame [1] **4gang frame** With labelling field and label holder. With small corner radii for trunking systems. Vertical.		
studio white	**1724-184 NSK**	2CKA001754A4367	1

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	future® linear Cover frame [1] **2gang frame** With labelling field and label holder. With small corner radii for trunking systems. Horizontal		
studio white	**1732-184 NSK**	2CKA001754A4368	10/100

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	future® linear Cover frame [1] **3gang frame** With labelling field and label holder. With small corner radii for trunking systems. Horizontal		
studio white	**1733-184 NSK**	2CKA001754A4369	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	future® linear Cover frame [1] **4gang frame** With labelling field and label holder. With small corner radii for trunking systems. Horizontal		
studio white	**1734-184 NSK**	2CKA001754A4370	1

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Cover frame [1] **1gang frame** With rounded edges and corners.		
ivory white	**1721-182**	2CKA001754A4168	10/100
studio white	**1721-184-500**	2CKA001754A4504	10/100

[1] Suitable for installation in trunking systems with 80 mm conduit.

	Cover frame **2gang frame** For vertical or horizontal installation. With rounded edges and corners.		
ivory white	**1722-182**	2CKA001754A4169	10/100
studio white	**1722-184-500**	2CKA001754A4508	10/100

	Cover frame **3gang frame** For vertical or horizontal installation. With rounded edges and corners.		
ivory white	**1723-182**	2CKA001754A4170	10/100
studio white	**1723-184**	2CKA001754A4175	10/100

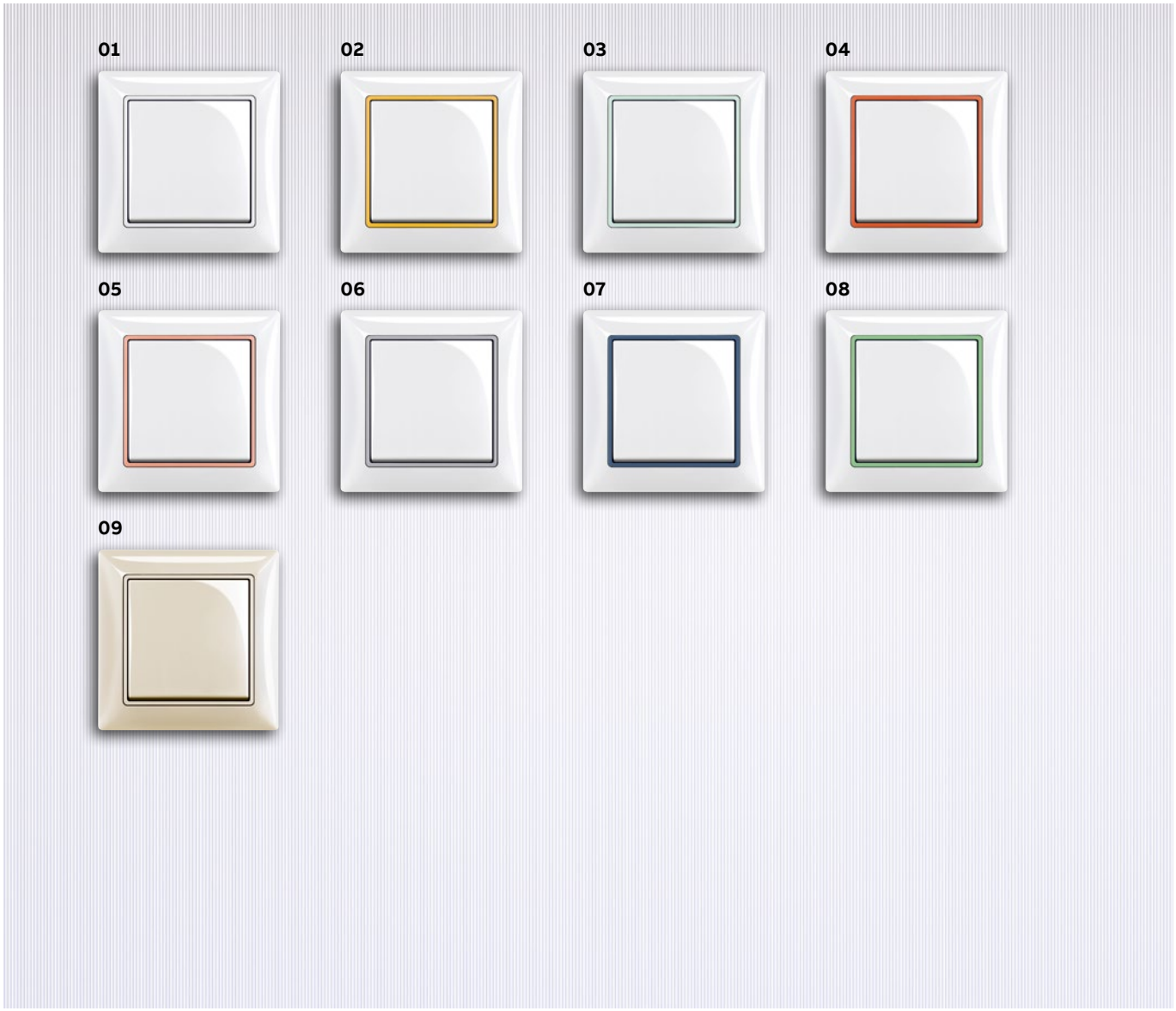
	Cover frame **4gang frame** For vertical or horizontal installation. With rounded edges and corners.		
ivory white	**1724-182**	2CKA001754A4171	1
studio white	**1724-184**	2CKA001754A4176	1

	Cover frame **5gang frame** For vertical or horizontal installation. With rounded edges and corners.		
ivory white	**1725-182**	2CKA001754A4172	1
studio white	**1725-184**	2CKA001754A4177	1

basic55®

One concept, numerous possibilities.

Square but still round, white but colourful. A smart concept which inspires the imagination and acknowledges the desire for individual styling. Elements formed into a creative solution. White rockers and frames fine-tuned with discreet colour rings. The concept which makes its own style.



01 alpine white / alpine white
02 alpine white / yellow
03 alpine white / luminous
04 alpine white / orange
05 alpine white / apricot
06 alpine white / silver
07 alpine white / blue
08 alpine white / light green
09 white / white

basic55®

basic55® range has many facets. It fulfils every wish for creative design. Six frame colours can be perfectly combined with two rocker colours to meet individual expectations. Plus the luxurious champagne version as alternative. Thirteen exclusive options for combining puristic design with modern, pleasant colours.

01 chalet-white / chalet-white
02 chalet-white / château-black
03 maison-beige / chalet-white
04 maison-beige / château-black
05 bistro-blue / chalet-white
06 bistro-blue / château-black
07 entrée-grey / chalet-white
08 entrée-grey / château-black
09 foyer-red / chalet-white
10 foyer-red / château-black
11 château-black / chalet-white
12 château-black / château-black
13 champagne

basic55®

Selected functions.

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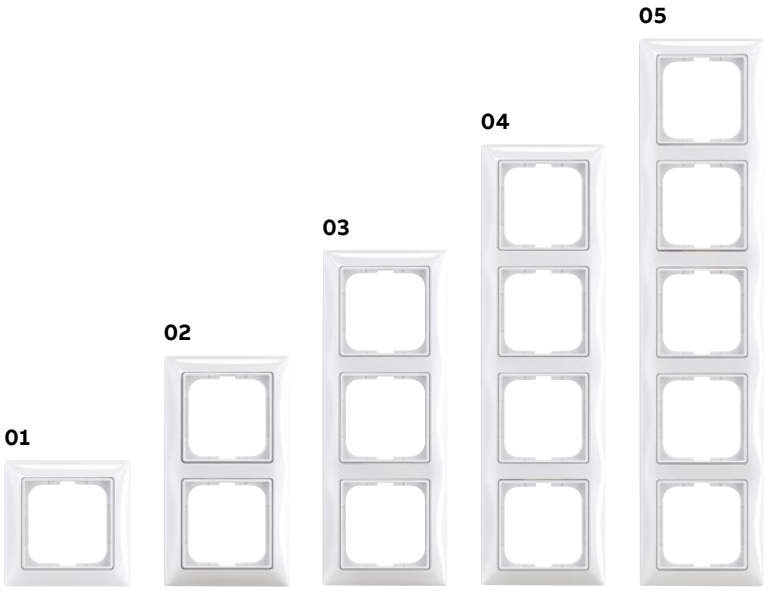
01 Switch/button with rocker
02 2gang switch
03 2gang switch with neon lamp
04 3gang 1way switch
05 Push switch with doorbell symbol and labeling field
06 Rotary dimmer
07 Push switch with illumination
08 20 A DP switch with red neon indicator
09 Busch-Comfort switch®
10 SCHUKO® socket outlet, shuttered
11 Socket outlet, shuttered with earthing pin
12 SCHUKO® socket outlet with hinged lid
13 SCHUKO® double socket outlet
14 Blind switches/push-buttons
15 Blind switches/push-buttons with rotary knob
16 Comfort timer
17 Card switch
18 Room temperature controller
19 Antenna socket
20 Antenna socket for TV
21 Antenna socket for Radio/TV/SAT
22 Light signal
23 Busch-iDock
24 Loudspeaker outlet
25 Telephone Single Outlet (TAE)
26 Universal data connecting unit
27 Universal data connecting unit, 2gang
28 Loudspeaker

basic55®

Selected functions.



1 to 5gang cover frame for horizontal and vertical installation.

01 84 mm x 84 mm
02 84 mm x 155 mm
03 84 mm x 226 mm
04 84 mm x 297 mm
05 84 mm x 368 mm

For more information about light switch ranges visit ABB global web sites.

basic55®

Switches / push-buttons

Product	Article-No.	Order-No.	Pack/Qty
	Switch with rocker breaking circuit, 1-pole Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
white	**2006/1 UC-92-507**	2CKA001012A2146	10/100
champagne	**2006/1 UC-93-507**	2CKA001012A2164	10/100
alpine white	**2006/1 UC-94-507**	2CKA001012A2139	10/100
château-black	**2006/1 UC-95-507**	2CKA001012A2174	10
chalet-white	**2006/1 UC-96-507**	2CKA001012A2184	10/100
	Switch with rocker breaking circuit, 1-pole With neon lamp. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
white	**2006/1 UCGL-92-507**	2CKA001012A2156	10/100
champagne	**2006/1 UCGL-93-507**	2CKA001012A2165	10
alpine white	**2006/1 UCGL-94-507**	2CKA001012A2153	10/100
château-black	**2006/1 UCGL-95-507**	2CKA001012A2175	10
chalet-white	**2006/1 UCGL-96-507**	2CKA001012A2185	10
	Switch with rocker 1gang 2way Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
white	**2006/6 UC-92-507**	2CKA001012A2149	10/100
champagne	**2006/6 UC-93-507**	2CKA001012A2169	10/100
alpine white	**2006/6 UC-94-507**	2CKA001012A2142	10/100
château-black	**2006/6 UC-95-507**	2CKA001012A2179	10/100
chalet-white	**2006/6 UC-96-507**	2CKA001012A2189	10/100
	Switch with rocker 2gang 1way Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
white	**2006/5 UC-92-507**	2CKA001012A2148	10/100
champagne	**2006/5 UC-93-507**	2CKA001012A2167	10/100
alpine white	**2006/5 UC-94-507**	2CKA001012A2141	10/100
château-black	**2006/5 UC-95-507**	2CKA001012A2177	10/100
chalet-white	**2006/5 UC-96-507**	2CKA001012A2187	10/100

Product	Article-No.	Order-No.	Pack/Qty
	Switch with rocker 2gang 1way With neon lamp. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
white	**2006/5 UCGL-92-507**	2CKA001012A2157	10/100
champagne	**2006/5 UCGL-93-507**	2CKA001012A2168	10
alpine white	**2006/5 UCGL-94-507**	2CKA001012A2154	10/100
château-black	**2006/5 UCGL-95-507**	2CKA001012A2178	10
chalet-white	**2006/5 UCGL-96-507**	2CKA001012A2188	10
	Switch with rocker 2gang 2way Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
white	**2006/6/6 UC-92-507**	2CKA001012A2151	10
champagne	**2006/6/6 UC-93-507**	2CKA001012A2171	10
alpine white	**2006/6/6 UC-94-507**	2CKA001012A2144	10/100
château-black	**2006/6/6 UC-95-507**	2CKA001012A2181	10
chalet-white	**2006/6/6 UC-96-507**	2CKA001012A2191	10
	Switch with rocker 3gang 1way, SP Rated voltage: 250 V~ Rated current: 16 AX IEC 60669-1		
white	**106/3/1 UC-92-507**	2CKA001012A2158	10/100
champagne	**106/3/1 UC-93-507**	2CKA001012A2163	10
alpine white	**106/3/1 UC-94-507**	2CKA001012A2155	10/100
château-black	**106/3/1 UC-95-507**	2CKA001012A2173	10
chalet-white	**106/3/1 UC-96-507**	2CKA001012A2183	10
	Switch with rocker 1gang Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
white	**2006/7 UC-92-507**	2CKA001012A2152	10
champagne	**2006/7 UC-93-507**	2CKA001012A2172	10
alpine white	**2006/7 UC-94-507**	2CKA001012A2145	10
château-black	**2006/7 UC-95-507**	2CKA001012A2182	10
chalet-white	**2006/7 UC-96-507**	2CKA001012A2192	10

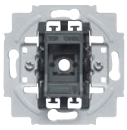
basic55®

Switches / push-buttons

Product	Article-No.	Order-No.	Pack/Qty
	Switch with rocker **1gang DP** With neon lamp. Rated voltage: 250 V~ Rated current: 20 AX IEC 60669-1		
white	**1020/2 UCK-92-507**	2CKA001020A0090	1
champagne	**1020/2 UCK-93-507**	2CKA001020A0091	10
alpine white	**1020/2 UCK-94-507**	2CKA001020A0089	1
château-black	**1020/2 UCK-95-507**	2CKA001020A0092	10
chalet-white	**1020/2 UCK-96-507**	2CKA001020A0093	10
	Switch with rocker [1) 2)] **1gang 2way with N-terminal** With neon lamp. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
white	**2006/6 UCK-92-507**	2CKA001012A2150	10
champagne	**2006/6 UCK-93-507**	2CKA001012A2170	10
alpine white	**2006/6 UCK-94-507**	2CKA001012A2143	10
château-black	**2006/6 UCK-95-507**	2CKA001012A2180	10
chalet-white	**2006/6 UCK-96-507**	2CKA001012A2190	10

[1)] With 1 mA neon lamp.
[2)] Illuminable by using lamps 8360, 8362, 8363, 8365, 8366, and 8367 and LED inserts.

	Push switch with rocker **SP, with normally open contact (operating current)** With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
white	**2026 UC-92-507**	2CKA001413A1083	10/100
champagne	**2026 UC-93-507**	2CKA001413A1091	10/100
alpine white	**2026 UC-94-507**	2CKA001413A1080	10/100
château-black	**2026 UC-95-507**	2CKA001413A1095	10
chalet-white	**2026 UC-96-507**	2CKA001413A1099	10
	Push switch with rocker **with doorbell symbol and labeling field** SP (operating current), With N terminal. Secondary: 250 V- Rated current: 10 A IEC 60669-1		
white	**2026 UCN/KL-92-507**	2CKA001413A1087	10/100
champagne	**2026 UCN/KL-93-507**	2CKA001413A1093	10
alpine white	**2026 UCN/KL-94-507**	2CKA001413A1086	10/100
château-black	**2026 UCN/KL-95-507**	2CKA001413A1097	10
chalet-white	**2026 UCN/KL-96-507**	2CKA001413A1101	10

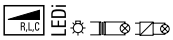
Product	Article-No.	Order-No.	Pack/Qty
	Push switch with rocker and neutral symbol **SP, with normally open contact (operating current)** With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC 60669-1		
white	**2026 UCN-92-507**	2CKA001413A1084	10/100
champagne	**2026 UCN-93-507**	2CKA001413A1092	10/100
alpine white	**2026 UCN-94-507**	2CKA001413A1081	10
château-black	**2026 UCN-95-507**	2CKA001413A1096	10
chalet-white	**2026 UCN-96-507**	2CKA001413A1100	10
	**Card switch 10 A** [1)] **SP, with normally open contact (operating current)** Illuminable. With N terminal. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1, British Standard EN 60669-1		
	2025 U	2CKA001012A1713	10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

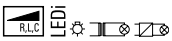
	Cover plate [1)] For card switch. For insert 2025 U. Suitable for cards sized 54 x 86 mm. The inner part of the cover plate is made of light-conducting plastic, so that the card slot is illuminated.		
white	**1792-92-507**	2CKA001710A3865	10
champagne	**1792-93-507**	2CKA001710A3929	10
alpine white	**1792-94-507**	2CKA001710A3864	10
château-black	**1792-95-507**	2CKA001710A3933	10
chalet-white	**1792-96-507**	2CKA001710A3937	10

[1)] Due to dimensions cover is suitable in cover frames without decorative styling frame only.

basic55®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6) 7)] **UP, LED, 2-400 W** Very small installation depth: < 20 mm Without claws. With rotary control, two-way switch and soft-catch. 2-wire connection (neutral conductor not required) Optimised for dimming of retrofit LED lamps (LEDi). For dimmable Retrofit-LEDs (LEDi). For dimmable Retrofit-LEDs (LEDi) with conventional or electronic transformers. For incandescent lamps, 230 V tungsten halogen lamps, low-voltage halogen lamps with conventional or electronic transformers and dimmable energy-saving halogen lamps. Mix operaton of LEDi with conventional loads possible. With manually adjustable operating mode: trailing / leading edge control. With adjustable minimum/maximum brightness. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. Without cover plate. Rated voltage: 230 V~, + 10% / - 10% Rated frequency: 50 Hz/60 Hz Nominal power: 2 - 100 W/VA (leading edge control) Nominal power: 2 - 400 W/VA (trailing edge control) Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 		
	6523 UR-103-500	2CKA006512A0345	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Also applicable for 1gang 2way installations.
[5)] Provided with terminal for net disconnection devices.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[7)] Recommendation: Please use loads and types of one producer.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4) 5) 6) 7)] **Flush-mounted, LED, 2-100 W** With rotary control, two-way switch and soft-catch. 2-wire connection (neutral conductor not required) Optimised for dimming of retrofit LED lamps (LEDi). For dimmable Retrofit-LEDs (LEDi). For dimmable Retrofit-LEDs (LEDi) with conventional or electronic transformers. For incandescent lamps, 230 V tungsten halogen lamps, low-voltage halogen lamps with conventional or electronic transformers and dimmable energy-saving halogen lamps. Mix operaton of LEDi with conventional loads possible. Via mode switch adjustable between leading edge control and trailing edge control. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, + 10% / - 10% Rated frequency: 50 Hz/60 Hz Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 250 W/VA (non-LED loads). Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 		
	6523 U-102-500	2CKA006512A0335	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Also applicable for 1gang 2way installations.
[5)] Provided with terminal for net disconnection devices.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[7)] Recommendation: Please use loads and types of one producer.

basic55®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty

Busch-touch dimmer [1) 2) 3) 4) 5) 6)]
Flush-mounted, LED, 2-100 W
Touch dimmer.
2-wire connection (neutral conductor not required)
Neutral conductor optionally connectable (recommended for the connection of low loads < 10 W/VA).
Optimised for dimming of retrofit LED lamps (LEDi).
For incandescent lamps, 230V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers and dimmable halogen energy-saving lamps.
Mix operaton of LEDi with conventional loads possible.
With adjustable minimum brightness.
The minimum brightness for the leading edge control can be adjusted using the potentiometer.
The potentiometer at the left limit stop corresponds with the trailing edge control mode.
Low-noise level by MOSFET transistors.
With electronic short-circuit protection.
With electronic overload protection.
With light-level memory and minimum brightness memory.
Operation also possible via conventional push buttons (2020 US, 2021/6 UK).
Without control cover.
For control cover with control lamp 6543-xxx-10x.
For Busch-Remote control IR control cover 6066-xxx-10x.
For comfort timer control element 6455-101-500.
For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx.
Nominal power: 2 - 100 W/VA (retrofit LED loads).
Nominal power: 10 - 200 W/VA (non-LED loads).
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 20
Temperature range (Device): 0 °C to 35 °C
IEC 60669-2-1, British Standard EN 60669-2-1

R,L,C LEDi

	6526 U-500	2CKA006512A0323	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Recommendation: Please use loads and types of one producer.
[6)] In connection with 6810-21x-101 and 6800-xx-104 (M) only suitable for switching retrofit LEDs (for 2-conductor connection).

Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1) 2) 3) 4) 5)]
flush mounted, RL, 20-500 W
With rotary control, 2way On-Off switching and soft-catch.
Leading Edge control.
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
With adjustable minimum brightness.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 20 - 500 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

R,L

	2247 U-500	2CKA006512A0302	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-rotary dimmer [1) 2) 3) 4) 5) 6)]
UP, RL, 200-700 W
With rotary control, 2way On-Off switching and soft-catch.
Leading Edge control.
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
Short-circuit-proof, overload-protected.
With adjustable minimum brightness.
Without cover plate.
Without claws.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 200 - 700 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

R,L

	6520 U-500	2CKA006520A0227	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Provided with terminal for net disconnection devices.
[4)] Also applicable for 1gang 2way installations.
[5)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[6)] Should be mounted in a seperate wallbox.

Busch-2gang switch/rotary dimmer [1) 2) 3)]
flush mounted, RL, 60-400 W
1 channel designed as dimmer.
1 channel designed as switch contact (1gang 2way contact element)
with leading edge control
For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer.
With adjustable minimum brightness.
Without cover plate.
Rated current 6A (changeover contact switch output).
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 60 - 400 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

R,L

	6517 U-101-500	2CKA006517A0018	1/10

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Can be used to replace a 2gang 1way switch.

basic55®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1) 2) 3) 4) 5) 6)]
flush mounted, RC, 40-550 W
With rotary control, soft-catch and with trailing edge control.
For incandescent lamps, 230 V tungsten halogen lamps and lowvoltage halogen lamps with electronic transformers.
Low-noise, short-circuit-proof, overload-protected.
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Rated power: 40 - 550 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6519 U	2CKA006519A0011	1

[1)] Not suitable with conventional transformers.
[2)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[3)] In case of electronic transformers, 5 % transformer losses.
[4)] Provided with terminal for net disconnection devices.
[5)] Also applicable for 1gang 2way installations.
[6)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Busch-rotary dimmer [1) 2) 3) 4) 5)]
flush mounted, RLC, 60-420 W
with soft-catch
With intelligence for universal operation.
For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers.
Short-circuit-proof, overload-protected.
Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible.
Operation via rotary-type remote control 6592 U possible,
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Rated power: 60 - 420 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	6591 U-101-500	2CKA006513A0588	1/10

[1)] Illuminable with neon lamp 3855. Neon lamp included in delivery with cover plate.
[2)] In case of electronic transformers, 5 % transformer losses.
[3)] In the case of conventional transformers, take ~20% transformer loss into account.
[4)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5)] Cannot be combined with a 2way switch.

Busch-rotary dimmer, extension [1) 2)]
flush mounted
for connection to 6591 U-101,
To be used with Busch-Dimmer®, MDRC 6583.
with soft-catch
A maximum of 5 multi-way extensions can be connected to a 6591U-101,
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz

	6592 U-500	2CKA006513A0590	1

[1)] Control elements 2115-xxx and 6540-xxx.
[2)] Required for illuminating the N-connection control element.

Product	Article-No.	Order-No.	Pack/Qty

Busch-rotary dimmer [1) 2) 3) 4)]
flush mounted, 1-10V
With rotary control.
For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC.
For LED control via control gears
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Rated power: 700 W/VA
IEC 60669-2-1, British Standard EN 60669-2-1

	2112 U-101-500	2CKA006599A2873	1/10

[1)] Non-illuminable.
[2)] Use cover plates 2115 J-.../2115-.../6540-... .
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Making-current limiters have to be provided in case of too high making currents.

Busch-rotary dimmer [1)]
flush mounted, DALI, with internal power supply
For DALI broadcast service (via central telegram).
With integrated DALI power adaptor.
For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface.
With rotary control and ON/OFF push operation.
With electronic short-circuit protection.
With electronic overload protection.
Brightness power-on level and backround brightness level adjustable, buffered.
With integrated LED illumination for orientation.
Color of orientation light adjustable (18 presets and OFF).
Up to 5 potentiometers are connectable in parallel.
Up to 3 potentiometers are connectable in parallel in active mode.
Not suitable for combining with other DALI sensors or central units of other manufacturers.
DALI-voltage: 15,5 V=
Rated current: max. 75 mA
Power consumption: < 2,5 W
Number of DALI-units:
37 in case of one active power-potentiometer
in case of three active power-potentiometer in parallel connection: 111
Active mode: the potentiometer is supporting the necessary control circuit for other DALI-devices.
Passive mode: the potentiometer is suitable as additional operation point.
Max. DALI-cable length: 300 m (1,5 - 2,5 mm²).
Without cover plate.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 20
Temperature range (Device): 0 °C to 35 °C

	2117/11 U-500	2CKA006599A2988	1

[1)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

basic55®
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2)] **flush mounted, RL, 25-500 W** With light-level memory and leading edge control. For incandescent lamps, 230 V tungsten halogen lamps and low-volt halogen lamps with conventional transformer. Compatible with control covers 6543-xxx-10x. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Parallel operation of several transformers and/or incandescents lamps possible. Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Rated power: 25 - 500 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6560 U-101-500	2CKA006560A1207	1/10

[1)] In the case of conventional transformers, take ~20% transformer loss into account.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-rotary dimmer [1) 2) 3) 4)] **flush mounted, 60-600 W** With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. For incandescent lamps and 230 V tungsten halogen lamps. With adjustable minimum brightness. Without cover plate. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 600 W IEC 60669-2-1, British Standard EN 60669-2-1		
	2250 U-507	2CKA006515A0840	1/10

[1)] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2)] Also applicable for 1gang 2way installations.
[3)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[4)] Provided with terminal for net disconnection devices.

Product	Article-No.	Order-No.	Pack/Qty
	Dimmer		
	2200 U-500	2CKA006514A0112	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Busch Dimmer® with cover plate With rotary control, 2way On-Off switching and soft-catch. Leading Edge control. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 400 W IEC 60669-2-1		
white	**2251 UCGL-92-507**	2CKA006515A0843	1/10
champagne	**2251 UCGL-93-507**	2CKA006515A0845	1/10
alpine white	**2251 UCGL-94-507**	2CKA006515A0842	1/10
château-black	**2251 UCGL-95-507**	2CKA006515A0846	1/10
chalet-white	**2251 UCGL-96-507**	2CKA006515A0847	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [1)] **with rotary knob, with indication lamp** For Busch-Dimmer®. For inserts 2112 U-101/2116(/11) U/ 2117(/11) U/ 2247 U/2250 U/6513 U-102/6517 U-10x/6519 U/ 6520 U/6523 U(10x) /6591 U-10x and 6592 U.		
white	**2115-92-507**	2CKA006599A2929	10
champagne	**2115-93-507**	2CKA006599A2990	10
alpine white	**2115-94-507**	2CKA006599A2928	10
château-black	**2115-95-507**	2CKA006599A2991	10
chalet-white	**2115-96-507**	2CKA006599A2992	10

[1)] Replacement neon lamp, Art. No. 3855.

Product	Article-No.	Order-No.	Pack/Qty
	Control element [1) 2) 3)] **with neon lamp** Can be combined with LED dimmer 6524 U, and 6526 U, Busch-Universal touch-type controller 6550 U-10x, Busch-Memory touch dimmer 6560 U-101, Busch-Universal-Dimmer® 6593 U, Busch-Universal relay insert 6401 U-10x, Busch-Universal 2gang insert 6402 U.		
white	**6543-92-507**	2CKA006599A2996	1/10
champagne	**6543-93-507**	2CKA006599A2993	1/10
alpine white	**6543-94-507**	2CKA006599A2997	1/10
château-black	**6543-95-507**	2CKA006599A2994	1/10
chalet-white	**6543-96-507**	2CKA006599A2995	1/10

[1)] Compatible with previous type 6543-xxx.
[2)] Touch-type Controller 6550 U-xxx non-illuminable.
[3)] Replacement neon lamp 3857.

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal relay switch insert 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog 180 FP sensor for All Weather 44 6800-3x-102C. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For comfort timer control element 6455-101-500. For Busch-Remote control IR control cover 6067-xxx-10x. For control cover with control lamp 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): -25 °C to 55 °C British Standard EN 60669-2-1		
	6401 U-102-500	2CKA006401A0049	1/10
	Busch-Watchdog relay mechanism 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated power: 700 W/VA Temperature range (Device): 0 °C to 55 °C British Standard EN 60669-2-1		
	6812 U-101-500	2CKA006800A2160	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal 2gang 1way insert 3 wire connection (neutral conductor required). For the serial switch operating mode: 2 separate outputs, 2 separate extension inputs. For operation mode timer: output 1 (eg lighting), output 2: ON/Off delay in dependence of output 1 (eg fan control). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For control cover 6430-xxx-10x and 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6402 U-500	2CKA006401A0051	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	neon lamp 3855, one neon lamp is supplied together with control cover plates 6540-2x.		
	Busch-Watchdog MOS-Fet Insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 60 - 420 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6804 U-101-500	2CKA006800A2219	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Requires an NIS international socket, E-No. 372507676.

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog extension insert [1] 3 wire connection (neutral conductor required). For extending Busch-Watchdog 180 flush-mounted and Busch-Watchdog Presence tech installations. For combination with relay insert 6401 U-102 and 6402 U. For combination with MOS-Fet insert 6804 U-101. For combination with Dimmer insert 6593 U and 6550 U-101. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Control/Signal outputs: 1, electronic output, potential-bound Temperature range (Device): 0 °C to 35 °C		
	6805 U-500	2CKA006800A2161	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1] Not combinable with relay switch insert 6812 U-101.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch 2-wire insert [1] [2] [3] [4] [5] [6] 2-wire connection (neutral conductor not required) For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 40 - 300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6815 U	2CKA006800A2270	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1] In case of electronic transformers, 5 % transformer losses.
[2] In the case of conventional transformers, take ~20% transformer loss into account.
[3] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4] Not suitable for activating the staircase time delay.
[5] Cannot be used to control relais.
[6] Output cannot be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch relay mechanism [1] [2] [3] 3 wire connection (neutral conductor required). For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer. Rated power: 2300 W/VA Suitable for: 230 V halogen lamps Rated power: 1200 W Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.5 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6816 U-500	2CKA006800A2621	1/10

[1] In case of electronic transformers, 5 % transformer losses.
[2] In the case of conventional transformers, take ~20% transformer loss into account.
[3] Output can be connected in parallel.

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Movement detectors / comfort switches

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted standard sensor [1] **with select-lens** For automatic switching of devices dependent on motion and brightness. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 80 sec. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
white	**6810-92-101-507**	2CKA006810A0004	1/10
champagne	**6810-93-101-507**	2CKA006810A0006	1
alpine white	**6810-94-101-507**	2CKA006810A0005	1
château-black	**6810-95-101-507**	2CKA006810A0007	1
chalet-white	**6810-96-101-507**	2CKA006810A0008	1

[1] Please order the respective flush-mounted insert separately.

	Busch-Watchdog 180 flush-mounted comfort sensor II [1] **with select-lens** For automatic switching of devices dependent on motion and brightness. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
white	**6800-92-104-507**	2CKA006800A2635	1
champagne	**6800-93-104-507**	2CKA006800A2637	1
alpine white	**6800-94-104-507**	2CKA006800A2636	1
château-black	**6800-95-104-507**	2CKA006800A2638	1
chalet-white	**6800-96-104-507**	2CKA006800A2639	1

[1] Please order the respective flush-mounted insert separately.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1] [2] **with multi-lens** For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 15 m, lateral: 5 m, Mounting height: 2.5 m Detection range 2: frontal: 10 m, lateral: 2.5 m, Mounting height: 1.2 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
white	**6800-92-104M-507**	2CKA006800A2640	1
champagne	**6800-93-104M-507**	2CKA006800A2642	1
alpine white	**6800-94-104M-507**	2CKA006800A2641	1
château-black	**6800-95-104M-507**	2CKA006800A2643	1
chalet-white	**6800-96-104M-507**	2CKA006800A2644	1

[1] installation: slide switch top.
[2] Please order the respective flush-mounted insert separately.

	Busch-Comfort switch control element [1] **with neon lamp** For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
white	**6815-92-507**	2CKA006800A2487	1/10
champagne	**6815-93-507**	2CKA006800A2596	1/10
alpine white	**6815-94-507**	2CKA006800A2486	1/10
château-black	**6815-95-507**	2CKA006800A2597	1/10
chalet-white	**6815-96-507**	2CKA006800A2598	1/10

[1] Please order the respective flush-mounted insert separately.

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Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Blind switch with cover [1] **SP, switch** With interlock. Rated voltage: 250 V~ Rated current: 10 AX IEC60669-1		
white	**2006/4 UC-92-507**	2CKA001012A2147	10
champagne	**2006/4 UC-93-507**	2CKA001012A2166	10
alpine white	**2006/4 UC-94-507**	2CKA001012A2140	10
château-black	**2006/4 UC-95-507**	2CKA001012A2176	10
chalet-white	**2006/4 UC-96-507**	2CKA001012A2186	10

[1] These blind switches/push buttons safely prevent a switch-over of the running direction being carried out too quickly.

Product	Article-No.	Order-No.	Pack/Qty
	Blind switch with cover [1] **SP, push switch** With interlock. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1		
white	**2026/4 UC-92-507**	2CKA001413A1085	10
champagne	**2026/4 UC-93-507**	2CKA001413A1094	10
alpine white	**2026/4 UC-94-507**	2CKA001413A1082	10
château-black	**2026/4 UC-95-507**	2CKA001413A1098	10
chalet-white	**2026/4 UC-96-507**	2CKA001413A1102	10

[1] These blind switches/push buttons safely prevent a switch-over of the running direction being carried out too quickly.

Product	Article-No.	Order-No.	Pack/Qty
	Blind switch with cover [1] [2] **SP, N, E** With rotary knob/switch and push switch. Rated voltage: 250 V~ Rated current: 10 AX IEC 60669-1		
white	**2713 UCDR-92-507**	2CKA001101A0922	10
champagne	**2713 UCDR-93-507**	2CKA001101A0926	10
alpine white	**2713 UCDR-94-507**	2CKA001101A0920	10
château-black	**2713 UCDR-95-507**	2CKA001101A0928	10
chalet-white	**2713 UCDR-96-507**	2CKA001101A0930	10

[1] Blind switches/push switches prevents fast change over between operating directions.
[2] Also suitable for DC drives.

Product	Article-No.	Order-No.	Pack/Qty
	Blind switch with cover [1] [2] **SP, N, E** With rotary knob/push button. Rated voltage: 250 V~ Rated current: 10 A IEC60669-1		
white	**2723 UCDR-92-507**	2CKA001101A0923	10
champagne	**2723 UCDR-93-507**	2CKA001101A0927	10
alpine white	**2723 UCDR-94-507**	2CKA001101A0921	10
château-black	**2723 UCDR-95-507**	2CKA001101A0929	10
chalet-white	**2723 UCDR-96-507**	2CKA001101A0931	10

[1] Blind switches/push switches prevents fast change over between operating directions.
[2] Also suitable for DC drives.

Product	Article-No.	Order-No.	Pack/Qty
	Comfort timer control element [1] For manual and time-controlled switching of blinds, roller blinds, awnings, lighting and other electrical devices. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Combined with Busch-Blind control II insert 6411 U/S-101, sun protection and twilight function. Freely adjustable temperature and brightness-dependent sun protection function. Freely adjustable twilight function. User-adjustable running times for blinds and air conditioning. Programming possible only with control element attached and energized. 6 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. When combined with LED dimmer 6524 U, Busch-Universal master dimmer insert 6593 U or Busch-Memory touch-type controller 6550 U-101, the brightness of the lighting can be adjusted for each ON switching time. For Busch-Blind control II insert 6411 U-101, 6411 U/S-101. For Busch-Universal relay switch insert 6401 U-102. For Busch-Universal master dimmer insert 6593 U. For LED dimmer insert 6524 U and 6526 U. For Busch-Memory touch-type controller 6550 U-101. Temperature range (Device): 0 °C to 35 °C		
	6455-101-500	2CKA006410A0399	1/10

[1] See respective cover plates 6435-xx.

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Blind control / timers

Product	Article-No.	Order-No.	Pack/Qty
	Standard timer control element [1] For manual and time-controlled switching of blinds and roller blinds. With dusk to dawn program including (Astro-program) Individual Astro adjustment and Astro blocking time. The controlled devices can be manually operated at any time. Simple setting via high-resolution display with background illumination. With preset switching times/date/time. Factory-set switching times can be individually adjusted. Automatic switchover from summer time to winter time (switch-off function). Switching times/programme are safely stored in the event of a mains power failure. Power reserve for time and date > 10 years. Simple toggling between manual/automatic/vacation modes. Programming possible only with control element attached and energized. 2 switching times per day can be user-defined for each day of the week. Astro switching times and switching times can be combined. For basic blind insert 6418 U. Temperature range (Device): 0 °C to 35 °C		
	6456-101	2CKA006410A0398	1/10

[1] See respective cover plates 6435-xx.

	Cover plate For comfort timer control element 6455-101-500. For standard timer control element 6456-101. For room thermostats 1098 U-101 and 1098 UF-101. For Busch-CO2 sensor 1091 U-500.		
white	**6435-92-507**	2CKA006430A0353	10
champagne	**6435-93-507**	2CKA006430A0392	10
alpine white	**6435-94-507**	2CKA006430A0352	10
château-black	**6435-95-507**	2CKA006430A0393	10
chalet-white	**6435-96-507**	2CKA006430A0394	10

Blind control / timers / CO2 sensor

Product	Article-No.	Order-No.	Pack/Qty
	Busch-CO2 sensor [1] **For controlling the incoming fresh air in rooms by means of opening or switching of windows/fans.** With display for carbon dioxide, humidity, temperature and air pressure. Setting values: carbon dioxide 800 ppm - 1500 ppm, humidity 40% - 95%. With 2 zero-potential relay contacts. Nominal voltage: 230 V~ Nominal current: 6 A cos ϕ = 1 Without claw fixation. To fit cover plate 6435-xxx.		
	1091 U-500	2CKA001032A0518	1/10

[1] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

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Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
white	**20 EUC-92-507**	2CKA002011A3857	10/100
champagne [2]	**20 EUC-93-507**	2CKA002011A6140	10/100
alpine white	**20 EUC-94-507**	2CKA002011A3855	10/100
château-black	**20 EUC-95-507**	2CKA002011A6142	10/100
chalet-white	**20 EUC-96-507**	2CKA002011A6144	10/100

[1] Terminals suitable for loop through connection.
[2] Surface painted.

	SCHUKO® socket outlet [1] **shuttered** With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
white	**20 EUCKS-92-507**	2CKA002013A5279	10/100
champagne	**20 EUCKS-93-507**	2CKA002013A5337	10
alpine white	**20 EUCKS-94-507**	2CKA002013A5278	10/100
château-black	**20 EUCKS-95-507**	2CKA002013A5338	10
chalet-white	**20 EUCKS-96-507**	2CKA002013A5339	10

[1] Increased shock protection.

	SCHUKO® socket outlet [1] **with marking "DATA"** With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
white	**20 EUC/DV-92-507**	2CKA002011A3856	10
champagne	**20 EUC/DV-93-507**	2CKA002011A6141	10
alpine white	**20 EUC/DV-94-507**	2CKA002011A3854	10
château-black	**20 EUC/DV-95-507**	2CKA002011A6143	10
chalet-white	**20 EUC/DV-96-507**	2CKA002011A6145	10

[1] Can only be used in SI frames with adapter 1746-....

	SCHUKO® socket outlet **with marking** With screwless terminals. DP (2 P + E) With continuous coloured marking of cover plate and base. Rated voltage: 250 V~ Rated current: 16 A		
red RAL 3003	**20 EUC-12-92-507**	2CKA002011A6151	10
green RAL 6018	**20 EUC-13-92-507**	2CKA002011A6152	10
orange RAL 2004	**20 EUC-14-92-507**	2CKA002011A6153	10

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet **with hinged lid** With screwless terminals. DP (2 P + E) Hinged lid notches when opened. Rated voltage: 250 V~ Rated current: 16 A		
white	**20 EUK-92-507**	2CKA002018A0351	10/100
champagne	**20 EUK-93-507**	2CKA002018A1498	10
alpine white	**20 EUK-94-507**	2CKA002018A0350	10/100
château-black	**20 EUK-95-507**	2CKA002018A1499	10
chalet-white	**20 EUK-96-507**	2CKA002018A1500	10

	SCHUKO® socket outlet **with hinged lid** Shuttered. With screwless terminals. DP (2 P + E) Hinged lid notches when opened. Rated voltage: 250 V~ Rated current: 16 A		
white	**20 EUKB-92-507**	2CKA002111A0652	10
champagne	**20 EUKB-93-507**	2CKA002111A0653	10
alpine white	**20 EUKB-94-507**	2CKA002111A0654	10
château-black	**20 EUKB-95-507**	2CKA002111A0655	10
chalet-white	**20 EUKB-96-507**	2CKA002111A0656	10

	SCHUKO® socket outlet **with hinged lid** Delivered with special frame for IP44 protection level The IP44 protection level will achieved only if the device is mounted on a flat and napless wall. With screwless terminals. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
white	**20 EUCKD-92-507**	2CKA002018A1504	10/100
champagne	**20 EUCKD-93-507**	2CKA002018A1501	10/100
alpine white	**20 EUCKD-94-507**	2CKA002018A1505	10/100
château-black	**20 EUCKD-95-507**	2CKA002018A1502	10/100
chalet-white	**20 EUCKD-96-507**	2CKA002018A1503	10/100

	Socket outlet cover plate **shuttered** For socket outlet insert 20 M-500. Rated voltage: 250 V~		
white	**2399 UCKS-92-507**	2CKA002099A0251	10
champagne	**2399 UCKS-93-507**	2CKA002099A0259	10
alpine white	**2399 UCKS-94-507**	2CKA002099A0250	10
château-black	**2399 UCKS-95-507**	2CKA002099A0260	10
chalet-white	**2399 UCKS-96-507**	2CKA002099A0261	10

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Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet [1] **with earth pin** With screwless terminals. Suitable for the countries: Belgium, Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
	20 M-500	2CKA002017A0854	10/100

[1] Insert can be used for all covers 2399 UCKS-xx.

Product	Article-No.	Order-No.	Pack/Qty
	Double SCHUKO® socket outlets With screwless terminals. DP (2 P + E) Suitable for 1gang flush-mounted boxes. Rated voltage: 250 V~ Rated current: 16 A		
white	**20-02 EUJ-92-507**	2CKA002014A1463	10/80
champagne	**20-02 EUJ-93-507**	2CKA002014A1476	10
alpine white	**20-02 EUJ-94-507**	2CKA002014A1462	10/80
château-black	**20-02 EUJ-95-507**	2CKA002014A1477	10
chalet-white	**20-02 EUJ-96-507**	2CKA002014A1478	10

Product	Article-No.	Order-No.	Pack/Qty
	Double SCHUKO® socket outlets [1] **shuttered** With screwless terminals. DP (2 P + E) Suitable for 1gang flush-mounted boxes. Rated voltage: 250 V~ Rated current: 16 A		
white	**20-02 EUJKS-92-507**	2CKA002021A0379	10
champagne	**20-02 EUJKS-93-507**	2CKA002021A0380	10
alpine white	**20-02 EUJKS-94-507**	2CKA002021A0378	10
château-black	**20-02 EUJKS-95-507**	2CKA002021A0381	10
chalet-white	**20-02 EUJKS-96-507**	2CKA002021A0382	10

[1] Increased shock protection.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] [2] **with screw-type terminals** DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
white	**2300 EUC-92-507**	2CKA002011A6154	10
champagne	**2300 EUC-93-507**	2CKA002011A6146	10
alpine white	**2300 EUC-94-507**	2CKA002011A6155	10
château-black	**2300 EUC-95-507**	2CKA002011A6147	10
chalet-white	**2300 EUC-96-507**	2CKA002011A6150	10

[1] Terminals suitable for loop through connection.
[2] With screw-type terminals.

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet with earthing pin With screwless terminals. Suitable for the countries like Poland, Czech Republic. DP (2 P + E) Rated voltage: 250 V~ Rated current: 16 A		
alpine white	**20 MUC-94-507**	2CKA002017A0847	10/100
white	**20 MUC-92-507**	2CKA002017A0848	10/100

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® USB socket outlet [1] [2] [3] **shuttered** With screwless terminals. DP (2 P + E) For supply and support of mobile devices via USB-cable. With USB female connector type A. With electronic short-circuit protection. With electronic overload protection. Simultaneous charging via USB connection and use of the SCHUKO® socket outlet. Rated voltage: 250 V~ Secondary: 5 V-, +5 % / -5 % Rated frequency: 50 Hz Suitable for: SCHUKO® socket outlet Rated current: 16 A Suitable for: USB connection Rated current: 700 mA Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm Mounting depth: 35 mm		
white	**20 EUCBUSB-92-507**	2CKA002011A6192	1
champagne [4]	**20 EUCBUSB-93-507**	2CKA002011A6194	1
alpine white	**20 EUCBUSB-94-507**	2CKA002011A6193	1
château-black	**20 EUCBUSB-95-507**	2CKA002011A6195	1
chalet-white	**20 EUCBUSB-96-507**	2CKA002011A6196	1

[1] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[2] No data transfer.
[3] Use dust cover 2098 when cleaning the device.
[4] Surface painted.

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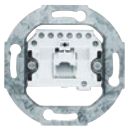
Data communication

Product	Article-No.	Order-No.	Pack/Qty
	**Universal data connection unit, cat. 3** [1] **1gang** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0213-507	2CKA000230A0378	1/10

[1] Suitable for cover plate 1803-xxx.

	Data-connection box, RJ45, cat.5e, shielded [1] **1gang** With down-leading outlet and LSA self-cutting clamps. Cat. 5 in accordance with DIN EN 50173-1:2011-09. Cat. 5e (Category 5 enhanced) according to TIA/EIA-568-B.2-2001. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 100 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
metal clad	**0216-101-507**	2CKA000230A0406	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1] Suitable for cover plate 1803-xxx.

	Universal data connection unit, RJ45, Cat. 5e, unshielded, with down-leading outlet [1] **1gang** With down-leading outlet and LSA self-cutting clamps. Cat. 5 in accordance with DIN EN 50173-1:2003-06. Cat. 5e (Category 5 enhanced) according to TIA/EIA-568-B.2-2001. Marking in accordance with EIA/TIA 568 A and B. Design according to IEC 60 603-7-2:2007. Up to 100 MHz on all pairs of wires. Suitable for Gigabit Ethernet. With claw.		
	0220-507-101	2CKA000230A0469	10

[1] Suitable for cover plate 1803-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	UAE connection unit, RJ45, cat. 6e, shielded [1] **1gang** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
metal clad	**0216-102-507**	2CKA000230A0466	1/10

[1] Suitable for cover plate 1803-xxx.

	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **1gang** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
metal clad	**0218/11-101-507**	2CKA000230A0410	1/10

[1] Suitable for cover plate 1803-xxx.

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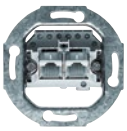
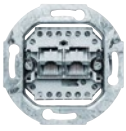
Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Universal data connection unit, RJ45, Cat. 6e, unshielded, with down-leading outlet [1] **1gang** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Cat. 6a (Category 6 augmented) in accordance with TIA/EIA-568-B.2-10 Draft 8.0. Marking in accordance with EIA/TIA 568 A and B. Design according to IEC 60 603-7-2:2007. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. With claw.		
	0221-507	2CKA000230A0399	10

[1] Suitable for cover plate 1803-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	**Universal data connection box with down-leading outlet** [1] **2gang internally parallel connected** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0214	2CKA000230A0235	10/100
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	**Universal data connection box with down-leading outlet** [1] **2 x outlets, 8/8-pole** With down-leading outlet. For 8-pole plug, RJ 11/12, RJ 45, ISDN capability, Cat. 3. Design according to IEC 60 603-7-2:2007. Screw contacts With claw.		
	0215	2CKA000230A0243	10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	not applicable		

[1] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	UAE connection unit, RJ45, cat. 6e, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Marking in accordance with EIA/TIA 568 A and B. According to EN 60 603-7-3:2010-06. Shielding according to DIN EN 55022, Class B. Up to 250 MHz on all pairs of wires. Suitable for Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 2.500 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. Clearly colour-coded connection identification. For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems. Without claws. Mounting depth: 31 mm.		
	0217-102-507	2CKA000230A0468	1/10

[1] Suitable for cover plate 1803-02-xxx.

Product	Article-No.	Order-No.	Pack/Qty
	Data-connection box, RJ 45, cat. 6a iso, shielded [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Up to 500 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Flex cable entries from all sides without buckles. Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. Suitable for RJ 11, RJ 12 und RJ 45. For data cables with a diameter of 6 -10 mm. For trunk systems, flush-mounted wall boxes and underfloor systems. For wires of AWG 24-22. Without claws. Mounting depth: 31 mm.		
metal clad	**0218/12-101-507**	2CKA000230A0412	1/10

[1] Suitable for cover plate 1803-02-xxx.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Universal data connection unit, RJ45, Cat. 6e, unshielded, with down-leading outlet [1] **2 x outlets, 8/8-pole** With down-leading outlet and LSA self-cutting clamps. Cat. 6 according to DIN EN 50173-1:2003-06, ISO/IEC 1180:2002, and TIA/EIA-568-B.2:2002. Cat. 6a (Category 6 augmented) in accordance with TIA/EIA-TR 42.7. Marking in accordance with EIA/TIA 568 A and B. Design according to IEC 60 603-7-2:2007. Up to 250 MHz on all pairs of wires. Suitable for 10-Gigabit Ethernet. With claw.		
	0221/12-507	2CKA000230A0400	10

[1] Suitable for cover plate 1803-02-xxx.

	Flush-mounted assembly adapter For the accommodation of one or two universal modules 0219. For flush-mounted installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/12	2CKA000230A0395	1/10

	Channel assembly adapter For the accommodation of one or two universal modules 0219. For channel and under-floor installation. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx.		
	0219/13	2CKA000230A0396	1/10

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
white	**0248/02-101**	2CKA000230A0402	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
alpine white	**0248/04-101-500**	2CKA000230A0464	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
anthracite	**0248/05-101**	2CKA000230A0404	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

Product	Article-No.	Order-No.	Pack/Qty
	USB connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link mobile devices like e.g. printer, scanner, USB-sticks or digital cameras etc. USB-type A, USB 2.0 compatible. For 5-wire USB- cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/11-500**	2CKA000230A0418	1

[1] Please follow the recommendations of the cable and device producers for the max. USB cable lengths.

	VGA connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link analogue video data between PCs and laptops to monitors or digital projectors etc. VGA-type: D-type, 15-pole. Fully HD ready (1920 x 1080 pixel). For 15-wire VGA-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/21-500**	2CKA000230A0424	1

[1] Please follow the recommendations of the cable and device producers for the max. VGA cable lengths.

	HDMI connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link high-definition digital audio and video data from e.g. SAT-receiver, DVD-/Blue-Ray-player to plasma-type, LCD- or-LED-TVs/screens. HDMI-type A, 3D-compatible. Fully HD ready (1920 x 1080 pixel). For 20-wire HDMI-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/31-500**	2CKA000230A0430	1

[1] Please follow the recommendations of the cable and device producers for the max. HDMI cable lengths.

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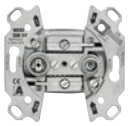
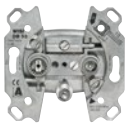
Data communication

Product	Article-No.	Order-No.	Pack/Qty
	TV outlet For connection to a TV or FM co-axial aerial lead. Rated frequency: 5000 Hz - 860000 Hz IEC 60169-2		
white	**1743-01-92-507**	2CKA001724A4280	10/100
champagne	**1743-01-93-507**	2CKA001724A4310	10/100
alpine white	**1743-01-94-507**	2CKA001724A4276	10/100
château-black	**1743-01-95-507**	2CKA001724A4313	10
chalet-white	**1743-01-96-507**	2CKA001724A4317	10
	Satellite co-axial outlets **2 connectors/dead-end feeder** Broadband technology 5-2.400 MHz For DVB-T, satellite and broad-band cable systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0230-101-507	2CKA000230A0380	10/100
	**Antenna socket insert Radio/TV** **2 connectors/loop through type** Broadband technology 5-2.400 MHz For DVB-T, satellite and broad-band cable systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0231-101	2CKA000230A0268	10/100
	**Satellite co-axial outlets Radio/TV/SAT** **3gang dead-end feeder** Broadband technology 47-2.150 MHz. SAT connection designed as screwable F-male plug. with remote feed via F-bush For DVB-T and broadband-cable-systems. For analogue and digital transmission. With claw. Minimal installation depth, class A.		
	0232-101-500	2CKA000230A0463	10/100
	Terminating resistor **75 Ohm**		
	0239	2CKA000230A0201	10/100
	Modular-Jack insert **Cat. 5e non-shielded, 8 (8)-pole** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0211/11-507	2CKA000225A0153	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Modular-Jack insert **6-pole Cat. 3 (AMP-No. 216000-2)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0210	2CKA000225A0078	10
	Modular-Jack insert **8-pole Cat. 3 (AMP-No. 216005-4)** For cover plate 2561- and insert 1812, 1866 built-in, 1867 built-in. For conductor cross-sections of 0.12 mm² (AWG 26) to 0.35 mm² (AWG 22).		
	0211	2CKA000225A0086	10
	Universal module, RJ 45, cat. 6a iso, shielded [1] **1gang** For installation in installation adapter 0219/12 or 0219/13. Also suited for mounting into cover plate 2561 and bases 1812, 1866 EB, and 1867 EB. RJ-45 terminals for networks according to Cat 6A, Class EA (10 Gbits/s / 500MHz). Equates to cat. 6a, Class EA according to ISO/IEC 11801:2011-06. Cat. 6A according to ISO/IEC 11801: 2011-06. Terminal marking A and B according to TIA/EIA-568-B.2. Typ according to EN 60 603-7-51:2011-01. Shielding according to DIN EN 55022, Class B. Suitable for PoE+ according to IEEE 802.3at, >- 1.000 contact durability. Bend-radius optimised cable feed (30°). Earthing of housing via 6,3 mm blade terminal at the back possible. Re-embedded proofed. Suitable for Mix-and-Match operation. For 8-pole plug RJ 45 only. Housing made from diecast zinc. With integrated dust-protection cap (can be removed if necessary). With insulation displacement connection For data cables with a diameter of 6 -10 mm. For wires of AWG 24-22. For trunk systems, flush-mounted wall boxes and underfloor systems.		
metal clad	**0219-101-507**	2CKA000230A0414	1/10

[1] With assembly adapters appropriate for telephone unit cover plates 2539-21x and 1766-xxx.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Mounting plate [1) 2)] **with green insert** For 2 modular jack inserts. For systems: CommScope (AVAYA / AT&T / Lucent Technologies), GigaSPEED, PowerSUM, 360 GS 10E bis MGS 600-BK, M1 BH-xx, MPS 100E-xx. With R&M adapter R310694 suitable for R&M connection modules R305111, R305112, R305113 and R305114. Pitch dimensions: (WxH) approx. 16.9 x 17.9 mm. Without claws.		
	1810-500	2CKA001753A9974	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

	Mounting plate [1) 2)] **with red insert** For 2 modular jack inserts. Suitable for Art. Nos. 0210, 0211 and 0219-101. For systems: AMP / tyco Electronics, BTR, EFB, Krone, Panduit, Quante, Radiall, Setec, Dr.-Ing. Sieger, Telena, Thomas & Betts For Telegärtner AMJ/UMJ connection modules/ couplings. For 2 fiber optic modules of the following types: 3M-Volition, Krone, mvk. Pitch dimensions: (WxH) approx. 14.8 x 19.4 mm. Without claws.		
	1812-500	2CKA001753A9972	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

	Mounting plate [1) 2)] **with black insert** For MTRJ or 2 modular jack inserts. For systems: Ackermann, AMP / tyco Electronics (Slim Line (SL) -SM 2gang/switches: 110Connect Jacks, Toolless Jacks / Standard 110Connect Jacks), Brand-Rex, CombiNet, EFB Electronic, Telena. For 2 fiber optic modules of the following types: AMP / tyco Electronics MTRJ. Pitch dimensions: (WxH) approx. 14.8 x 20.4 mm. Without claws.		
	1814-500	2CKA001753A9973	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

Product	Article-No.	Order-No.	Pack/Qty
	Mounting plate [1) 2)] **with blue insert** For 2 modular jack inserts. For system: ITT Cannon RJ45 Cat. 5 type 808 RJ45 Mark III. Pitch dimensions: (WxH) approx. 16.0 x 11.0 mm. Without claws.		
	1816	2CKA001710A3100	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

	Mounting plate [1) 2)] **with orange base** For 2 modular jack inserts. For system: LexCom 150 and LexCom 250. Pitch dimensions: (WxH) approx. 15.4 x 15.4 mm. Without claws.		
	1819	2CKA001753A8056	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

	Mounting plate [1) 2)] **with grey base** For 2 modular jack inserts. For system: Panduit MiniCom (Cu. z. B. TX6 10 Gig Shielded Jack modules and fiber optic modules. Pitch dimensions: (WxH) approx. 15.9 x 18.7 mm. Without claws.		
	1820	2CKA001753A8057	10/100

[1)] Compatibility with other manufacturers not listed is to be checked in accordance with specified snap-in dimensions.
[2)] For further information, please refer on the Internet.

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate **1gang** As cover for universal data connection boxes. Art.-No. 0213 (Cat 3/ISDN), 0216-101, 0218/11-101 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. Brand-Rex (WAEGV 8 EKR/EK). BTR (universal data connecting unit design and IAE design). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet.		
white	**1803-92-507**	2CKA001753A0098	10/100
champagne	**1803-93-507**	2CKA001753A0204	10/100
alpine white	**1803-94-507**	2CKA001753A0096	10/100
château-black	**1803-95-507**	2CKA001753A0207	10
chalet-white	**1803-96-507**	2CKA001753A0210	10
	Cover plate **2gang** As cover for universal data connection boxes. Art. No. 0214, 0215 (Cat 3), 0220/12-507, 0221/12-507, 0218, 0217 (Cat 5e/6 data technology) and comparable types of the company Rutenbeck. Brand-Rex (WAEGV 8/8 EKR/EK). AMP (NETCONNECT 5E). BTR (E-DAT C6, E-DAT design, Universal data connecting unit design and IAE design). cti (cti-wire 2.8 Cat.6). Telegärtner (AMJ 45, UMJ 45). With down-leading outlet.		
white	**1803-02-92-507**	2CKA001753A0097	10/100
champagne	**1803-02-93-507**	2CKA001753A0203	10/100
alpine white	**1803-02-94-507**	2CKA001753A0095	10/100
château-black	**1803-02-95-507**	2CKA001753A0206	10
chalet-white	**1803-02-96-507**	2CKA001753A0209	10
	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
white	**2539-92-507**	2CKA001724A4279	10
champagne	**2539-93-507**	2CKA001724A4312	10
alpine white	**2539-94-507**	2CKA001724A4275	10/100
château-black	**2539-95-507**	2CKA001724A4315	10
chalet-white	**2539-96-507**	2CKA001724A4318	10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate **adapter ring** For telecommunication inserts with cover plate 50 x 50 mm. With cover plate 50 x 50 mm, AMP, Brand-Rex, Rutenbeck, BTR, Telegärtner, etc.		
white	**1746-92-507**	2CKA001726A0221	10
champagne	**1746-93-507**	2CKA001726A0229	10
alpine white	**1746-94-507**	2CKA001726A0219	10
château-black	**1746-95-507**	2CKA001726A0231	10
chalet-white	**1746-96-507**	2CKA001726A0233	10
	Cover plate **as cover for standard Radio/TV/SAT socket outlets** With 3 connectors. Radio/TV/SAT. With M3 fixing screw.		
white	**1743-92-507**	2CKA001724A4284	10/100
champagne	**1743-93-507**	2CKA001724A4311	10/100
alpine white	**1743-94-507**	2CKA001724A4283	10/100
château-black	**1743-95-507**	2CKA001724A4314	10
chalet-white	**1743-96-507**	2CKA001724A4316	10
	Cover plate [1] **with metal mounting plate** As cover for flex outlet, for cords up to 10.3 mm diameter. With strain relief (without terminal block).		
white	**2527-92-507**	2CKA001710A3773	10
champagne	**2527-93-507**	2CKA001710A3932	10
alpine white	**2527-94-507**	2CKA001710A3772	10
château-black	**2527-95-507**	2CKA001710A3936	10
chalet-white	**2527-96-507**	2CKA001710A3940	10

[1] Cover plate can also be used individually as cover for telephone connector boxes (VDo).

	Blank plate **with metal mounting plate**		
white	**2538-92-507**	2CKA001715A0313	10
champagne	**2538-93-507**	2CKA001715A0314	10
alpine white	**2538-94-507**	2CKA001715A0312	10
château-black	**2538-95-507**	2CKA001715A0315	10
chalet-white	**2538-96-507**	2CKA001715A0316	10

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate As cover for flush-mounted light signal. For insert 2061/2661 U.		
white	**1756-92-507**	2CKA001753A0099	10
champagne	**1756-93-507**	2CKA001753A0202	10
alpine white	**1756-94-507**	2CKA001753A0100	10
château-black	**1756-95-507**	2CKA001753A0205	10
chalet-white	**1756-96-507**	2CKA001753A0208	10
	Cover plate **with metal mounting plate** For 1 modular jack. Suitable for Art. Nos. 0210, 0211 and 0219-101. Without claws.		
white	**2561-92-507**	2CKA001753A0211	10
champagne	**2561-93-507**	2CKA001753A0212	10
alpine white	**2561-94-507**	2CKA001753A0213	10
château-black	**2561-95-507**	2CKA001753A0214	10
chalet-white	**2561-96-507**	2CKA001753A0215	10
	Cover plate [1] **with labelling field** For modular jack with slide entrance. To fit only Art. No. 1810, 1812, 1814, 1816, 1818, 1819 and 1820. Size of labelling field: 60 x 9 mm.		
white	**1800-92-507**	2CKA001710A3944	10
champagne	**1800-93-507**	2CKA001710A3941	10
alpine white	**1800-94-507**	2CKA001710A3945	10
château-black	**1800-95-507**	2CKA001710A3942	10
chalet-white	**1800-96-507**	2CKA001710A3943	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-DigitalRadio [1) 2) 3) 4) 5)] RDS stereo radio alarm clock for flush-mounted installation. Reception frequency: 87.50 MHz - 108.00 MHz. With display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. For mono/stereo operation. 8 radio stations storable. With time display. With alarm function. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated antenna. With additional connection for external antenna. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 34 mm		
	8215 U-500	2CKA008200A0182	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Also combinable with built-in ceiling loudspeaker (8225 EB & 8226 EB) and HiFi built-in ceiling loudspeaker (8226/11 EB).
[4)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[5)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Radio iNet [1) 2) 3) 4)] WLAN Internet radio alarm clock for flush-mounted installation. For the reception of national and international radio stations via Internet. Radio station search possible via various genres. With high resolution graphic display and background illumination. With external input for Busch-iDock. Remote control possible via Busch-iDock. Integrated web-server for configuration and control. Remote operation with smartphone via browser surface. UPnP replay function. It is controlled via smartphone. For mono/stereo operation. 8 radio stations storable. With time and date display. With alarm function. With short-time timer. With automatic switch-off function (automatic sleep mode). With extension input to remote-controlled ON/OFF switches. With integrated WLAN antenna. WLAN standards: IEEE 802.11b / IEEE 802.11g. WLAN safety: WPA / WPA2. Permitted speaker impedance: 4 - 8 Ohm Can be installed as 1gang and in multiple combinations. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 5 °C to 40 °C Dimensions: (L x W x D): 71 mm x 71 mm x 49 mm Mounting depth: 33 mm APP		
	8216 U-500	2CKA008200A0153	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).
[4)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty

Busch-Radio BTconnect [1) 2) 3) 4)]
RDS stereo radio alarm clock for flush-mounted installation.
With Bluetooth interface for music replay of mobile devices.
Reception frequency: 87.50 MHz - 108.00 MHz.
With high resolution graphic display and background illumination.
With external AUX input.
For mono/stereo operation.
8 radio stations storable.
With time and date display.
With alarm clock and snooze function.
With short-time timer.
With automatic switch-off function (automatic sleep mode).
With extension input to remote-controlled ON/OFF switches.
With integrated antenna.
With additional connection for external antenna.
Permitted speaker impedance: 4 - 8 Ohm
Can be installed as 1gang and in multiple combinations.
Bluetooth specification: 2.1
Bluetooth profiles supported: A2DP
Number of stored Bluetooth connections: max. 8
Rated voltage: 110 - 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Protection class (Device): IP 20
Temperature range (Device): 5 °C to 40 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 47 mm
Mounting depth: 32 mm

Bluetooth

	8217 U-500	2CKA008200A0194	1

[1)] No claw. Screw-fixing via keyholes.
[2)] Matching loudspeaker insert 8223 U.
[3)] Also combinable with built-in ceiling loudspeaker (8225 EB & 8226 EB) and HiFi built-in ceiling loudspeaker (8226/11 EB).
[4)] Can also be combined with built-in loudspeaker (8222 EB) and moist atmosphere loudspeaker (8224 EB).

Loudspeaker insert [1)]
5 cm (2")
For Busch-DigitalRadio 8215 U/8216 U.
For Busch-Radio iNet 8216 U.
For Busch-Radio BTconnect 8217 U.
For Busch Bluetooth receiver 8219 U.
With broadband characteristics.
With flat plug connector.
Incl. speaker connection cable.
Rated output: 2 W (RMS)
Frequency response: 200 - 20,000 Hz
Impedance: 4 Ohm
Protection class (Device): IP 20, SELV
Mounting depth: 32 mm

	8223 U-500	2CKA008200A0183	1/10

[1)] No claw. Screw-fixing via keyholes.

Product	Article-No.	Order-No.	Pack/Qty

Busch-iDock [1) 2) 3) 4) 5) 6) *)]
iPod*/iPhone* docking station for models with a dock connector.
The music playback takes place through Busch-DigitalRadio 8215 U or 8216 U.
Can be integrated as music source in Busch-AudioWorld® systems.
With charging function of the contacted Apple* device.
With IR receiver to control the contacted device via the Apple* Remote.
Acknowledgement of the received IR commands through the integrated LED.
With control function for Busch-DigitalRadio 8215 U or 8216 U.
With AUX input (3.5 mm stereo jack) for additional playback devices.
Can be installed as 1gang and in multiple combinations.
*Apple, iPod, and iPhone are registered trademarks of Apple Inc.
Rated voltage: 230 V~, +10 % / -10 %
Rated frequency: 50 Hz
Protection class (Device): IP 20
Mounting depth: 34 mm

Made for iPod iPhone

anthracite	**8218 U**	2CKA008200A0142	1/10

[1)] No claw. Screw-fixing via keyholes.
[2)] Remote control not included in delivery.
[3)] A list of the currently compatible Apple products can be called up at www.busch-jaeger.de.
[4)] "Made for iPod" and "Made for iPhone" means that an electronic accessory has been specially designed for connection to an iPod or iPhone and meets the respective Apple performance specifications that have been confirmed by the designer.
Apple is not responsible for the function of this device or its conformity with safety standards and regulatory standards.
[5)] Not suitable for devices with lightning connector.
[6)] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.
[*)] Phase-out type

USB power adapter insert, flush-mounted [1) 2) 3) 4)]
For supply and support of mobile devices via USB-cable.
With two USB type A outputs.
To support two devices at the same time.
With electronic short-circuit protection.
With electronic overload protection.
Rated voltage: 100 - 230 V~, +10 % / -10 %
Secondary: 5 V-, +5 % / -5 %
Rated frequency: 50 Hz - 60 Hz
Suitable for: In case one output is used:
Rated current: 1400 mA
Suitable for: In case two output are used:
Rated current: 700 mA
Protection class (Device): IP 20, SELV
Temperature range (Device): 5 °C to 40 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 43 mm
Mounting depth: 32 mm

	6472 U-500	2CKA006400A0002	1

[1)] No claw. Screw-fixing via keyholes.
[2)] No data transfer.
[3)] For terminal devices with standardized charging interface according to DIN EN 62684.
[4)] Use dust cover 2098 when cleaning the device.

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Insert [1] For charging and supplying mobile terminal devices. With quick charging function for devices compatible with quickcharge. Makes possible fast charging of the mobile terminal device. Rated voltage: 100 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: Apple terminal device Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with USB-C connection Rated current: 2.1 A Output voltage: 5 V Suitable for: Terminal device with quick-charge support and USB-C connection Rated current: 2 A Output voltage: 9 V Protection class (Device): IP 20, SELV Temperature range (Device): 5 °C to 35 °C Dimensions: (L x W x D): 71 mm x 71 mm x 32 mm NEW Mounting depth: 32 mm		
	6473 U-500	2CKA006400A0039	1/10

[1] No claw. Screw-fixing via keyholes.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Charging cradle with Apple lightning connection [1] For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with lightning connection. For iPhone 7 Plus, iPhone 7, iPhone SE, iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5. For iPod touch (6th generation), iPod touch (5th generation), iPod nano (7th generation). Suitable for use with protective covers certified by Apple. Temperature range (Device): 5 °C to 35 °C NEW Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473-500	2CKA006400A0081	1/10

[1] Not released for use with the iPad.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-powerDock Charging cradle with USB-C connection For Busch-powerDock insert 6473 U. For attaching mobile terminal devices with USB-C connection. Temperature range (Device): 5 °C to 35 °C NEW Dimensions: (L x W x D): 54 mm x 54 mm x 36 mm		
	6473/11-500	2CKA006400A0083	1/10

Product	Article-No.	Order-No.	Pack/Qty
	HDMI connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link high-definition digital audio and video data from e.g. SAT-receiver, DVD-/Blue-Ray-player to plasma-type, LCD- or-LED-TVs/screens. HDMI-type A, 3D-compatible. Fully HD ready (1920 x 1080 pixel). For 20-wire HDMI-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/31-500**	2CKA000230A0430	1
alpine white	**0261/32-500**	2CKA000230A0431	1
grey	**0261/33-500**	2CKA000230A0432	1

[1] Please follow the recommendations of the cable and device producers for the max. HDMI cable lengths.

Product	Article-No.	Order-No.	Pack/Qty
	VGA connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link analogue video data between PCs and laptops to monitors or digital projectors etc. VGA-type: D-type, 15-pole. Fully HD ready (1920 x 1080 pixel). For 15-wire VGA-cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/21-500**	2CKA000230A0424	1
alpine white	**0261/22-500**	2CKA000230A0425	1
grey	**0261/23-500**	2CKA000230A0426	1

[1] Please follow the recommendations of the cable and device producers for the max. VGA cable lengths.

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	USB connection unit [1] **with screw-type terminals and strain relief** Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To link mobile devices like e.g. printer, scanner, USB-sticks or digital cameras etc. USB-type A, USB 2.0 compatible. For 5-wire USB- cables via srew-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems. For easy installation and to follow the valid bending radii the "Kaiser- electronic-wall-box" type 1068-02 or 9062-74 is recommended. Without cover plate. Without claws. Mounting depth: 34 mm		
white	**0261/11-500**	2CKA000230A0418	1
alpine white	**0261/12-500**	2CKA000230A0419	1
grey	**0261/13-500**	2CKA000230A0420	1

[1] Please follow the recommendations of the cable and device producers for the max. USB cable lengths.

	Communication adapter for BNC-F Duct-jacks Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0262/11-500**	2CKA000230A0436	1
alpine white	**0262/12-500**	2CKA000230A0437	1
grey	**0262/13-500**	2CKA000230A0438	1

	F duct-jack for communication adapter For connection of antenna cables e.g.. for TVs with integrated TV-tuner and satellite receiver. With screw-type terminals. For trunk systems, flush-mounted wall boxes and underfloor systems.		
metal clad	**0262-500**	2CKA000230A0440	1

	Communication adapter for Cinch-jacks Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0263/11-500**	2CKA000230A0444	1
alpine white	**0263/12-500**	2CKA000230A0445	1
grey	**0263/13-500**	2CKA000230A0446	1

Product	Article-No.	Order-No.	Pack/Qty
	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked white: audio , channel left. With soldering tag.		
alpine white	**0263/04-500**	2CKA000230A0451	1

	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked black: audio , channel left. With soldering tag.		
black	**0263/05-500**	2CKA000230A0452	1

	Cinch-jacks for communication adapter To link analogue audio devices like audio-receiver, amplifier and HiFi-sets. Audio-band 20Hz - 20kHz. Marked red: audio , channel left. With soldering tag.		
Red	**0263/06-500**	2CKA000230A0453	1

	Cinch-jacks for communication adapter For connecting analogue video devices, such as DVD players, hard disc recorders, video recorders or receivers. Marked yellow: audio , channel left. With soldering tag.		
yellow	**0263/07-500**	2CKA000230A0454	1

	Communication adapter for Mini-jacks 3,5mm. Suitable for telephone connection unit cover plates 2539-21x and 1766-xxx. To support 1 or 2 jacks. For trunk systems, flush-mounted wall boxes and underfloor systems. Without cover plate. Without claws.		
white	**0264/11-500**	2CKA000230A0458	1
alpine white	**0264/12-500**	2CKA000230A0459	1
grey	**0264/13-500**	2CKA000230A0460	1

	Mini-jack 3,5 mm for communication adapter For the connection of mobile terminal devices such as MP3 player (stereo), mobile telephone and smartphones. Audio-band 20Hz - 20kHz. With soldering tag.		
chrome gloss	**0264-500**	2CKA000230A0462	1

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Multimedia / communication adapters

Product	Article-No.	Order-No.	Pack/Qty
	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
white	**0248/02-101**	2CKA000230A0402	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
alpine white	**0248/04-101-500**	2CKA000230A0464	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Stereo loudspeaker connection box [1] With screwless terminals (with screw-type terminals on the back). With 4 terminals. Cable cross-section max. 10 mm². Polarity is indicated by color. With claw.		
anthracite	**0248/05-101**	2CKA000230A0404	10/100

[1] Suitable for cover telephone unit 1766-xxx and 2539-21x.

	Cover plate For Busch-DigitalRadio 8215 U/8216 U. For Busch-Radio iNet 8216 U. For Busch-Radio BTconnect 8217 U.		
white	**8252-92-507**	2CKA008200A0166	10
champagne	**8252-93-507**	2CKA008200A0157	10
alpine white	**8252-94-507**	2CKA008200A0169	10
château-black	**8252-95-507**	2CKA008200A0160	10
chalet-white	**8252-96-507**	2CKA008200A0163	10

	Cover plate For loudspeaker insert 8223 U.		
white	**8253-92-507**	2CKA008200A0167	1/10
champagne	**8253-93-507**	2CKA008200A0158	1/10
alpine white	**8253-94-507**	2CKA008200A0170	1/10
château-black	**8253-95-507**	2CKA008200A0161	1/10
chalet-white	**8253-96-507**	2CKA008200A0164	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate [*] For Busch-iDock 8218 U.		
white	**8254-92-507**	2CKA008200A0168	10
champagne	**8254-93-507**	2CKA008200A0159	10
alpine white	**8254-94-507**	2CKA008200A0171	10
château-black	**8254-95-507**	2CKA008200A0162	10
chalet-white	**8254-96-507**	2CKA008200A0165	10

[1] Phase-out type.

	Cover plate For telephone connection unit. For USB, VGA, HDMI inserts and communication adapter. USB power adapter insert 6472 U. For loudspeaker connection box. Suitable for part number 0248/0x-101. For data modules. Suitable for Art. No. 0219/12 and 0219/13. For modular outlets with 90° RJ45 outlet from Telegärtner (type MJ and WE).		
white	**2539-92-507**	2CKA001724A4279	10
champagne	**2539-93-507**	2CKA001724A4312	10
alpine white	**2539-94-507**	2CKA001724A4275	10/100
château-black	**2539-95-507**	2CKA001724A4315	10
chalet-white	**2539-96-507**	2CKA001724A4318	10

	Cover plate for Busch-powerDock For Busch-powerDock charging cradles.		
NEW			
white	**6477-92-507**	2CKA006400A0050	10
champagne [1]	**6477-93-507**	2CKA006400A0053	10
alpine white	**6477-94-507**	2CKA006400A0052	10
château-black	**6477-95-507**	2CKA006400A0054	10
chalet-white	**6477-96-507**	2CKA006400A0055	10

[1] Phase-out type.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1) 2) 3)]
NC contact
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1094 U-500	2CKA001032A0512	1/10

1) Only in conjunction with standard flush-mounting boxes according to DIN 49073.
2) Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
3) Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
1gang 2way
With fixing claws.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 5 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1097 U-500	2CKA001032A0513	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

1) Only in conjunction with standard flush-mounting boxes according to DIN 49073.
2) Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.
3) Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2) 3)]
NC contact, slide switch
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
EN 60730-2-9, British Standard EN 60669-2-1

	1095 U-500	2CKA001032A0514	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

1) Only in conjunction with standard flush-mounting boxes according to DIN 49073.
2) Servo-valves, "closed when de-energized", are necessary for connection to thermostat. e.g. Article No. 6164/10-, see KNX chapter.
3) Switching temperature difference: ± 0.5 K.

Product	Article-No.	Order-No.	Pack/Qty

Room thermostat, flush-mounted [1)]
NC contact, remote sensor
With remote sensor and thermal feedback
For underfloor heating.
With built-in slide switch and control lamp for nightly reduction of 4 K.
Switch contact opens when the set temperature is reached.
With fixing claws.
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Adjusting range: +10 to +50° C.
Connecting cable: 1mm² to 2.5 mm²
Separate terminal to activate nighttime mode and reduction of room temperature by 4K.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A, cos ϕ 1
EN 60730-2-9, British Standard EN 60669-2-1

	1095 UF-507	2CKA001032A0498	1/10

1) Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Room thermostat, flush-mounted [1) 2) 3)]
Change-over contact, setpoint indication, timer
With change-over contact.
Easy adjustment using menu and text-based display.
4 switching times per day can be user-defined for each day of the week.
With fixing claws.
Automatic summer/wintertime switch-over
Power reserve > 10 hours.
To fit cover plate 6435-xxx.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 10 A
Temperature range (Device): 5 °C to 30 °C
NEW EN 60730-2-9

	1098 U-101	2CKA001032A0508	1/10

1) Only in conjunction with standard flush-mounting boxes according to DIN 49073.
2) Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.
3) Switching temperature difference: ± 0.5 K.

Room thermostat, flush-mounted [1) 2)]
Change-over contact, setpoint indication, timer, remote sensor
With change-over contact.
Easy adjustment using menu and text-based display.
4 switching times per day can be user-defined for each day of the week.
With fixing claws.
Automatic summer/wintertime switch-over
Remote sensor cable length: 4 m.
Sensor =NTC, 10 kilo-ohm at 25 degrees C.
Power reserve > 10 hours
To fit cover plate 6435-xxx.
Class of temperature controller 1
Contribution to space heating energy efficiency 1,0%.
Rated voltage: 230 V~
Rated current: 16 A
Temperature range (Device): 10 °C to 50 °C
NEW EN 60730-2-9

	1098 UF-101	2CKA001032A0509	1/10

1) Only in conjunction with standard flush-mounting boxes according to DIN 49073..
2) Servo valves of "closed or open when de-energized" design are required for the controller. E.g. article no. 6164/10-101.

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Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for room thermostat For room thermostats 1094 U, 1097 U.		
white	**1794-92-507**	2CKA001710A3868	10
champagne	**1794-93-507**	2CKA001710A3930	10
alpine white	**1794-94-507**	2CKA001710A3866	10
château-black	**1794-95-507**	2CKA001710A3934	10
chalet-white	**1794-96-507**	2CKA001710A3938	10
	Cover plate for room thermostat With sliding switch for nightly room temperature reduction. to activate nighttime mode and reduction of room temperature by 4K, for thermostats 1095 U and 1095 UF.		
white	**1795-92-507**	2CKA001710A3869	10
champagne	**1795-93-507**	2CKA001710A3931	10
alpine white	**1795-94-507**	2CKA001710A3867	10
château-black	**1795-95-507**	2CKA001710A3935	10
chalet-white	**1795-96-507**	2CKA001710A3939	10

Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Surface-mounting box **1gang box** Box for inserts and cover plates with cover frame.		
white	**1701-92-507**	2CKA001799A0971	10
champagne	**1701-93-507**	2CKA001799A0962	10
alpine white	**1701-94-507**	2CKA001799A0974	10
château-black	**1701-95-507**	2CKA001799A0965	10
chalet-white	**1701-96-507**	2CKA001799A0968	10
	Surface-mounting box **2gang box** Box for inserts and cover plates with cover frame.		
white	**1702-92-507**	2CKA001799A0972	1
champagne	**1702-93-507**	2CKA001799A0963	1
alpine white	**1702-94-507**	2CKA001799A0975	1
château-black	**1702-95-507**	2CKA001799A0966	1
chalet-white	**1702-96-507**	2CKA001799A0969	1
	Surface-mounting box **3gang box** Box for inserts and cover plates with cover frame.		
white	**1703-92-507**	2CKA001799A0973	1
champagne	**1703-93-507**	2CKA001799A0964	1
alpine white	**1703-94-507**	2CKA001799A0976	1
château-black	**1703-95-507**	2CKA001799A0967	1
chalet-white	**1703-96-507**	2CKA001799A0970	1

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Cover frames

Cover frame with decorative styling frame
1gang frame

Product	Article-No.	Order-No.	Pack/Qty
entrée-grey	**2511-91-507**	2CKA001725A1531	10/100
white	**2511-92-507**	2CKA001725A1484	10/100
champagne	**2511-93-507**	2CKA001725A1501	10/100
alpine white	**2511-94-507**	2CKA001725A1479	10/100
château-black	**2511-95-507**	2CKA001725A1506	10/100
chalet-white	**2511-96-507**	2CKA001725A1511	10/100
foyer-red	**2511-97-507**	2CKA001725A1516	10/100
bistro-blue	**2511-98-507**	2CKA001725A1521	10/100
maison-beige	**2511-99-507**	2CKA001725A1526	10/100

Cover frame with decorative styling frame
2gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
entrée-grey	**2512-91-507**	2CKA001725A1532	10/100
white	**2512-92-507**	2CKA001725A1485	10/100
champagne	**2512-93-507**	2CKA001725A1502	10/100
alpine white	**2512-94-507**	2CKA001725A1480	10/100
château-black	**2512-95-507**	2CKA001725A1507	10/100
chalet-white	**2512-96-507**	2CKA001725A1512	10/100
foyer-red	**2512-97-507**	2CKA001725A1517	10/100
bistro-blue	**2512-98-507**	2CKA001725A1522	10/100
maison-beige	**2512-99-507**	2CKA001725A1527	10/100

Cover frame with decorative styling frame
3gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
entrée-grey	**2513-91-507**	2CKA001725A1533	10/100
white	**2513-92-507**	2CKA001725A1486	10/100
champagne	**2513-93-507**	2CKA001725A1503	10/100
alpine white	**2513-94-507**	2CKA001725A1481	10/100
château-black	**2513-95-507**	2CKA001725A1508	10/100
chalet-white	**2513-96-507**	2CKA001725A1513	10
foyer-red	**2513-97-507**	2CKA001725A1518	10
bistro-blue	**2513-98-507**	2CKA001725A1523	10
maison-beige	**2513-99-507**	2CKA001725A1528	10/100

Cover frame with decorative styling frame
4gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
entrée-grey	**2514-91-507**	2CKA001725A1534	10
white	**2514-92-507**	2CKA001725A1487	10
champagne	**2514-93-507**	2CKA001725A1504	1
alpine white	**2514-94-507**	2CKA001725A1482	10
château-black	**2514-95-507**	2CKA001725A1509	10
chalet-white	**2514-96-507**	2CKA001725A1514	10
foyer-red	**2514-97-507**	2CKA001725A1519	10
bistro-blue	**2514-98-507**	2CKA001725A1524	10
maison-beige	**2514-99-507**	2CKA001725A1529	10

Cover frame with decorative styling frame
5gang frame
For vertical or horizontal installation.

Product	Article-No.	Order-No.	Pack/Qty
entrée-grey	**2515-91-507**	2CKA001725A1535	10
white	**2515-92-507**	2CKA001725A1488	10
champagne	**2515-93-507**	2CKA001725A1505	1
alpine white	**2515-94-507**	2CKA001725A1483	10
château-black	**2515-95-507**	2CKA001725A1510	10
chalet-white	**2515-96-507**	2CKA001725A1515	10
foyer-red	**2515-97-507**	2CKA001725A1520	10
bistro-blue	**2515-98-507**	2CKA001725A1525	10
maison-beige	**2515-99-507**	2CKA001725A1530	10

Decorative styling frame
For styling frames 2511-9x-507, 2512-9x-507, 2513-9x-507, 2514-9x-507, 2515-9x-507

Product	Article-No.	Order-No.	Pack/Qty
white	**2516-92-507**	2CKA001726A0220	10/100
champagne	**2516-93-507**	2CKA001726A0230	10/100
alpine white	**2516-94-507**	2CKA001726A0218	10/100
château-black	**2516-95-507**	2CKA001726A0232	10/100
chalet-white	**2516-96-507**	2CKA001726A0234	10/100
attica/ pigeon blue	**2516-901-507**	2CKA001726A0222	10/100
silver metallic	**2516-902-507**	2CKA001726A0223	10/100
light green	**2516-903-507**	2CKA001726A0224	10/100
orange	**2516-904-507**	2CKA001726A0225	10/100
yellow	**2516-905-507**	2CKA001726A0226	10/100
apricot	**2516-906-507**	2CKA001726A0227	10/100
luminous	**2516-907-507**	2CKA001726A0228	10/100

Sky Niessen

Touch your imagination.

A light switch range offering a minimalistic design. Very slim and balanced. Distinct materials like glass, stainless steel, ash wood or more modest options; all guaranteeing quality. An object of desire, a jewel to decorate the most exclusive of environments. Feel special every day, feel the sky in your hands with Niessen switches.

01 soft white
02 soft black
03 silver
04 antic gold
05 ash frame - white switch
06 stainless steel
07 white glass
08 black glass
09 natural wenge frame - silver switch
10 stainless steel frame - chrome switch
11 black glass frame - chrome switch
12 white glass frame - chrome switch

Sky Niessen

Selected functions.

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01 Stand-alone FM radio and alarm
02 Loudspeaker 2"
03 Universal push dimmer
04 LED rotary dimmer
05 ABB-free@home® movement detector
06 ABB-free@home® room thermostat
07 ABB-free@home® sensors
08 Card switch
09 Digital timer control
10 2way key switch 2 positions
11 USB charger outlet
12 SCHUKO® socket outlet with lamp
13 Movement detector
14 VDI connectors (HDMI+USB)
15 1gang, 1 way single pole switch with lamp
16 Electronic blind control
17 Multiple melody doorbell
18 USB charger outlet
19 TV-FM & satellite outlet
20 Telephone and/or data outlet
21 LED rotary dimmer

01 02

03

04

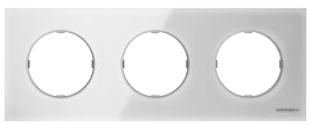
05

06

Sky Niessen
1 to 5gang cover frame
01 Side view, 8,5 x 86 mm
02 86 x 86 mm
03 86 x 157 mm
04 86 x 228 mm
05 84 mm x 299 mm
06 84 mm x 370 mm

01 02

03

04 

Skymoon
1 to 3gang cover frame
01 Side view, 6,4 x 86 mm
02 86 x 86 mm
03 86 x 157 mm
04 86 x 228 mm

For more information about light switch ranges visit ABB global web sites.

Sky Niessen

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 1-way, single pole Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screwless terminals. Included: fixing claws. Optional: locator LED lamp 6192 BL (230 Vac). Rocker code: 8501, 8501.2, 8501.3 & 8501.4.		
	8101	2CLA810100A1001	10
	Switch 1-gang, 2-way, single pole Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screwless terminals. Included: fixing claws. Optional: locator LED lamp 6192 BL (230 Vac). Rocker code: 8501, 8501.2, 8501.3 & 8501.4.		
	8102	2CLA810200A1001	10
	Switch 1-gang, 2-way, single pole 16A Rated voltage: 110 - 250 Vac. Rated current: 16 AX. Screwless terminals. Included: fixing claws. Optional: locator LED lamp 6192 BL (230 Vac). Rocker code: 8501, 8501.2, 8501.3 & 8501.4.		
	8102.1	2CLA810210A1001	10
	Switch 1-gang, intermidiate, single pole Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screwless terminals. Included: fixing claws. Optional: locator LED lamp 6192 BL (230 Vac). Rocker code: 8501, 8501.2, 8501.3 & 8501.4.		
	8110	2CLA811000A1001	10
	Switch 1-gang, 1-way, double pole 16A Rated voltage: 110 - 250 Vac. Rated current: 16 AX. Screwless terminals. Included: fixing claws. Optional: locator/indicator LED lamp 6192 BL (230 Vac). Rocker code: 8501, 8501.2, 8501.3 & 8501.4.		
	8101.1	2CLA810110A1001	10
	Switch 1-gang, 1-way, double pole Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screwless terminals. Included: fixing claws. Optional: locator/indicator LED lamp 6192 BL (230 Vac). Rocker code: 8501, 8501.2, 8501.3 & 8501.4.		
	8101.2	2CLA810120A1001	10
	Switch 1-gang, 1-way, single pole Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screwless terminals. Included: fixing claws. 3 wire connection (neutral conductor required). Included: indicator LED lamp 6192 BL (230 Vac). Rocker code: 8501.3 & 8501.4.		
	8101.5	2CLA810150A1001	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 2-way, single pole Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screwless terminals. Included: fixing claws. 4 wire connection (neutral conductor required). Indicator: indicator LED lamp 6192 BL (230 Vac). Rocker code: 8501.3 & 8501.4.		
	8102.5	2CLA810250A1001	10
	Push-button 1-gang, single pole, NO Rated voltage: 110 - 250 Vac. Rated current: 10 AX. NO: Normally Open. Screwless terminals. Included: fixing claws. Optional: locator LED lamp 6192 BL (230 Vac). Rocker code: 8501, 8501.3, 8504, 8504.2, 8504.3 & 8504.4.		
	8104	2CLA810400A1001	10
	Push-button 1-gang, SP, NO w/ locator lamp Rated voltage: 110 - 250 Vac. Rated current: 10 AX. NO: Normally Open. Screwless terminals. Included: fixing claws. 3 wire connection (neutral conductor required). Included: locator LED lamp 6192 BL (230 Vac). Rocker code: 8501.3, 8504.3 & 8504.4.		
	8104.5	2CLA810450A1001	10
	Push-button 1-gang, single pole, NC Rated voltage: 110 - 250 Vac. Rated current: 10AX. NC: normally closed. Screwless terminals. Included: fixing claws. Optional: locator LED lamp 6192 BL (230 Vac). Rocker code: 8501, 8501.3, 8504, 8504.2, 8504.3 & 8504.4.		
	8104.9	2CLA810490A1001	5
	Switch 2-gangs, 1-way, single pole Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screwless terminals. Included: fixing claws. Rocker code: 8511.		
	8111	2CLA811100A1001	10
	Switch 2-gangs, 2-way, single pole Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screwless terminals. Included: fixing claws. Rocker code: 8511.		
	8122	2CLA812200A1001	10

Sky Niessen

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	Push-button 2-gangs, single pole, NO Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screwless terminals. Without interlock. Included: fixing claws. Rocker code: 8511.		
	8144.2	2CLA814420A1001	10
	Switch 2-way + push-button 1-way NO, SP Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screwless terminals. Included: fixing claws. Rocker code: 8511 & 8542.		
	8142	2CLA814200A1001	10
	Indicator/locator LED lamp 230Vac For 81XX inserts. Lamp: white LED. Long life cycle. Two functions: indicator or locator light. Power consumption: 0,2 mA. Especially recommended for LED and energy saving lamps.		
	6192 BL	2CLA819202A1001	10
	Rocker for switch, 1-gang Rocker for switches code: 8101, 8101.1, 8101.2, 8102, 8102.1 & 8110.		
Soft White	**8501 BL**	2CLA850100A1101	20
Silver	**8501 PL**	2CLA850100A1301	20
Soft Black	**8501 NS**	2CLA850100A1501	20
Stainless Steel	**8501 AI**	2CLA850100A1401	20
Antic Gold	**8501 OE**	2CLA850100A1201	20
White Glass	**8501 CB**	2CLA850100A2101	10
Black Glass	**8501 CN**	2CLA850100A2501	10
	Rocker with On/Off symbol, 1-gang Rocker for switches code: 8101, 8101.1, 8101.2, 8102, 8102.1 & 8110.		
Soft White	**8501.2 BL**	2CLA850120A1101	5
Silver	**8501.2 PL**	2CLA850120A1301	5
Soft Black	**8501.2 NS**	2CLA850120A1501	5
Stainless Steel	**8501.2 AI**	2CLA850120A1401	5
Antic Gold	**8501.2 OE**	2CLA850120A1201	5

Product	Article-No.	Order-No.	Pack/Qty
	Rocker for switch with lens, 1-gang Rocker for switches code: 8101, 8101.1, 8101.2, 8101.5, 8102, 8102.1, 8102.5 & 8110.		
Soft White	**8501.3 BL**	2CLA850130A1101	10
Silver	**8501.3 PL**	2CLA850130A1301	10
Soft Black	**8501.3 NS**	2CLA850130A1501	10
Stainless Steel	**8501.3 AI**	2CLA850130A1401	10
Antic Gold	**8501.3 OE**	2CLA850130A1201	10
White Glass	**8501.3 CB**	2CLA850130A2101	5
Black Glass	**8501.3 CN**	2CLA850130A2501	5
	Rocker with lens & On/Off symbol, 1-gang Rocker for switches code: 8101, 8101.1, 8101.2, 8101.5, 8102, 8102.1, 8102.5 & 8110.		
Soft White	**8501.4 BL**	2CLA850140A1101	5
Silver	**8501.4 PL**	2CLA850140A1301	5
Soft Black	**8501.4 NS**	2CLA850140A1501	5
Stainless Steel	**8501.4 AI**	2CLA850140A1401	5
Antic Gold	**8501.4 OE**	2CLA850140A1201	5
	Rocker with bell symbol, 1-gang Rocker for push-buttons code: 8104 & 8104.9.		
Soft White	**8504 BL**	2CLA850400A1101	10
Silver	**8504 PL**	2CLA850400A1301	10
Soft Black	**8504 NS**	2CLA850400A1501	10
Stainless Steel	**8504 AI**	2CLA850400A1401	10
Antic Gold	**8504 OE**	2CLA850400A1201	10
	Rocker with light symbol, 1-gang Rocker for push-buttons code: 8104 & 8104.9.		
Soft White	**8504.2 BL**	2CLA850420A1101	10
Silver	**8504.2 PL**	2CLA850420A1301	10
Soft Black	**8504.2 NS**	2CLA850420A1501	10
Stainless Steel	**8504.2 AI**	2CLA850420A1401	10
Antic Gold	**8504.2 OE**	2CLA850420A1201	10

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Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	Rocker with bell symbol & lens, 1-gang Rocker for push-buttons code: 8104, 8104.5 & 8104.9.		
Soft White	**8504.3 BL**	2CLA850430A1101	5
Silver	**8504.3 PL**	2CLA850430A1301	5
Soft Black	**8504.3 NS**	2CLA850430A1501	5
Stainless Steel	**8504.3 AI**	2CLA850430A1401	5
Antic Gold	**8504.3 OE**	2CLA850430A1201	5
	Rocker with light symbol & lens, 1-gang Rocker for push-buttons code: 8104, 8104.5 & 8104.9.		
Soft White	**8504.4 BL**	2CLA850440A1101	5
Silver	**8504.4 PL**	2CLA850440A1301	5
Soft Black	**8504.4 NS**	2CLA850440A1501	5
Stainless Steel	**8504.4 AI**	2CLA850440A1401	5
Antic Gold	**8504.4 OE**	2CLA850440A1201	5
	Rocker for switch/push-button, 2-gangs Rocker for switch/push-buttons code: 8111, 8122, 8144.2 & 8142.		
Soft White	**8511 BL**	2CLA851100A1101	20
Silver	**8511 PL**	2CLA851100A1301	20
Soft Black	**8511 NS**	2CLA851100A1501	20
Stainless Steel	**8511 AI**	2CLA851100A1401	20
Antic Gold	**8511 OE**	2CLA851100A1201	20
White Glass	**8511 CB**	2CLA851100A2101	10
Black Glass	**8511 CN**	2CLA851100A2501	10
	Rocker for switch + push-button, 2-gangs Rocker for switch + push-buttons code: 8142.		
Soft White	**8542 BL**	2CLA854200A1101	5
Silver	**8542 PL**	2CLA854200A1301	5
Soft Black	**8542 NS**	2CLA854200A1501	5
Stainless Steel	**8542 AI**	2CLA854200A1401	5
Antic Gold	**8542 OE**	2CLA854200A1201	5
	Card switch 1-gang, 1-way, double pole Rated voltage: 110 - 250 Vac. Rated current: 10 AX. For 54mm width cards. Included: fixing claws. Included: locator LED lamp 6192 BL (230 Vac). Cover plate code: 8514.		
	8114	2CLA811400A1001	10

Product	Article-No.	Order-No.	Pack/Qty
	Card switch 1-gang, 1-way, double pole 16A Rated voltage: 110 - 250 Vac. Rated current: 16 AX. For 54mm width cards. Included: fixing claws. Included: locator LED lamp 6192 BL (230 Vac). Cover plate code: 8514.		
	8114.1	2CLA811410A1001	10
	Card switch 1-gang, 2-way, double pole Rated voltage: 110 - 250 Vac. Rated current: 10 AX. For 54mm width cards. Included: fixing claws. Included: locator LED lamp 6192 BL (230 Vac). Cover plate code: 8514.		
	8114.2	2CLA811420A1001	10
	Card switch 1-gang, 1-way, SP w/ time delay Rated voltage: 110 - 250 Vac ; 50 / 60 Hz. Rated current: - Incandescent/halogen: 3.000W@230Vac / 1.600W@127Vac. - Fluorescent: 1.300VA@230Vac / 700VA@127Vac. - Electronic and ferromag. transf. and motors: 3.000VA@230Vac / 1.600VA@127Vac. 3 wire connection (neutral conductor required). For 54 mm. width cards. Locator LED lamp included. Time delayed switch: 5 - 90 seconds. Cover plate code: 8514.		
	8114.5	2CLA811450A1001	1
	Cover plate for card switch with lens Cover plate for card switch code: 8114, 8114.1, 8114.2 & 8114.5.		
Soft White	**8514 BL**	2CLA851400A1101	10
Silver	**8514 PL**	2CLA851400A1301	10
Soft Black	**8514 NS**	2CLA851400A1501	10
Stainless Steel	**8514 AI**	2CLA851400A1401	10
Antic Gold	**8514 OE**	2CLA851400A1201	10
	Pullcord switch 1-gang, 1-way, single pole Rated voltage: 110 - 250 Vac. Rated current: 16 A. Screwless terminals. Included: fixing claws. Cord length: 2 meters. Cover plate code: 8507.		
	8148	2CLA814800A1001	5

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Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	Cover for pull cord switch Cover plate for pullcord switch code: 8148.		
Soft White	**8507 BL**	2CLA850700A1101	10
Silver	**8507 PL**	2CLA850700A1301	10
Soft Black	**8507 NS**	2CLA850700A1501	10
Stainless Steel	**8507 AI**	2CLA850700A1401	10
Antic Gold	**8507 OE**	2CLA850700A1201	10

Key swithches

Product	Article-No.	Order-No.	Pack/Qty
	Key switch 1-way, 2 positions, single pole Rated voltage: 110 - 250 Vac. Rated current: 5 A. Key removable in the 2 positions. Unique key for each lock. Suitable for alarms. Cover plate code: 8553.		
	8153	2CLA815300A1001	1
	Key push button 1-way, 2 positions, SP Rated voltage: 110 - 250 Vac. Rated current: 5 A. Key removable in “OFF” position. Unique key for each lock. Suitable for alarms. Cover plate code: 8553.		
	8153.2	2CLA815320A1001	1
	Cover plate for 2 position key switch Cover plate for key switch code: 8153 & 8153.2.		
Soft White	**8553 BL**	2CLA855300A1101	1
Silver	**8553 PL**	2CLA855300A1301	1
Soft Black	**8553 NS**	2CLA855300A1501	1
Stainless Steel	**8553 AI**	2CLA855300A1401	1
Antic Gold	**8553 OE**	2CLA855300A1201	1
	Key switch 2-way, 3 positions, single pole Rated voltage: 110 - 250 Vac. Rated current: 150 mA. Key removable in “OFF” position. Unique key for each lock. Suitable for blinds, shutters, etc. Cover plate code: 8553.1.		
	8153.1	2CLA815310A1001	1
	Cover plate for 3 position key switch Cover plate for key switch code: 8153.1.		
Soft White	**8553.1 BL**	2CLA855310A1101	1
Silver	**8553.1 PL**	2CLA855310A1301	1
Soft Black	**8553.1 NS**	2CLA855310A1501	1
Stainless Steel	**8553.1 AI**	2CLA855310A1401	1
Antic Gold	**8553.1 OE**	2CLA855310A1201	1

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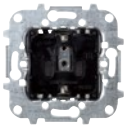
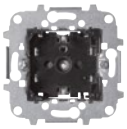
Blind control

Product	Article-No.	Order-No.	Pack/Qty
	Push-button blind control 2-gangs Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Direct control. Interlocked gangs. Included: fixing claws. Rocker code: 8544.		
	8144	2CLA814400A1001	10
	Switch blind control 2-gangss Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Direct control. Interlocked gangs. Included: fixing claws. Rocker code: 8544.		
	8144.1	2CLA814410A1001	10
	Rocker for blind switch/push-button Rocker for blind switch/push-button code: 8144 & 8144.1.		
Soft White	**8544 BL**	2CLA854400A1101	10
Silver	**8544 PL**	2CLA854400A1301	10
Soft Black	**8544 NS**	2CLA854400A1501	10
Stainless Steel	**8544 AI**	2CLA854400A1401	10
Antic Gold	**8544 OE**	2CLA854400A1201	10
White Glass	**8544 CB**	2CLA854400A2101	5
Black Glass	**8544 CN**	2CLA854400A2501	5
	Electronic blind control 1-gang Rated voltage: 110 - 250 Vac ; 50 / 60 Hz. Rated current: 700VA@230Vac / 350VA@127Vac. Direct control. Functions: - PERS: standard blinds control. Optionally other 8144 inserts can be connected to the 8130.3 to control the blind from other locations. - LAM: venetian type blinds control. Optionally other 8144 inserts can be connected to the 8130.3 to control the blind from other locations. - Centralization (CEN): one 8130.3 can control all the 8130.3 of a line centrally. Included: fixing claws. Electronic rocker code: 8530.		
	8130.3	2CLA813030A1001	1
	Electronic rocker for blind control Electronic rocker for blind control code: 8130.3.		
Soft White	**8530 BL**	2CLA853000A1101	1
Silver	**8530 PL**	2CLA853000A1301	1
Soft Black	**8530 NS**	2CLA853000A1501	1
Stainless Steel	**8530 AI**	2CLA853000A1401	1
Antic Gold	**8530 OE**	2CLA853000A1201	1

Product	Article-No.	Order-No.	Pack/Qty

Sky Niessen
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	**Schuko socket outlet** Rated voltage: 250 Vac. Rated current: 16 A. Type F: 2P + E. Shuttered for child safety. Screw terminals. Without fixing claws code: 8188. With fixing claws code: 8188.5. Cover plate code: 8588.		
	8188	2CLA818800A1001	10
	8188.5	2CLA818850A1001	10
	**Schuko socket outlet screwless connection** Rated voltage: 250 Vac. Rated current: 16 A. Type F: 2P + E. Shuttered for child safety. Screwless terminals. Without fixing claws. Cover plate code: 8588.		
	8188.6	2CLA818860A1001	10
	Cover plate for Schuko socket outlet Cover plate for Schuko socket outlet code: 8188, 8188.5 & 8188.6.		
Soft White	**8588 BL**	2CLA858800A1101	20
Silver	**8588 PL**	2CLA858800A1301	20
Soft Black	**8588 NS**	2CLA858800A1501	20
Stainless Steel	**8588 AI**	2CLA858800A1401	20
Antic Gold	**8588 OE**	2CLA858800A1201	20
White Glass	**8588 CB**	2CLA858800A2101	10
Black Glass	**8588 CN**	2CLA858800A2501	10
	Cover plate for Schuko socket outlet Suitable to identify special circuits. Cover plate for Schuko socket outlet code: 8188, 8188.5 & 8188.6.		
Red	**8588 RJ**	2CLA858800A7001	5
Green	**8588 VD**	2CLA858800A8001	5
Orange	**8588 NA**	2CLA858800A9001	5
	Cover plate for Schuko socket outlet w/ lid Cover plate for Schuko socket outlet code: 8188, 8188.5 & 8188.6.		
Soft White	**8588.1 BL**	2CLA858810A1101	10
Silver	**8588.1 PL**	2CLA858810A1301	10
Soft Black	**8588.1 NS**	2CLA858810A1501	10
Stainless Steel	**8588.1 AI**	2CLA858810A1401	5
Antic Gold	**8588.1 OE**	2CLA858810A1201	5

Product	Article-No.	Order-No.	Pack/Qty
	Schuko socket outlet with indicator lamp Rated voltage: 250 Vac. Rated current: 16 A. Type F: 2P + E. Shuttered for child safety. Screw terminals. Without fixing claws. Included: indicator LED lamp. Cover plate code: 8588.		
	8188.8	2CLA818880A1001	5
	Cover plate for Schuko socket outlet w/ lens Cover plate for Schuko socket outlet code: 8188.8.		
Soft White	**8588.8 BL**	2CLA858880A1101	10
Silver	**8588.8 PL**	2CLA858880A1301	10
Soft Black	**8588.8 NS**	2CLA858880A1501	10
Stainless Steel	**8588.8 AI**	2CLA858880A1401	10
Antic Gold	**8588.8 OE**	2CLA858880A1201	10
	Schuko socket outlet for plain covers Rated voltage: 250 Vac. Rated current: 16 A. Type F: 2P + E. Shuttered for child safety. Screw terminals. Without fixing claws. Cover plate code: 8588.9.		
	8188.9	2CLA818890A1001	10
	Flat cover plate for Schuko socket outlet Cover plate for Schuko socket outlet code: 8188.9.		
Soft White	**8588.9 BL**	2CLA858890A1101	20
Silver	**8588.9 PL**	2CLA858890A1301	20
Soft Black	**8588.9 NS**	2CLA858890A1501	20
Stainless Steel	**8588.9 AI**	2CLA858890A1401	20
Antic Gold	**8588.9 OE**	2CLA858890A1201	20
White Glass	**8588.9 CB**	2CLA858890A2101	10
Black Glass	**8588.9 CN**	2CLA858890A2501	10

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Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	French/Earth-pin socket outlet Rated voltage: 250 Vac. Rated current: 16 A. Type E: 2P + E. Shuttered for child safety. Screw terminals. Included: fixing claws. Cover plate code: 8587.		
	8187	2CLA818700A1001	10
	Cover plate for French socket outlet Cover plate for Schuko socket outlet code: 8187.		
Soft White	**8587 BL**	2CLA858700A1101	20
Silver	**8587 PL**	2CLA858700A1301	20
Soft Black	**8587 NS**	2CLA858700A1501	20
Stainless Steel	**8587 AI**	2CLA858700A1401	20
Antic Gold	**8587 OE**	2CLA858700A1201	20
	French/Earth-pin socket outlet for plain covers Rated voltage: 250 Vac. Rated current: 16 A. Type E: 2P + E. Shuttered for child safety. Screwless terminals. Included: fixing claws. Cover plate code: 8587.9.		
	8187.9	2CLA818790A1001	10
	Flat cover plate for French socket outlet Cover plate for French / earth-pin socket outlet code: 8187.9.		
Soft White	**8587.9 BL**	2CLA858790A1101	10
Silver	**8587.9 PL**	2CLA858790A1301	10
Soft Black	**8587.9 NS**	2CLA858790A1501	10
Stainless Steel	**8587.9 AI**	2CLA858790A1401	10
Antic Gold	**8587.9 OE**	2CLA858790A1201	10
White Glass	**8587.9 CB**	2CLA858790A2101	10
Black Glass	**8587.9 CN**	2CLA858790A2501	10

Product	Article-No.	Order-No.	Pack/Qty
	Universal socket outlet Rated voltage: 125 / 250 Vac. Rated current: 15 / 16 A. Multiple type: 2P + E. Shuttered for child safety. Screw terminals. Without fixing claws. Cover plates: - Euroamerican type (Type B+C: 2P + E / NEMA 5-15R): 8538. - Universal type (Multiple type: 2P + E): 8539.		
	8139	2CLA813900A1001	10
	Cover plate for Euroamerican socket outlet Cover plate with Euroamerican type figure for universal socket outlet code: 8139.		
Soft White	**8538 BL**	2CLA853800A1101	10
Silver	**8538 PL**	2CLA853800A1301	10
Soft Black	**8538 NS**	2CLA853800A1501	10
Stainless Steel	**8538 AI**	2CLA853800A1401	10
Antic Gold	**8538 OE**	2CLA853800A1201	10
	Cover plate for Universal socket outlet Cover plate with universal type figure for universal socket outlet code: 8139.		
Soft White	**8539 BL**	2CLA853900A1101	10
Silver	**8539 PL**	2CLA853900A1301	10
Soft Black	**8539 NS**	2CLA853900A1501	10
Stainless Steel	**8539 AI**	2CLA853900A1401	10
Antic Gold	**8539 OE**	2CLA853900A1201	10
	British standard socket outlet - 2M Rated voltage: 250 Vac. Rated current: 13A. Type G: 2P + E. Without switch. Shuttered for child safety. Screw terminals. Cover plate for British socket type: 8537.		
	8137	2CLA813700A1001	10
	Cover plate for British socket outlet Cover plate with British type figure for universal socket outlet code: 8139.		
Soft White	**8537 BL**	2CLA853700A1101	10
Silver	**8537 PL**	2CLA853700A1301	10
Soft Black	**8537 NS**	2CLA853700A1501	10
Stainless Steel	**8537 AI**	2CLA853700A1401	10
Antic Gold	**8537 OE**	2CLA853700A1201	10

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USB chargers

Product	Article-No.	Order-No.	Pack/Qty
	USB charger 1.500mA, 2 outlets Input voltage: 100 - 240 Vac ±10% ; 50 / 60 Hz. Input current: 0,20 A (with maximum load). Output voltage: 5 Vdc ±5%. Output current: 1.500 mA (total for both gangs). Power consumption in stand-by: <= 0,3W@230Vac. Energy efficiency: >= 71%. Operating temperature: 0 ºC to 35 ºC. Mounting grid delivered with the cover plate (without fixing claws). Cover plate code: 8585.		
	8185	2CLA818500A1001	1
	Cover plate for USB charger 1,5 A Cover plate for USB charger code: 8185.		
Soft White	**8585 BL**	2CLA858500A1101	5
Silver	**8585 PL**	2CLA858500A1301	5
Soft Black	**8585 NS**	2CLA858500A1501	5
Stainless Steel	**8585 AI**	2CLA858500A1401	5
Antic Gold	**8585 OE**	2CLA858500A1201	5

Product	Article-No.	Order-No.	Pack/Qty
	USB charger 2.000 mA, 1 outlet Input voltage: 100 - 230 Vac ±10% ; 50 / 60 Hz. Input current: 0,20 A (with maximum load). Output voltage: 5 Vdc ±5%. Output current: 2.000 mA. Power consumption in stand-by: <= 0,01W@230Vac. Energy efficiency: >= 79%. Operating temperature: 0 ºC to 45 ºC. Without fixing claws. Cover plate code: 8585.2.		
	8185.2	2CLA818520A1001	1
	Cover plate for USB charger 2A Cover plate for USB charger code: 8185.2.		
Soft White	**8585.2 BL**	2CLA858520A1101	1
Silver	**8585.2 PL**	2CLA858520A1301	1
Soft Black	**8585.2 NS**	2CLA858520A1501	1
Stainless Steel	**8585.2 AI**	2CLA858520A1401	1
Antic Gold	**8585.2 OE**	2CLA858520A1201	1
	USB charger 2x 2.000mA, 2 outlets Input voltage: 100 - 230 Vac ±10%; 50/60 Hz. Input current: 0,20 A (with maximum load). Output voltage: 5 Vdc ±5%. Output current: 2.000 mA. Power consumption in stand-by: <= 0,01W@230Vac. Energy efficiency: >= 79%. Operating temperature: 0 ºC to 45 ºC. Without fixing claws. Cover plate code: 8585.3.		
	8185.3	2CLA818530A1001	1
	Cover plate for USB charger 2x 2 A Cover plate for USB charger code: 8185.3.		
Soft White	**8585.3 BL**	2CLA858530A1101	1
Silver	**8585.3 PL**	2CLA858530A1301	1
Soft Black	**8585.3 NS**	2CLA858530A1501	1
Stainless Steel	**8585.3 AI**	2CLA858530A1401	1
Antic Gold	**8585.3 OE**	2CLA858530A1201	1

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	TV / R terminal outlet TV and R double outlet - Final. Without filter. Installation as a terminal outlet connected to a tap-off or splitter (without terminal resistor). Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52mm diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 5 - 862 MHz / 5 - 862 MHz / 5 - 862 MHz. Basic loss (FM / DAB / VHF / UHF): 10,0±0,7 dB / 10,0 ±1,5 dB / 4,0±1,5 dB / 3,0±0,5 dB. Isolation (FM / TV): >14 / >14. Return loss (FM / TV): >18 / >10. Included: fixing claws. Cover plate code: 8550.		
	8150	2CLA815000A1001	10
	TV / R final outlet - CATV outlet TV and R double outlet - CATV outlet - Final. With filter. Installation as a terminal outlet connected to a tap-off or splitter (without terminal resistor). Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (C1 / C2): 5 - 68 & 118 - 1.000 MHz / 87,5 - 108 MHz. Basic loss (R / FM / TV): 0,3±0,1 dB / 1,1 ±0,3 dB / 0,9±0,3 dB. Isolation (FM / TV): >18 / >16. Selectivity (FM / TV): >10 / >18. Return loss (R / FM / TV): >18 / >16 / >18. Chroma-luminance delay (ns): <10. Included: fixing claws. Cover plate code: 8550.		
	8150.3	2CLA815030A1001	10
	TV / R loop-through outlet TV and R double outlet - Intermidiate. Installation as an intermidiate outlet in series connected to each other. From 2nd to 4th floor. Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52mm diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 13 - 862 MHz / 13 - 862 MHz / 13 - 862 MHz. Basic loss (FM / DAB / VHF / UHF): 25±1,5 dB / 25 ±1,5 dB / 8,0±0,7 dB / 8,0±0,7 dB. Through loss (FM / VHF / UHF): 2,0±0,3 dB / 2,0±0,5 dB / 2,0±0,5 dB. Directivity (FM / TV): >12 dB / >9 dB. Isolation (FM / TV): >16 / >15. Return loss (FM / TV): >12 / >12. Included: fixing claws. Cover plate code: 8550.		
	8150.7	2CLA815070A1001	10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for TV/R outlet Cover plate for TV outlet code: 8150, 8150.3 & 8150.7.		
Soft White	**8550 BL**	2CLA855000A1101	20
Silver	**8550 PL**	2CLA855000A1301	20
Soft Black	**8550 NS**	2CLA855000A1501	20
Stainless Steel	**8550 AI**	2CLA855000A1401	20
Antic Gold	**8550 OE**	2CLA855000A1201	20
	TV-R/SAT terminal outlet TV-R and SAT double outlet - Final. Installation as a terminal outlet connected to a tap-off or splitter (without terminal resistor). Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 5 - 2.400 MHz / 5 - 862 MHz / 930 - 2.400 MHz. Basic loss (FM / TV / SAT): 0,2±0,1 dB / 1,0 ±0,5 dB / 1,2±0,6 dB. Isolation (FM / TV / SAT): >45 / >14 / >14. Selectivity (TV-R / SAT): >15 / >15. Return loss (VR / FM / TV / SAT): >25 / >25 / >14 / >10. DC path (Vdc / mA / Tono): 24 max. / 500 max. / 22 KHz - DiSEqC. Included: fixing claws. Cover plate code: 8550.1.		
	8151.3	2CLA815130A1001	10
	TV-R/SAT final outlet TV-R and SAT double outlet - Final. Installation as a terminal outlet connected to a series with loop-through outlets. Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 5 - 2.400 MHz / 5 - 2.400 MHz / 5 - 2.400 MHz. Basic loss (FM / TV / SAT): 3,7±0,3 dB / 4,0±0,5 dB / 5,0±1,2 dB. Isolation (FM / TV / SAT): >20 / >20 / >14. Return loss (VR / FM / TV / SAT): >16 / >16 / >16 / >9. DC path (Vdc / mA / Tono): 24 max. / 500 max. / 22 KHz - DiSEqC. Included: fixing claws. Cover plate code: 8550.1.		
	8151.7	2CLA815170A1001	10

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	TV-R/SAT loop-through outlet TV-R and SAT double outlet - Intermidiate Installation as an intermidiate outlet in series connected to each other. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 5 - 2.400 MHz / 5 - 2.400 MHz / 5 - 2.400 MHz. Basic loss (FM / TV / SAT): 10,0±1,0 dB / 10,0±1,0 dB / 12,0±2,0 dB. Through loss (FM / TV / SAT): 2,5±0,5 / 2,5±0,7 / 3,0±1,0. Directivity (FM / TV / SAT): >20 / >12 / >5. Isolation (FM / TV / SAT): >45 / >30 / >28. Return loss (VR / FM / TV / SAT): >13 / >13 / >12 / >12. DC path (Vdc / mA / Tono): 24 max. / 500 max. / 22 KHz - DiSEqC. Included: fixing claws. Cover plate code: 8550.1.		
	8151.8	2CLA815180A1001	10
	Cover plate for TV-R/SAT outlet Cover plate for TV outlet code: 8151.3 , 8150.7 & 8150.8.		
Soft White	**8550.1 BL**	2CLA855010A1101	20
Silver	**8550.1 PL**	2CLA855010A1301	20
Soft Black	**8550.1 NS**	2CLA855010A1501	20
Stainless Steel	**8550.1 AI**	2CLA855010A1401	20
Antic Gold	**8550.1 OE**	2CLA855010A1201	20
	Telephone outlet RJ12 RJ12 type connector. 6 contacts. Suitable for 2 (6P2C), 4 (6P4C) or 6 (6P6C) RJ11 and RJ12 jacks. Screw terminals. Without fixing claws. Cover plate code: 8517.		
	8117	2CLA811700A1001	10
	Data outlet RJ45 Cat.5e UTP RJ45 type connector. Cat.5e UTP. In compliance with ANSI/TIA/EIA 568B.2, ISO/IEC11801 & EN50173. Universal TIA/EIA 568A and 568B labeling. Housing: ABS UL-94-0. Durability: 750 cycles min. (ISO/IEC 11801, IEC 60603-7-4) IDC: PC UL94V-0, Accept 22-26AWG solid wire. Contact: RJ45 8P8C, 3~50 micro-inch gold plating over nickel plated on contact area. Tool-less wiring. Without fixing claws. Cover plate code: 8517.		
	8118	2CLA811800A1001	10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for telephone/data outlets Cover plate for telephone/data outlet code: 8117 & 8118.		
Soft White	**8517 BL**	2CLA851700A1101	10
Silver	**8517 PL**	2CLA851700A1301	10
Soft Black	**8517 NS**	2CLA851700A1501	10
Stainless Steel	**8517 AI**	2CLA851700A1401	10
Antic Gold	**8517 OE**	2CLA851700A1201	10
	Telephone outlet RJ12 RJ12 type connector. 6 contacts. Suitable for 2 (6P2C), 4 (6P4C) or 6 (6P6C) RJ11 and RJ12 jacks. Screw terminals. Mounting grid delivered with the cover plate. Cover plate code: 8518.1 & 8518.2.		
	2017.2	2CLA201720A1001	10
	Telephone outlet RJ45 Cat.3 RJ45 type connector. Cat.3. 8 contacts. Suitable for 8 (8P8C) RJ45 jacks. Tool-less wiring. Mounting grid delivered with the cover plate. Cover plate code: 8518.1 & 8518.2.		
	2017.3	2CLA201730A1001	10
	Data outlet RJ45 Cat.5e UTP RJ45 type connector. Cat.5e UTP. In compliance with ANSI/TIA/EIA 568B.2, ISO/IEC11801 & EN50173. Universal TIA/EIA 568A and 568B labeling. Housing: ABS UL-94-0. Durability: 750 cycles min. (ISO/IEC 11801, IEC 60603-7-4). IDC: PC UL94V-0, Accept 22-26AWG solid wire. Contact: RJ45 8P8C, 3~50 micro-inch gold plating over nickel plated on contact area. Tool-less wiring. Mounting grid delivered with the cover plate. Cover plate code: 8518.1 & 8518.2.		
	2018.5	2CLA201850A1001	10
	Data outlet RJ45 Cat.6 UTP RJ45 type connector. Cat.6 UTP. In compliance with ANSI/TIA/EIA 568B.2, ISO/IEC11801 & EN50173. Universal TIA/EIA 568A and 568B labeling. Housing: ABS UL-94-0. Durability: 750 cycles min. (ISO/IEC 11801, IEC 60603-7-4). IDC: PC UL94V-0, Accept 22-26AWG solid wire. Contact: RJ45 8P8C, 3~50 micro-inch gold plating over nickel plated on contact area. Tool-less wiring. Mounting grid delivered with the cover plate. Cover plate code: 8518.1 & 8518.2.		
	2018.6	2CLA201860A1001	10

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Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Data outlet RJ45 Cat.6A STP RJ45 type connector. Cat.6A STP. In compliance with ANSI/TIA/EIA 568B.2 , ISO/IEC11801 & EN50173. Universal TIA/EIA 568A and 568B Labeling. 10 Gb/sec. Durability: 750 cycles min. (ISO/IEC 11801, IEC 60603-7-4). Housing: Zinc Die-casting design for optimal EMI protection. Slim size is ideal for interfaces where the spaces are tight. IDC: PC UL94V-0, Accept 22-26AWG solid wire. Contact: RJ45 8P8C, 3~50 micro-inch gold plating over nickel plated on contact area. Tool-less wiring. Mounting grid delivered with the cover plate. Cover plate code: 8518.1 & 8518.2.		
	2018.7	2CLA201870A1001	10
	Housing for data outlets - Keystone type Housing for connectors with Keystone type clipping system. Mounting grid delivered with the cover plate. Cover plate code: 8518.1 & 8518.2.		
	2018	2CLA201800A1001	10
	Housing for data outlets - Systimax type Housing for connectors with Systimax type clipping system. Mounting grid delivered with the cover plate. Cover plate code: 8518.1 & 8518.2.		
	2018.8	2CLA201880A1001	10
	Cover plate for data outlet 1-gang Cover plate for data outlets code: 2017.2, 2017.3, 2018, 2018.5, 2018.6 & 2018.8. Included: - Mounting grid without claws. - Shutters. - Labeling area.		
Soft White	**8518.1 BL**	2CLA851810A1101	10
Silver	**8518.1 PL**	2CLA851810A1301	10
Soft Black	**8518.1 NS**	2CLA851810A1501	10
Stainless Steel	**8518.1 AI**	2CLA851810A1401	10
Antic Gold	**8518.1 OE**	2CLA851810A1201	10
	Cover plate for data outlet 2-gangs Cover plate for data outlets code: 2017.2, 2017.3, 2018, 2018.5, 2018.6 & 2018.8. Included: - Mounting grid without claws. - Shutters. - Labeling area.		
Soft White	**8518.2 BL**	2CLA851820A1101	10
Silver	**8518.2 PL**	2CLA851820A1301	10
Soft Black	**8518.2 NS**	2CLA851820A1501	10
Stainless Steel	**8518.2 AI**	2CLA851820A1401	10
Antic Gold	**8518.2 OE**	2CLA851820A1201	10

Product	Article-No.	Order-No.	Pack/Qty
	Mini-Jack connection unit Front: 1x Mini-Jack connector (3,5mm stereo audio jack). Rear: screw terminals (3/4 wires). Without fixing claws. Cover plate code: 8555.		
	8155.4	2CLA815540A1101	1
	HDMI connection unit Front: 1x HDMI connector (Type A connector). Rear: screwless terminals (20 wires). Without fixing claws. Cover plate code: 8555.		
	8155.6	2CLA815560A1101	1
	HDMI female-female connection unit Front: 1x HDMI connector (Type A connector). Rear: 1x HDMI connector (Type A connector) fitted at 90º angle. Without fixing claws. Cover plate code: 8555.		
	8155.7	2CLA815570A1101	1
	USB connection unit Front: 1x USB 2.0 connector (Type A connector). Rear: screw terminals (5 wires). Without fixing claws. Cover plate code: 8555.		
	8155.8	2CLA815580A1101	1
	USB female-female connection unit Front: 1x USB 2.0 connector (Type A connector). Rear: 1x USB 2.0 connector (Type A connector) fitted at 90º angle. Without fixing claws. Cover plate code: 8555.		
	8155.9	2CLA815590A1101	1
	Cover plate 1-gang VDI connection unit Cover plate for 1-gang VDI connection unit code: 8155.4, 8155.6, 8155.7, 8155.8 & 8155.9.		
Soft White	**8555 BL**	2CLA855500A1101	1
Silver	**8555 PL**	2CLA855500A1301	1
Soft Black	**8555 NS**	2CLA855500A1501	1
Stainless Steel	**8555 AI**	2CLA855500A1401	1
Antic Gold	**8555 OE**	2CLA855500A1201	1
	HDMI wired + USB connection unit Front: 1x HDMI connector (Type A connector) & 1x USB 2.0 connector (Type A connector). Rear: HDMI screwless terminals (20 wires) & USB screw terminals (5 wires). Without fixing claws. Cover plate code: 8555.1.		
	8155.68	2CLA815560A1801	1

Sky Niessen

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	HDMI female-female + USB connection unit Front: 1x HDMI connector (Type A connector) & 1x USB 2.0 connector (Type A connector). Rear: 1x HDMI connector (Type A connector) fitted at 90º angle & USB screw terminals (5 wires). Without fixing claws. Cover plate code: 8555.1.		
	8155.78	2CLA815578A1001	1
	Double USB connection unit Front: 2x USB 2.0 connector (Type A connector). Rear: 2x USB screw terminals (5 wires). Without fixing claws. Cover plate code: 8555.1.		
	8155.88	2CLA815580A1801	1
	Cover plate 2-gangs VDI connection unit Cover plate for 2-gangs VDI connection unit code: 8155.68, 8155.78 & 8155.88.		
Soft White	**8555.1 BL**	2CLA855510A1101	1
Silver	**8555.1 PL**	2CLA855510A1301	1
Soft Black	**8555.1 NS**	2CLA855510A1501	1
Stainless Steel	**8555.1 AI**	2CLA855510A1401	1
Antic Gold	**8555.1 OE**	2CLA855510A1201	1
	2x RCA connection unit Front: 2x RCA connectors (Red / White). Rear: screw terminals (4 wires). Without fixing claws. Cover plate code: 8555.2.		
	8155.2	2CLA815520A1101	1
	Cover plate 2RCA connection unit Cover plate for 2RCA connection unit code: 8155.2.		
Soft White	**8555.2 BL**	2CLA855520A1101	1
Silver	**8555.2 PL**	2CLA855520A1301	1
Soft Black	**8555.2 NS**	2CLA855520A1501	1
Stainless Steel	**8555.2 AI**	2CLA855520A1401	1
Antic Gold	**8555.2 OE**	2CLA855520A1201	1
	3x RCA connection unit Front: 3x RCA connectors (Red / White / Yellow). Rear: screw terminals (6 wires). Without fixing claws. Cover plate code: 8555.3.		
	8155.3	2CLA815530A1101	1

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate 3RCA connection unit Cover plate for 3RCA connection unit code: 8155.3.		
Soft White	**8555.3 BL**	2CLA855530A1101	1
Silver	**8555.3 PL**	2CLA855530A1301	1
Soft Black	**8555.3 NS**	2CLA855530A1501	1
Stainless Steel	**8555.3 AI**	2CLA855530A1401	1
Antic Gold	**8555.3 OE**	2CLA855530A1201	1
	VGA connection unit Front: 1x VGA connector (DE-15 connector). Rear: screw terminals (15 wires). Without fixing claws. Cover plate code: 8555.5.		
	8155.5	2CLA815550A1101	1
	Cover plate VGA connection unit Cover plate for VGA connection unit code: 8155.5.		
Soft White	**8555.5 BL**	2CLA855550A1101	1
Silver	**8555.5 PL**	2CLA855550A1301	1
Soft Black	**8555.5 NS**	2CLA855550A1501	1
Stainless Steel	**8555.5 AI**	2CLA855550A1401	1
Antic Gold	**8555.5 OE**	2CLA855550A1201	1
	VGA + 2RCA connection unit Front: 1x VGA connector (DE-15 connector) & 2x RCA connectors (Red / White). Rear: VGA screw terminals (15 wires) & RCA screw terminals (4 wires). Without fixing claws. Cover plate code: 8555.6.		
	8155.52	2CLA815550A1201	1
	Cover plate VGA + 2RCA connection unit Cover plate for VGA + 2RCA connection unit code: 8155.52.		
Soft White	**8555.6 BL**	2CLA855560A1101	1
Silver	**8555.6 PL**	2CLA855560A1301	1
Soft Black	**8555.6 NS**	2CLA855560A1501	1
Stainless Steel	**8555.6 AI**	2CLA855560A1401	1
Antic Gold	**8555.6 OE**	2CLA855560A1201	1
	VGA + mini-Jack connection unit Front: 1x VGA connector (DE-15 connector) & 1x Mini-Jack connector (3,5mm stereo audio jack). Rear: VGA screw terminals (15 wires) & Mini-jack screw terminals (3/4 wires). Without fixing claws. Cover plate code: 8555.4.		
	8155.54	2CLA815550A1401	1

Sky Niessen

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate VGA + mini-jack connection unit Cover plate for VGA + mini-jack connection unit code: 8155.54.		
Soft White	**8555.4 BL**	2CLA855540A1101	1
Silver	**8555.4 PL**	2CLA855540A1301	1
Soft Black	**8555.4 NS**	2CLA855540A1501	1
Stainless Steel	**8555.4 AI**	2CLA855540A1401	1
Antic Gold	**8555.4 OE**	2CLA855540A1201	1

Product	Article-No.	Order-No.	Pack/Qty

Sky Niessen

Protection devices

Product	Article-No.	Order-No.	Pack/Qty
	Circuit breaker 6A & RCD 10mA Rated voltage: 120 - 230 Vac ; 50 / 60 Hz. Rated current: 6 A. Braking capacity: 1.500 A. Residual current (sensitivity - IΔn): 10 mA. C type magneto-thermic protection. A type residual current protection. Two-pole (1P + N) with 1 protected pole. Without fixing claws. Cover plate code: 8534.		
	8134.1	2CLA813410A1001	1
	Circuit breaker 10A & RCD 10mA Rated voltage: 120 - 230 Vac ; 50 / 60 Hz. Rated current: 10 A. Braking capacity: 3.000 A. Residual current (sensitivity - IΔn): 10 mA. C type magneto-thermic protection. A type residual current protection. Two-pole (1P + N) with 1 protected pole. Without fixing claws. Cover plate code: 8534.		
	8134.2	2CLA813420A1001	1
	Circuit breaker 16A & RCD 10mA Rated voltage: 120 - 230 Vac ; 50 / 60 Hz. Rated current: 16 A. Braking capacity: 3.000 A. Residual current (sensitivity - IΔn): 10 mA. C type magneto-thermic protection. A type residual current protection. Two-pole (1P + N) with 1 protected pole. Without fixing claws. Cover plate code: 8534.		
	8134.3	2CLA813430A1001	1
	Cover plate for circuit breaker & RCD Cover plate for circuit breaker & RCD code: 8134.1, 8134.2 & 8134.3.		
Soft White	**8534 BL**	2CLA853400A1101	1
Silver	**8534 PL**	2CLA853400A1301	1
Soft Black	**8534 NS**	2CLA853400A1501	1
Stainless Steel	**8534 AI**	2CLA853400A1401	1
Antic Gold	**8534 OE**	2CLA853400A1201	1

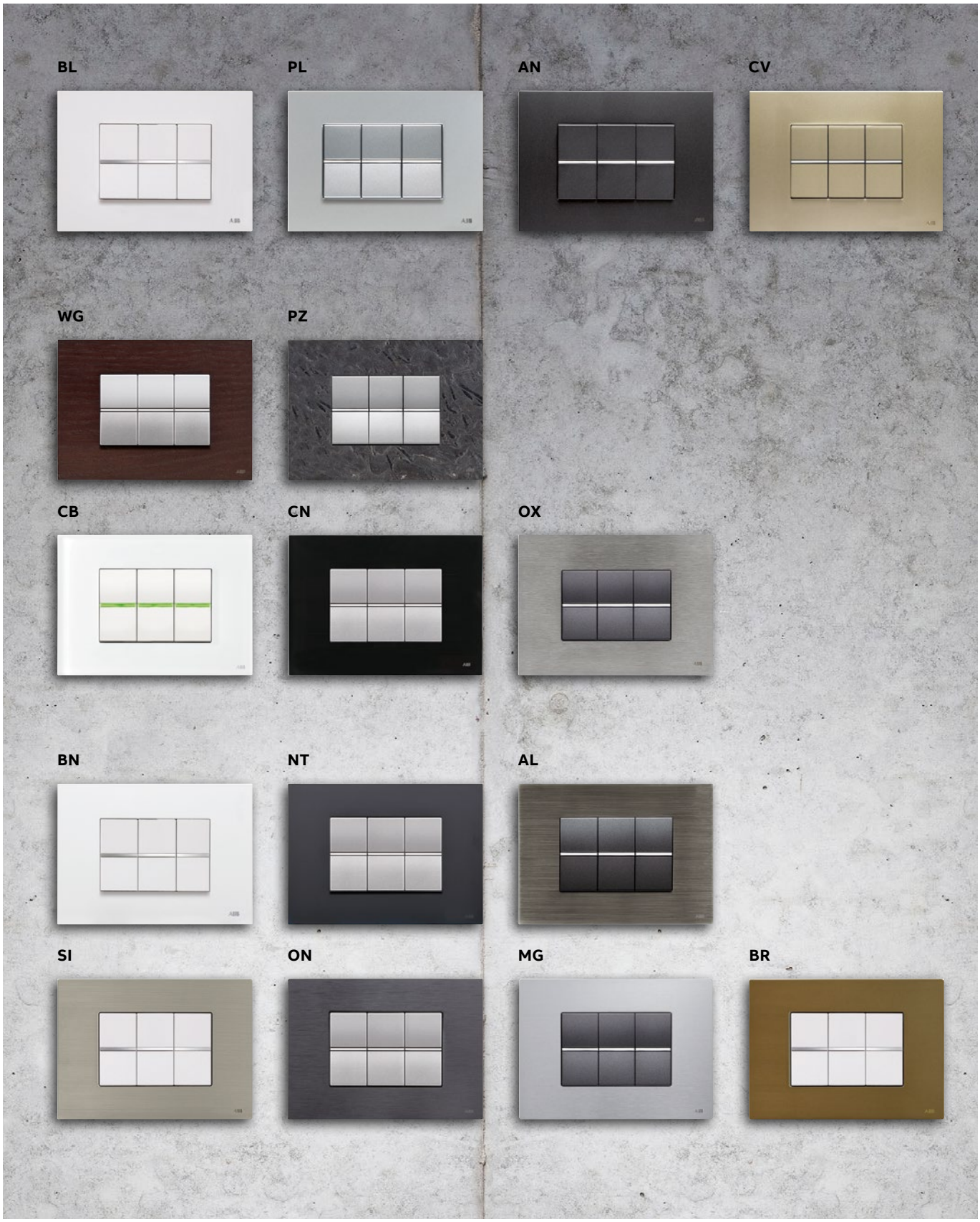
Product	Article-No.	Order-No.	Pack/Qty

Zenit
Natural in its habitat.

Zenit is forever a good decision, it becomes a corner stone for your projects. You can always count on it. Modular system with a wide choice of functionalities for greater comfort. Appreciated design. Various frame materials from more modest finishes to glass, steel or even slate. Blends into its surroundings or presents itself gracefully. All you need to do is choose.

Zenit
BL White
PL Silver
AN Anthracite
CV Champagne

Zenit Noble
CB White Glass
CN Black Glass
CF Graphite Glass
CH Champagne Glass
CP Pearl Glass
CC Coffee Glass
OX Stainless Steel
WG Wenge
PZ Slate



Zenit
BL White
PL Silver
AN Anthracite
CV Champagne

Zenit Noble
WG Wenge
PZ Slate
CB White Glass
CN Black Glass
OX Stainless Steel

Zenit Metallic
BN Snow White
NT Touch Black
AL Polished Steel
SI Silicium
ON Onyx
MG Magnesium
BR Bronze

Zenit

Selected functions.

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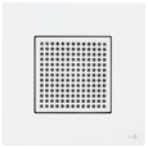
02 

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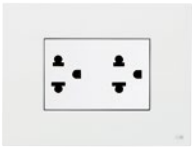
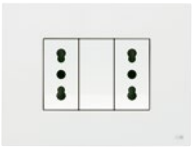
16 

17 

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01 Stand-alone FM radio and alarm
02 Loudspeaker 2"
03 Universal push dimmer
04 LED rotary dimmer
05 ABB-free@home® movement detector
06 ABB-free@home® room thermostat
07 KNX room thermostat
08 DND/MUR switch
09 RCD circuit breaker
10 Orientation light
11 USB charger
12 SCHUKO® socket outlet
13 Movement detector
14 VDI connectors (HDMI+USB)
15 Nema duplex socket outlet
16 Euroamerican duplex socket outlet
17 Italian 16A socket outlet
18 Brazilian 20A socket outlet

01

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11

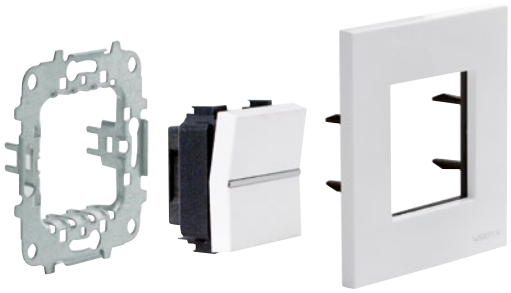
1 to 5gang cover frame for
horizontal and vertical installation
01 Side view, 7,5 x 85 mm
02 Frame 2 modules, 85 x 85 mm
03 Frame 2 + 2 modules, 156 x 85 mm
04 Frame 2 + 2 + 2 modules, 227 x 85 mm
05 Frame 2 + 2 + 2 + 2 modules, 298 x 85 mm
06 Frame 2 + 2 + 2 + 2 + 2 modules, 369 x 85 mm

1 to 7 modules cover frame for
horizontal and vertical installation
07 Frame 1 module, 117 x 85 mm
08 Frame 2 modules, 117 x 85 mm
09 Frame 3 modules, 117 x 85 mm
10 Frame 4 modules, 139 x 85 mm
11 Frame 7 modules, 205 x 85 mm

Zenit

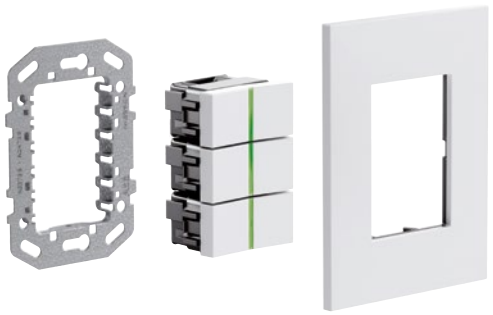
Easy and intuitive installation system.

Switch composition in square box



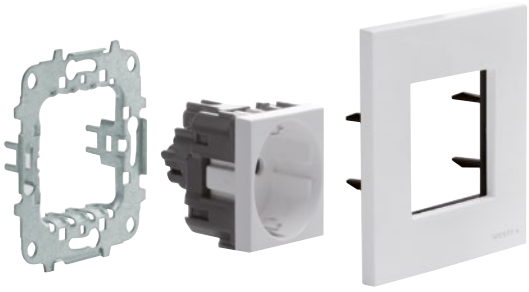
Mounting plate | Insert / Cover plate | Frame

Switch composition in rectangular box



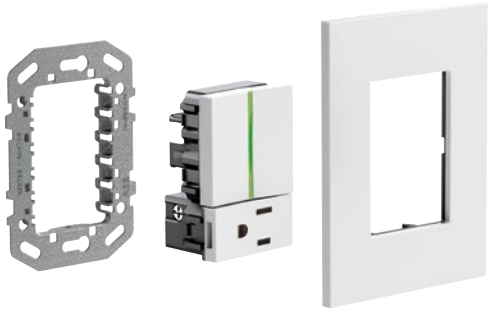
Mounting plate | Insert / Cover plate | Frame

Schuko socket outlet composition in square box



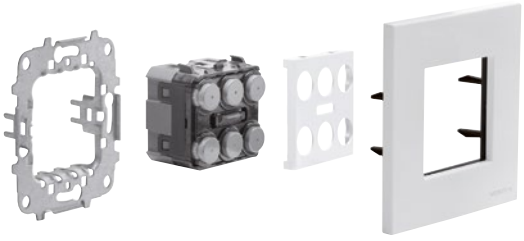
Mounting plate | Insert / Cover plate | Frame

NEMA socket outlet composition in rectangular box



Mounting plate | Insert / Cover plate | Frame

KNX and free@home sensor composition in square box



Mounting plate | Insert | Cover plate | Frame

KNX and free@home sensor composition in rectangular box

Mounting plate for vertical installation | Insert | Cover plate | Frame

For more information about light switch ranges visit ABB global web sites.

Zenit

Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 1-way, SP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2191 BL (127 Vac) or N2191 VD (230 Vac).		
White	**N2101 BL**	2CLA210100N1102	20
Silver	**N2101 PL**	2CLA210100N1302	20
Anthracite	**N2101 AN**	2CLA210100N1802	20
Champagne	**N2101 CV**	2CLA210100N1902	20
	Switch 1-gang, 1-way, SP - 1,5 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2191.1 BL (127 Vac).		
White	**N2801 BL**	2CLA280100N1102	10
Silver	**N2801 PL**	2CLA280100N1302	10
Anthracite	**N2801 AN**	2CLA280100N1802	10
Champagne	**N2801 CV**	2CLA280100N1902	10
	Switch 1-gang, 1-way, SP - 2 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2191.1 BL (127 Vac) or N2191 VD (230 Vac).		
White	**N2201 BL**	2CLA220100N1102	10
Silver	**N2201 PL**	2CLA220100N1302	10
Anthracite	**N2201 AN**	2CLA220100N1802	10
Champagne	**N2201 CV**	2CLA220100N1902	10
	Switch 1-gang, 1-way, SP - 3 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2191.1 BL (127 Vac).		
White	**N2301 BL**	2CLA230100N1102	10
Silver	**N2301 PL**	2CLA230100N1302	10
Anthracite	**N2301 AN**	2CLA230100N1802	10
Champagne	**N2301 CV**	2CLA230100N1902	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 2-way, SP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192 NG (127 Vac) or N2192 RJ (230 Vac).		
White	**N2102 BL**	2CLA210200N1102	20
Silver	**N2102 PL**	2CLA210200N1302	20
Anthracite	**N2102 AN**	2CLA210200N1802	20
Champagne	**N2102 CV**	2CLA210200N1902	20
	Switch 1-gang, 2-way, SP - 1,5 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192.1 NG (127 Vac).		
White	**N2802 BL**	2CLA280200N1102	10
Silver	**N2802 PL**	2CLA280200N1302	10
Anthracite	**N2802 AN**	2CLA280200N1802	10
Champagne	**N2802 CV**	2CLA280200N1902	10
	Switch 1-gang, 2-way, SP - 2 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192.1 NG (127 Vac) or N2192 RJ (230 Vac).		
White	**N2202 BL**	2CLA220200N1102	10
Silver	**N2202 PL**	2CLA220200N1302	10
Anthracite	**N2202 AN**	2CLA220200N1802	10
Champagne	**N2202 CV**	2CLA220200N1902	10
	Switch 1-gang, 2-way, SP - 3 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192.1 NG (127 Vac).		
White	**N2302 BL**	2CLA230200N1102	10
Silver	**N2302 PL**	2CLA230200N1302	10
Anthracite	**N2302 AN**	2CLA230200N1802	10
Champagne	**N2302 CV**	2CLA230200N1902	10

Zenit

Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, intermediate, SP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192 NG (127 Vac) or N2192 RJ (230 Vac).		
White	**N2110 BL**	2CLA211000N1102	20
Silver	**N2110 PL**	2CLA211000N1302	20
Anthracite	**N2110 AN**	2CLA211000N1802	20
Champagne	**N2110 CV**	2CLA211000N1902	20
	Switch 1-gang, intermediate, SP - 1,5 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192.1 NG (127 Vac).		
White	**N2810 BL**	2CLA281000N1102	10
Silver	**N2810 PL**	2CLA281000N1302	10
Anthracite	**N2810 AN**	2CLA281000N1802	10
Champagne	**N2810 CV**	2CLA281000N1902	10
	Switch 1-gang, intermediate, SP - 2 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192.1 NG (127 Vac) or N2192 RJ (230 Vac).		
White	**N2210 BL**	2CLA221000N1102	10
Silver	**N2210 PL**	2CLA221000N1302	10
Anthracite	**N2210 AN**	2CLA221000N1802	10
Champagne	**N2210 CV**	2CLA221000N1902	10
	Switch 1-gang, intermediate, SP - 3 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192.1 NG (127 Vac).		
White	**N2310 BL**	2CLA231000N1102	10
Silver	**N2310 PL**	2CLA231000N1302	10
Anthracite	**N2310 AN**	2CLA231000N1802	10
Champagne	**N2310 CV**	2CLA231000N1902	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 1-way, DP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192 NG (127 Vac) or N2192 RJ (230 Vac).		
White	**N2101.2 BL**	2CLA210120N1102	20
Silver	**N2101.2 PL**	2CLA210120N1302	20
Anthracite	**N2101.2 AN**	2CLA210120N1802	20
Champagne	**N2101.2 CV**	2CLA210120N1902	20
	Switch 1-gang, 1-way, DP - 2 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192.1 BL (127 Vac) or N2192 RJ (230 Vac).		
White	**N2201.2 BL**	2CLA220120N1102	10
Silver	**N2201.2 PL**	2CLA220120N1302	10
Anthracite	**N2201.2 AN**	2CLA220120N1802	10
Champagne	**N2201.2 CV**	2CLA220120N1902	10
	Switch 1-gang, 1-way, DP, 32AX - 2 M Rated voltage: 110 - 250 Vac. Rated current: 32AX. Screwless terminals. Optional: locator LED lamp N2192.1 BL (127 Vac) or N2192 RJ (230 Vac).		
White	**N2201.8 BL**	2CLA220180N1102	5
Silver	**N2201.8 PL**	2CLA220180N1302	5
Anthracite	**N2201.8 AN**	2CLA220180N1802	5
Champagne	**N2201.8 CV**	2CLA220180N1902	5
	Switch 1-gang, 2-way, DP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. Optional: locator LED lamp N2192 NG (127 Vac) or N2192 RJ (230 Vac).		
White	**N2102.2 BL**	2CLA210220N1102	5
Silver	**N2102.2 PL**	2CLA210220N1302	5
Anthracite	**N2102.2 AN**	2CLA210220N1802	5
Champagne	**N2102.2 CV**	2CLA210220N1902	5

Zenit

Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 1-way, SP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 3 wires (Neutral conductor required). Included: indicator LED lamp N2192 RJ (230 Vac).		
White	**N2101.5 BL**	2CLA210150N1102	5
Silver	**N2101.5 PL**	2CLA210150N1302	5
Anthracite	**N2101.5 AN**	2CLA210150N1802	5
Champagne	**N2101.5 CV**	2CLA210150N1902	5
	Switch 1-gang, 1-way, SP - 2 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 3 wires (Neutral conductor required). Included: indicator LED lamp N2192 RJ (230 Vac).		
White	**N2201.5 BL**	2CLA220150N1102	5
Silver	**N2201.5 PL**	2CLA220150N1302	5
Anthracite	**N2201.5 AN**	2CLA220150N1802	5
Champagne	**N2201.5 CV**	2CLA220150N1902	5
	Switch 1-gang, 2-way, SP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 4 wires (Neutral conductor required). Included: indicator LED lamp N2191 VD (230 Vac).		
White	**N2102.5 BL**	2CLA210250N1102	5
Silver	**N2102.5 PL**	2CLA210250N1302	5
Anthracite	**N2102.5 AN**	2CLA210250N1802	5
Champagne	**N2102.5 CV**	2CLA210250N1902	5
	Switch 1-gang, 2-way, SP - 2 M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 4 wires (Neutral conductor required). Included: indicator LED lamp N2191 VD (230 Vac).		
White	**N2202.5 BL**	2CLA220250N1102	5
Silver	**N2202.5 PL**	2CLA220250N1302	5
Anthracite	**N2202.5 AN**	2CLA220250N1802	5
Champagne	**N2202.5 CV**	2CLA220250N1902	5

Product	Article-No.	Order-No.	Pack/Qty
	Push-button, SP without symbol - 1M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 3 wires (Neutral conductor required). Included: indicator LED lamp N2192 RJ (230 Vac).		
White	**N2104.5 BL**	2CLA210450N1102	5
Silver	**N2104.5 PL**	2CLA210450N1302	5
Anthracite	**N2104.5 AN**	2CLA210450N1802	5
Champagne	**N2104.5 CV**	2CLA210450N1902	5
	Push-button, SP without symbol - 2M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 3 wires (Neutral conductor required). Included: indicator LED lamp N2192 RJ (230 Vac).		
White	**N2204.5 BL**	2CLA220450N1102	5
Silver	**N2204.5 PL**	2CLA220450N1302	5
Anthracite	**N2204.5 AN**	2CLA220450N1802	5
Champagne	**N2204.5 CV**	2CLA220450N1902	5

Zenit

Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Push-button, SP with bell symbol - 1M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 1-gang, 1-way - Normally Opened (NO) contact. Optional: locator LED lamp N2191 BL (127 Vac) or N2191 VD (230 Vac). N2191 VD (230 Vac).		
White	**N2104 BL**	2CLA210400N1102	20
Silver	**N2104 PL**	2CLA210400N1302	20
Anthracite	**N2104 AN**	2CLA210400N1802	20
Champagne	**N2104 CV**	2CLA210400N1902	20
	Push-button, SP with bell symbol - 2M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 1-gang, 1-way - Normally Opened (NO) contact. Optional: locator LED lamp N2191.1 BL (127 Vac) or N2191 VD (230 Vac).		
White	**N2204 BL**	2CLA220400N1102	10
Silver	**N2204 PL**	2CLA220400N1302	10
Anthracite	**N2204 AN**	2CLA220400N1802	10
Champagne	**N2204 CV**	2CLA220400N1902	10
	Push-button, SP with bell symbol - 3M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 1-gang, 1-way - Normally Opened (NO) contact. Optional: locator LED lamp N2191.1 BL (127 Vac).		
White	**N2304 BL**	2CLA230400N1102	10
Silver	**N2304 PL**	2CLA230400N1302	10
Anthracite	**N2304 AN**	2CLA230400N1802	10
Champagne	**N2304 CV**	2CLA230400N1902	10

Product	Article-No.	Order-No.	Pack/Qty
	Push-button, SP with light symbol - 1M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 1-gang, 1-way - Normally Opened (NO) contact. Optional: locator LED lamp N2191 BL (127 Vac) or N2191 VD (230 Vac).		
White	**N2104.2 BL**	2CLA210420N1102	20
Silver	**N2104.2 PL**	2CLA210420N1302	20
Anthracite	**N2104.2 AN**	2CLA210420N1802	20
Champagne	**N2104.2 CV**	2CLA210420N1902	20
	Push-button, SP with light symbol - 2M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 1-gang, 1-way - Normally Opened (NO) contact. Optional: locator LED lamp N2191.1 BL (127 Vac) or N2191 VD (230 Vac).		
White	**N2204.2 BL**	2CLA220420N1102	10
Silver	**N2204.2 PL**	2CLA220420N1302	10
Anthracite	**N2204.2 AN**	2CLA220420N1802	10
Champagne	**N2204.2 CV**	2CLA220420N1902	10
	Push-button, NC, SP without symbol - 1M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 1-gang, 1-way - Normally Closed (NC) contact. Locator lamp option not available.		
White	**N2104.6 BL**	2CLA210460N1102	5
Silver	**N2104.6 PL**	2CLA210460N1302	5
Anthracite	**N2104.6 AN**	2CLA210460N1802	5
Champagne	**N2104.6 CV**	2CLA210460N1902	5
	Push-button, NC, SP without symbol - 2M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 1-gang, 1-way - Normally Closed (NC) contact Locator lamp option not available.		
White	**N2204.6 BL**	2CLA220460N1102	5
Silver	**N2204.6 PL**	2CLA220460N1302	5
Anthracite	**N2204.6 AN**	2CLA220460N1802	5
Champagne	**N2204.6 CV**	2CLA220460N1902	5

Zenit

Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Push-button, SP without symbol - 1M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 1-gang, 1-way - Normally Opened (NO) contact. Optional: locator LED lamp N2191 BL (127 Vac) or N2191 VD (230 Vac).		
White	**N2104.7 BL**	2CLA210470N1102	20
Silver	**N2104.7 PL**	2CLA210470N1302	20
Anthracite	**N2104.7 AN**	2CLA210470N1802	20
Champagne	**N2104.7 CV**	2CLA210470N1902	20
	Push-button, SP without symbol - 2M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 1-gang, 1-way - Normally Opened (NO) contact. Optional: locator LED lamp N2191.1 BL (127 Vac) or N2191 VD (230 Vac).		
White	**N2204.7 BL**	2CLA220470N1102	10
Silver	**N2204.7 PL**	2CLA220470N1302	10
Anthracite	**N2204.7 AN**	2CLA220470N1802	10
Champagne	**N2204.7 CV**	2CLA220470N1902	10
	Push-button, SP with label holder - 2M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Screwless terminals. 1-gang, 1-way - Normally Opened (NO) contact. Optional: locator LED lamp N2191.1 BL (127 Vac) or N2191 VD (230 Vac).		
White	**N2204.8 BL**	2CLA220480N1102	10
Silver	**N2204.8 PL**	2CLA220480N1302	10
Anthracite	**N2204.8 AN**	2CLA220480N1802	10
Champagne	**N2204.8 CV**	2CLA220480N1902	10

Product	Article-No.	Order-No.	Pack/Qty
	Rocker cover with symbol housing - 1M Spare rocker cover with housing for N2004.X symbols. Suitable for N2101.X, N2102.X, N2110 and N2104.X inserts.		
White	**N2101.9 BL**	2CLA210190N1102	10
Silver	**N2101.9 PL**	2CLA210190N1302	10
Anthracite	**N2101.9 AN**	2CLA210190N1802	10
Champagne	**N2101.9 CV**	2CLA210190N1902	10
	Rocker cover with symbol housing - 2M Spare rocker cover with housing for N2004.X symbols. Suitable for N2201.X, N2202.X, N2210 and N2204.X inserts.		
White	**N2201.9 BL**	2CLA220190N1102	10
Silver	**N2201.9 PL**	2CLA220190N1302	10
Anthracite	**N2201.9 AN**	2CLA220190N1802	10
Champagne	**N2201.9 CV**	2CLA220190N1902	10
	Rocker cover with symbol housing - 3M Spare rocker cover with housing for N2004.X symbols. Suitable for N2301, N2302, N2310 and N2304inserts.		
White	**N2301.9 BL**	2CLA230190N1102	5
Silver	**N2301.9 PL**	2CLA230190N1302	5
Anthracite	**N2301.9 AN**	2CLA230190N1802	5
Champagne	**N2301.9 CV**	2CLA230190N1902	5
	Symbols Symbols for N2X01.9 rocker covers.		
Key symbol	**N2004.1**	2CLA200410N1102	10
Fan symbol	**N2004.2**	2CLA200420N1102	10
WC symbol	**N2004.3**	2CLA200430N1102	10
Room service symbol	**N2004.4**	2CLA200440N1102	10
Nurse symbol	**N2004.5**	2CLA200450N1102	10
Dot symbol	**N2004.6**	2CLA200460N1102	10

Zenit

Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Card switch 1-gang, 1-way, DP - 2M Rated voltage: 110 - 250 Vac. Rated current: 16AX. For 54mm width cards. Included: locator LED lamp N2193 VD (127 Vac) or N2191 NG (230 Vac).		
White	**N2214.1 BL**	2CLA221410N1102	10
Silver	**N2214.1 PL**	2CLA221410N1302	10
Anthracite	**N2214.1 AN**	2CLA221410N1802	10
Champagne	**N2214.1 CV**	2CLA221410N1902	10
	Card timer switch 1-gang, 1-way, SP - 2M Rated voltage: 110 - 250 Vac ; 50-60 Hz. Rated current: - Incandescent/halogen: 3.000W@230Vac / 1.600W@127Vac. - Fluorescent: 1.300VA@230Vac / 700VA@127Vac. - Electronic and ferromag. transf. and motors: 3.000VA@230Vac / 1.600VA@127Vac. For 54mm width cards. Locator LED lamp included. Time delayed switch: 5 - 90 seconds.		
White	**N2214.5 BL**	2CLA221450N1102	1
Silver	**N2214.5 PL**	2CLA221450N1302	1
Anthracite	**N2214.5 AN**	2CLA221450N1802	1
Champagne	**N2214.5 CV**	2CLA221450N1902	1
	Pullcord switch 1-gang, 1-way, SP - 1M Rated voltage: 110 - 250 Vac. Rated current: 16A. Screwless terminals. Cord length: 2 meters.		
White	**N2148 BL**	2CLA214800N1102	5
Silver	**N2148 PL**	2CLA214800N1302	5
Anthracite	**N2148 AN**	2CLA214800N1802	5
Champagne	**N2148 CV**	2CLA214800N1902	5
	Pullcord switch 1-gang, 1-way, SP - 2M Rated voltage: 110 - 250 Vac. Rated current: 16A. Screwless terminals. Cord length: 2 meters.		
White	**N2248 BL**	2CLA224800N1102	5
Silver	**N2248 PL**	2CLA224800N1302	5
Anthracite	**N2248 AN**	2CLA224800N1802	5
Champagne	**N2248 CV**	2CLA224800N1902	5

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Universal rotatory/push dimmer - 2M Rated voltage: 230 Vac / 50 Hz. Min. power: 60 W / VA. Max. power: - Incandescent: 500 W. - Halogen lamp with electronic transformer: 500 VA. - Halogen lamp with ferromagnetic transformer: 400 VA. 2 wire connection. Optional: auxiliary control with N2X04.X push-buttons. Indicator LED lamp included. Operating temperature: 0° C to +30° C.		
White	**N2260.2 BL**	2CLA226020N1102	1
Silver	**N2260.2 PL**	2CLA226020N1302	1
Anthracite	**N2260.2 AN**	2CLA226020N1802	1
Champagne	**N2260.2 CV**	2CLA226020N1902	1
	LED rotatory/push dimmer - 2M Rated voltage: 230 Vac ± 10%. Frequency: 50 Hz (Nominal power: 250 W/VA) / 60 Hz (Nominal power: 200 W/VA). Power (min./max load): - LEDi: 2 / 100 W/VA (max. 10 lamps). - Dimmable energy saving lamps: 2 / 100 W/VA (max. 10 lamps). - LV LEDi with transformer (only type L or LC): 4 / 100 W/VA (max. 10 lamps). - Incandescent lamps: 10 / 250 W/VA. - Halogen lamps: 10 / 250 W/VA. - LV halogen with transformer (only type L or LC): 10 / 250 W/VA (max. 10 lamps). 2 wire connection. Optional: auxiliary on/off with 2-way switch N2X02. Indicator LED lamp included. Back-up fuse: Electronic. Overload protection: Electronic. Ambient temperature: 0° C to +35° C.		
White	**N2260.3 BL**	2CLA226030N1102	1
Silver	**N2260.3 PL**	2CLA226030N1302	1
Anthracite	**N2260.3 AN**	2CLA226030N1802	1
Champagne	**N2260.3 CV**	2CLA226030N1902	1

Zenit
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	LED rotatory/push dimmer - 2M Rated voltage: 127 Vac ± 10%. Frequency: 50 / 60 Hz (Nominal power: 140 W / VA). Power (min./max load): - LEDi: 2 / 55 W/VA (max. 10 lamps). - Dimmable energy saving lamps: 2 / 55 W/VA (max. 10 lamps). - LV LEDi with transformer (only type L or LC): 4 / 55 W/VA (max. 10 lamps). - Incandescent lamps: 10 / 140 W/VA. - Halogen lamps: 10 / 140 W/VA. - LV halogen with transformer (only type L or LC): 10 / 140 W/VA (max. 10 lamps). 2 wire connection. Optional: auxiliary on/off with 2-way switch N2X02. Indicator LED lamp included. Back-up fuse: Electronic. Overload protection: Electronic. Ambient temperature: 0° C to +35° C.		
White	**N2260.8 BL**	2CLA226080N1102	1
Silver	**N2260.8 PL**	2CLA226080N1302	1
Anthracite	**N2260.8 AN**	2CLA226080N1802	1
Champagne	**N2260.8 CV**	2CLA226080N1902	1
	1-10V rotary dimmer - 2M Rated voltage: 127 - 230 Vac / 50 - 60 Hz Dimmable electronic ballast/driver with 1-10V control input. Max. power: - 230 Vac: 700 VA. - 127 Vac: 350 VA. Max. 6 ballasts per device. Indicator LED lamp included.		
White	**N2260.9 BL**	2CLA226090N1102	1
Silver	**N2260.9 PL**	2CLA226090N1302	1
Anthracite	**N2260.9 AN**	2CLA226090N1802	1
Champagne	**N2260.9 CV**	2CLA226090N1902	1

Product	Article-No.	Order-No.	Pack/Qty
	Universal push dimmer - 2M Rated voltage: 127 - 230 Vac / 50 - 60 Hz. Max. Power (230 Vac / 127 Vac): - Incandescent: 450 / 250 W. - Halogen with transformer: 400 / 250 VA. 2 wire connection. Optional: auxiliary control with N2X04.X push-buttons. Overcurrent protection: with fuse. Indicator LED lamp included. Operating temperature: 0° C to +30° C.		
White	**N2260 BL**	2CLA226000N1102	1
Silver	**N2260 PL**	2CLA226000N1302	1
Anthracite	**N2260 AN**	2CLA226000N1802	1
Champagne	**N2260 CV**	2CLA226000N1902	1
	Universal push dimmer - 2M Rated voltage: 230 Vac / 50 Hz. Min. power: 60 W / VA. Max. power: - Incandescent: 500 W. - Halogen lamp with electronic transformer: 500 VA. - Halogen lamp with ferromagnetic transformer: 400 VA. 2 wire connection. Optional: auxiliary control with N2X04.X push-buttons. Indicator LED lamp included. Operating temperature: 0° C to +30° C.		
White	**N2260.1 BL**	2CLA226010N1102	1
Silver	**N2260.1 PL**	2CLA226010N1302	1
Anthracite	**N2260.1 AN**	2CLA226010N1802	1
Champagne	**N2260.1 CV**	2CLA226010N1902	1

Zenit

Movement detectors

Product	Article-No.	Order-No.	Pack/Qty
	110° motion sensor - 2M Rated voltage: 127 - 230 Vac ± 10% / 50 - 60 Hz Outputs: 1 Normally Open (NO). Potential free Max. power: - Incandescent: 1.800W @230Vac / 1.000W @127Vac - Halogen with electronic o ferromagnetic transformer: 750VA @230Vac / 400VA @127Vac - Fluorescent lamps or motors: 400VA @230Vac / 200VA @127Vac For automatic switching of devices dependent on motion and brightness. With integrated selector switch for ON-AUTOMATIC-OFF in the front side. Switch-off delay: 10 sec to 10 min or short-time pulse 1 sec adjustable (from the front side). Detection range: 5 m radious Adjustable light set point level for activation (from the front side). Detection angle: 110 ° Mounting height: 1,2 m Auxiliary control with N2X04.X push-buttons Temperature range (Device): -10 °C to 40 °C		
White	**N2241 BL**	2CLA224100N1102	1
Silver	**N2241 PL**	2CLA224100N1302	1
Anthracite	**N2241 AN**	2CLA224100N1802	1
Champagne	**N2241 CV**	2CLA224100N1902	1
	Time delayed switch - 2M Rated voltage: 230 Vac / 50 Hz. Power: - Incandescent: 40 - 500 W. - Halogen with transformer: 40 - 400 VA. - Motors: 40 - 100 VA. 2 wire connection. Delay setup: 10 sec. to 10 min. Overcurrent protection: with fuse. Indicator LED lamp included. Operating temperature: 0° C to +40° C.		
White	**N2262.1 BL**	2CLA226210N1102	1
Silver	**N2262.1 PL**	2CLA226210N1302	1
Anthracite	**N2262.1 AN**	2CLA226210N1802	1
Champagne	**N2262.1 CV**	2CLA226210N1902	1

Key switches

Product	Article-No.	Order-No.	Pack/Qty
	Key switch 2-way, 3 positions, SP - 1M Rated voltage: 110 - 250 Vac. Rated current: 5A. Key removable in the 3 positions. Unique key for each lock. Suitable for blinds, shutters, etc.		
White	**N2153.1 BL**	2CLA215310N1102	1
Silver	**N2153.1 PL**	2CLA215310N1302	1
Anthracite	**N2153.1 AN**	2CLA215310N1802	1
Champagne	**N2153.1 CV**	2CLA215310N1902	1
	Key switch 1-way, 2 positions, SP - 2M Rated voltage: 110 - 250 Vac. Rated current: 5A. Key removable in the 2 positions. Unique key for each lock. Suitable for alarms.		
White	**N2253 BL**	2CLA225300N1102	1
Silver	**N2253 PL**	2CLA225300N1302	1
Anthracite	**N2253 AN**	2CLA225300N1802	1
Champagne	**N2253 CV**	2CLA225300N1902	1
	Key switch 2-way, 3 positions, SP - 2M Rated voltage: 110 - 250 Vac. Rated current: 150mA. Key removable in “OFF” position. Unique key for each lock. Suitable for blinds, shutters, etc.		
White	**N2253.1 BL**	2CLA225310N1102	1
Silver	**N2253.1 PL**	2CLA225310N1302	1
Anthracite	**N2253.1 AN**	2CLA225310N1802	1
Champagne	**N2253.1 CV**	2CLA225310N1902	1
	Key push-button 1-way, 2 positions, SP - 2M Rated voltage: 110 - 250 Vac. Rated current: 5A. Key removable in “OFF” position. Unique key for each lock. Suitable for alarms.		
White	**N2253.2 BL**	2CLA225320N1102	1
Silver	**N2253.2 PL**	2CLA225320N1302	1
Anthracite	**N2253.2 AN**	2CLA225320N1802	1
Champagne	**N2253.2 CV**	2CLA225320N1902	1

Zenit

Blind control

Product	Article-No.	Order-No.	Pack/Qty
	Push-button blind control 1-gang - 1M Rated voltage: 110 - 250 Vac. Rated current: 6AX. Miniswitch. Direct control.		
White	**N2144 BL**	2CLA214400N1102	5
Silver	**N2144 PL**	2CLA214400N1302	5
Anthracite	**N2144 AN**	2CLA214400N1802	5
Champagne	**N2144 CV**	2CLA214400N1902	5
	Push-button blind control 2-gangs - 2M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Direct control. Interlocked gangs.		
White	**N2244 BL**	2CLA224400N1102	5
Silver	**N2244 PL**	2CLA224400N1302	5
Anthracite	**N2244 AN**	2CLA224400N1802	5
Champagne	**N2244 CV**	2CLA224400N1902	5
	Switch blind control 2-gangs - 2M Rated voltage: 110 - 250 Vac. Rated current: 16AX. Direct control. Interlocked gangs.		
White	**N2244.1 BL**	2CLA224410N1102	5
Silver	**N2244.1 PL**	2CLA224410N1302	5
Anthracite	**N2244.1 AN**	2CLA224410N1802	5
Champagne	**N2244.1 CV**	2CLA224410N1902	5
	Electronic blind control 1-gang - 2M Rated voltage: 110 - 250 Vac; 50/60 Hz. Rated current: 700VA@230Vac / 350VA@127Vac. Direct control. Functions: - PERS: standard blinds control. Optionally other N2244 inserts can be connected to the N2261.2 to control the blind from other locations. - LAM: venetian type blinds control. Optionally other N2244 inserts can be connected to the N2261.2 to control the blind from other locations. - Centralization (CEN): one N2261.2 can control all the N2261.2 centrally.		
White	**N2261.2 BL**	2CLA226120N1102	1
Silver	**N2261.2 PL**	2CLA226120N1302	1
Anthracite	**N2261.2 AN**	2CLA226120N1802	1
Champagne	**N2261.2 CV**	2CLA226120N1902	1

Decorative trims for rocker covers

Product	Article-No.	Order-No.	Pack/Qty
	Decorative trim - 1M Spare decorative trim. Suitable for N2101.X, N2102.X, N2110 and N2104.X inserts.		
Green diffuser	**N2170 VD**	2CLA217000N1002	20
White	**N2170 BL**	2CLA217000N1102	20
Chrome	**N2170 CR**	2CLA217000N1402	20
Anthracite	**N2170 AN**	2CLA217000N1802	20
Champagne	**N2170 CV**	2CLA217000N1902	20
	Decorative trim - 1,5M Spare decorative trim. Suitable for N2801, N2802 and N2810 inserts.		
White	**N2870 BL**	2CLA287000N1102	20
Anthracite	**N2870 AN**	2CLA287000N1802	20
Champagne	**N2870 CV**	2CLA287000N1902	20
	Decorative trim - 2M Spare decorative trim. Suitable for N2201.X, N2202.X, N2210 and N2204.X inserts.		
Green diffuser	**N2270 VD**	2CLA227000N1002	20
White	**N2270 BL**	2CLA227000N1102	20
Chrome	**N2270 CR**	2CLA227000N1402	20
Anthracite	**N2270 AN**	2CLA227000N1802	20
Champagne	**N2270 CV**	2CLA227000N1902	20
	Decorative trim - 3M Spare decorative trim. Suitable for N2301, N2302, N2310 and N2304 inserts.		
White	**N2370 BL**	2CLA237000N1102	20
Anthracite	**N2370 AN**	2CLA237000N1802	20
Champagne	**N2370 CV**	2CLA237000N1902	20

Zenit

Locator & indicator lights

Product	Article-No.	Order-No.	Pack/Qty
	Locator LED lamp kit - 127 Vac - Card switch Suitable for N2214.1 card switches. Rated voltage: 127 Vac. Tooless front connection. Rated current: <0,7 mA.		
Green light	**N2193 VD**	2CLA219300N1002	20
	Locator LED lamp kit - 230 Vac - Card switch Suitable for N2214.1 card switches. Rated voltage: 230 Vac. Tooless front connection. Rated current: <0,7 mA.		
Green light	**N2193 NG**	2CLA219310N1002	20
	Locator LED lamp kit - 230 Vac - 1 & 2M Suitable for 1-gang, 1-way, SP switches and 1-gang, 1-way, SP NO push-buttons. Rated voltage: 230 Vac. Tooless front connection. Includes diffusers for 1 and 2 module rocker covers. Rated current: <0,2 mA. Specially designed for CFL and LED lamps.		
Green light	**N2191 VD**	2CLA219100N1002	10
	Locator LED lamp kit - 127 Vac - 1M Suitable for 1-gang, 1-way, SP switches and 1-gang, 1-way, SP NO push-buttons. Rated voltage: 230 Vac. Tooless front connection. Includes diffuser for 1 module rocker covers. Rated current: <0,2 mA. Specially designed for CFL and LED lamps.		
Green light	**N2191 BL**	2CLA219101N1002	10
	Locator LED lamp kit - 127 Vac - 1,5 ; 2 & 3M Suitable for 1-gang, 1-way, SP switches and 1-gang, 1-way, SP NO push-buttons. Rated voltage: 230 Vac. Tooless front connection. Includes diffuser for 1,5; 2 and 3 module rocker covers. Rated current: <0,2 mA. Specially designed for CFL and LED lamps.		
Green light	**N2191.1 BL**	2CLA219110N1002	10

Product	Article-No.	Order-No.	Pack/Qty
	Locator LED lamp kit - 230 Vac - 1 & 2M Suitable for 1-gang, 1-way, DP switches, 1-gang, 2-ways, SP and 1-gang, intermediate switches. Rated voltage: 230 Vac. Tooless front connection. Includes diffusers for 1 and 2 module rocker covers. Rated current: <0,2 mA. Specially designed for CFL and LED lamps.		
Green light	**N2192 RJ**	2CLA219200N1002	10
	Locator LED lamp kit - 127 Vac - 1M Suitable for 1-gang, 1-way, DP switches, 1-gang, 2-ways, SP and 1-gang, intermediate switches. Rated voltage: 230 Vac. Tooless front connection. Includes diffusers for 1 module rocker covers. Rated current: <0,2 mA. Specially designed for CFL and LED lamps.		
Green light	**N2192 NG**	2CLA219201N1002	10
	Locator LED lamp kit - 127 Vac - 1,5 ; 2 & 3M Suitable for 1-gang, 1-way, DP switches, 1-gang, 2-ways, SP and 1-gang, intermediate switches. Rated voltage: 230 Vac. Tooless front connection. Includes diffusers for 1,5; 2 and 3 module rocker covers. Rated current: <0,2 mA. Specially designed for CFL and LED lamps.		
Green light	**N2192.1 NG**	2CLA219210N1002	10

Zenit

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Schuko socket outlet - 2M Rated voltage: 250 Vac. Rated current: 16A. Type F: 2P + E. Shuttered for child safety. Screw terminals.		
White	**N2288 BL**	2CLA228800N1102	10
Silver	**N2288 PL**	2CLA228800N1302	10
Anthracite	**N2288 AN**	2CLA228800N1802	10
Champagne	**N2288 CV**	2CLA228800N1902	10
	Schuko socket outlet - 2M Rated voltage: 250 Vac. Rated current: 16A. Type F: 2P + E. Shuttered for child safety. Screw terminals. Suitable to identify special circuits.		
Red	**N2288 RJ**	2CLA228800N7002	5
Green	**N2288 VD**	2CLA228800N8002	5
Orange	**N2288 NA**	2CLA228800N9002	5
	Schuko socket outlet with lid - 2M Rated voltage: 250 Vac. Rated current: 16A. Type F: 2P + E. Shuttered for child safety. Screw terminals. Lid with notch. 180º opening.		
White	**N2288.1 BL**	2CLA228810N1102	10
Silver	**N2288.1 PL**	2CLA228810N1302	10
Anthracite	**N2288.1 AN**	2CLA228810N1802	10
Champagne	**N2288.1 CV**	2CLA228810N1902	10
	Schuko socket outlet srewless terminal - 2M Rated voltage: 250 Vac. Rated current: 16A. Type F: 2P + E. Shuttered for child safety. Screwless terminals.		
White	**N2288.6 BL**	2CLA228860N1102	10
Silver	**N2288.6 PL**	2CLA228860N1302	10
Anthracite	**N2288.6 AN**	2CLA228860N1802	10
Champagne	**N2288.6 CV**	2CLA228860N1902	10
	European unearthed socket outlet - 2M Rated voltage: 250 Vac. Rated current: 16A. Type C: 2P (non earthed). Shuttered for child safety. Screw terminals.		
White	**N2203 BL**	2CLA220300N1102	10
Silver	**N2203 PL**	2CLA220300N1302	10
Anthracite	**N2203 AN**	2CLA220300N1802	10
Champagne	**N2203 CV**	2CLA220300N1902	10

Product	Article-No.	Order-No.	Pack/Qty
	French/Earth-pin socket outlet - 2M Rated voltage: 250 Vac. Rated current: 16A. Type E: 2P + E. Shuttered for child safety. Screw terminals.		
White	**N2287 BL**	2CLA228700N1102	10
Silver	**N2287 PL**	2CLA228700N1302	10
Anthracite	**N2287 AN**	2CLA228700N1802	10
Champagne	**N2287 CV**	2CLA228700N1902	10
	French/Earth-pin socket outlet - 2M Rated voltage: 250 Vac. Rated current: 16A. Type E: 2P + E. Shuttered for child safety. Screw terminals. Suitable to identify special circuits.		
Red	**N2287 RJ**	2CLA228770N1002	10
	French/Earth-pin socket outlet screwless - 2M Rated voltage: 250 Vac. Rated current: 16A. Type E: 2P + E. Shuttered for child safety. Screwless terminals.		
White	**N2287.6 BL**	2CLA228760N1102	10
Silver	**N2287.6 PL**	2CLA228760N1302	10
Anthracite	**N2287.6 AN**	2CLA228760N1802	10
Champagne	**N2287.6 CV**	2CLA228760N1902	10
	French/Earth-pin socket outlet screwless - 2M Rated voltage: 250 Vac. Rated current: 16A. Type E: 2P + E. Shuttered for child safety. Screwless terminals. Suitable to identify special circuits.		
Anthracite	**N2287.6 RJ**	2CLA228760N7002	10
Champagne	**N2287.6 VD**	2CLA228760N8002	10
	Italian 10/16A socket outlet - 1M Rated voltage: 250 Vac. Rated current: 10 / 16A. Type L: 2P + E / P17/11. Shuttered for child safety. Screw terminals.		
White	**N2133 BL**	2CLA213300N1102	20
Silver	**N2133 PL**	2CLA213300N1302	20
Anthracite	**N2133 AN**	2CLA213300N1802	20
Champagne	**N2133 CV**	2CLA213300N1902	20

Zenit
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Italian 10A socket outlet - 1M Rated voltage: 250 Vac. Rated current: 10A. Type L: 2P + E / P11. Shuttered for child safety. Screw terminals.		
White	**N2133.1 BL**	2CLA213310N1102	20
Silver	**N2133.1 PL**	2CLA213310N1302	20
Anthracite	**N2133.1 AN**	2CLA213310N1802	20
Champagne	**N2133.1 CV**	2CLA213310N1902	20
	American earthed socket outlet - 1M Rated voltage: 125 Vac. Rated current: 15A. Type B: 2P + E / NEMA 5-15R. Shuttered for child safety. Screw terminals.		
White	**N2128 BL**	2CLA212800N1102	20
Silver	**N2128 PL**	2CLA212800N1302	20
Anthracite	**N2128 AN**	2CLA212800N1802	20
Champagne	**N2128 CV**	2CLA212800N1902	20
	American earthed duplex socket outlet - 3M Rated voltage: 125 Vac. Rated current: 15A. Type B: 2P + E / NEMA 5-15R. Duplex outlet. Shuttered for child safety. Screw terminals.		
White	**N2328 BL**	2CLA232800N1102	20
Silver	**N2328 PL**	2CLA232800N1302	20
Anthracite	**N2328 AN**	2CLA232800N1802	20
Champagne	**N2328 CV**	2CLA232800N1902	20
	Euro-American unearthed socket outlet - 1M Rated voltage: 125 / 250 Vac. Rated current: 15 / 16A. Type A+C: 2P (non-earthed) / NEMA 1-15R. Screw terminals.		
White	**N2135 BL**	2CLA213500N1102	20
Silver	**N2135 PL**	2CLA213500N1302	20
Anthracite	**N2135 AN**	2CLA213500N1802	20
Champagne	**N2135 CV**	2CLA213500N1902	20

Product	Article-No.	Order-No.	Pack/Qty
	Euro-American earthed socket outlet - 1M Rated voltage: 125 / 250 Vac. Rated current: 15 / 16 A. Type B+C: 2P + E / NEMA 5-15R. Shuttered for child safety. Screw terminals.		
White	**N2138 BL**	2CLA213800N1102	20
Silver	**N2138 PL**	2CLA213800N1302	20
Anthracite	**N2138 AN**	2CLA213800N1802	20
Champagne	**N2138 CV**	2CLA213800N1902	20
	Euro-American earthed socket outlet - 2M Rated voltage: 125 / 250 Vac. Rated current: 15 / 16A. Type B+C: 2P + E / NEMA 5-15R. Shuttered for child safety. Screw terminals.		
White	**N2238 BL**	2CLA223800N1102	10
Silver	**N2238 PL**	2CLA223800N1302	10
Anthracite	**N2238 AN**	2CLA223800N1802	10
Champagne	**N2238 CV**	2CLA223800N1902	10
	Euro-American duplex socket outlet - 3M Rated voltage: 125 / 250 Vac. Rated current: 15 / 16A. Type B+C: 2P + E / NEMA 5-15R. Duplex outlet. Shuttered for child safety. Screw terminals		
White	**N2338 BL**	2CLA233800N1102	20
Silver	**N2338 PL**	2CLA233800N1302	20
Anthracite	**N2338 AN**	2CLA233800N1802	20
Champagne	**N2338 CV**	2CLA233800N1902	20
	Brazilian 10A socket outlet - 1M Rated voltage: 250 Vac. Rated current: 10 A. Type N: 2P + E. Shuttered for child safety. Screw terminals. Screw terminals		
White	**N2136 BL**	2CLA213600N1102	10
Silver	**N2136 PL**	2CLA213600N1302	10
Anthracite	**N2136 AN**	2CLA213600N1802	10
Champagne	**N2136 CV**	2CLA213600N1902	10
	Brazilian 10A socket outlet - 1M Rated voltage: 250 Vac. Rated current: 10 A. Type N: 2P + E. Shuttered for child safety. Screw terminals. Suitable to identify special circuits. Screw terminals		
Red	**N2136 RJ**	2CLA213600N7002	5

Zenit

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Brazilian 20A socket outlet - 1M Rated voltage: 250 Vac. Rated current: 20 A. Type N: 2P + E. Shuttered for child safety. Screw terminals.		
White	**N2136.2 BL**	2CLA213620N1102	10
Silver	**N2136.2 PL**	2CLA213620N1302	10
Anthracite	**N2136.2 AN**	2CLA213620N1802	10
Champagne	**N2136.2 CV**	2CLA213620N1902	10
	Brazilian 20A socket outlet - 1M Rated voltage: 250 Vac. Rated current: 20 A. Type N: 2P + E. Shuttered for child safety. Screw terminals. Suitable to identify special circuits.		
Red	**N2136.2 RJ**	2CLA213620N7002	5
	British standard socket outlet - 2M Rated voltage: 250 Vac. Rated current: 13A. Type G: 2P + E. Without switch. Shuttered for child safety. Screw terminals.		
White	**N2237 BL**	2CLA223700N1102	10
Silver	**N2237 PL**	2CLA223700N1302	10
Anthracite	**N2237 AN**	2CLA223700N1802	10
Champagne	**N2237 CV**	2CLA223700N1902	10
	Universal socket outlet - 2M Rated voltage: 125 / 250 Vac. Rated current: 13 / 16A. Multiple type: 2P + E. Shuttered for child safety. Screw terminals.		
White	**N2239 BL**	2CLA223900N1102	10
Silver	**N2239 PL**	2CLA223900N1302	10
Anthracite	**N2239 AN**	2CLA223900N1802	10
Champagne	**N2239 CV**	2CLA223900N1902	10

Product	Article-No.	Order-No.	Pack/Qty

Zenit

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	TV / R terminal outlet TV and R double outlet - Final. Without filter. Installation as a terminal outlet connected to a tap-off or splitter (without terminal resistor). Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 5 - 862 MHz / 5 - 862 MHz / 5 - 862 MHz. Basic loss (FM / DAB / VHF / UHF): 10,0±0,7 dB / 10,0 ±1,5 dB / 4,0±1,5 dB / 3,0±0,5 dB. Isolation (FM / TV): >14 / >14. Return loss (FM / TV): >18 / >10. To be installed with N2250.8 cover plates. Fitting boxes with 60mm distance between screws (codes: 1099, 1999 and 1999.2).		
	8150	2CLA815000A1002	10
	TV / R final outlet - CATV outlet TV and R double outlet - CATV outlet - Final. With filter. Installation as a terminal outlet connected to a tap-off or splitter (without terminal resistor). Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (C1 / C2): 5 - 68 & 118 - 1.000 MHz / 87,5 - 108 MHz. Basic loss (R / FM / TV): 0,3±0,1 dB / 1,1 ±0,3 dB / 0,9±0,3 dB. Isolation (FM / TV): >18 / >16. Selectivity (FM / TV): >10 / >18. Return loss (R / FM / TV): >18 / >16 / >18. Chroma-luminance delay (ns): <10. To be installed with N2250.8 cover plates. Fitting boxes with 60mm distance between screws (codes: 1099, 1999 and 1999.2).		
	8150.3	2CLA815030A1002	10
	TV / R loop-through outlet TV and R double outlet - Intermediate. Installation as an intermediate outlet in series connected to each other. From 2nd to 4th floor. Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 13 - 862 MHz / 13 - 862 MHz / 13 - 862 MHz. Basic loss (FM / DAB / VHF / UHF): 25±1,5 dB / 25 ±1,5 dB / 8,0±0,7 dB / 8,0±0,7 dB. Through loss (FM / VHF / UHF): 2,0±0,3 dB / 2,0±0,5 dB / 2,0±0,5 dB. Directivity (FM / TV): >12 dB / >9 dB. Isolation (FM / TV): >16 / >15. Return loss (FM / TV): >12 / >12. To be installed with N2250.8 cover plates. Fitting boxes with 60mm distance between screws (codes: 1099, 1999 and 1999.2).		
	8150.7	2CLA815070A1002	10

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for TV/R outlet - 2M Cover plates for outlets with 2 connectors codes 8150, 8150.3 and 8150.7. Covers prepared to fix the frame to the wall. TV and R engraved in the front.		
White	**N2250.8 BL**	2CLA225080N1102	20
Silver	**N2250.8 PL**	2CLA225080N1302	20
Anthracite	**N2250.8 AN**	2CLA225080N1802	20
Champagne	**N2250.8 CV**	2CLA225080N1902	20
	TV-R/SAT terminal outlet TV-R and SAT double outlet - Final. Installation as a terminal outlet connected to a tap-off or splitter (without terminal resistor). Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 5 - 2.400 MHz / 5 - 862 MHz / 930 - 2.400 MHz. Basic loss (FM / TV / SAT): 0,2±0,1 dB / 1,0 ±0,5 dB / 1,2±0,6 dB. Isolation (FM / TV / SAT): >45 / >14 / >14. Selectivity (TV-R / SAT): >15 / >15. Return loss (VR / FM / TV / SAT): >25 / >25 / >14 / >10. DC path (Vdc / mA / Tono): 24 max. / 500 max. / 22 KHz - DiSEqC. To be installed with N2250.1 cover plates. Fitting boxes with 60mm distance between screws (codes: 1099, 1999 and 1999.2).		
	8151.3	2CLA815130A1002	10
	TV-R/SAT final outlet TV-R and SAT double outlet - Final. Installation as a terminal outlet connected to a series with loop-through outlets. Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 5 - 2.400 MHz / 5 - 2.400 MHz / 5 - 2.400 MHz. Basic loss (FM / TV / SAT): 3,7±0,3 dB / 4,0±0,5 dB / 5,0±1,2 dB. Isolation (FM / TV / SAT): >20 / >20 / >14. Return loss (VR / FM / TV / SAT): >16 / >16 / >16 / >9. DC path (Vdc / mA / Tono): 24 max. / 500 max. / 22 KHz - DiSEqC. To be installed with N2250.1 cover plates. Fitting boxes with 60mm distance between screws (codes: 1099, 1999 and 1999.2).		
	8151.7	2CLA815170A1002	10

Zenit

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	TV-R/SAT loop-through outlet TV-R and SAT double outlet - Intermediate. Installation as an intermediate outlet in series connected to each other. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 5 - 2.400 MHz / 5 - 2.400 MHz / 5 - 2.400 MHz. Basic loss (FM / TV / SAT): 10,0±1,0 dB / 10,0±1,0 dB / 12,0±2,0 dB. Through loss (FM / TV / SAT): 2,5±0,5 / 2,5±0,7 / 3,0±1,0. Directivity (FM / TV / SAT): >20 / >12 / >5. Isolation (FM / TV / SAT): >45 / >30 / >28. Return loss (VR / FM / TV / SAT): >13 / >13 / >12 / >12. DC path (Vdc / mA / Tono): 24 max. / 500 max. / 22 KHz - DiSEqC. To be installed with N2250.1 cover plates. Fitting boxes with 60mm distance between screws (codes: 1099, 1999 and 1999.2).		
	8151.8	2CLA815180A1002	10
	Cover plate for TV-R/SAT - 2M Cover plates for outlets with 2 connectors codes 8150.3, 8150.7 and 8150.8. Covers prepared to fix the frame to the wall. TV-R and SAT engraved in the front.		
White	**N2250.1 BL**	2CLA225010N1102	20
Silver	**N2250.1 PL**	2CLA225010N1302	20
Anthracite	**N2250.1 AN**	2CLA225010N1802	20
Champagne	**N2250.1 CV**	2CLA225010N1902	20
	TV/R/SAT final outlet TV, R and SAT triple outlet - Final. Installation as a terminal outlet. Connection: screw terminal and clamp. Output connectors (C1 / C2 / C3): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. / F female Frequency range (I / C1 / C2 / C3): 5 - 2.500 MHz / 5 - 68 & 125 - 862 MHz / 87,5 - 108 MHz / 950 - 2.5000 MHz. Basic loss (FM / TV / SAT): 2,0 dB / 2,7 dB / 2,3 dB. Isolation (FM / TV / SAT): >24,3 / >15 / >15. Selectivity (FM / TV / SAT): >15 / >15 / >15. Return loss (VR / FM / TV / SAT): >7,6 / >10 / >7,6 / >8,2. DC path (Vdc / mA / Tono): 34 max. / 500 max. / 22 KHz - DiSEqC. To be installed with N2252 cover plates. Fitting boxes with 60mm distance between screws (Codes: 1099, 1999 and 1999.2).		
	8152.7	2CLA815270A1002	10
	Cover plate for TV/R/SAT - 2M Cover plates for outlets with 3 connectors code 8152.7. Covers prepared to fix the frame to the wall. TV, R and SAT engraved in the front.		
White	**N2252 BL**	2CLA225200N1102	20
Silver	**N2252 PL**	2CLA225200N1302	20
Anthracite	**N2252 AN**	2CLA225200N1802	20
Champagne	**N2252 CV**	2CLA225200N1902	20

Product	Article-No.	Order-No.	Pack/Qty
	TV-R/SAT terminal outlet - 2M TV-R and SAT double outlet - Final. Installation as a terminal outlet connected to a tap-off or splitter (without terminal resistor). Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52mm diam. / IEC female 9,52mm diam. Frequency range (I/O / C1 / C2): 5 - 2.400 MHz / 5 - 862 MHz / 930 - 2.400 MHz. Basic loss (FM / TV / SAT): 0,2±0,1 dB / 1,0 ±0,5 dB / 1,2±0,6 dB. Isolation (FM / TV / SAT): >45 / >14 / >14. Selectivity (TV-R / SAT): >15 / >15. Return loss (VR / FM / TV / SAT): >25 / >25 / >14 / >10. DC path (Vdc / mA / Tono): 24 max. / 500 max. / 22 KHz - DiSEqC.		
White	**N2251.3 BL**	2CLA225130N1102	10
Silver	**N2251.3 PL**	2CLA225130N1302	10
Anthracite	**N2251.3 AN**	2CLA225130N1802	10
Champagne	**N2251.3 CV**	2CLA225130N1902	10
	TV-R/SAT final outlet - 2M TV-R and SAT double outlet - Final. Installation as a terminal outlet connected to a series with loop-through outlets. Connection: screw terminal and clamp. Output connectors (C1 / C2): IEC male 9,52mm diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 5 - 2.400 MHz / 5 - 2.400 MHz / 5 - 2.400 MHz. Basic loss (FM / TV / SAT): 3,7±0,3 dB / 4,0±0,5 dB / 5,0±1,2 dB. Isolation (FM / TV / SAT): >20 / >20 / >14. Return loss (VR / FM / TV / SAT): >16 / >16 / >16 / >9. DC path (Vdc / mA / Tono): 24 max. / 500 max. / 22 KHz - DiSEqC.		
White	**N2251.7 BL**	2CLA225170N1102	10
Silver	**N2251.7 PL**	2CLA225170N1302	10
Anthracite	**N2251.7 AN**	2CLA225170N1802	10
Champagne	**N2251.7 CV**	2CLA225170N1902	10
	TV-R/SAT loop-through outlet - 2M TV-R and SAT double outlet - Intermediate. Installation as an intermediate outlet in series connected to each other. Output connectors (C1 / C2): IEC male 9,52 mm. diam. / IEC female 9,52 mm. diam. Frequency range (I/O / C1 / C2): 5 - 2.400 MHz / 5 - 2.400 MHz / 5 - 2.400 MHz. Basic loss (FM / TV / SAT): 10,0±1,0 dB / 10,0±1,0 dB / 12,0±2,0 dB. Through loss (FM / TV / SAT): 2,5±0,5 / 2,5±0,7 / 3,0±1,0. Directivity (FM / TV / SAT): >20 / >12 / >5. Isolation (FM / TV / SAT): >45 / >30 / >28. Return loss (VR / FM / TV / SAT): >13 / >13 / >12 / >12. DC path (Vdc / mA / Tono): 24 max. / 500 max. / 22 KHz - DiSEqC.		
White	**N2251.8 BL**	2CLA225180N1102	10
Silver	**N2251.8 PL**	2CLA225180N1302	10
Anthracite	**N2251.8 AN**	2CLA225180N1802	10
Champagne	**N2251.8 CV**	2CLA225180N1902	10

Zenit

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	TV terminal outlet F-type - 1M Single TV outlet - Dead-end. F type. For 75 Ω impedance coaxial cable. Frequency range: 0 - 2.000 Mhz. Working voltage: 250 VRMS max. Dielectric withstanding voltage: 500 VRMS min. Contact resistance: - 5 mΩ max. (center contact). - 2 mΩ max. (outer contact). Insulator resistance: 1.000 MΩ min.		
White	**N2150 BL**	2CLA215000N1102	10
Silver	**N2150 PL**	2CLA215000N1302	10
Anthracite	**N2150 AN**	2CLA215000N1802	10
Champagne	**N2150 CV**	2CLA215000N1902	10
	TV terminal outlet M-type - 1M Single TV outlet - Dead-end. M type - 9,52 mm. male. For 75 Ω impedance coaxial cable. Avoid small bending radius. Frequency range: 5 - 2.400 Mhz. Connection loss: 1 dB. Isolation: >16 dB. Return loss: >7,6 dB. DC path (Vdc / mA / Tono): 34 max. / 500 max. / 22kHz - DiSEqC.		
White	**N2150.7 BL**	2CLA215070N1102	10
Silver	**N2150.7 PL**	2CLA215070N1302	10
Anthracite	**N2150.7 AN**	2CLA215070N1802	10
Champagne	**N2150.7 CV**	2CLA215070N1902	10
	TV terminal outlet M-type - 2M Single TV outlet - Dead-end. M type - 9,52 mm. male. For 75 Ω impedance coaxial cable. Avoid small bending radius. Frequency range: 5 - 2.400 Mhz. Connection loss: 1 dB. Isolation: >16 dB. Return loss: >7,6 dB. DC path (Vdc / mA / Tono): 34 max. / 500 max. / 22kHz - DiSEqC.		
White	**N2250.7 BL**	2CLA225070N1102	10
Silver	**N2250.7 PL**	2CLA225070N1302	10
Anthracite	**N2250.7 AN**	2CLA225070N1802	10
Champagne	**N2250.7 CV**	2CLA225070N1902	10

Product	Article-No.	Order-No.	Pack/Qty
	Telephone outlet RJ12 - 1M RJ12 type connector. 6 contacts. Suitable for 2, 4 or 6 contscts jack. Screw terminals.		
White	**N2117.6 BL**	2CLA211760N1102	20
Chrome	**N2117.6 PL**	2CLA211760N1302	20
Anthracite	**N2117.6 AN**	2CLA211760N1802	20
Champagne	**N2117.6 CV**	2CLA211760N1902	20
	Telephone outlet RJ12 - 2M RJ12 type connector. 6 contacts. Suitable for 2, 4 or 6 contscts jack. Screw terminals.		
White	**N2217.6 BL**	2CLA221760N1102	10
Silver	**N2217.6 PL**	2CLA221760N1302	10
Anthracite	**N2217.6 AN**	2CLA221760N1802	10
Champagne	**N2217.6 CV**	2CLA221760N1902	10
	Telephone outlet Telebrás type - 2M Outlet for Telebrás type connectors Screw terminals.		
White	**N2217.1 BL**	2CLA221710N1102	5
Silver	**N2217.1 PL**	2CLA221710N1302	5
Anthracite	**N2217.1 AN**	2CLA221710N1802	5
Champagne	**N2217.1 CV**	2CLA221710N1902	5
	Fiber optic SC simplex adapter - 1M Insertion Loss (IL) <=0.3dB for SM and MM. Durability(500 Mating): 0.2dB max. increase. Withdrawal force (g/f): 100300. Operating temperature: -40º C to +85º C. Meet JIS C5974 and Bellcore GR-326 standard. Compliant with IEC874-14 & IEC874-19. All parts compliant with ROHS.		
White	**N2118.3 BL**	2CLA211830N1102	10
Silver	**N2118.3 PL**	2CLA211830N1302	10
Anthracite	**N2118.3 AN**	2CLA211830N1802	10
Champagne	**N2118.3 CV**	2CLA211830N1902	10

Zenit

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for data outlet 1-gang - 1M Cover plate for one 201X.X connector or housing (codes: 2017.2, 2017.3, 2018.5, 2018.6, 2018 and 2018.8). With labeling area. Without shutter.		
White	**N2118.1 BL**	2CLA211810N1102	10
Silver	**N2118.1 PL**	2CLA211810N1302	10
Anthracite	**N2118.1 AN**	2CLA211810N1802	10
Champagne	**N2118.1 CV**	2CLA211810N1902	10
	Cover plate for data outlet 1-gang - 2M Cover plate for one 201X.X connector or housing (codes: 2017.2, 2017.3, 2018.5, 2018.6, 2018 and 2018.8). With labeling area. Without shutter.		
White	**N2218.1 BL**	2CLA221810N1102	10
Silver	**N2218.1 PL**	2CLA221810N1302	10
Anthracite	**N2218.1 AN**	2CLA221810N1802	10
Champagne	**N2218.1 CV**	2CLA221810N1902	10
	Cover plate for data outlet 2-gangs - 2M Cover plate for two 201X.X connectors and/or and housings (codes: 2017.2, 2017.3, 2018.5, 2018.6, 2018 and 2018.8). With labeling area. Without shutter.		
White	**N2218.2 BL**	2CLA221820N1102	10
Silver	**N2218.2 PL**	2CLA221820N1302	10
Anthracite	**N2218.2 AN**	2CLA221820N1802	10
Champagne	**N2218.2 CV**	2CLA221820N1902	10
	Telephone outlet RJ12 RJ12 type connector. 6 contacts. Suitable for 2 (6P2C), 4 (6P4C) or 6 (6P6C) RJ11 and RJ12 jacks. Screw terminals. To be installed with N2118.1, N2218.1 and N2218.2 cover plates.		
	2017.2	2CLA201720A1002	10
	Telephone outlet RJ45 Cat.3 RJ45 type connector. Cat.3. 8 contacts. Suitable for 8 (8P8C) RJ45 jacks. Tool-less wiring. To be installed with N2118.1, N2218.1 and N2218.2 cover plates.		
	2017.3	2CLA201730A1002	10

Product	Article-No.	Order-No.	Pack/Qty
	Data outlet RJ45 Cat.5e UTP RJ45 type connector. Cat.5e UTP. In compliance with ANSI/TIA/EIA 568B.2, ISO/IEC11801 & EN50173. Universal TIA/EIA 568A and 568B labeling. Housing: ABS UL-94-0. Durability: 750 cycles min. (ISO/IEC 11801, IEC 60603-7-4). IDC: PC UL94V-0, Accept 22-26AWG solid wire. Contact: RJ45 8P8C, 3~50 micro-inch gold plating over nickel plated on contact area. Tool-less wiring. To be installed with N2118.1, N2218.1 and N2218.2 cover plates.		
	2018.5	2CLA201850A1002	10
	Data outlet RJ45 Cat.6 UTP RJ45 type connector. Cat.6 UTP. In compliance with ANSI/TIA/EIA 568B.2, ISO/IEC11801 & EN50173. Universal TIA/EIA 568A and 568B labeling. Housing: ABS UL-94-0. Durability: 750 cycles min. (ISO/IEC 11801, IEC 60603-7-4). IDC: PC UL94V-0, Accept 22-26AWG solid wire. Contact: RJ45 8P8C, 3~50 micro-inch gold plating over nickel plated on contact area. Tool-less wiring. To be installed with N2118.1, N2218.1 and N2218.2 cover plates.		
	2018.6	2CLA201860A1002	10
	Data outlet RJ45 Cat.6A STP RJ45 type connector. Cat.6A STP. In compliance with ANSI/TIA/EIA 568B.2, ISO/IEC11801 & EN50173. Universal TIA/EIA 568A and 568B Labeling. 10Gb/sec. Durability: 750 cycles min. (ISO/IEC 11801, IEC 60603-7-4). Housing: Zinc Die-casting design for optimal EMI protection. Slim size is ideal for interfaces where the spaces are tight. IDC: PC UL94V-0, Accept 22-26AWG solid wire. Contact: RJ45 8P8C, 3~50 micro-inch gold plating over nickel plated on contact area. Tool-less wiring. To be installed with N2118.1, N2218.1 and N2218.2 cover plates.		
	2018.6 S	2CLA201862A1002	10
	Housing for data outlets - Keystone type Housing for connectors with Keystone type clipping system. To be installed with N2118.1, N2218.1 and N2218.2 cover plates.		
	2018	2CLA201800A1002	10
	Housing for data outlets - Systimax type Housing for connectors with Systimax type clipping system. To be installed with N2118.1, N2218.1 and N2218.2 cover plates.		
	2018.8	2CLA201880A1002	10

Zenit

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	2x RCA connection unit - 1M Front: 2x RCA connectors (Red / White). Rear: screw terminals (4 wires).		
White	**N2155.2 BL**	2CLA215520N1102	1
Silver	**N2155.2 PL**	2CLA215520N1302	1
Anthracite	**N2155.2 AN**	2CLA215520N1802	1
Champagne	**N2155.2 CV**	2CLA215520N1902	1
	3x RCA connection unit - 1M Front: 3x RCA connectors (Red / White / Yellow). Rear: screw terminals (6 wires).		
White	**N2155.3 BL**	2CLA215530N1102	1
Silver	**N2155.3 PL**	2CLA215530N1302	1
Anthracite	**N2155.3 AN**	2CLA215530N1802	1
Champagne	**N2155.3 CV**	2CLA215530N1902	1
	Mini-Jack connection unit - 1M Front: 1x Mini-Jack connector (3,5 mm. stereo audio jack). Rear: screw terminals (3/4 wires).		
White	**N2155.4 BL**	2CLA215540N1102	1
Silver	**N2155.4 PL**	2CLA215540N1302	1
Anthracite	**N2155.4 AN**	2CLA215540N1802	1
Champagne	**N2155.4 CV**	2CLA215540N1902	1
	VGA connection unit - 1M Front: 1x VGA connector (DE-15 connector). Rear: screw terminals (15 wires).		
White	**N2155.5 BL**	2CLA215550N1102	1
Silver	**N2155.5 PL**	2CLA215550N1302	1
Anthracite	**N2155.5 AN**	2CLA215550N1802	1
Champagne	**N2155.5 CV**	2CLA215550N1902	1

Product	Article-No.	Order-No.	Pack/Qty
	HDMI connection unit - 1M Front: 1x HDMI connector (Type A connector). Rear: screwless terminals (20 wires).		
White	**N2155.6 BL**	2CLA215560N1102	5
Silver	**N2155.6 PL**	2CLA215560N1302	5
Anthracite	**N2155.6 AN**	2CLA215560N1802	5
Champagne	**N2155.6 CV**	2CLA215560N1902	5
	HDMI female-female connection unit - 1M Front: 1x HDMI connector (Type A connector). Rear: 1x HDMI connector (Type A connector) fitted at 90º angle.		
White	**N2155.7 BL**	2CLA215570N1102	5
Silver	**N2155.7 PL**	2CLA215570N1302	5
Anthracite	**N2155.7 AN**	2CLA215570N1802	5
Champagne	**N2155.7 CV**	2CLA215570N1902	5
	USB connection unit - 1M Front: 1x USB 2.0 connector (Type A connector). Rear: screwless terminals (5 wires).		
White	**N2155.8 BL**	2CLA215580N1102	5
Silver	**N2155.8 PL**	2CLA215580N1302	5
Anthracite	**N2155.8 AN**	2CLA215580N1802	5
Champagne	**N2155.8 CV**	2CLA215580N1902	5
	USB female-female connection unit - 1M Front: 1x USB 2.0 connector (Type A connector). Rear: 1x USB 2.0 connector (Type A connector) fitted at 90º angle.		
White	**N2155.9 BL**	2CLA215590N1102	5
Silver	**N2155.9 PL**	2CLA215590N1302	5
Anthracite	**N2155.9 AN**	2CLA215590N1802	5
Champagne	**N2155.9 CV**	2CLA215590N1902	5

Zenit

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	USB charger 750mA, 1-gang - 1M Input voltage: 100 - 240 Vac ±10%; 50/60 Hz. Input current: 0,12 A (with maximum load). Output voltage: 5 Vdc ±5%. Output current: 750 mA. Power consumption in stand-by: <= 0,3W@230Vac. Energy efficiency: >= 66%. Operating temperature: 0ºC to 45ºC.		
White	**N2185 BL**	2CLA218500N1102	1
Silver	**N2185 PL**	2CLA218500N1302	1
Anthracite	**N2185 AN**	2CLA218500N1802	1
Champagne	**N2185 CV**	2CLA218500N1902	1
	USB charger 2.000mA, 1-gang - 1M Input voltage: 100 - 230 Vac ±10%; 50/60 Hz. Input current: 0,20 A (with maximum load). Output voltage: 5 Vdc ±5%. Output current: 2.000 mA. Power consumption in stand-by: <= 0,01W@230Vac. Energy efficiency: >= 79%. Operating temperature: 0ºC to 45ºC.		
White	**N2185.2 BL**	2CLA218520N1102	1
Silver	**N2185.2 PL**	2CLA218520N1302	1
Anthracite	**N2185.2 AN**	2CLA218520N1802	1
Champagne	**N2185.2 CV**	2CLA218520N1902	1
	USB charger 1.500mA, 2-gang - 2M Input voltage: 100 - 240 Vac ±10%; 50/60 Hz. Input current: 0,20 A (with maximum load). Output voltage: 5 Vdc ±5%. Output current: 1.500 mA (total for both gangs). Power consumption in stand-by: <= 0,3W@230Vac. Energy efficiency: >= 71%. Operating temperature: 0ºC to 35ºC.		
White	**N2285 BL**	2CLA228500N1102	1
Silver	**N2285 PL**	2CLA228500N1302	1
Anthracite	**N2285 AN**	2CLA228500N1802	1
Champagne	**N2285 CV**	2CLA228500N1902	1

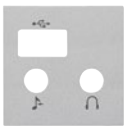
Product	Article-No.	Order-No.	Pack/Qty

Zenit
Multimedia

Product	Article-No.	Order-No.	Pack/Qty
	Multiroom sound module Rated voltage: 127-230 Vac ± 15%; 50-60 Hz. Max. consumption: 200 mA. Stand-by consuption: 0,3W. Amplifier power: 6+6 W; <1% distorsion (4 Ω). Speaker impedance: 4 Ω (2+2 W audio). FM radio digital tuner with RDS. Alarm clock with buzzer, radio types and snooze function. Bluetooth receiver: Bluetooth® v2.1 2.4GHz IEEE 802.15.1. Multiroom function available (1 master device and up to 14 slave devices). Remote control using code 9368.2 (ZigBee 2.4GHz IEEE 802.15.4). Optional: auxilary module 9368.3 for I/O (1 mini-jack stereo input & 1 mini-jack stereo output) and USB connection functions.		
	9368.1	2CLA936810A1001	1
	Remote control for multiroom sound module - 2M Rated voltage: 127-230 Vac ± 15%; 50-60 Hz. Max. consumption: 15 mA. Stand-by consuption: 0,5W. To control 9368.1 module (1 remote control for each module). Wireless connection between moles 9368.1 and 9368.2 (ZigBee 2.4GHz IEEE 802.15.4). Optional: auxilary module 9368.3 for I/O (1 mini-jack stereo input & 1 mini-jack stereo output) and USB connection functions. In case of using 9368.3 module, the connection between modules 9368.1 and 9368.2 must be wired (3 wires). Mounting grid delivered with the cover plate (without fixing claws). Cover plate code: N2268.		
	9368.2	2CLA936820A1001	1
	Cover plate for radio/remote control modules Cover plate for FM-radio module and for remote control module code: 9368, 9368.2 & 9368.7.		
White	**N2268 BL**	2CLA226800N1102	1
Silver	**N2268 PL**	2CLA226800N1302	1
Anthracite	**N2268 AN**	2CLA226800N1802	1
Champagne	**N2268 CV**	2CLA226800N1902	1

Product	Article-No.	Order-No.	Pack/Qty
	FM-radio and alarm module - 2M Rated voltage: 230 Vac ± 15%; 50-60 Hz. Max. consumption: 100 mA. Stand-by consuption: 0,2W. Amplifier power: 2+2 W; <1% distorsion (16 Ω). Speaker impedance: 16 Ω (2+2 W audio). FM radio digital tuner with RDS. Alarm clock with buzzer, radio types and snooze function. Optional: auxilary module 9368.3 for I/O (1 mini-jack stereo input & 1 mini-jack stereo output), USB connection and Bluetooth receiver functions. Mounting grid delivered with the cover plate (without fixing claws). Cover plate code: N2268.		
	9368	2CLA936800A1001	1
	FM-radio and alarm module - 2M Rated voltage: 127 Vac ± 15%; 50-60 Hz. Max. consumption: 100 mA. Stand-by consuption: 0,2W. Amplifier power: 2+2 W; <1% distorsion (16 Ω). Speaker impedance: 16 Ω (2+2 W audio). FM radio digital tuner with RDS. Alarm clock with buzzer, radio types and snooze function. Optional: auxilary module 9368.3 for I/O (1 mini-jack stereo input & 1 mini-jack stereo output), USB connection and Bluetooth receiver functions. Mounting grid delivered with the cover plate (without fixing claws). Cover plate code: N2268.		
	9368.7	2CLA936870A1001	1
	Cover plate for radio/remote control modules Cover plate for FM-radio module and for remote control module code: 9368, 9368.2 & 9368.7.		
White	**N2268 BL**	2CLA226800N1102	1
Silver	**N2268 PL**	2CLA226800N1302	1
Anthracite	**N2268 AN**	2CLA226800N1802	1
Champagne	**N2268 CV**	2CLA226800N1902	1

Zenit
Multimedia

Product	Article-No.	Order-No.	Pack/Qty
	Auxiliary module - 2M Power supply through 9368, 9368.2 or 9368.7 modules. Max. consumption: 200 mA. Stand-by consuption: 0,4W. Bluetooth receiver: Bluetooth® v2.1 2.4GHz IEEE 802.15.1. USB connector: for MP3 and WAV files. Max. consuption of the connected device: 100 mA @5Vdc. Input: 1x mini-jack stereo 3,5 mm. Output: 1x mini-jack stereo 3,5 mm. Mounting grid delivered with the cover plate (without fixing claws). Cover plate code: N2268.3.		
	9368.3	2CLA936830A1001	1
	**Cover plate for I/O + USB + Bluetooth module** Cover plate for I/O + USB + Bluetooth module code: 9368.3.		
White	**N2268.3 BL**	2CLA226830N1102	1
Silver	**N2268.3 PL**	2CLA226830N1302	1
Anthracite	**N2268.3 AN**	2CLA226830N1802	1
Champagne	**N2268.3 CV**	2CLA226830N1902	1
	Speaker connection unit - 2M Front: 2x spring speaker terminals (Red/Black). Rear: 2x screw terminals.		
White	**N2257.1 BL**	2CLA225710N1102	1
Silver	**N2257.1 PL**	2CLA225710N1302	1
Anthracite	**N2257.1 AN**	2CLA225710N1802	1
Champagne	**N2257.1 CV**	2CLA225710N1902	1
	2" loudspeaker 2 W Compatible with sound modules and amplifier code: 9368, 9368.1, 9368.7 and 9335.1. With broadband characteristics. With screwless terminals. Rated output: 2 W (RMS). Frequency response: 150 - 16.000 Hz. Impedance: 16 Ohm. Mounting depth: 34 mm. Without fixing claws. Cover plate code: N2229, 8629 & 9399.4.		
	9329	2CLA932900A1001	1
	Cover plate for 2" loudspeaker Cover plate for 2" loudspeaker code: 9329.		
White	**N2229 BL**	2CLA222900N1102	5
Silver	**N2229 PL**	2CLA222900N1302	5
Anthracite	**N2229 AN**	2CLA222900N1802	5
Champagne	**N2229 CV**	2CLA222900N1902	5

Product	Article-No.	Order-No.	Pack/Qty
	Embellishing grid for 2" loudspeaker Embellishing grid for 2" loudspeaker code: 9329. Plastic material.		
White	**9399.4 BA**	2CLA939940A1001	5
Black	**9399.4 NG**	2CLA939940A1501	5
	5" loudspeaker 6 W Compatible with sound modules and amplifier code: 9368, 9368.1, 9368.7 and 9335.1. With broadband characteristics. With screw terminals. Rated output: 6 W (RMS). Frequency response: 70 - 10.000 Hz. Impedance: 16 Ohm. Flush mounted installation with 9399 mounting box or 9399.1 mounting ring. Embellishing grid code: 9399.2.		
	9329.1	2CLA932910A1001	1
	Installation box for 5" loudspeaker For 9329.1 loudspeaker. For flush-mounted assembly. Drilling measurements: 174 mm. Mounting depth: 84 mm.		
	9399	2CLA939900A1001	12
	Installation ring for 5" loudspeaker For 9329.1 loudspeaker. For mounting in hollow walls/ceilings. With spring brackets. Drilling measurements: 160 mm. Mounting depth: 110 mm.		
	9399.1	2CLA939910A1001	12
	Embellishing grid for 5" loudspeaker Embellishing grid for 5" loudspeaker code: 9329.1. Plastic material. With central fixation screw.		
	9399.2	2CLA939920A1001	12
	Auxiliary 20W amplifier Rated voltage: 230 Vac ± 10 % / 50-60 Hz. Power consumption: 3,5 VA (max. 36 VA). Output voltage: 15 V- (max. 1,5 A). Output power: - 10 + 10 W (2 Ω). - 20 W (4 Ω). Speaker impedance: - 2 - 16 Ω (10 + 10 W). - 4 - 16 Ω (20 W). Can be operated in booster mode with FM radio modules 9368 and 9368.7 and multiroom modules 9368.1. Can be operated in "standalone" mode with one audio input. Can be used in bridge operation. For extending the number of speakers at one amplifier insert. For max. 16 speakers code 9329 or 9329.1. DIN-rail installation. Module width: 7.		
	9335.1	2CLA933510A1001	1

Zenit

Room thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Rotatory thermostat with floor sensor - 2M Rated voltage: 230 Vac ±10% / 50-60 Hz. Load power: 2.300 W. Load type: floor heating resistor. Control temperature: +5ºC to +45ºC (Set point). OFF state: at OFF position, the thermostat is off, so that it does not address the temperature measured by the floor temperature probe. The relay output contact is open. Temperature accuracy: 0,5º C. Hysteresis: 0,5º C. Floor temperature sensor: NTC, 10 KΩ at 25º C, -40º C. to 80º C. Double isolated cable, 4 m. length. LED light indication: Red and green. Ambient temperature: -20º C to 45º C.		
White	**N2240.3 BL**	2CLA224030N1102	1
Silver	**N2240.3 PL**	2CLA224030N1302	1
Anthracite	**N2240.3 AN**	2CLA224030N1802	1
Champagne	**N2240.3 CV**	2CLA224030N1902	1
	Digital room thermostat - 2M Rated voltage: 230 Vac / 50-60 Hz. Power consumption: < 1W. Operating temperature range: + 0º C to 50º C. Measurement accuracy: ±2º C (±1º C with calibration). Resolution: 0.1º C. Control output: Potential-free relay contacts Normally Open (NO). Maximum load: 3A cos = 0,5. Output relay operation modes: - Hysteresis: 0.5º C. - Pulse-width modulation: with a ±4ºC difference with the set-point temperature, variable from 100% to 0% modulation. To be installed with N2240.5 cover plates.		
	8140.5	2CLA814050A1002	1
	Cover plate for digital thermostat- 2M Cover plate for digital room thermostat code 8140.5.		
White	**N2240.5 BL**	2CLA224050N1102	5
Silver	**N2240.5 PL**	2CLA224050N1302	5
Anthracite	**N2240.5 AN**	2CLA224050N1802	5
Champagne	**N2240.5 CV**	2CLA224050N1902	5
	Rotatory 3-speed fan control - 2M Rated voltage: 127 Vac / 60 Hz. Rated current: 1,5 A. Load type: ceiling fan. 4 control positions: - 0: Off. - I: On maximum speed. - II: On medium speed. - III: On low speed. Ambient temperature: 0º C to 40º C.		
White	**N2254.1 BL**	2CLA225410N1102	1
Silver	**N2254.1 PL**	2CLA225410N1302	1
Anthracite	**N2254.1 AN**	2CLA225410N1802	1
Champagne	**N2254.1 CV**	2CLA225410N1902	1

Protection devices

Product	Article-No.	Order-No.	Pack/Qty
	Fuse holder - 1M Rated voltage: 250 Vac. Rated current: 16A. Fuse type / dimension: glass tube / 6 x 24 mm.		
White	**N2108 BL**	2CLA210800N1102	20
Silver	**N2108 PL**	2CLA210800N1302	20
Anthracite	**N2108 AN**	2CLA210800N1802	20
Champagne	**N2108 CV**	2CLA210800N1902	20
	Fuse holder - 2M Rated voltage: 250 Vac. Rated current: 16A. Fuse type / dimension: glass tube / 6 x 24 mm.		
White	**N2208 BL**	2CLA220800N1102	10
Silver	**N2208 PL**	2CLA220800N1302	10
Anthracite	**N2208 AN**	2CLA220800N1802	10
Champagne	**N2208 CV**	2CLA220800N1902	10
	Circuit breaker 6A & RCD - 2M Rated voltage: 120 - 230 Vac; 50/60 Hz. Rated current: 6A. Braking capacity: 1.500A. Residual current (sensitivity - IΔn): 10 mA. C type magneto-thermic protection. A type residual current protection. Two-pole (1P + N) with 1 protected pole.		
White	**N2234.1 BL**	2CLA223410N1102	1
Silver	**N2234.1 PL**	2CLA223410N1302	1
Anthracite	**N2234.1 AN**	2CLA223410N1802	1
Champagne	**N2234.1 CV**	2CLA223410N1902	1
	Circuit breaker 10A & RCD - 2M Rated voltage: 120 - 230 Vac; 50/60 Hz. Rated current: 10A. Braking capacity: 3.000A. Residual current (sensitivity - IΔn): 10 mA. C type magneto-thermic protection. A type residual current protection. Two-pole (1P + N) with 1 protected pole.		
White	**N2234.2 BL**	2CLA223420N1102	1
Silver	**N2234.2 PL**	2CLA223420N1302	1
Anthracite	**N2234.2 AN**	2CLA223420N1802	1
Champagne	**N2234.2 CV**	2CLA223420N1902	1
	Circuit breaker 16A & RCD - 2M Rated voltage: 120 - 230 Vac; 50/60 Hz. Rated current: 16A. Braking capacity: 3.000A. Residual current (sensitivity - IΔn): 10 mA. C type magneto-thermic protection. A type residual current protection. Two-pole (1P + N) with 1 protected pole.		
White	**N2234.3 BL**	2CLA223430N1102	1
Silver	**N2234.3 PL**	2CLA223430N1302	1
Anthracite	**N2234.3 AN**	2CLA223430N1802	1
Champagne	**N2234.3 CV**	2CLA223430N1902	1

Zenit

Signaling and lighting systems

Product	Article-No.	Order-No.	Pack/Qty
	LED white signaling light - 1M Rated voltage: 127-230 Vac / 50-60 Hz. Lamp: white LED. Luminous flux: > 2 lumen at 1 meter. White diffuser.		
White	**N2180 BL**	2CLA218000N1102	5
	LED warm white signaling light - 1M Rated voltage: 127-230 Vac / 50-60 Hz. Lamp: white LED. 2.700 Kelvin. Low luminous flux: < 0,5 lumen at 0,3 meter. White diffuser.		
White	**N2180.1 BL**	2CLA218010N1102	5
	LED signaling light - 2M Rated voltage: 127-230 Vac / 50-60 Hz. Lamp: white LED. Luminous flux: > 2 lumen at 1 meter. White diffuser.		
White	**N2280 BL**	2CLA228000N1102	1
	LED DND/MUR signaling light - 2M Rated voltage: 127-230 Vac / 50-60 Hz. Lamp: red/green LED. Luminous flux: > 2 lumen at 1 meter. White diffuser.		
White	**N2280.2 RJ/VD**	2CLA228020N1102	1
	Beacon LED light - 2M Rated voltage: 230 Vac / 50 Hz. Lamp: white LED. Luminous flux: > 2 lumen at 1 meter. White diffuser. Autonomy: 3 hours (1 hour at maximum illumination 2 hours with lower illumination). Battery: Ni-MH (estimated lifetime: 4 years).		
White	**N2281 BL**	2CLA228100N1102	1
	Labels for signaling / beacon lights - 2M Labels with symbols for signaling and beacon lights code: N2280, N2280.2 & N2281. Symbols: “WC men”, “WC women”, “No smoking”, “Direction”, “WC handic.”, “WC”, “Salida” and no symbol label.		
	N2281.1	2CLA228110N1002	5

Product	Article-No.	Order-No.	Pack/Qty
	LED red signaling light - 1M Rated voltage: 127-230 Vac / 50-60 Hz. Lamp: white LED. Luminous flux: > 2 lumen at 1 meter. Red diffuser.		
Red	**N2180 RJ**	2CLA218000N1602	5
	LED red signaling light - 1M Rated voltage: 127-230 Vac / 50-60 Hz. Lamp: white LED. Luminous flux: > 2 lumen at 1 meter. Green diffuser.		
Green	**N2180 VD**	2CLA218000N1802	5
	LED DND signaling light - 1M Rated voltage: 127-230 Vac / 50-60 Hz. Lamp: white LED. Luminous flux: > 2 lumen at 1 meter. Red diffuser. Do Not Disturb (DND) symbol. To be controlled with N2244.5 DND/MUR 2-gang interlocked switch.		
White	**N2180.4 BL**	2CLA218040N1102	5
Silver	**N2180.4 PL**	2CLA218040N1302	5
Anthracite	**N2180.4 AN**	2CLA218040N1802	5
Champagne	**N2180.4 CV**	2CLA218040N1902	5
	LED MUR signaling light - 1M Rated voltage: 127-230 Vac / 50-60 Hz. Lamp: white LED. Luminous flux: > 2 lumen at 1 meter. Green diffuser. Make Up Room (MUR) symbol. To be controlled with N2244.5 DND/MUR 2-gang interlocked switch.		
White	**N2180.5 BL**	2CLA218050N1102	5
Silver	**N2180.5 PL**	2CLA218050N1302	5
Anthracite	**N2180.5 AN**	2CLA218050N1802	5
Champagne	**N2180.5 CV**	2CLA218050N1902	5
	DND/MUR 2-gang interlocked switch - 2M Rated voltage: 110 - 250 Vac. Rated current: 16 AX. Interlocked gangs. Gang 1: Make Up Room (MUR) green symbol. Gang 2: Do Not Disturb (DND) red symbol. To control N2180.4 & N2180.5 DND/MUR signaling lights.		
White	**N2244.5 BL**	2CLA224450N1102	5
Silver	**N2244.5 PL**	2CLA224450N1302	5
Anthracite	**N2244.5 AN**	2CLA224450N1802	5
Champagne	**N2244.5 CV**	2CLA224450N1902	5

Zenit

Buzzer / Door bell

Product	Article-No.	Order-No.	Pack/Qty
	Buzzer - 1M Rated voltage: 127-230 Vac / 50-60 Hz. Rated power: 8 VA. Adjustable tone. Acoustic power at 1 meter with cover plate: 75 dB.		
White	**N2119 BL**	2CLA211900N1102	10
Silver	**N2119 PL**	2CLA211900N1302	10
Anthracite	**N2119 AN**	2CLA211900N1802	10
Champagne	**N2119 CV**	2CLA211900N1902	10
	Buzzer - 2M Rated voltage: 127-230 Vac / 50-60 Hz. Rated power: 8 VA. Adjustable tone. Acoustic power at 1 meter with cover plate: 75 dB.		
White	**N2219 BL**	2CLA221900N1102	10
Silver	**N2219 PL**	2CLA221900N1302	10
Anthracite	**N2219 AN**	2CLA221900N1802	10
Champagne	**N2219 CV**	2CLA221900N1902	10
	Electronic door bell 230 Vac - 2M Rated voltage: 230 Vac / 50-60 Hz. 4 melodies available. Acoustic power at 1 meter with cover plate: 72 dB.		
White	**N2224 BL**	2CLA222400N1102	10
Silver	**N2224 PL**	2CLA222400N1302	10
Anthracite	**N2224 AN**	2CLA222400N1802	10
Champagne	**N2224 CV**	2CLA222400N1902	10
	Electronic door bell 127 Vac - 2M Rated voltage: 127 Vac / 60 Hz. 4 melodies available. Acoustic power at 1 meter with cover plate: 72 dB.		
White	**N2224.1 BL**	2CLA222410N1102	10
Silver	**N2224.1 PL**	2CLA222410N1302	10
Anthracite	**N2224.1 AN**	2CLA222410N1802	10
Champagne	**N2224.1 CV**	2CLA222410N1902	10

Blank covers / Cable outlets

Product	Article-No.	Order-No.	Pack/Qty
	Blank cover plate - 1M Blank cover plate for spare spaces. Size: 1 module.		
White	**N2100 BL**	2CLA210000N1102	10
Silver	**N2100 PL**	2CLA210000N1302	10
Anthracite	**N2100 AN**	2CLA210000N1802	10
Champagne	**N2100 CV**	2CLA210000N1902	10
	Blank cover plate - 2M Blank cover plate for spare spaces. Size: 2 modules.		
White	**N2200 BL**	2CLA220000N1102	10
Silver	**N2200 PL**	2CLA220000N1302	10
Anthracite	**N2200 AN**	2CLA220000N1802	10
Champagne	**N2200 CV**	2CLA220000N1902	10
	Cable outlet - 1M Maximum cable diameter: 6 mm. Cable tie included.		
White	**N2107 BL**	2CLA210700N1102	10
Silver	**N2107 PL**	2CLA210700N1302	10
Anthracite	**N2107 AN**	2CLA210700N1802	10
Champagne	**N2107 CV**	2CLA210700N1902	10
	Cable outlet - 2M Maximum cable diameter: 6 mm. Cable tie included.		
White	**N2207 BL**	2CLA220700N1102	10
Silver	**N2207 PL**	2CLA220700N1302	10
Anthracite	**N2207 AN**	2CLA220700N1802	10
Champagne	**N2207 CV**	2CLA220700N1902	10

Zenit

Frames for European square boxes

01

Standard frame

Basic frame

02

03

04

05

06

1 to 5gang cover frame for horizontal and vertical installation
01 Side view, 7,5 x 85 mm
02 Frame 2 modules, 85 x 85 mm
03 Frame 2 + 2 modules, 156 x 85 mm
04 Frame 2 + 2 + 2 modules, 227 x 85 mm
05 Frame 2 + 2 + 2 + 2 modules, 298 x 85 mm
06 Frame 2 + 2 + 2 + 2 + 2 modules, 369 x 85 mm

Zenit

Frames for European boxes – Basic

Product	Article-No.	Order-No.	Pack/Qty
	Frames 1 to 4-gang Size (height x width): - 1-gang: 85 x 85 mm. - 2-gang: 85 x 156 mm. - 3-gang: 85 x 227 mm. - 4-gang: 85 x 298 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 1		
White	**N2171.1 BL**	2CLA217110N1102	20
	1-gang / Modularity: 2		
White	**N2271.1 BL**	2CLA227110N1102	20
	2-gang / Modularity: 2+2		
White	**N2272.1 BL**	2CLA227210N1102	10
	3-gang / Modularity: 2+2+2		
White	**N2273.1 BL**	2CLA227310N1102	5
	4-gang / Modularity: 2+2+2+2		
White	**N2274.1 BL**	2CLA227410N1102	5

Product	Article-No.	Order-No.	Pack/Qty
	Frames 1 to 4-gang Color: Size (height x width): - 1-gang: 85 x 85 mm. - 2-gang: 85 x 156 mm. - 3-gang: 85 x 227 mm. - 4-gang: 85 x 298 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Silver	**N2271.1 PL**	2CLA227110N1302	20
	2-gang / Modularity: 2+2		
Silver	**N2272.1 PL**	2CLA227210N1302	10
	3-gang / Modularity: 2+2+2		
Silver	**N2273.1 PL**	2CLA227310N1302	5
	4-gang / Modularity: 2+2+2+2		
Silver	**N2274.1 PL**	2CLA227410N1302	5

Product	Article-No.	Order-No.	Pack/Qty
	Frames 1 to 4-gang Size (height x width): - 1-gang: 85 x 85 mm. - 2-gang: 85 x 156 mm. - 3-gang: 85 x 227 mm. - 4-gang: 85 x 298 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Anthracite	**N2271.1 AN**	2CLA227110N1802	20
	2-gang / Modularity: 2+2		
Anthracite	**N2272.1 AN**	2CLA227210N1802	10
	3-gang / Modularity: 2+2+2		
Anthracite	**N2273.1 AN**	2CLA227310N1802	5
	4-gang / Modularity: 2+2+2+2		
Anthracite	**N2274.1 AN**	2CLA227410N1802	5

Product	Article-No.	Order-No.	Pack/Qty
	Frames 1 to 4-gang Size (height x width): - 1-gang: 85 x 85 mm. - 2-gang: 85 x 156 mm. - 3-gang: 85 x 227 mm. - 4-gang: 85 x 298 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Champagne	**N2271.1 CV**	2CLA227110N1902	20
	2-gang / Modularity: 2+2		
Champagne	**N2272.1 CV**	2CLA227210N1902	10
	3-gang / Modularity: 2+2+2		
Champagne	**N2273.1 CV**	2CLA227310N1902	5
	4-gang / Modularity: 2+2+2+2		
Champagne	**N2274.1 CV**	2CLA227410N1902	5

Zenit

Frames for European boxes

Product	Article-No.	Order-No.	Pack/Qty
	Frames 1 to 5-gang Size (height x width): - 1-gang: 85 x 85 mm. - 2-gang: 85 x 156 mm. - 3-gang: 85 x 227 mm. - 4-gang: 85 x 298 mm. - 5-gang: 85 x 369 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 1		
White	**N2171 BL**	2CLA217100N1102	20
	1-gang / Modularity: 2		
White	**N2271 BL**	2CLA227100N1102	20
	2-gang / Modularity: 2+2		
White	**N2272 BL**	2CLA227200N1102	10
	3-gang / Modularity: 2+2+2		
White	**N2273 BL**	2CLA227300N1102	5
	4-gang / Modularity: 2+2+2+2		
White	**N2274 BL**	2CLA227400N1102	5
	5-gang / Modularity: 2+2+2+2+2		
White	**N2275 BL**	2CLA227500N1102	5
	Frames 1 to 5-gang Size (height x width): - 1-gang: 85 x 85 mm. - 2-gang: 85 x 156 mm. - 3-gang: 85 x 227 mm. - 4-gang: 85 x 298 mm. - 5-gang: 85 x 369 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Silver	**N2271 PL**	2CLA227100N1302	20
	2-gang / Modularity: 2+2		
Silver	**N2272 PL**	2CLA227200N1302	10
	3-gang / Modularity: 2+2+2		
Silver	**N2273 PL**	2CLA227300N1302	5
	4-gang / Modularity: 2+2+2+2		
Silver	**N2274 PL**	2CLA227400N1302	5
	5-gang / Modularity: 2+2+2+2+2		
Silver	**N2275 PL**	2CLA227500N1302	5

Product	Article-No.	Order-No.	Pack/Qty
	Frames 1 to 5-gang Size (height x width): - 1-gang: 85 x 85 mm. - 2-gang: 85 x 156 mm. - 3-gang: 85 x 227 mm. - 4-gang: 85 x 298 mm. - 5-gang: 85 x 369 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Anthracite	**N2271 AN**	2CLA227100N1802	20
	2-gang / Modularity: 2+2		
Anthracite	**N2272 AN**	2CLA227200N1802	10
	3-gang / Modularity: 2+2+2		
Anthracite	**N2273 AN**	2CLA227300N1802	5
	4-gang / Modularity: 2+2+2+2		
Anthracite	**N2274 AN**	2CLA227400N1802	5
	5-gang / Modularity: 2+2+2+2+2		
Anthracite	**N2275 AN**	2CLA227500N1802	5
	Frames 1 to 5-gang Size (height x width): - 1-gang: 85 x 85 mm. - 2-gang: 85 x 156 mm. - 3-gang: 85 x 227 mm. - 4-gang: 85 x 298 mm. - 5-gang: 85 x 369 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Champagne	**N2271 CV**	2CLA227100N1902	20
	2-gang / Modularity: 2+2		
Champagne	**N2272 CV**	2CLA227200N1902	10
	3-gang / Modularity: 2+2+2		
Champagne	**N2273 CV**	2CLA227300N1902	5
	4-gang / Modularity: 2+2+2+2		
Champagne	**N2274 CV**	2CLA227400N1902	5
	5-gang / Modularity: 2+2+2+2+2		
Champagne	**N2275 CV**	2CLA227500N1902	5

Zenit

Frames for European boxes – Noble

Product	Article-No.	Order-No.	Pack/Qty
	Frames 1 to 4-gang Material: glass Size (height x width): - 1-gang: 90 x 90 mm. - 2-gang: 90 x 161 mm. - 3-gang: 90 x 232 mm. - 4-gang: 90 x 303 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
White Glass	**N2271 CB**	2CLA227100N3002	1
	2-gang / Modularity: 2+2		
White Glass	**N2272 CB**	2CLA227200N3002	1
	3-gang / Modularity: 2+2+2		
White Glass	**N2273 CB**	2CLA227300N3002	1
	4-gang / Modularity: 2+2+2+2		
White Glass	**N2274 CB**	2CLA227400N3002	1
	Frames 1 to 4-gang Material: glass Size (height x width): - 1-gang: 90 x 90 mm. - 2-gang: 90 x 161 mm. - 3-gang: 90 x 232 mm. - 4-gang: 90 x 303 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Black Glass	**N2271 CN**	2CLA227100N3102	1
	2-gang / Modularity: 2+2		
Black Glass	**N2272 CN**	2CLA227200N3102	1
	3-gang / Modularity: 2+2+2		
Black Glass	**N2273 CN**	2CLA227300N3102	1
	4-gang / Modularity: 2+2+2+2		
Black Glass	**N2274 CN**	2CLA227400N3102	1
	Frames 1 to 4-gang Material: glass Size (height x width): - 1-gang: 90 x 90 mm. - 2-gang: 90 x 161 mm. - 3-gang: 90 x 232 mm. - 4-gang: 90 x 303 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Pearl Glass	**N2271 CP**	2CLA227100N3502	1
	2-gang / Modularity: 2+2		
Pearl Glass	**N2272 CP**	2CLA227200N3502	1
	3-gang / Modularity: 2+2+2		
Pearl Glass	**N2273 CP**	2CLA227300N3502	1
	4-gang / Modularity: 2+2+2+2		
Pearl Glass	**N2274 CP**	2CLA227400N3502	1

Product	Article-No.	Order-No.	Pack/Qty
	Frames 1 to 4-gang Material: glass Size (height x width): - 1-gang: 90 x 90 mm. - 2-gang: 90 x 161 mm. - 3-gang: 90 x 232 mm. - 4-gang: 90 x 303 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Coffee Glass	**N2271 CC**	2CLA227100N3702	1
	2-gang / Modularity: 2+2		
Coffee Glass	**N2272 CC**	2CLA227200N3702	1
	3-gang / Modularity: 2+2+2		
Coffee Glass	**N2273 CC**	2CLA227300N3702	1
	4-gang / Modularity: 2+2+2+2		
Coffee Glass	**N2274 CC**	2CLA227400N3702	1
	Frames 1 to 4-gang Material: glass Size (height x width): - 1-gang: 90 x 90 mm. - 2-gang: 90 x 161 mm. - 3-gang: 90 x 232 mm. - 4-gang: 90 x 303 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.99 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Graphite Glass	**N2271 CF**	2CLA227100N3802	1
	2-gang / Modularity: 2+2		
Graphite Glass	**N2272 CF**	2CLA227200N3802	1
	3-gang / Modularity: 2+2+2		
Graphite Glass	**N2273 CF**	2CLA227300N3802	1
	4-gang / Modularity: 2+2+2+2		
Graphite Glass	**N2274 CF**	2CLA227400N3802	1
	Frames 1 to 4-gang Material: glass Size (height x width): - 1-gang: 90 x 90 mm. - 2-gang: 90 x 161 mm. - 3-gang: 90 x 232 mm. - 4-gang: 90 x 303 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
Champagne Glass	1-gang / Modularity: 2		
	N2271 CH	2CLA227100N3902	1
Champagne Glass	2-gang / Modularity: 2+2		
	N2272 CH	2CLA227200N3902	1
Champagne Glass	3-gang / Modularity: 2+2+2		
	N2273 CH	2CLA227300N3902	1
Champagne Glass	4-gang / Modularity: 2+2+2+2		
	N2274 CH	2CLA227400N3902	1

Zenit

Frames for European boxes – Noble

Product	Article-No.	Order-No.	Pack/Qty
	Frames 1 to 4-gang Material: slate Size (height x width): - 1-gang: 90 x 90 mm. - 2-gang: 90 x 161 mm. - 3-gang: 90 x 232 mm. - 4-gang: 90 x 303 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Slate	**N2271 PZ**	2CLA227100N2202	1
	2-gang / Modularity: 2+2		
Slate	**N2272 PZ**	2CLA227200N2202	1
	3-gang / Modularity: 2+2+2		
Slate	**N2273 PZ**	2CLA227300N2202	1
	4-gang / Modularity: 2+2+2+2		
Slate	**N2274 PZ**	2CLA227400N2202	1
	Frames 1 to 4-gang Material: stainless steel Size (height x width): - 1-gang: 90 x 90 mm. - 2-gang: 90 x 161 mm. - 3-gang: 90 x 232 mm. - 4-gang: 90 x 303 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Stainless Steel	**N2271 OX**	2CLA227100N4002	1
	2-gang / Modularity: 2+2		
Stainless Steel	**N2272 OX**	2CLA227200N4002	1
	3-gang / Modularity: 2+2+2		
Stainless Steel	**N2273 OX**	2CLA227300N4002	1
	4-gang / Modularity: 2+2+2+2		
Stainless Steel	**N2274 OX**	2CLA227400N4002	1
	Frames 1 to 4-gang Material: wood Size (height x width): - 1-gang: 90 x 90 mm. - 2-gang: 90 x 161 mm. - 3-gang: 90 x 232 mm. - 4-gang: 90 x 303 mm. Mounting grid code suitable for 60 mm. screw distance boxes: N2271.9, N2271.9G & N2272.9 Flush mounting boxes code: 1099, 1999 & 1999.2 Surface mounting boxes code: 8591, 8592 & 8593		
	1-gang / Modularity: 2		
Wenge	**N2271 WG**	2CLA227100N2102	1
	2-gang / Modularity: 2+2		
Wenge	**N2272 WG**	2CLA227200N2102	1
	3-gang / Modularity: 2+2+2		
Wenge	**N2273 WG**	2CLA227300N2102	1
	4-gang / Modularity: 2+2+2+2		
Wenge	**N2274 WG**	2CLA227400N2102	1

Product	Article-No.	Order-No.	Pack/Qty

Zenit

Product	**Article-No.**	Order-No.	Pack/Qty

Product	**Article-No.**	Order-No.	Pack/Qty

Zenit

Frames for rectangular boxes

01

Standard frame Basic frame

02

03

04

05

06

07

08

09

10

11

12

13

14

1 to 7 modules cover frame
for horizontal and vertical installation

01 Side view, 7,5 x 85 mm
02 Frame blank for 3 modules box
03 Frame 1 module vertical for 3 modules box
04 Frame 1 module for 3 modules box
05 Frame 1 + 1 modules for 3 modules box
06 Frame 2 modules for 3 modules box
07 Frame 3 modules for 3 modules box
08 Frame 4 modules for 4 modules box
09 Frame 7 modules for 7 modules box
10 Frame blank for 4“ x 4“ box
11 Frame 1 + 1 modules for 4“ x 4“ box
12 Frame 2 + 2 modules for 4“ x 4“ box
13 Frame 1 + 1 + 1 + 1 modules for 4“ x 4“ box
14 Frame 3 + 3 modules for 4“ x 4“ box

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Frames for NEMA inserts, 3 modules in square box, metallic and plastic profiles and DIN-rail

15 Frame 1-gang for NEMA inserts
16 Frame 1-gang / 3 modules for square box
17 Frame 1-gang / 1 module for metallic and plastic profiles
18 Frame 2-gang / 1 + 1 modules for metallic and plastic profiles
19 Frame 1-gang / 2 modules for metallic and plastic profiles
20 Adaptor 1-gang / 2 modules for DIN-rail

Zenit

Frames for 3 module boxes

Product	Article-No.	Order-No.	Pack/Qty
	Frames - Blank to 3 modules Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	Blank		
White	**N2370.1 BL**	2CLA237010N1102	10
	1 module		
White	**N2371.1 BL**	2CLA237110N1102	10
	1 module V		
White	**N2371.1V BL**	2CLA237190N1102	10
	2 modules		
White	**N2372.1 BL**	2CLA237210N1102	10
	1+1 modules		
White	**N2372.2 BL**	2CLA237220N1102	10
	3 modules		
White	**N2373.1 BL**	2CLA237310N1102	10

Product	Article-No.	Order-No.	Pack/Qty
	Frames - Blank to 3 modules Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	Blank		
Silver	**N2370.1 PL**	2CLA237010N1302	10
	1 module		
Silver	**N2371.1 PL**	2CLA237110N1302	20
	1 module V		
Silver	**N2371.1V PL**	2CLA237190N1302	10
	2 modules		
Silver	**N2372.1 PL**	2CLA237210N1302	20
	1+1 modules		
Silver	**N2372.2 PL**	2CLA237220N1302	10
	3 modules		
Silver	**N2373.1 PL**	2CLA237310N1302	10

Product	Article-No.	Order-No.	Pack/Qty
	Frames - Blank to 3 modules Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	Blank		
Anthracite	**N2370.1 AN**	2CLA237010N1802	20
	1 module		
Anthracite	**N2371.1 AN**	2CLA237110N1802	10
	1 module V		
Anthracite	**N2371.1V AN**	2CLA237190N1802	10
	2 modules		
Anthracite	**N2372.1 AN**	2CLA237210N1802	10
	1+1 modules		
Anthracite	**N2372.2 AN**	2CLA237220N1802	10
	3 modules		
Anthracite	**N2373.1 AN**	2CLA237310N1802	20

Product	Article-No.	Order-No.	Pack/Qty
	Frames - Blank to 3 modules Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	Blank		
Champagne	**N2370.1 CV**	2CLA237010N1902	10
	1 module		
Champagne	**N2371.1 CV**	2CLA237110N1902	10
	1 module V		
Champagne	**N2371.1V CV**	2CLA237190N1902	10
	2 modules		
Champagne	**N2372.1 CV**	2CLA237210N1902	10
	1+1 modules		
Champagne	**N2372.2 CV**	2CLA237220N1902	20
	3 modules		
Champagne	**N2373.1 CV**	2CLA237310N1902	10

Product	Article-No.	Order-No.	Pack/Qty
	Frames - 2 and 3 modules - Noble Material: glass Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	2 modules		
White Glass	**N2372.1 CB**	2CLA237210N3002	2
	3 modules		
White Glass	**N2373.1 CB**	2CLA237310N3002	2

Product	Article-No.	Order-No.	Pack/Qty
	Frames - 2 and 3 modules - Noble Material: glass Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	2 modules		
Black Glass	**N2372.1 CN**	2CLA237210N3102	2
	3 modules		
Black Glass	**N2373.1 CN**	2CLA237310N3102	2

Zenit

Frames for 3 module boxes

Product	Article-No.	Order-No.	Pack/Qty
	Frames - 2 and 3 modules - Noble Material: slate Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	2 modules		
Slate	**N2372.1 PZ**	2CLA237210N2202	2
	3 modules		
Slate	**N2373.1 PZ**	2CLA237310N2202	2
	Frames - 2 and 3 modules - Noble Material: stainless steel Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	2 modules		
Stainless Steel	**N2372.1 OX**	2CLA237210N4002	2
	3 modules		
Stainless Steel	**N2373.1 OX**	2CLA237310N4002	2
	Frames - 2 and 3 modules - Noble Material: wood Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	2 modules		
Wenge	**N2372.1 WG**	2CLA237210N2102	2
	3 modules		
Wenge	**N2373.1 WG**	2CLA237310N2102	2
	Frames - 3 modules - Metal Material: zamak Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	3 modules		
Snow White	**N2373.1 BN**	2CLA237300N5102	2
	Frames - 3 modules - Metal Material: zamak Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	3 modules		
Touch Black	**N2373.1 NT**	2CLA237300N5502	2

Product	Article-No.	Order-No.	Pack/Qty
	Frames - 3 modules - Metal Material: zamak Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	3 modules		
Polished Steel	**N2373.1 AL**	2CLA237310N5202	2
	Frames - 3 modules - Metal Material: anodized aluminum Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	3 modules		
Onyx	**N2373.1 ON**	2CLA237310N4102	2
	Frames - 3 modules - Metal Material: anodized aluminum Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	3 modules		
Bronze	**N2373.1 BR**	2CLA237310N4402	2
	Frames - 3 modules - Metal Material: anodized aluminum Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	3 modules		
Magnesium	**N2373.1 MG**	2CLA237310N4302	2
	Frames - 3 modules - Metal Material: anodized aluminum Size (height x width): 122 x 90 mm. Mounting plate code suitable for 83,5 mm. screw distance boxes: N2371.9 & N2373.9. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” boxes and American boxes. Flush mounting boxes code: 499.3 Surface mounting boxes code: N2993		
	3 modules		
Silicium	**N2373.1 SI**	2CLA237310N4202	2

Zenit

Frames for 4 module boxes

Product	Article-No.	Order-No.	Pack/Qty
	Frames - 4 modules Size (height x width): 139 x 85 mm Mounting plate code suitable for 107 mm screw distance boxes: N2374.9. Frame and mounting plate also suitable for 4 module Italian type boxes. Flush mounting boxes code: 1499.4 Surface mounting boxes code: N2994		
White	4 modules **N2374.1 BL**	2CLA237410N1102	10
	Frames - 4 modules Size (height x width): 139 x 85 mm Mounting plate code suitable for 107 mm screw distance boxes: N2374.9. Also suitable for 4 module Italian type boxes. Flush mounting boxes code: 1499.4 Surface mounting boxes code: N2994		
Silver	4 modules **N2374.1 PL**	2CLA237410N1302	10
	Frames - 4 modules Size (height x width): 139 x 85 mm Mounting plate code suitable for 107 mm screw distance boxes: N2374.9. Frame and mounting plate also suitable for 4 module Italian type boxes. Flush mounting boxes code: 1499.4 Surface mounting boxes code: N2994		
Anthracite	4 modules **N2374.1 AN**	2CLA237410N1802	10
	Frames - 4 modules Size (height x width): 139 x 85 mm Mounting plate code suitable for 107 mm screw distance boxes: N2374.9. Frame and mounting plate also suitable for 4 module Italian type boxes. Flush mounting boxes code: 1499.4 Surface mounting boxes code: N2994		
Champagne	4 modules **N2374.1 CV**	2CLA237410N1902	10
	Frames - 4 modules - Noble Material: glass Size (height x width): 142 x 90 mm Mounting plate code suitable for 107 mm screw distance boxes: N2374.9. Frame and mounting plate also suitable for 4 module Italian type boxes. Flush mounting boxes code: 1499.4 Surface mounting boxes code: N2994		
White Glass	4 modules **N2374.1 CB**	2CLA237400N3002	10

Product	Article-No.	Order-No.	Pack/Qty
	Frames - 4 modules - Noble Material: glass Size (height x width): 142 x 90 mm Mounting plate code suitable for 107 mm screw distance boxes: N2374.9. Frame and mounting plate also suitable for 4 module Italian type boxes. Flush mounting boxes code: 1499.4 Surface mounting boxes code: N2994		
Black Glass	4 modules **N2374.1 CN**	2CLA237400N3102	2
	Frames - 4 modules - Noble Material: slate Size (height x width): 142 x 90 mm Mounting plate code suitable for 107 mm screw distance boxes: N2374.9. Frame and mounting plate also suitable for 4 module Italian type boxes. Flush mounting boxes code: 1499.4 Surface mounting boxes code: N2994		
Slate	4 modules **N2374.1 PZ**	2CLA237400N2202	2
	Frames - 4 modules - Noble Material: slate Size (height x width): 142 x 90 mm Mounting plate code suitable for 107 mm screw distance boxes: N2374.9. Frame and mounting plate also suitable for 4 module Italian type boxes. Flush mounting boxes code: 1499.4 Surface mounting boxes code: N2994		
Stainless Steel	4 modules **N2374.1 OX**	2CLA237400N4002	2
	Frames - 4 modules - Noble Material: wood Size (height x width): 142 x 90 mm Mounting plate code suitable for 107 mm screw distance boxes: N2374.9. Frame and mounting plate also suitable for 4 module Italian type boxes. Flush mounting boxes code: 1499.4 Surface mounting boxes code: N2994		
Wenge	4 modules **N2374.1 WG**	2CLA237410N2102	2

Zenit

Frames for 7 module boxes

Product	Article-No.	Order-No.	Pack/Qty
	Frames - 7 modules Size (height x width): 205 x 85 mm Mounting plate code suitable for 100 mm screw distance 7 module boxes: N2777.9. Flush mounting boxes code: 1499.7		
White	7 modules **N2777.1 BL**	2CLA277710N1102	5
	Frames - 7 modules Size (height x width): 205 x 85 mm Mounting plate code suitable for 100 mm screw distance 7 module boxes: N2777.9. Flush mounting boxes code: 1499.7		
Silver	7 modules **N2777.1 PL**	2CLA277710N1302	5
	Frames - 7 modules Size (height x width): 205 x 85 mm Mounting plate code suitable for 100 mm screw distance 7 module boxes: N2777.9. Flush mounting boxes code: 1499.7		
Anthracite	7 modules **N2777.1 AN**	2CLA277710N1802	5
	Frames - 7 modules Size (height x width): 205 x 85 mm Mounting plate code suitable for 100 mm screw distance 7 module boxes: N2777.9. Flush mounting boxes code: 1499.7		
Champagne	7 modules **N2777.1 CV**	2CLA277710N1902	5

Product	Article-No.	Order-No.	Pack/Qty

Zenit

Frames for 4” x 4” boxes

Product	Article-No.	Order-No.	Pack/Qty
	Frames - Blank to 6 modules Size (height x width): 122 x 138 mm. Mounting plate code suitable for 4” x 4” boxes: N2673.9.		
	Blank		
White	**N2670 BL**	2CLA267000N1102	5
	1+1 modules		
White	**N2671.1 BL**	2CLA267110N1102	5
	2+2 modules		
White	**N2672.2 BL**	2CLA267220N1102	5
	1+1+1+1 modules		
White	**N2672.4 BL**	2CLA267240N1102	5
	3+3 modules		
White	**N2673.6 BL**	2CLA267360N1102	5
	Frames - Blank to 6 modules Size (height x width): 122 x 138 mm. Mounting plate code suitable for 4” x 4” boxes: N2673.9.		
	Blank		
Silver	**N2670 PL**	2CLA267000N1302	5
	1+1 modules		
Silver	**N2671.1 PL**	2CLA267110N1302	5
	2+2 modules		
Silver	**N2672.2 PL**	2CLA267220N1302	5
	1+1+1+1 modules		
Silver	**N2672.4 PL**	2CLA267240N1302	5
	3+3 modules		
Silver	**N2673.6 PL**	2CLA267360N1302	5
	Frames - Blank to 6 modules **Size (height x width): 122 x 138 mm.** **Mounting plate code suitable for 4” x 4” boxes: N2673.9.**		
	Blank		
Anthracite	**N2670 AN**	2CLA267000N1802	5
	1+1 modules		
Anthracite	**N2671.1 AN**	2CLA267110N1802	5
	2+2 modules		
Anthracite	**N2672.2 AN**	2CLA267220N1802	5
	1+1+1+1 modules		
Anthracite	**N2672.4 AN**	2CLA267240N1802	5
	3+3 modules		
Anthracite	**N2673.6 AN**	2CLA267360N1802	5

Product	Article-No.	Order-No.	Pack/Qty
	Frames - Blank to 6 modules **Size (height x width): 122 x 138 mm.** **Mounting plate code suitable for 4” x 4” boxes: N2673.9.**		
	Blank		
Champagne	**N2670 CV**	2CLA267000N1902	5
	1+1 modules		
Champagne	**N2671.1 CV**	2CLA267110N1902	5
	2+2 modules		
Champagne	**N2672.2 CV**	2CLA267220N1902	5
	1+1+1+1 modules		
Champagne	**N2672.4 CV**	2CLA267240N1902	5
	3+3 modules		
Champagne	**N2673.6 CV**	2CLA267360N1902	5
	Frames - 6 modules - Noble Material: glass Size (height x width): 122 x 138 mm. Mounting plate code suitable for 4” x 4” boxes: N2673.9.		
	3+3 modules		
White Glass	**N2673.6 CB**	2CLA267360N3002	2
	Frames - 6 modules - Noble Material: glass Size (height x width): 122 x 138 mm. Mounting plate code suitable for 4” x 4” boxes: N2673.9.		
	3+3 modules		
Black Glass	**N2673.6 CN**	2CLA267360N3102	2
	Frames - 6 modules - Noble Material: slate Size (height x width): 122 x 138 mm. Mounting plate code suitable for 4” x 4” boxes: N2673.9.		
	3+3 modules		
Slate	**N2673.6 PZ**	2CLA267360N2202	2
	Frames - 6 modules - Noble Stainless Steel Material: stainless steel Size (height x width): 122 x 138 mm. Mounting plate code suitable for 4” x 4” boxes: N2673.9.		
	3+3 modules		
Stainless Steel	**N2673.6 OX**	2CLA267360N4002	2
	Frames - 6 modules - Noble Material: wood Size (height x width): 122 x 138 mm. Mounting plate code suitable for 4” x 4” boxes: N2673.9.		
	3+3 modules		
Wenge	**N2673.6 WG**	2CLA267360N2102	5

Zenit

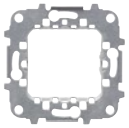
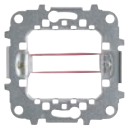
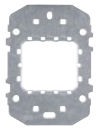
Frames for NEMA inserts and 3 modules in square boxes

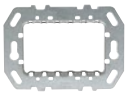
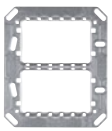
Product	Article-No.	Order-No.	Pack/Qty
	Frames - NEMA rectangular devices Size (height x width): 117 x 85 mm. Wallplate for rectangular face NEMA devices (max: 2,62" H x 1,3" W)		
	1-gang		
White	**N2473.6 BL**	2CLA247360N1102	20
	Frames - NEMA rectangular devices Size (height x width): 117 x 85 mm. Wallplate for rectangular face NEMA devices (max: 2,62" H x 1,3" W)		
	1-gang		
Silver	**N2473.6 PL**	2CLA247360N1302	20
	Frames - NEMA rectangular devices Size (height x width): 117 x 85 mm. Wallplate for rectangular face NEMA devices (max: 2,62" H x 1,3" W)		
	1-gang		
Anthracite	**N2473.6 AN**	2CLA247360N1802	20
	Frames - NEMA rectangular devices Size (height x width): 117 x 85 mm. Wallplate for rectangular face NEMA devices (max: 2,62" H x 1,3" W)		
	1-gang		
Champagne	**N2473.6 CV**	2CLA247360N1902	20

Product	Article-No.	Order-No.	Pack/Qty
	Frames - 3 modules in squeare box Size (height x width): 90 x 90 mm. Mounting plate code suitable for 60 mm. screw distance boxes: N2573.9. Flush mounting boxes code: 1099.		
	1-gang		
White	**N2573 BL**	2CLA257300N1102	20
	Frames - 3 modules in squeare box Size (height x width): 90 x 90 mm. Mounting plate code suitable for 60 mm. screw distance boxes: N2573.9. Flush mounting boxes code: 1099.		
	1-gang		
Silver	**N2573 PL**	2CLA257300N1302	20
	Frames - 3 modules in squeare box **Size (height x width): 90 x 90 mm.** **Mounting plate code suitable for 60 mm. screw distance boxes: N2573.9.** **Flush mounting boxes code: 1099.**		
	1-gang		
Anthracite	**N2573 AN**	2CLA257300N1802	20
	Frames - 3 modules in squeare box Size (height x width): 90 x 90 mm. Mounting plate code suitable for 60 mm. screw distance boxes: N2573.9. Flush mounting boxes code: 1099.		
	1-gang		
Champagne	**N2573 CV**	2CLA257300N1902	20

Zenit

Mounting plates and accesories

Product	Article-No.	Order-No.	Pack/Qty
	**Mounting plate for European box** For horizontal and vertical installation. To be installed with frames code: N2171 and N227X. Mounting plate suitable for 60 mm screw distance boxes code: 1099, 1999 & 1999.2 or surface mounting boxes code: 8591, 8592 & 8593. With aligning flaps for multigang frames. Optional: elastic claws N2071.9.		
	1-gang / 2 modules **N2271.9**	2CLA227190N1002	20
	**Mounting plate for European box with clamps** For horizontal and vertical installation. For horizontal and vertical installation. To be installed with frames code: N2171 and N227X. Mounting plate suitable for 60 mm screw distance boxes code: 1099, 1999 & 1999.2 or surface mounting boxes code: 8591, 8592 & 8593. With aligning flaps for multigang frames. Included: fixing claws.		
	1-gang / 2 modules **N2271.9 G**	2CLA227190N1102	20
	Mounting plate for European box For horizontal installation. To be installed with frames code: - N2272: 1x N2272.9. - N2273: 1x N2272.9 + 1x N2271.9. - N2274: 2x N2272.9. - N2275: 2x N2272.9 + 1x N2271.9. Mounting plate suitable for 60 mm screw distance boxes code: 1099, 1999 & 1999.2 or surface mounting boxes code: 8592 & 8593. With aligning flaps for multigang frames.		
	2-gang / 2+2 modules **N2272.9**	2CLA227290N1002	20
	Mounting plate for European box For horizontal installation. To be installed with frames code: - N2273: 1x N2273.9 - N2274: 1x N2273.9 + 1x N2271.9. - N2275: 1x N2273.9 + 1x N2272.9. Mounting plate suitable for 60 mm screw distance boxes code: 1099, 1999 & 1999.2 or surface mounting boxes code: 8592 & 8593. With aligning flaps for multigang frames.		
	3-gang / 2+2+2 modules **N2273.9**	2CLA227390N1002	20
	**Mounting plate for 3 module box - Vertical** Mounting plate that facilitates the assembly of 1 and 2 module devices in vertical installations. To be installed with frames code: N2371.1V and N2372.1. Mounting plate suitable for 83,5 mm screw distance boxes code: 499.3 or surface mounting boxes code: N2993.		
	1-gang / 2 modules **N2371.9V**	2CLA237190N1002	20

Product	Article-No.	Order-No.	Pack/Qty
	**Mounting plate for 3 module box** For horizontal and vertical installation of 1, 2 or 3 module devices. To be installed with frames code: N2370.1, N2371.1, N2372.1, N2372.2 and N2273.1. Mounting plate suitable for 83,5 mm screw distance boxes code: 499.3 or surface mounting boxes code: N2993.		
	1-gang / 3 modules **N2373.9**	2CLA237390N1002	20
	Mounting plate for European box For horizontal and vertical installation of 1, 2 or 3 module devices. To be installed with frames code: N2374.1. Mounting plate suitable for 107 mm screw distance boxes code: 1499.4 or surface mounting boxes code: N2994.		
	1-gang / 4 modules **N2374.9**	2CLA237490N1002	20
	Mounting plate for 7 module box For horizontal and vertical installation of 1, 2 or 3 module devices. To be installed with frames code: N2777.1. Mounting plate suitable for 100 mm screw distance boxes code: 1499.7.		
	1-gang / 7 modules **N2777.9**	2CLA277790N1002	20
	**Mounting plate for 4”x4” box** For horizontal and vertical installation of 1, 2 or 3 module devices. To be installed with frames code: N2670, N2671.1, N2672.2, N2672.4 and N2673.6. Mounting plate suitable for 4””x4”” boxes.		
	2-gang / 3+3 modules **N2673.9**	2CLA267390N1002	10
	Mounting plate for square box - 3M For horizontal and vertical installation in square boxes of 1, 2 or 3 module devices. To be installed with frames code: N2573. Mounting plate suitable for 60 mm screw distance boxes code: 1099.		
	1-gang / 3 modules **N2573.9**	2CLA257390N1002	20
	Accessory for elastic claws Accessory that facilitates the installation of 1 module devices in mounting plate N2271.9 with the elastic claws N2071.9.		
	N2071.8	2CLA207180N1002	10
	Elastic claws Fixing elastic claws for mounting plates code: N2271.9.		
	N2071.9	2CLA207190N1002	20

Zenit

free@home sensors

Product	Article-No.	Order-No.	Pack/Qty
	free@home Sensor unit 1-gang - 2M For sending switching, dimming and blind commands to an ABB-free@home® actuator. To be used with ABB-free@home® 2 fold push buttons. Control element: Switch contacts top/ bottom. Display elements: LED as light for orientation or display. of switching state. Protection class of device: IP 20. Mounting depth: 14,1 mm. To be installed with SR-2-N2 cover plates.		
	SU-F-1.0.PB.1	2CKA006220A0222	1
	free@home Sensor unit 2-gang - 2M For sending switching, dimming and blind commands. to an ABB-free@home® actuator. To be used with ABB-free@home® 4 fold push buttons. Control element: Switch contacts top/ bottom. Display elements: LED as light for orientation or display of switching state. Protection class of device: IP 20. Mounting depth: 14,1 mm. To be installed with SR-4-N2 cover plates.		
	SU-F-2.0.PB.1	2CKA006220A0223	1
	free@home Sensor/Switch actuator 1/1-gang - 2M For switching 230 V~ devices. With 1 integrated switch actuator. Switching function is available pre-configured. Use with ABB-free@home® 2 fold push buttons. Outputs: 1× normally open contact, potential free. Suitable for: resistive. Rated current: 10 A. Rated power: 2300 W. Suitable for: capacitive. Rated current: 10 AX. Protection class of device: IP 20. Mounting depth: 31,5 mm. To be installed with SR-2-N2 cover plates.		
	SSA-F-1.1.PB.1	2CKA006220A0232	1
	free@home Sensor/Switch actuator 2/1-gang - 2M For switching 230 V~ devices. With 1 integrated switch actuator. Switching function is available pre-configured. Use with ABB-free@home® 4 fold push buttons. Outputs: 1× normally open contact, potential free. Suitable for: resistive. Rated current: 10 A. Rated power: 2300 W. Suitable for: capacitive. Rated current: 10 AX. Protection class of device: IP 20. Mounting depth: 31,5 mm. To be installed with SR-4-N2 cover plates.		
	SSA-F-2.1.PB.1	2CKA006220A0233	1

Product	Article-No.	Order-No.	Pack/Qty
	free@home Sensor/Switch actuator 2/2-gang - 2M For switching 230 V~ devices. With 1 integrated switch actuator. Switching function is available pre-configured. Use with ABB-free@home® 4 fold push buttons. Outputs: 2× normally open contact, potential free. Suitable for: resistive. Rated current: 10 A. Rated power: 2 x 1200 W. Suitable for: capacitive. Rated current: 10 AX. Protection class of device: IP 20. Mounting depth: 31,5 mm. To be installed with SR-4-N2 cover plates.		
	SSA-F-2.2.PB.1	2CKA006220A0234	1
	free@home Sensor/Dimmer actuator 1/1-gang - 2M For dimming 230 V~ loads. With integrated universal dimming. Actuator for controlling different lamps. The dimming function. Is available pre-configured. Use with ABB-free@home® 2 fold. Push buttons. Outputs: 1× dimming channel. Suitable for: 230 V incandescent lamps and low-voltage. Halogen lamps with conventional transformers or electronic. Transformers. Rated power: 10–180 W/VA. Suitable for: LEDi and energy-saving bulbs. Rated power: 2–80 W/VA. Protection class of device: IP 20. Mounting depth: 31,5 mm. To be installed with SR-2-N2 cover plates.		
	SDA-F-1.1.PB.1	2CKA006220A0235	1
	free@home Sensor/Dimmer actuator 2/1-gang - 2M For dimming 230 V~ loads. With integrated universal dimming actuator for controlling different lamps. The dimming function is available pre-configured. Use with ABB-free@home® 4 fold push buttons. Outputs: 1× dimming channel. Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Rated power: 10–180 W/VA. Suitable for: LEDi and energy-saving bulbs. Rated power: 2–80 W/VA. Protection class of device: IP 20. Mounting depth: 31,5 mm. To be installed with SR-4-N2 cover plates.		
	SDA-F-2.1.PB.1	2CKA006220A0236	1

Zenit

free@home sensors

Product	Article-No.	Order-No.	Pack/Qty
	free@home Sensor/Blind actuator 1/1-gang - 2M For controlling blind and awning motors. With integrated blind actuator. Blind function is available pre-configured. To be used with ABB-free@home® 2 fold push buttons. Outputs: 1× Change-over contacts/normally open contact, potential-bound. Rated power: 920 VA. Rated current: 4 A. Suitable for: Operating mode blind. Protection class of device: IP 20. Mounting depth: 31,5 mm. To be installed with SR-2-N2 cover plates.		
	SBA-F-1.1.PB.1	2CKA006220A0237	1
	free@home Sensor/Blind actuator 2/1-gang - 2M For controlling blind and awning motors. With integrated blind actuator. Blind function is available pre-configured. To be used with ABB-free@home® 4 fold push buttons. Outputs: 1× Change-over contacts/normally open contact, potential-bound. Rated power: 920 VA. Rated current: 4 A. Suitable for: Operating mode blind. Protection class of device: IP 20. Mounting depth: 31,5 mm. To be installed with SR-4-N2 cover plates.		
	SBA-F-2.1.PB.1	2CKA006220A0238	1
	free@home Room temperature controller - 2M Room temperature control function for controlling commercially available valve drives or analogue valve drives (continuous controllers). With display of set-value temperature. Only to be used with ABB-free@home® Zenit cover plates for room thermostat. Display elements: LCD Display showing operation modes. Protection class of device: IP 20. Mounting depth: 17,9 mm. To be installed with CP-RTC-N2 or CP-RTC-FC-N2 cover plates.		
	RTC-F-1.PB	2CKA006220A0276	1

Product	Article-No.	Order-No.	Pack/Qty
	free@home 180° motion sensor - 2M With select lens for detection with animal access. For automatic switching of ABB-free@home® actuators dependent on movement and brightness. To be used with ABB-free@home® Zenit cover plates for movement detector. Detection range: frontal 6 m, lateral 3 m. Detection angle: 180°. Brightness limit value: 1 – 500 lux. Protection class of device: IP 20. Mounting depth: 14.1 mm. To be installed with CP-MD-N2 cover plates.		
	MD-F-1.0.PB.1	2CKA006220A0229	1
	free@home 180° motion sensor/actuator - 2M With select lens for detection with animal access. Including an integrated actuator for switching 230 V~ devices. To be used with ABB-free@home® Zenit cover plates for movement detector. Outputs: 1× normally open contact, potential free. Suitable for: resistive. Rated current: 10 A. Rated power: 2300 W. Suitable for: capacitive. Rated current: 10 AX. Detection range: frontal 6 m, lateral 3 m. Detection angle: 180°. Brightness limit value: 1 – 500 lux. Protection class of device: IP 20. Mounting depth: 31.5 mm. To be installed with CP-MD-N2 cover plates.		
	MSA-F.1.1.PB.1	2CKA006220A0231	1

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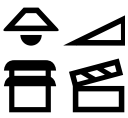
free@home sensors

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate - free@home 1-gang sensors - 2M Cover plate for free@home sensors and sensor/ actuators with 1-gang sensors code: SU-F-1.0.PB.1, SSA-F-1.1.PB.1, SDA-F-1.1.PB.1 and SBA-F-1.1.PB.1. Included: 2 buttons without symbol.		
White	**SR-2-N2 BL**	2CLA222620N1102	5
Silver	**SR-2-N2 PL**	2CLA222620N1302	5
Anthracite	**SR-2-N2 AN**	2CLA222620N1802	5
Champagne	**SR-2-N2 CV**	2CLA222620N1902	5
	Cover plate - free@home 2-gang sensors - 2M Cover plate for free@home sensors and sensor/ actuators with 2-gang sensors code: SU-F-2.0.PB.1, SSA-F-2.1.PB.1, SSA-F-2.2.PB.1, SDA-F-2.1.PB.1 and SBA-F-2.1.PB.1. Included: 4 buttons without symbol.		
White	**SR-4-N2 BL**	2CLA222640N1102	5
Silver	**SR-4-N2 PL**	2CLA222640N1302	5
Anthracite	**SR-4-N2 AN**	2CLA222640N1802	5
Champagne	**SR-4-N2 CV**	2CLA222640N1902	5
	Cover plate - free@home RTC - 2M Cover plate with RTC symbols for free@home room temperature controler code RTC-F-1.PB.		
White	**CP-RTC-N2 BL**	2CLA224060N1102	5
Silver	**CP-RTC-N2 PL**	2CLA224060N1302	5
Anthracite	**CP-RTC-N2 AN**	2CLA224060N1802	5
Champagne	**CP-RTC-N2 CV**	2CLA224060N1902	5
	Cover plate - free@home fan coil control - 2M Cover plate with fan coil control symbols for free@home room temperature controler code RTC-F-1.PB.		
White	**CP-RTC-FC-N2 BL**	2CLA225420N1102	1
Silver	**CP-RTC-FC-N2 PL**	2CLA225420N1302	1
Anthracite	**CP-RTC-FC-N2 AN**	2CLA225420N1802	1
Champagne	**CP-RTC-FC-N2 CV**	2CLA225420N1902	1
	Cover plate - free@home motion sensor - 2M Cover plate for free@home motion sensors and sensor/actuators code: MD-F-1.0.PB.1 and MSA-F.1.1.PB.1.		
White	**CP-MD-N2 BL**	2CLA224160N1102	5
Silver	**CP-MD-N2 PL**	2CLA224160N1302	5
Anthracite	**CP-MD-N2 AN**	2CLA224160N1802	5
Champagne	**CP-MD-N2 CV**	2CLA224160N1902	5

Product	Article-No.	Order-No.	Pack/Qty
	**free@home button with symbol** Button with free@home symbol for sensor and sensor/actuator's cover plates code: SR-2-N2 and SR-4-N2. - SBL: light symbol. - SBB: blind symbol. - SBS: scene symbol. - SBD: dimmer symbol.		
White	**SBL-N2BL**	2CLA202610N1102	20
Gray	**SBL-N2GR**	2CLA202610N1402	20
White	**SBB-N2BL**	2CLA202620N1102	20
Gray	**SBB-N2GR**	2CLA202620N1402	20
White	**SBS-N2BL**	2CLA202630N1102	20
Gray	**SBS-N2GR**	2CLA202630N1402	20
White	**SBD-N2BL**	2CLA202640N1102	20
Gray	**SBD-N2GR**	2CLA202640N1402	20

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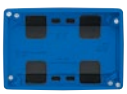
free@home

Product	Article-No.	Order-No.	Pack/Qty
	ABB-free@homeTouch 7” For the central control of up to 16 configurable ABB-free@home® functions of type: switching, dimming, blind, RTC, scene, Philips HUE. Display of the video image of the outdoor station of ABB-Welcome door entry system. Suitable as room temperature controller extension unit (up to 8). Surface mounting. The bus can be connected via enclosed terminal block. Display size / resolution: 17.8 cm (7’’) / 800 x 480 Consumer units: 11 Display elements: TFT Touch Display Dimensions: (L x W x D): 155 mm x 218 mm x 29 mm Programming only with bus voltage applied via the web interface of the System Access Point. The power is supplied by the ABB-Welcome system controller or when using the ABB-free@home panel without an ABB-Welcome system, a separate ABB 24 V- power supply is required. Protection class (device): IP30 Temperature range (device): -5 °C to 40 °C		
White	**DP7-S-611**	2CKA008300A0356	1
Black	**DP7-S-625**	2CKA008300A0357	1
	ABB-free@homeTouch 4.3” For the central control of up to 16 configurable ABB-free@home® functions. For the display of configurable system messages. A configurable primary function can be triggered with a multi-touch gesture. Capacitive touch screen with closed glass surface. With integrated room temperature controller and temperature sensor. In connection with temperature sensor 6226/T the integrated room temperature controller can be fitted with a remote sensor. Suitable as room temperature controller extension unit (up to 8). Requires additional ABB power supply 24 VDC. Display size / resolution: 10.9 cm (4.3’’) / 480 x 854. Mounting height: 8 mm. Control element: freely programmable touch surfaces. Display elements: LCD display Bus voltage: 24 V- Dimensions: (L x W x D): 104 mm x 143 mm x 53 mm Programming only with bus voltage applied via the web interface of the System Access Point. Protection class (device): IP20 Temperature range (device): -5 °C to 40 °C		
White	**DP4-1-611**	2CKA006220A0119	1
Black	**DP4-1-625**	2CKA006220A0120	1
	**Flush mounting installation box** For flush-mounted in hollow-wall installation of the ABB-free@homeTouch 4.3”. Windproof. Installation dimensions (H x W x D): 82 mm. x 123 mm. x 50 mm. Mounting depth: 50 mm. Halogen free.		
Black	**DP4-F**	2CKA006220A0389	1

Product	Article-No.	Order-No.	Pack/Qty
	Temperature sensor For use as remote sensor with ABB- free@homeTouch 4.3”. Line type: H03 VV-F Cable length: 4 m Type: NTC 10 kohm.		
	DP4-T-1	2CKA006220A0721	1
	System Access Point - Wireless For commissioning and remote control of the ABB-free@home® system. With integrated free@home wireless antenna. With integrated free@home bus connection. Allows the execution of astro and time programs. Commissioning and remote control is executed via the web interface or app. No additional commissioning software is required. Easy commissioning with WLAN ad-hoc mode. WLAN modes switchable via local operation. Connection to the home network via WLAN client mode or via CAT cable. The bus connection is provided via the enclosed bus terminal. Display elements: LED for status display. Rated voltage: 230 V~; 50/60 Hz. Bus voltage: 24 V. Dimensions: (L x W x D): 110 mm x 170 mm x 31 mm Programming via the web interface of the System Access Point. Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C		
	SAP-S-2	2CKA006200A0105	1
	External antenna - Wireless For use with System Access Point SAP-S-2 and SAP-S-127.2. Feed the free@home wireless signal to the outside when the internal antenna of the System Access Point is shielded due to structural conditions. With magnetic base. Cable length: 1.5 m.		
	SAP-1-WL	2CKA006200A0100	1
	Weather station For recording and transmitting of brightness, temperature, wind speed and rain. Weather data can be linked with actuators to automatically control functions. Weather data can be visualized in the free@home web interface and the free@home app. Wind speed measuring range 2 - 30 m/s The bus can be connected via enclosed terminal block. Rated voltage: 110 V~ - 230 V~; 50/60 Hz. Bus voltage: 24 V- Inputs: 4 Temperature range (sensor): Brightness limit value: 1 lux - 100000 lux Dimensions: (L x W x D): 108 mm x 121 mm x 227 mm Protection class (device): IP44 Temperature range (device): -20 °C to 55 °C		
	WS-1	2CKA006220A0390	1

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Product	Article-No.	Order-No.	Pack/Qty
	Power supply Power supply with integrated choke. Fast diagnosis due to LED display for operational readiness and errors. The bus can be connected via enclosed terminal block. Display elements: operational load/overload LED Rated voltage: 127 V~ - 230 V~, +10 % / -15 %; 50/60Hz Secondary: 30 V, +2 V / --2 V Outputs: 1 Rated current: 640 mA Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C Dimensions: (L x W x D): 90 mm x 72 mm x 64 mm Module width (DIN-rail): 4 MW		
	PS-M-64.1.1	2CDG510001R0011	1
	Binary input 2-gang Conventional push-buttons or auxiliary contacts can be connected to 2 channels. The information of the contact scanning can be used for activating ABB-free@home® actuators or for recording status information. The contact polling voltage is made available from the binary input itself. Extension of the connecting cables possible by a maximum of 10 m. Flush-mounted device for installation in a 60 mm device box or distribution box. The bus can be connected via enclosed terminal block. Programming only with bus voltage applied via the web interface of the System Access Point. Bus voltage: 24 V Inputs: 2 Polling voltage: 20 V- Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C Dimensions: (L x W x D): 39 mm x 40 mm x 12 mm.		
	BI-F-2.0.1	2CDG510002R0011	1
	Binary input 4-gang Conventional push-buttons or auxiliary contacts can be connected to 4 channels. The information of the contact scanning can be used for activating ABB-free@home® actuators or for recording status information. The contact polling voltage is made available from the binary input itself. Extension of the connecting cables possible by a maximum of 10 m. Flush-mounted device for installation in a 60 mm device box or distribution box. The bus can be connected via enclosed terminal block. Programming only with bus voltage applied via the web interface of the System Access Point. Bus voltage: 24 V Inputs: 4 Polling voltage: 20 V- Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C Dimensions: (L x W x D): 39 mm x 40 mm x 12 mm		
	BI-F-4.0.1	2CDG510003R0011	1

Product	Article-No.	Order-No.	Pack/Qty
	Binary input 4-gang The device detects AC/DC signals of 10 - 230 V via 4 channels. The information of the signal evaluation can be used for controlling ABB-free@home® actuators or for recording status information. The bus can be connected via enclosed terminal block. Programming only with bus voltage applied via the web interface of the System Access Point. Bus voltage: 24 V Inputs: 4 Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C Dimensions: (L x W x D): 90 mm x 36 mm x 64 mm Module width DIN-rail): 2 MW		
	BI-M-4.0.1	2CDG510004R0011	1
	Binary input 8-gang / switch actuator 8-gang Combination device with 8 binary inputs and 8 switch actuators. Conventional push-buttons or auxiliary contacts can be connected to 8 channels. The information of the contact scanning can be used for activating ABB-free@home® actuators or for recording status information. The contact polling voltage is made available by the device itself. Maximum cable length at a cable cross-section of 1.5 mm² < 100 m For switching 8 independent 230 V~ loads. No additional commissioning software is required. Programming only with bus voltage applied via the web interface of the System Access Point. Bus voltage: 24 V Inputs: 8 Polling voltage: 35 V- Outputs: 8 Normally Open contact, potential free Suitable for: AC1 (Output voltage: 230 V~) Rated current: 6 A, cos ϕ0.8 Suitable for: AC3 (Output voltage: 230 V~) Rated current: 6 A, cos ϕ0.45 Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C Dimensions: (L x W x D): 90 mm x 144 mm x 64.5 mm Module width (DIN-rail): 8 MW.		
	SA-M-8.8.1	2CDG510007R0011	1
	Switch actuator 4-gang For switching 4 independent 127 V~/230 V~ loads. Each contact has a manual operation function independent of auxiliary voltage for additionally displaying the contact setting. The bus can be connected via enclosed terminal block. Control element: relay control element. Display elements: relay control element. Programming only with bus voltage applied via the web interface of the System Access Point. Power dissipation: 4 W Bus voltage: 24 V Outputs: 4 Suitable for: AC1 (Output voltage: 230 V~) Rated current: 16 A, cos ϕ0.8 Suitable for: AC3 Rated current: 8 A, cos ϕ0.45 Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C Dimensions: (L x W x D): 90 mm x 72 mm x 64 mm Module width (DIN-rail): 4 MW.		
	SA-M-0.4.1	2CDG510006R0011	1

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Product	Article-No.	Order-No.	Pack/Qty
	Dimming actuator 4-gang Multi-channel universal dimming actuator for controlling LEDs, incandescent lamps, 230 V halogen lamps, low-voltage halogen lamps with conventional or electronic transformers, and dimmable energy-saving halogen lamps. For dimmable Retrofit-LEDs (LEDi). Increasing the max. load via channel bridging possible. The outputs can be switched parallel in any combination. Outputs automatically recognize the connected load. In addition, the operating mode can be selected manually. Status indication of the channels via LED. The bus can be connected via enclosed terminal block. Display elements: outputs status indication via LED. Programming only with bus voltage applied via the web interface of the System Access Point. Rated voltage: 230 V~; 50/60 Hz Bus voltage: 24 V Outputs: 4 dimming channel Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer. Rated power: 10 - 315 W/VA Suitable for: LEDi and energy-saving bulbs; typical Rated power: 2 - 80 W/VA Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C Dimensions: (L x W x D): 90 mm x 144 mm x 64 mm Module width (DIN-rail): 8 MW.		
	DA-M-0.4.2	2CKA006220A0395	1
	Blind actuator 4-gang For controlling 4 independent blind or roller shutter drives. The outputs are inversely blocked. The bus can be connected via enclosed terminal block. Programming only with bus voltage applied via the web interface of the System Access Point. Power dissipation: 2 W Bus voltage: 24 V Outputs: 4 Suitable for: AC3 (Output voltage: 230 V~) Rated current: 6 A, cos ϕ0.45 Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C Dimensions: (L x W x D): 90 mm x 72 mm x 64 mm Module width (DIN-rail): 4 MW.		
	BA-M-0.4.1	2CDG510011R0011	1
	Heating actuator 6-gang For controlling thermoelectric actuating drives in heating/cooling systems. The outputs are protected against short-circuit and overload. The bus can be connected via enclosed terminal block. Programming only with bus voltage applied via the web interface of the System Access Point. Power dissipation: 2 W Bus voltage: 24 V Outputs: 6 Suitable for: resistive Rated current: 160 mA Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C. Dimensions: (L x W x D): 90 mm x 72 mm x 64 mm. Module width (DIN-rail): 4 MW.		
	HA-M-0.6.1	2CDG510008R0011	1

Product	Article-No.	Order-No.	Pack/Qty
	Heating actuator 12-gang For controlling thermoelectric actuating drives in heating/cooling systems. The outputs are protected against short-circuit and overload. The bus can be connected via enclosed terminal block. Programming only with bus voltage applied via the web interface of the System Access Point. Power dissipation: 4 W Bus voltage: 24 V Outputs: 12 Suitable for: ohmic Rated current: 160 mA Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C Dimensions: (L x W x D): 90 mm x 144 mm x 64 mm. Module width: 8 MW.		
	HA-M-0.12.1	2CDG510009R0011	1
	Fan coil actuator For controlling blower convectors. Supports 2-pipe and 4-pipe system for heating and cooling. The fan speed levels can be switched using a changeover or step switch function. Three contacts for switching a three-stage fan. Two contacts for activating the heating and cooling valves. Supports 24V and 230V valves. With two binary inputs for connecting dew-point and condensation contacts. The scanning voltage is provided by the device. The bus connection is provided via the enclosed bus terminal. Programming only with bus voltage applied via the web interface of the System Access Point. Bus voltage: 24 V Inputs: 2 Polling voltage: 10 V- Outputs: 3 Normally Open contact, potential free Suitable for: AC3 (Output voltage: 230 V~) Rated current: 6 A Protection class (device): IP20 Temperature range (device): -5 °C to 45 °C. Dimensions: (L x W x D): 90 mm x 108 mm x 64.5 mm. Module width (DIN-rail): 6 MW.		
	FCA-M-2.3.1	2CDG510010R0011	1

Zenit

Zenit KNX sensors

Product	Article-No.	Order-No.	Pack/Qty
	KNX sensor - 1/2-gang - 2M For ABB i-bus® KNX. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The accompanying symbol can be replaced by the symbols for lighting, blinds, room thermostat, szene and FanCoil. Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function. Temperature range (Device): -5 °C to 45 °C. To be installed with N2221.2 cover plates.		
	6125/98-509	2CKA006115A0444	1
	KNX sensor - 2/4-gang - 2M For ABB i-bus® KNX. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The accompanying symbol can be replaced by the symbols for lighting, blinds, room thermostat, szene and FanCoil. Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function. Temperature range (Device): -5 °C to 45 °C. To be installed with N2221.4 cover plates.		
	6126/98-509	2CKA006116A0219	1
	KNX sensor - 3/6-gang - 2M For ABB i-bus® KNX. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The accompanying symbol can be replaced by the symbols for lighting, blinds, room thermostat, szene and FanCoil. Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function. Temperature range (Device): -5 °C to 45 °C. To be installed with N2221.6 cover plates.		
	6129/96-509	2CKA006118A0105	1

Product	Article-No.	Order-No.	Pack/Qty
	KNX sensor - 3/6-gang with IR receiver - 2M For ABB i-bus® KNX. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The accompanying symbol can be replaced by the symbols for lighting, blinds, room thermostat, szene and FanCoil. Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function. Temperature range (Device): -5 °C to 45 °C. To be installed with N2221.7 cover plates.		
	6129/98-509	2CKA006118A0108	1
	KNX room temperature controller - 2M For ABB i-bus® KNX. Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a thermostat for Fan Coil units in 2 - and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Switch contacts for operating mode selection and dial for setpoint or fan speed adjustment. Display elements: LCD showing operation modes. Temperature range (Device): -5 °C to 45 °C. To be installed with N2240.4 cover plates.		
	6124/98-509	2CKA006134A0297	1
	KNX 180° motion sensor - 2M For ABB i-bus® KNX. Movement detector with up to 4 channels. Protection class (Device): IP 20. Temperature range (Device): -5 °C to 45 °C. Detection range: frontal: 6 m, lateral: 6 m. Brightness limit value: 5 Lux - 150 Lux. Detection angle: 180 ° Dimensions: (L x W x D): 53 mm x 44 mm. Position for installation: vertical. Mounting height: 1.1 m. To be installed with N2241.4 cover plates.		
	6122/98-509	2CKA006132A0307	1

Zenit

Zenit KNX sensors

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate - KNX 1/2-gang sensors - 2M Cover plate for KNX sensors 1/2-gang code: 6125/98-509.		
White	**N2221.2 BL**	2CLA222120N1102	1
Silver	**N2221.2 PL**	2CLA222120N1302	1
Anthracite	**N2221.2 AN**	2CLA222120N1802	1
Champagne	**N2221.2 CV**	2CLA222120N1902	1
	Cover plate - KNX 2/4-gang sensors - 2M Cover plate for KNX sensors 2/4-gang code: 6126/98-509.		
White	**N2221.4 BL**	2CLA222140N1102	1
Silver	**N2221.4 PL**	2CLA222140N1302	1
Anthracite	**N2221.4 AN**	2CLA222140N1802	1
Champagne	**N2221.4 CV**	2CLA222140N1902	1
	Cover plate - KNX 3-gang sensors - 2M CCover plate for KNX sensors 3/6-gang code: 6129/96-509.		
White	**N2221.6 BL**	2CLA222160N1102	1
Silver	**N2221.6 PL**	2CLA222160N1302	1
Anthracite	**N2221.6 AN**	2CLA222160N1802	1
Champagne	**N2221.6 CV**	2CLA222160N1902	1
	Cover plate - KNX 3-gang sensors with IR - 2M Cover plate for KNX sensors 3/6-gang with IR receiver code: 6129/98-509.		
White	**N2221.7 BL**	2CLA222170N1102	1
Silver	**N2221.7 PL**	2CLA222170N1302	1
Anthracite	**N2221.7 AN**	2CLA222170N1802	1
Champagne	**N2221.7 CV**	2CLA222170N1902	1

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate - KNX RTC - 2M Cover plate for KNX RTC sensors code: 6124/98-509.		
White	**N2240.4 BL**	2CLA224040N1102	1
Silver	**N2240.4 PL**	2CLA224040N1302	1
Anthracite	**N2240.4 AN**	2CLA224040N1802	1
Champagne	**N2240.4 CV**	2CLA224040N1902	1
	Cover plate - KNX RTC - 2M Cover plate for KNX RTC sensors code: 6124/98-509.		
White	**N2241.4 BL**	2CLA224140N1102	1
Silver	**N2241.4 PL**	2CLA224140N1302	1
Anthracite	**N2241.4 AN**	2CLA224140N1802	1
Champagne	**N2241.4 CV**	2CLA224140N1902	1
	KNX button with symbol Button with ABB i-bus® KNX symbol for sensor's cover plates code: N2221.2, N2221.4, N2221.6 and N2221.7. - 6123/20-500: light symbol. - 6123/21-500: blind symbol. - 6123/22-500: scene symbol. - 6123/23-500: RTC symbol. - 6123/24-500: ceiling light symbol. - 6123/26-500: fan coil symbol.		
Gray	**6123/20-500**	2CKA006123A0001	1
Gray	**6123/21-500**	2CKA006123A0002	1
Gray	**6123/22-500**	2CKA006123A0003	1
Gray	**6123/23-500**	2CKA006123A0004	1
Gray	**6123/24-500**	2CKA006123A0005	1
Gray	**6123/26-500**	2CKA006123A0006	1

Impressivo
Zest for life.

Convenient, adaptable and modular. Has got the ability to do whatever you can imagine. A modern design combined with functions which meet all requirements of contemporary living. Impressivo amazes with its flexibility. Flush and surface mounting is possible in common dry and wet environments.

01 white
02 aluminium
03 anthracite

Materials
UV-resistant, free of PVC and halogen.

Impressivo

Selected functions.

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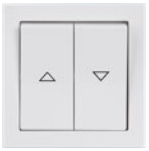
03 

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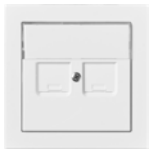
15 

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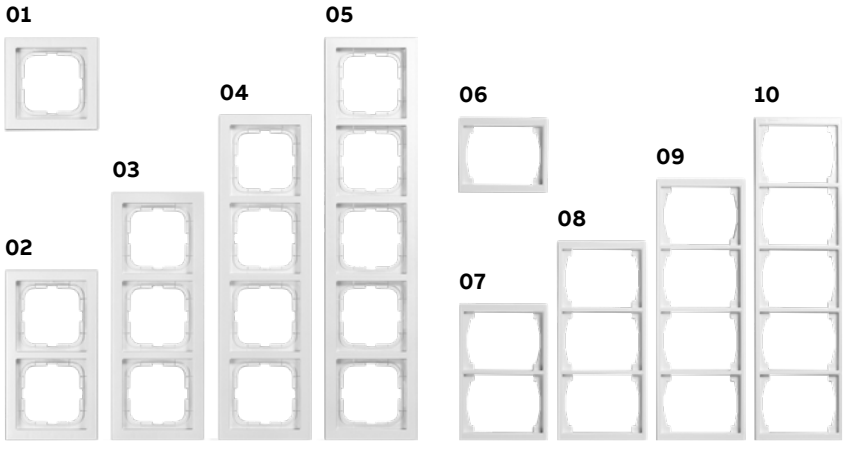
01 Rocker switch 1gang
02 Rocker switch 2gang
03 2-gang push switch
04 3-gang 1-way switch
05 Switch rocker 1-gang, “bell” symbol
06 Comfort switch
07 Rotary dimmer
08 SCHUKO® socket outlet
09 SCHUKO® USB socket outlet
10 USB charging station
11 Euro socket outlet
12 Double SCHUKO® socket outlet
13 2-gang SCHUKO® socket outlet, IP 44
14 Residual current device
15 RJ45 outlet with sliding dust covers
16 IceLight with symbol
17 Movement detector
18 LED signal light
19 Thermostat
20 Timer
21 Timer
22 4/2-gang push button panel
23 DigitalRadio
24 Loudspeaker for DigitalRadio
25 KNX-thermostat
26 ABB-free@home®, 2-gang switch



1 to 5gang cover frame for horizontal and vertical installation
01 85 mm x 85 mm
02 85 mm x 156 mm
03 85 mm x 227 mm
04 85 mm x 298 mm
05 85 mm x 369 mm

1 to 5gang cover frame for double socket outlets, for horizontal and vertical installation
06 100 mm x 85 mm
07 100 mm x 156 mm
08 100 mm x 227 mm
09 100 mm x 298 mm
10 100 mm x 369 mm

For more information about light switch ranges visit ABB global web sites.

Impressivo

Rocker switches, push switches

Product	Article-No.	Order-No.	Pack/Qty
	Flush mounting 1-gang switches, IP21 Switches with screwless terminals and rocker with clip-on fastening. The terminals are for max 2 rigid wires. Flush mounting on a smooth surface IP21.		
	Includes switch insert and rocker		
	1-gang 2-way switch, 16AX/250V, 2 X-terminals		
white	**1066UC-84**	2TKA00000419	1/10
	1-gang intermediate switch, 16AX/250V, 2 X-terminals		
white	**1067UC-84**	2TKA00000422	1/10
	Modular		
	1-gang 2-way switch insert, 16AX/250V, 2 X-terminals, lamp possibility		
	1066.21	2TKA000175G1	10/100
	1-gang intermediate switch insert, 16AX/250V, 2 X-terminals, lamp possibility		
	1067.21	2TKA000201G1	10/100
	Double pole 1-gang 2-way switch insert, 16AX/250V, no X-terminals, lamp possibility		
	10662.00	2TKA000177G1	10/100
	Switch rocker, 1-gang		
white	**1786-84**	2TKA000543G1	1/10
	Switch rocker, 1-gang		
anthracite	**1786-81**	2TKA000541G1	1/10
	Switch rocker, 1-gang		
aluminium	**1786-83**	2TKA000542G1	1/10
	Flush mounting 1-gang 1-way push switch, IP21 Push switches with screwless terminals and rocker with clip-on fastening. The terminals are for max 2 rigid wires. Flush mounting on a smooth surface IP21.		
	Includes switch insert and rocker		
	1-gang 2-way push switch, 16A/250V, 1N terminal		
white	**1466UC-84**	2TKA00000430	1/10
	Modular		
	1-gang 1-way push switch insert 16A/250V, 2 X-terminals, lamp possibility		
	1461.21	2TKA000227G1	10/100
	Switch rocker, 1-gang		
white	**1786-84**	2TKA000543G1	1/10
	Switch rocker, 1-gang		
anthracite	**1786-81**	2TKA000541G1	1/10
	Switch rocker, 1-gang		
aluminium	**1786-83**	2TKA000542G1	1/10
	Switch rocker, 1-gang, "light" symbol, lens		
white	**1789LI-84**	2TKA000569G1	1/10
	Switch rocker, 1-gang, "light" symbol, lens		
anthracite	**1789LI-81**	2TKA000567G1	1/10
	Switch rocker, 1-gang, "light" symbol, lens		
aluminium	**1789LI-83**	2TKA000568G1	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Flush mounting 2-pole switch, IP21 Switches with screwless terminals and rocker with clip-on fastening. The terminals are for max 2 rigid wires. Flush mounting on a smooth surface IP21.		
	Includes switch insert and rocker		
	2-pole 1-gang 1-way switch, 16AX/250V, 2 X-terminals		
white	**1062UC-84**	2TKA00000407	1/10
	Modular		
	Switch insert, 16AX/250V, 2-pole, 2 X-terminals, lamp possibility		
	1062.21	2TKA000130G1	10/100
	Switch rocker, 1-gang, red lens, "1/0" symbol		
anthracite	**1788-81**	2TKA000549G1	1/10
	Switch rocker, 1-gang, red lens, "1/0" symbol		
aluminium	**1788-83**	2TKA000550G1	1/10
	Flush mounting 2-gang switches, IP21 Switches with screwless terminals and rocker with clip-on fastening. The terminals are for max 2 rigid wires. Flush mounting on a smooth surface IP21.		
	Includes switch insert and rocker		
	2-gang 1-way switch, 16AX/250V, 2 X-terminals		
white	**1065UC-84**	2TKA00000413	1/10
	2-gang 2-way switch, 16AX/250V, no X-terminals		
white	**10666UC-84**	2TKA00000416	1/10
	Modular		
	2-gang 1-way switch insert, 16AX/250V, 2 X-terminals, no lamp possibility		
	1065.20	2TKA000158G1	10/100
	2-gang 2-way switch insert, 16AX/250V, no X-terminals, no lamp possibility		
	10666.00	2TKA000179G1	10/100
	Switch rocker, 2-gang		
white	**1785-84**	2TKA000523G1	1/10
	Switch rocker, 2-gang		
anthracite	**1785-81**	2TKA000521G1	1/10
	Switch rocker, 2-gang		
aluminium	**1785-83**	2TKA000522G1	1/10
	Flush mounting 2-pole + 1-way switch, IP21 The switch has one 1-way switch and one 2-pole 1 switch together. Switches with screwless terminals and rocker with clip-on fastening. The terminals are for max 2 rigid wires. Flush mounting on a smooth surface IP21. No X-terminals.		
	Includes switch insert and rocker		
white	**10621UC-84**	2TKA00000404	1/10
anthracite	**10621UC-81**	2TKA00000402	1/10
aluminium	**10621UC-83**	2TKA00000403	1/10

Impressivo

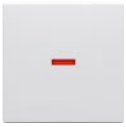
Rocker switches, push switches

Product	Article-No.	Order-No.	Pack/Qty
	2-gang push switch inserts 2-gang push switches with screwless terminals and rocker with clip-on fastening. The terminals are for max 2 rigid wires. Flush mounting on a smooth surface IP21.		
	Modular		
	Push switch insert 10A/250V, for up/down control		
	2020/4U-101	2TKA000640G1	10/100
	Switch rocker, 2-gang, "up/down" symbol		
white	**1785JA-84**	2TKA000532G1	1/10
	Switch rocker, 2-gang, "up/down" symbol		
anthracite	**1785JA-81**	2TKA000530G1	1/10
	Switch rocker, 2-gang, "up/down" symbol		
aluminium	**1785JA-83**	2TKA000531G1	1/10
	Flush mounting 3-gang 1-way switch, IP21 Switches with screwless terminals and rocker with clip-on fastening. The terminals are for max 2 rigid wires. Flush mounting on a smooth surface IP21.		
	Includes switch insert and rocker		
	3-gang 1-way switch, 16AX/250V, no X-terminals		
white	**10631UC-84**	2TKA00000410	1/10
	Modular		
	3-gang 1-way switch insert, 16AX/250V, no X-terminals, no lamp possibility		
	10631.00	2TKA000147G1	10/100
	Switch rocker, 3-gang		
anthracite	**1783-81**	2TKA000514G1	1/10
	Switch rocker, 3-gang		
aluminium	**1783-83**	2TKA000515G1	1/10
	Flush mounting 1-gang 2-way switch, IP44 Product includes switch insert, rocker, cover frame, screw-mounted rocker frame and seal. Screwless terminals are for max 2 rigid wires. Flush mounting on rough surface IP44. 16AX/250V, no X-terminals.		
	1066UW-84	2TKA000200G1	1/10
	Flush mounting 2-gang 1-way switch, IP44 Product includes switch insert, rocker, cover frame, screw-mounted rocker frame and seal. Screwless terminals are for max 2 rigid wires. Flush mounting on rough surface IP44. 16AX/250V, no X-terminals		
	1065UW-84	2TKA000173G1	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Card switch Card switch can be used, for example, as a hotel room ”main switch”. The card switch is operated with a credit card sized card. Delivery includes a 230V lamp.		
	Card switch insert, 16AX/250V, 2-pole, no X terminals, lamp included		
	8114.1	2TKA003950G1	10/100
	Center plate, for card switch 8114.1		
white	**1792-84**	2TKA000581G1	1/10
	Center plate, for card switch 8114.1		
anthracite	**1792-81**	2TKA000579G1	1/10
	Center plate, for card switch 8114.1		
aluminium	**1792-83**	2TKA000580G1	1/10
	Lamp, 230V/1.5mA, fluorescent, for card switch		
	8331	2TKA000042G1	10/100
	Push button panel 4/2-gang, 5-24V ac/dc 4/2-gang push button panel to control bistable relays or electronic control systems. Load capacity 1A AC/DC. White LED-light with adjustable illumination. Installation on surface or on top of a standard flush mounting box.		
white	**FAP1204-84**	2TKA00000915	1/10
anthracite	**FAP1204-81**	2TKA00000913	1/10
aluminium	**FAP1204-83**	2TKA00000914	1/10
	1-gang rockers, IP21/IP44 1-gang rockers for all 1-gang switch inserts. Flush- and surface mounting: Protection class IP21, and IP44 with a seal and screw fastening rocker frame.		
white	**1786-84**	2TKA000543G1	1/10
anthracite	**1786-81**	2TKA000541G1	1/10
aluminium	**1786-83**	2TKA000542G1	1/10
	1-gang rockers with name plate, IP21/IP44 1-gang rockers for all 1-gang switch inserts. Flush- and surface mounting: Protection class IP21, and IP44 with a seal and screw fastening rocker frame. The rockers have a name plate (59,7 mm x 11,7 mm) with a strip for writing. The delivery includes one blank strip and one strip with the text "MASTER".		
white	**1764NLI-84**	2TKA000492G1	1/10
anthracite	**1764NLI-81**	2TKA000490G1	1/10
aluminium	**1764NLI-83**	2TKA000491G1	1/10

Impressivo

Rocker switches, push switches

Product	Article-No.	Order-No.	Pack/Qty
	**1-gang rockers with red lens, IP21/IP44** 1-gang rockers for all 1-gang switch inserts. Flush- and surface mounting: Protection class IP21, and IP44 with a seal and screw fastening rocker frame. The rockers contain a red lens.		
	Switch rocker, 1-gang, red lens		
white	**1789-84**	2TKA000559G1	1/10
	Switch rocker, 1-gang, red lens		
anthracite	**1789-81**	2TKA000557G1	1/10
	Switch rocker, 1-gang, red lens		
aluminium	**1789-83**	2TKA000558G1	1/10
	1-gang rockers with transparent lens and "light" symbol, IP21/IP44 1-gang rockers for all 1-gang switch inserts. Flush- and surface mounting: Protection class IP21, and IP44 with a seal and screw fastening rocker frame. The rocker contains transparent lens and "Light" symbol.		
white	**1789LI-84**	2TKA000569G1	1/10
anthracite	**1789LI-81**	2TKA000567G1	1/10
aluminium	**1789LI-83**	2TKA000568G1	1/10
	1-gang rockers with transparent lens and "key" symbol, IP21/IP44 1-gang rockers for all 1-gang switch inserts. Flush- and surface mounting: Protection class IP21, and IP44 with a seal and screw fastening rocker frame. The rocker contains transparent lens and "key" symbol.		
white	**1789TR-84**	2TKA000574G1	1/10
anthracite	**1789TR-81**	2TKA000572G1	1/10
aluminium	**1789TR-83**	2TKA000573G1	1/10
	1-gang rockers with transparent lens and "bell" symbol, IP21/IP44 1-gang rockers for all 1-gang switch inserts. Flush- and surface mounting: Protection class IP21, and IP44 with a seal and screw fastening rocker frame. The rocker contains transparent lens and "bell" symbol.		
white	**1789KL-84**	2TKA000564G1	1/10
anthracite	**1789KL-81**	2TKA000562G1	1/10
aluminium	**1789KL-83**	2TKA000563G1	1/10
	Seal for switches, IP44 Seal for 85mm cover frame. Switches and push switches are IP21 when installed on a rough surface with a seal. Protection class is IP44 when using screw-mounted rocker frame with a seal.		
	2463	2TKA000002G1	20/200

Product	Article-No.	Order-No.	Pack/Qty
	Screw-mounted rocker frames, IP44 Screw-mounted rocker frames are used with the seals 2463 or 2464 to reach IP44 protection class on switches and push switches. Furthermore, it can be used to connect the switch frame to the insert for improved security.		
	Supporting frame for 1/3-gang rocker, screw fastening		
	2474	2TKA000004G1	20/200
	Supporting frame for 2-gang rocker, screw fastening		
	2475	2TKA000005G1	20/200
	Lamps for switches Lamps for switches and push buttons. Lamps can be installed in 1-gang switch inserts that include the signal-/search light possibility. Lamps can't be installed in 2- or 3-gang switch inserts.		
	Lamp, 230V/0.4mA, fluorescent, for 1-gang switches		
	8370	2TKA000045G1	10/100
	Lamp, 230V/2mA, fluorescent, for 1-gang switches		
	8372	2TKA000047G1	10/100
	Lamp, 24V/22mA, incandescent, for 1-gang switches		
	8375	2TKA000048G1	10/100
	Lamp, 12V/40mA, incandescent, for 1-gang switches		
	8376	2TKA000049G1	10/100
	Lamp, 230V/1.5mA, fluorescent, for card switch		
	8331	2TKA000042G1	10/100
	Lamp, 250V/0.4mA, LED, for 1-gang switches		
	8370R	2TKA00003241	10/100
	Lamp, 5-24V/0,5-2,5mA, LED, for 1-gang switches		
	8375R	2TKA00003242	10/100

Impressivo

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Flat LED-dimmer, with rotary control Rotary control dimmer for LED lamps. Via mode switch adjustable between leading edge control (RL) or trailing edge control (RC). 2-wire connection (N-wire not needed). Nominal power: 2 - 100 VA or 10-400W (details in manual). Linear and low-noise operation. Mixed loads allowed. Electronic short-circuit and overload protection. Adjustable minimum brightness. Also applicable for 1-gang 2-way installations. Nominal voltage 230 V/50-60 Hz. Maximum 20 LED lamps behind one dimmer. Compatibility with defined Philips LED lamps is guaranteed. 		
	LED dimmer, rotary 2-100VA, with neon lamp		
	6523URCGL-84-103		1/10
	LED dimmer, rotary 2-100VA, insert with neon lamp		
	6523UR-103-500		1/10
	Dimmer center plate, with neon lamp		
white	**6540-84-101**	2TKA001454G1	1/10
	Dimmer center plate, with neon lamp		
anthracite	**6540-81-101**	2TKA001452G1	1/10
	Dimmer center plate, with neon lamp		
aluminium	**6540-83-101**	2TKA001453G1	1/10

Note! There might be limitations from transformer producers on how many dimmable LED bulbs can be connected behind one transformer.

	LED-dimmer, with rotary control Rotary control dimmer for LED lamps. Via mode switch adjustable between leading edge control (RL) or trailing edge control (RC). 2-wire connection (N-wire not needed). Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 250 W/VA (non-LED loads). Linear and low-noise operation. Mixed loads allowed. Electronic short-circuit and overload protection. Adjustable minimum brightness. Also applicable for 1-gang 2-way installations. Nominal voltage 230 V/50-60 Hz. Maximum 20 LED lamps behind one dimmer. Compatibility with defined Philips LED lamps is guaranteed. 		
	LED dimmer insert, rotary 2-100VA		
	6523U-102-500	2TKA00001113	1/10
	Dimmer center plate, with neon lamp		
white	**6540-84-101**	2TKA001454G1	1/10
	Dimmer center plate, with neon lamp		
anthracite	**6540-81-101**	2TKA001452G1	1/10
	Dimmer center plate, with neon lamp		
aluminium	**6540-83-101**	2TKA001453G1	1/10

Note! There might be limitations from transformer producers on how many dimmable LED bulbs can be connected behind one transformer.

Product	Article-No.	Order-No.	Pack/Qty
	DALI-potentiometrs For DALI broadcast service (via central telegram) according standard IEC 62386. For switching and dimming up to 64 DALI- devices like electronic ballasts and transformers with DALI-interface. With (2117/11U-500)or without (2117U-500) power supply. No center plate or frame included.		
	Inserts		
	DALI potentiometer insert		
	2117U-500	2TKA00001861	1/10
	With integrated power supply		
	2117/11U-500	2TKA00001865	1/10
	Dimmer center plate, with neon lamp		
white	**6540-84-101**	2TKA001454G1	1/10
anthracite	**6540-81-101**	2TKA001452G1	1/10
aluminium	**6540-83-101**	2TKA001453G1	1/10

	230 V Rotation dimmer for incandescent- and halogen lamps 230 V dimmer for incandescent- and halogen lamps. Push switch function, change over contact. Nominal voltage: 230 V/50 Hz. Fuse T3,15 A/250 V. 		
	Includes insert and center plate		
	Dimmer, 60-600 VA, with neon lamp		
white	**2250UC-84**	2TKA00000472	1/10
	Sold in parts		
	Dimmer, 60-600 VA, insert		
	2250U	2TKA000723G1	1/10
	Dimmer center plate, with neon lamp		
white	**6540-84-101**	2TKA001454G1	1/10
	Dimmer center plate, with neon lamp		
anthracite	**6540-81-101**	2TKA001452G1	1/10
	Dimmer center plate, with neon lamp		
aluminium	**6540-83-101**	2TKA001453G1	1/10

Impressivo

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Dimmer for conventional transformers (low-voltage halogen) Dimmer for conventional transformers (low voltage -halogen). Push switch function, change over contact. Nominal voltage: 230 V/50 Hz. Suitable also for 230 V incandescent- and halogen lamps. Fuse T3, 15A/250V. **Includes insert and center plate**		
	Dimmer, 20-500 VA, with neon lamp		
white	**2247UC-84**	2TKA00000479	1/10
	Sold in parts		
	Dimmer insert, 20-500 VA		
	2247U	2TKA000721G1	1/10
	Dimmer insert, 200-1000 VA		
	6520U	2TKA001447G1	1/10
	Dimmer center plate, with neon lamp		
white	**6540-84-101**	2TKA001454G1	1/10
	Dimmer center plate, with neon lamp		
anthracite	**6540-81-101**	2TKA001452G1	1/10
	Dimmer center plate, with neon lamp		
aluminium	**6540-83-101**	2TKA001453G1	1/10
	Dimmer/switch combination for conventional transformes Dimmer/switch combination 400 VA + 6 A switch. For controlling two light groups. One lighting group is connected and controlled by rotating the knob (1-pole switch). The other group is switched on/off by pressing the knob (2-way switch). Adjusting the other lighting group is possible by installing a separate dimmer equipped with a 2-way switch to the group. Fuse T3, 15 A/250 V. **Sold in parts**		
	Dimmer/switch combination insert 60-400 VA + 6 A switch		
	6517U-101	2TKA001443G1	1/10
	Dimmer center plate, with neon lamp		
white	**6540-84-101**	2TKA001454G1	1/10
	Dimmer center plate, with neon lamp		
anthracite	**6540-81-101**	2TKA001452G1	1/10
	Dimmer center plate, with neon lamp		
aluminium	**6540-83-101**	2TKA001453G1	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Dimmer for electronic halogen transformers Dimmer for electronic halogen transformers. Push switch function, change over contact. Nominal voltage: 230 V/50 Hz. Electronic short circuit- and overload protection. Suitable also for 230V incandescent- and halogen lamps. **Includes insert and center plate**		
	El. transformer dimmer, 40-420 VA, with neon lamp		
white	**6513UC-84**	2TKA00000475	1/10
	Sold in parts		
	El. transformer dimmer insert, 40-420 VA		
	6513U-102	2TKA001438G1	1/10
	El. transformer dimmer insert, 40-550 VA		
	6519U	2TKA001445G1	1/10
	Dimmer center plate, with neon lamp		
white	**6540-84-101**	2TKA001454G1	1/10
	Dimmer center plate, white, "0" marking		
white	**6544-84-501**	2TKA00000898	1/10
	Dimmer center plate, with neon lamp		
anthracite	**6540-81-101**	2TKA001452G1	1/10
	Dimmer center plate, anthracite, "0" marking		
anthracite	**6544-81-501**	2TKA00000896	1/10
	Dimmer center plate, with neon lamp		
aluminium	**6540-83-101**	2TKA001453G1	1/10
	Dimmer center plate, aluminium, "0" marking		
aluminium	**6544-83-501**	2TKA00000897	1/10
	Universal dimmer 420VA Universal dimmer 40-420 VA. Push switch function. Dimmer for incandescent lamps, electronic or conventional transformers. Not suitable for fluorescent lamps. Nominal voltage: 230 V/50 Hz. Electronic short circuit- and overload protection. **Sold in parts**		
	Universal dimmer insert 40-420 VA, 230 V incandescent and halogen lamps and electronic or conventional transformers		
	6591U-101	2TKA001483G1	1/10
	Dimmer center plate, with neon lamp		
white	**6540-84-101**	2TKA001454G1	1/10
	Dimmer center plate, with neon lamp		
anthracite	**6540-81-101**	2TKA001452G1	1/10
	Dimmer center plate, with neon lamp		
aluminium	**6540-83-101**	2TKA001453G1	1/10

Impressivo
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Potentiometer 1-10 V Potentiometer 1-10 V. For controlling electronic control gears for fluorescent lamps, analogy adjustment (IEC 929). Nominal voltage: 230 V/50 Hz. Control current max. 50 mA DC. Switching capability 4 A cos ϕ 0,9. Up to 4 control gears can be directly connected to 1 dimmer. With larger loads an external relay or contactor must be used.		
	Includes insert and center plate		
	Potentiometer 1-10 V		
white	**2112UC-84**	2TKA00000309	1/10
	Sold in parts		
	Potentiometer insert 1-10 V		
	2112U-101	2TKA000702G1	1/10
	Dimmer center plate, with neon lamp		
white	**6540-84-101**	2TKA001454G1	1/10
	Dimmer center plate, with neon lamp		
anthracite	**6540-81-101**	2TKA001452G1	1/10
	Dimmer center plate, with neon lamp		
aluminium	**6540-83-101**	2TKA001453G1	1/10
	LED-Touch Dimmer Touch dimmer for LED lamps. Leading and trailing edge control (RLC-type). 2-wire connection. Rated power 2 - 100 VA. Linear and low-noise operation. Mixed loads allowed. Electronic short-circuit and overload protection. Adjustable minimum brightness. Nominal voltage 230 V/50-60 Hz. Also applicable for 1-gang 2-way installations. Operation also possible via conventional push buttons (Functions: on, off and dim). Maximum 20 LED lamps behind one dimmer. Compatibility with defined Philips LED lamps is guaranteed.		
	Sold in parts		
	LED dimmer push button		
	6526U-500	2TKA00002920	1/10
	Touch dimmer center plate, with neon lamp		
white	**6543-84-101**	2TKA001469G1	1/10
	Touch dimmer center plate, with neon lamp		
anthracite	**6543-81-101**	2TKA001467G1	1/10
	Touch dimmer center plate, with neon lamp		
aluminium	**6543-83-101**	2TKA001468G1	1/10

Note! There might be limitations from transformer producers on how many dimmable LED bulbs can be connected behind one transformer.

Product	Article-No.	Order-No.	Pack/Qty
	Touch dimmer 420 VA Universal touch dimmer 60-420 VA. For 230 V incandescent- and halogen lamps, electronic or conventional transformers. 3-wire connection. Not suitable for fluorescent lamps. Nominal voltage 230 V, 50 Hz. Also applicable for 1-gang 2-way installations. Electronic short circuit- and overload protection. 230 V closing push buttons can be used as extension controllers for on/off and control functions.		
	Sold in parts		
	Universal touch dimmer insert 60-420 VA.		
	6593U	2TKA001487G1	1/10
	Touch dimmer center plate, with neon lamp		
white	**6543-84-101**	2TKA001469G1	1/10
	Touch dimmer center plate, with neon lamp		
anthracite	**6543-81-101**	2TKA001467G1	1/10
	Touch dimmer center plate, with neon lamp		
aluminium	**6543-83-101**	2TKA001468G1	1/10
	2-gang dimmer, 2 x 40-315 VA, with memory Dimmer for 230 V incandescent and halogen lamps or halogen lamps with electronic transformers. Nominal voltage 230 V/50 Hz. Electronic short circuit- and overload protection. For switching and dimming 2 independent groups. Suitable center plates 6545-8x.		
	Sold in parts		
	Memory 2-gang dimmer insert, 2 x 40-315 VA.		
	6565U	2TKA001479G1	1/10
	2-gang dimmer center plate, with neon lamp		
white	**6545-84**	2TKA001474G1	1/10
	2-gang dimmer center plate, with neon lamp		
anthracite	**6545-81**	2TKA001472G1	1/10
	2-gang dimmer center plate, with neon lamp		
aluminium	**6545-83**	2TKA001473G1	1/10
	Touch controller 1-10 V Touch controller 1-10 V. For conrolling electronic control gears for fluorescent lamp, analogy adjustment (IEC 929). Nominal voltage: 230 V/50 Hz. Control current max. 50 mA DC. Coupling ability 4 A cos ϕ 0,9 or cos ϕ 0,5. 4 gears can be directly connected to one dimmer. With larger loads an external relay or contactor must be used. 230 V closing push buttons can be used as extension dimmers for on/off and control functions.		
	Sold in parts		
	Touch controller 1-10 V, insert		
	6550U-101	2TKA001477G1	1/10
	Touch dimmer center plate, with neon lamp		
white	**6543-84-101**	2TKA001469G1	1/10
	Touch dimmer center plate, with neon lamp		
anthracite	**6543-81-101**	2TKA001467G1	1/10
	Touch dimmer center plate, with neon lamp		
aluminium	**6543-83-101**	2TKA001468G1	1/10

Note! Neon indication lamp does not work in this application.

Impressivo

Movement detectors

Product	Article-No.	Order-No.	Pack/Qty
	Comfort switch 230V, IP20, for flush mounting, 2-wire or 3-wire models. Detection angle 170°. Detection range: frontal: 5 m, lateral: 3 m. Operation also possible with 230V conventional push buttons. Brightness limit value: 0.5 Lux - 300 Lux. Switch-off delay: 1 to 10 min. Mounting height: 0.8 m - 1.2 m.		
	Includes insert and center plate		
	Comfort switch, relay 10A, 3-wire connection		
white	**6816UC-84**	2TKA00000478	1/10
	Sold in parts		
	Comfort switch insert, 40-300 W/VA, 2-wire connection		
	6815U	2TKA001525G1	1/10
	Comfort switch relay insert 10A, 3-wire connection		
	6816U	2TKA001529G1	1/10
	Comfort switch sensor		
white	**6815-84**	2TKA001522G1	1/10
	Comfort switch sensor		
anthracite	**6815-81**	2TKA001520G1	1/10
	Comfort switch sensor		
aluminium	**6815-83**	2TKA001521G1	1/10
	Motion detector 180 Comfort multiple surveillance 230 V, 10 A relay, IP20, for flush mounting. Detection area 180º. The area has been extended approximately 35º downwards. This enables e.g. the surveillance of a stairway from an upper platform. The detection range depends on the mounting height; for more information, see the specifications. Adjustable lighting level 5 - 250 lux, switch-off delay 10sec-30min. Three-way operating switch (off - automatic - always on), which can be locked to the automatic position.		
	Sold in parts		
	Universal relay unit insert, 10 A		
	6401U-102	2TKA001428G1	1/10
	Motion detector sensor 180 Comfort multiple surveillance		
white	**6800-84-104M**	2TKA001509G1	1/10
	Motion detector sensor 180 Comfort multiple surveillance		
anthracite	**6800-81-104M**	2TKA001505G1	1/10
	Motion detector sensor 180 Comfort multiple surveillance		
aluminium	**6800-83-104M**	2TKA001507G1	1/10
	Motion detector 180 Comfort 230 V, 10 A relay, IP20, for flush mounting. Detection area 180 degrees, approximately 8 m to the sides and approximately 12 m to the front at the mounting height. Adjustable lighting level 5-250 lux, switch-off delay 2 sec.-30 min. Three-way operating switch (off - automatic - always on), which can be locked to the automatic position. Mounting height 1-1.2 m.		
	Sold in parts		
	Universal relay unit insert, 10 A		
	6401U-102	2TKA001428G1	1/10
	Motion detector sensor 180 Comfort		
white	**6800-84-104**	2TKA001508G1	1/10
	Motion detector sensor 180 Comfort		
anthracite	**6800-81-104**	2TKA001504G1	1/10
	Motion detector sensor 180 Comfort		
aluminium	**6800-83-104**	2TKA001506G1	1/10

Timers

Product	Article-No.	Order-No.	Pack/Qty
	Countdown timer User friendly timer with fixed time settings 15min, 30min, 1h, 2h, 4h or 8h. Countdown time is set with a screwdriver. 2-pole switch.		
	Includes insert and center plate		
white	**T210-84**	2TKA00000875	1/10
anthracite	**T210-81**	2TKA00000876	1/10
aluminium	**T210-83**	2TKA00000877	1/10
	Timer switches Timer switch display, 10 A. Four switching times per day can be user-defined for each day of the week. Automatic summer/wintertime switch-over. 14-hour power reserve. Nominal voltage: 230 V/50 Hz. Operating temperature range: 0 °C - 35 °C. Timer switch insert is connected to universal relay unit 6401U-102. Suitable center plates 6435-8X.		
	Inserts		
	Universal relay unit insert, 10 A		
	6401U-102	2TKA001428G1	1/10
	Timer switch display		
	6455-101-500	2TKA000025G1	1/10
	Centre plates		
white	**6435-84**	2TKA001434G1	1/10
aluminium	**6435-83**	2TKA001433G1	1/10

Impressivo
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	3-gang Euro socket outlets, flush mounting IP21 Product includes euro socket outlet insert and center plate. The socket outlet insert has shutters and screwless N and L terminals for max 4 wires and 2 screwless X-terminals for max 2 wires. The terminals are for rigid wires. Branching terminals.		
white	**303UC-84**	2TKA00000433	1/10
anthracite	**303UC-81**	2TKA00000340	1/10
aluminium	**303UC-83**	2TKA00000451	1/10
	2-gang Schuko socket outlets, flush mounting, with cover plate, IP21 Product includes Schuko socket outlet insert and cover plate. The socket outlet insert has shutters and screwless terminals for max 4 rigid wires. Branching terminals.		
white	**302EUJ-84**	2TKA000952G1	1/10
anthracite	**302EUJ-81**	2TKA000951G1	1/10
aluminium	**302EUJ-83**	2TKA00000442	1/10
	2-gang Schuko socket outlets, flush mounting in special 1,5 x box, IP21 Product includes Schuko socket outlet insert and cover plate. There are screwless terminals for each contact of the socket outlet for max 4 rigid wires. No X-terminals. The socket outlet insert has shutters. Flush mounting on a smooth surface IP21. Very flat construction. Installation in special 1,5X mounting box. Branching terminals.		
white	**302EUJT-84**	2TKA00002007	1/10
anthracite	**302EUJT-81**	2TKA00002005	1/10
aluminium	**302EUJT-83**	2TKA00002006	1/10
	2-gang Schuko socket outlets, flush mounting, IP21 Product includes Schuko socket outlet insert and center plate. The socket outlet insert has shutters and screwless terminals for max 4 rigid wires. Branching terminals.		
white	**302EUC-84**	2TKA00000431	1/10
anthracite	**302EUC-81**	2TKA00000440	1/10
aluminium	**302EUC-83**	2TKA00000441	1/10
	2-gang Schuko outlets with special colour, IP21 Product includes Schuko socket outlet insert and center plate. The socket outlet insert has shutters and screwless terminals for max 4 rigid wires. These socket outlets can be used, for instance, in hospitals and offices, when there is a need to limit socket outlet use to certain applications. Flush mounting: On a smooth surface IP21, on a rough surface with a seal IP21. Surface mounting: IP21. Branching terminals.		
red	**302EUC-02**	2TKA00002962	1/10
orange	**302EUC-03**	2TKA00002963	1/10
green	**302EUC-05**	2TKA00002964	1/10
blue	**302EUC-06**	2TKA00002965	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Flush mounting 2-gang Schuko socket outlets with lid IP21 Product includes Schuko socket outlet insert, center plate with lid. The socket outlet insert has shutters and screwless terminals. The terminals are for max 2 rigid wires. Flush mounting on slide surface IP21 and with seal 2464 on rough surface IP44. The seal 2464 is not included in delivery. Branching terminals.		
white	**302EUCK-84**	2TKA00003033	1/10
anthracite	**302EUCK-81**	2TKA00003031	1/10
aluminium	**302EUCK-83**	2TKA00003032	1/10
	Non-earthed flush mounting 2-gang socket outlets IP21, with cover plate Product includes socket outlet insert, center plate and cover frame. The socket outlet insert has shutters and screwless terminals for max 4 rigid wires. Claws can be fitted to socket outlet afterwards. Branching terminals.		
white	**302UJ-84**	2TKA00000432	1/10
anthracite	**302UJ-81**	2TKA00000339	1/10
aluminium	**302UJ-83**	2TKA00000338	1/10
	Flush mounting 1-gang Schuko socket outlets IP21 with cover plate Product includes Schuko socket outlet insert, center plate and cover frame. The socket outlet has shutters and screwless terminals for max 2 rigid wires.		
white	**20EUJ-84**	2TKA003848G1	1/10
anthracite	**20EUJ-81**	2TKA00000438	1/10
aluminium	**20EUJ-83**	2TKA00000439	1/10
	1-gang Schuko socket outlets, flush mounting, IP21 Product includes Schuko socket outlet insert and center plate. The socket outlet has shutters and screwless terminals for max 2 rigid wires.		
white	**20EUC-84**	2TKA003846G1	1/10
anthracite	**20EUC-81**	2TKA00000434	1/10
aluminium	**20EUC-83**	2TKA00000435	1/10
	Flush mounting 1-gang Schuko socket outlets with lid IP21 Product includes Schuko socket outlet insert and center plate. The socket outlet has shutters and screwless terminals for max 2 rigid wires.		
white	**20EUCK-84**	2TKA003847G1	1/10
anthracite	**20EUCK-81**	2TKA00000436	1/10
aluminium	**20EUCK-83**	2TKA00000437	1/10

Impressivo

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	1-gang Schuko socket outlets, flush mounting, with LED light, IP20 Product includes Schuko socket outlet insert and center plate. A white color LED light is integrated into the socket outlet. The light can be controlled seperately or it can be connected to the socket terminals. The socket outlet insert has shutters. There are screwless terminals for max 2 rigid wires for each contact of the socket outlet.		
white	**20EUCBLI-84**	2TKA00000891	1/10
aluminium	**20EUCBLI-83**	2TKA00000889	1/10
	1-gang Schuko socket outlet with center plate and USB charger, IP20 The socket outlet has an integrated USB charger 5V/0,7A with electronic short-circuit and overload protection. Power dissipation 0,1W. Compatible with USB devices, iPod and iPhone. The Schuko socket outlet is 16A/250V. There are screwless terminals for each contact of the socket outlet. The socket outlet has shutters. The terminals are for max 2 rigid wires. No X-terminals.		
white	**20EUCBUSB-84**	2TKA00001884	1
anthracite	**20EUCBUSB-81**	2TKA00001882	1
aluminium	**20EUCBUSB-83**	2TKA00001883	1
	Residual current devices 16A/250V IP21, with built-in A-type residual current device (RCD), tripping current 30mA. Approved for extending a branch circuit, but only regular sockets connected to protected outlet wires are protected. The socket outlet insert has shutters. The products are sold with cover plates. The socket outlet insert has shutters and screwless terminals.		
white	**3120EUC-84**	2TKA00003318	1/10
white	**3150UC-84.1**	2TKA00003319	1/10
	2-gang Schuko socket outlet, Flush mounting, IP44 Product includes Schuko socket outlet insert, center plate with lid, cover frame and seal. The socket outlet insert has shutters and screwless terminals. The terminals are for max 2 rigid wires. Flush mounting on rough surface IP44. Branching terminals.		
white	**302EUJW-84**	2TKA000954G1	1/10
	1-gang Schuko socket outlet, flush mounting, IP44 Product includes Schuko socket outlet insert, center plate with lid, cover frame and seal. The socket outlet insert has shutters and screwless terminals. The terminals are for max 2 rigid wires. Flush mounting on rough surface IP44.		
white	**20EUJW-84**	2TKA000698G1	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Seal 85mm for 1-gang socket outlet, IP44 1-gang socket outlets installed with a seal and a center plate with a hinged lid are IP44. Socket outlet without hinged lid on a rough surface is IP21.		
	2463	2TKA000002G1	20/200
	Seal 100mm for 2-gang socket outlet, IP44 2-gang socket outlets installed with a seal and a center plate with a hinged lid are IP44. Socket outlet without hinged lid on a rough surface is IP21.		
	2464	2TKA000003G1	20/200

Impressivo

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	RJ45 outlet with sliding dust covers for Impressivo Insert for 2 x RJ45 connectors and center plate with dust covers. The connectors CEL30.UX are not compatible with this device, due to its integrated blind covers.		
	Modular		
	Supporting frame insert for 2xRJ45, Keystone **1819.01**	2TKA000599G1	10/100
	Supporting frame insert for 2xRJ45, AMP **1819.02**	2TKA000600G1	10/100
	Supporting frame insert for 2xRJ45, Actassi **1819.03**	2TKA000601G1	10/100
	Supporting frame insert for 2xRJ45, Systimax **1819.04**	2TKA000602G1	10/100
white	Center plate, 2 x RJ45, dust covers **1819DC-84**	2TKA00001111	1/10
anthracite	Center plate, 2 x RJ45, dust covers **1819DC-81**	2TKA00001109	1/10
aluminium	Center plate, 2 x RJ45, dust covers **1819DC-83**	2TKA00001110	1/10
	RJ45 outlet with sliding dust covers for design-series Insert for 2 x RJ45 connectors and center plate with dust covers. The connectors CEL30.UX are not compatible with this device, due to its integrated blind covers.		
	Modular		
green	Supporting frame insert for 2xRJ45, Systimax **1810.1**	2TKA000595G1	10/100
red	Supporting frame insert for 2xRJ45, Keystone **1812.1**	2TKA000596G1	10/100
black	Supporting frame insert for 2xRJ45, AMP **1814.1**	2TKA000597G1	10/100
	RJ45 outlet including connectors RJ45 outlet including 2 x Cat6 UTP RJ45 connectors manufactured by 3M and blind cover plates. The dust covers are integrated in the connector. Blind covers included.		
white	**FOT6208-84**	2TKA00000463	1/10
anthracite	**FOT6208-81**	2TKA00000461	1/10
aluminium	**FOT6208-83**	2TKA00000462	1/10
	RJ45 connectors Unshielded (UTP) RJ45 connectors with Keystone fixing and A/B coupling. No special connecting tool is needed. Use with RJ45 insert 1819.01 and center plate 1819-xx. The dust covers are integrated into the connectors. The connector is manufactured by 3M.		
white	**CEL30.U6**	2TKA001891G1	10/100

Product	Article-No.	Order-No.	Pack/Qty
	DKS insert and center plate DKS-center plate is used to fix many different kind of tele connectors into the mounting box. To be fitted with a suitable DKS adapter 18XXEB.XXX. The product includes center plate and assembly ring.		
white	**1758-84**	2TKA000487G1	1/10
anthracite	**1758-81**	2TKA000485G1	1/10
aluminium	**1758-83**	2TKA000486G1	1/10
	DKS-adapters Different adapters for DKS-system. Suitable for DKS-center plate 1758-xx.		
	RJ45		
	Adapter for DKS-system, 2 x RJ45, Keystone **1867EB**	2TKA000618G1	10/100
	Adapter for DKS-system, 2 x RJ45, AMP **1875EB**	2TKA000624G1	10/100
	Adapter for DKS-system, 2 x RJ45, Systimax **1872EB**	2TKA000622G1	10/100
	Fiber		
	Adapter for DKS-system, fiber 2 x Simplex ST **1870EB**	2TKA000621G1	10/100
	Adapter for DKS-system, fiber 2 x SCD **1874EB**	2TKA000623G1	10/100
	Audio		
	Adapter for DKS-system, XLR audio connector type FP **1853EB**	2TKA000614G1	10/100
	Adapter for DKS-system, XLR audio connector type MP **1854EB**	2TKA000615G1	10/100
	Adapter for DKS-system, XLR D-type or Speakon audio connector **1876EB**	2TKA000626G1	10/100
	Others		
	Adapter for DKS-system, D-type 9-pin connector **1850EB**	2TKA000612G1	10/100
	Adapter for DKS-system, 2 x BNC/TNC, 9,8mm **1855EB**	2TKA000616G1	10/100
	Adapter for DKS-system, 2 x BNC/TNC, 12,9mm **1857EB**	2TKA000617G1	10/100
	Adapter for DKS-system, blank **1869EB**	2TKA000620G1	10/100
	DKS-adapter with VGA connector Suitable for DKS-center plate 1758-xx. VGA connector is included (15pin D-sub). Cable should be connected by soldering.		
	1850EB.VGA	2TKA000613G1	1/10

Impressivo

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	DKS-adapter with Composite-/S-video connectors Suitable for DKS-center plate 1758-xx. Composite (BNC) and S-video (Mini DIN) connectors are included. Composite video connectors internal coaxial cable should be terminated by BNC-type connector. S-video internal cable is standard twisted-pair cable with toolless connection.		
	1875EB.YCV	2TKA000625G1	1/10
	DKS-adapter with Speakon connector Suitable for DKS-center plate 1758-xx. Speakon 4-pin loudspeaker connector is included. Flat tab terminals.		
	1876EB.SPE	2TKA000627G1	1/10
	Antenna center plate, TV/R/Sat Center plate for common antenna outlet inserts. The terminal “Sat” is closed, but can be knocked out.		
white	**1743-84**	2TKA000465G1	1/10
anthracite	**1743-81**	2TKA000463G1	1/10
aluminium	**1743-83**	2TKA000464G1	1/10
	USB charger For supply and support of two mobile devices via USB-cable. With two USB A-type connectors. With electronic short-circuit and overload protection. Rated voltage: 230V~/5V-, 50Hz - 60Hz, power dissipation 0.3W. Suitable for: In case one output is used rated current max 1400mA. In case two output are used rated current max 700mA.		
	Insert		
	Tele outlet insert, USB charging station 2 x 0,7A **6472U**	2TKA00001885	1
	Center plate, tele outlet		
white	**1766-84**	2TKA000498G1	1/10
anthracite	**1766-81**	2TKA000495G1	1/10
aluminium	**1766-83**	2TKA000496G1	1/10
	Tele outlet USB Tele outlet with USB A-type connector. Compatible up to USB 2.0 versions. Internal connections with screw type terminals.		
	Insert *		
	Tele outlet insert, with USB A-type connector **0261/13**	2TKA00001916	1
	Center plate, tele outlet		
white	**1766-84**	2TKA000498G1	1/10
anthracite	**1766-81**	2TKA000495G1	1/10
aluminium	**1766-83**	2TKA000496G1	1/10

* Delivery time 3 weeks.

Product	Article-No.	Order-No.	Pack/Qty
	Tele outlet VGA Tele outlet for VGA display with D-sub 15pin connector. Internal connections with screw type terminals.		
	Insert *		
	Tele outlet insert, with VGA 15pin D-sub connector **0261/23**	2TKA00001917	1
	Center plate, tele outlet		
white	**1766-84**	2TKA000498G1	1/10
anthracite	**1766-81**	2TKA000495G1	1/10
aluminium	**1766-83**	2TKA000496G1	1/10

* Delivery time 3 weeks.

	Tele outlet HDMI Tele outlet for HDMI display with A-type connector. Internal connections with screw type terminals.		
	Insert *		
	Tele outlet insert, with HDMI A-type connector **0261/33**	2TKA00001918	1
	Center plate, tele outlet		
white	**1766-84**	2TKA000498G1	1/10
anthracite	**1766-81**	2TKA000495G1	1/10
aluminium	**1766-83**	2TKA000496G1	1/10

* Delivery time 3 weeks.

	Tele outlet BNC-F Tele outlet for 1 or 2 BNC-F type connectors. Mounting hole for a connector is 12mm. The insert and the connectors are sold separately.		
	Insert and connector *		
	Tele outlet insert for 2 x BNC-F type connectors **0262/13**	2TKA00001919	1
	Connector, BNC-F type, d = 12mm **0262**	2TKA00001920	1
	Center plate, tele outlet		
white	**1766-84**	2TKA000498G1	1/10
anthracite	**1766-81**	2TKA000495G1	1/10
aluminium	**1766-83**	2TKA000496G1	1/10

* Delivery time 3 weeks.

Impressivo

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	Tele outlet RCA Tele outlet for 1 or 2 RCA audio/video connectors. The insert and the connectors are sold separately.		
	Insert and connector *		
	Tele outlet insert for 2 x RCA connectors **0263/13**	2TKA00001921	1
white	Connector, RCA **0263/04**	2TKA00001922	1
black	Connector, RCA **0263/05**	2TKA00001923	1
red	Connector, RCA **0263/06**	2TKA00001924	1
yellow	Connector, RCA **0263/07**	2TKA00001925	1
	Center plate, tele outlet		
white	**1766-84**	2TKA000498G1	1/10
anthracite	**1766-81**	2TKA000495G1	1/10
aluminium	**1766-83**	2TKA000496G1	1/10

* Delivery time 3 weeks.

Product	Article-No.	Order-No.	Pack/Qty
	Tele outlet for Mini Jack Tele outlet for 1 or 2 Mini Jack connectors. The insert and the connectors are sold separately.		
	Insert and connector *		
	Tele outlet insert for 2 x Mini Jack connectors **0264/13**	2TKA00001926	1
	Connector, Mini Jack 3,5mm, stereo **0264**	2TKA00001927	1
	Center plate, tele outlet		
white	**1766-84**	2TKA000498G1	1/10
anthracite	**1766-81**	2TKA000495G1	1/10
aluminium	**1766-83**	2TKA000496G1	1/10

* Delivery time 3 weeks.

Product	Article-No.	Order-No.	Pack/Qty
	Speaker outlet, stereo There are plug in connectors for speaker wires and screw terminals for max 10mm² internal wires.		
	Modular		
	Tele outlet insert, speaker, stereo **0248.00**	2TKA000090G1	1/10
white	Center plate, tele outlet **1766-84**	2TKA000498G1	1/10
anthracite	Center plate, tele outlet **1766-81**	2TKA000495G1	1/10
aluminium	Center plate, tele outlet **1766-83**	2TKA000496G1	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Speaker outlet, mono There is one red and one black gold plated terminal screw for the speaker wires and screw terminals for max 10mm² internal wires.		
	Modular		
	Speaker insert, with terminal screws **1819.LSP**	2TKA000603G1	1/10
white	Center plate, 2 x RJ45, blind covers **1819-84**	2TKA000609G1	1/10
anthracite	Center plate, 2 x RJ45, blind covers **1819-81**	2TKA000605G1	1/10
aluminium	Center plate, 2 x RJ45, blind covers **1819-83**	2TKA000607G1	1/10
	Center plates for Ø 22.5mm devices Center plates with Ø 22.5mm openings, equipped with a groove to prevent rotation. Use with 22mm dieameter to fasten different devices.		
white	**2533-84**	2TKA000841G1	1/10
anthracite	**2533-81**	2TKA000839G1	1/10
aluminium	**2533-83**	2TKA000840G1	1/10
	Equipotential outlet 2-gang equipotential outlet. Screw terminals for 1 x 6mm² and 4 x 2,5mm² wires. The product includes insert and center plate.		
white	**2095UC-84**	2TKA000652G1	10/100
anthracite	**2095UC-81**	2TKA000650G1	10/100
aluminium	**2095UC-83**	2TKA000651G1	10/100
	Equipotential plug Suitable for potential equalization and to be used with equipotential outlets. For max. 6 mm² wires. The wire is connected by pressing with tool or by soldering.		
	0299.00032	2TKA000091G1	10/100

Impressivo

Multimedia

Product	Article-No.	Order-No.	Pack/Qty
	DigitalRadio set 2-gang combination digital radio and loudspeaker (flush mounted). The radio offers a stereo RDS tuner with 8 memory presets as well as programmable clock, alarm and snooze functions which are controlled with the switch rocker.		
white	**8220-84**	2TKA001587G1	1/10
	DigitalRadio The radio offers a stereo RDS tuner with 8 memory presets as well as programmable clock, alarm and snooze functions. Output max. 2x2W. Frequency response: 100-10 000 Hz. Reception frequency 87,50-108,0 Mhz. IP20.		
	Insert		
	Digital Radio Insert, FM **8215U**	2TKA001586G1	1/10
	Center plate		
white	**8252-84**	2TKA001592G1	1/10
anthracite	**8252-81**	2TKA001590G1	1/10
aluminium	**8252-83**	2TKA001591G1	1/10
	Loudspeaker For DigitalRadio 8215U. Size 2". Rated output 2W. Frequency response: 200-20 000 Hz, IP20.		
	Insert		
	Loudspeaker insert **8223U**	2TKA001588G1	1/10
	Center plate		
white	**8253-84**	2TKA001597G1	1/10
anthracite	**8253-81**	2TKA001595G1	1/10
aluminium	**8253-83**	2TKA001596G1	1/10
	iNetRadio WLAN Internet radio with display for flush-mounted installation. For the reception of national and international radio stations via Internet. Radio station search possible via various genres. Integrated web-server for configuration and control. Remote operation with smartphone via browser surface. UPnP replay function. It is controlled via smartphone. For mono/stereo operation. 8 radio stations storable.		
	Set *		
	iNetRadio kit **8240-84-500**	2TKA00002109	1/10
	Center plate *		
	iNetRadio **8216U-500**	2TKA00002110	1/10
white	DigitalRadio, center plate **8252-84**	2TKA001592G1	1/10
anthracite	DigitalRadio, center plate **8252-81**	2TKA001590G1	1/10
aluminium	DigitalRadio, center plate **8252-83**	2TKA001591G1	1/10

* Delivery time to ask.

Thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Floor heating thermostat Floor heating thermostat for room-specific temperature adjustment. 230 V~, 50 Hz, 15 A / 3450 W, IP 31. Sensor: 3 m NTC 15 kΩ / 25 °C. Operating temperature: -10…+30 °C. Switch: 2-pole. Screw terminals: max. 2x2.5 mm2. Temperature drop: fixed 5 °C. Adjustment range: +5…+ 45 °C. Hysteresis +/- 0,4 °C. Ball pressure temperature: 75 °C. Utilization category: 2 (home use). Type: 1C. Method of mounting: fixed.		
	Includes insert and center plate		
white	Floor heating thermostat, 16 A, with sensor **TF16-15-84**	2TKA00002923	1/10
	Sold in parts		
	Floor heating thermostat, 16 A, with sensor, Insert **TF16-15U**	2TKA00002848	1/10
white	Center plate, for thermostat **T-11-84**	2TKA00000274	1/10
anthracite	Center plate, for thermostat **T-11-81**	2TKA00000267	1/10
aluminium	Center plate, for thermostat **T-11-83**	2TKA00000273	1/10
	Combination thermostat 15A Combination thermostat can be used as a combination thermostat or only either as a room thermostat or floor heating thermostat. Set the room temperature to the desired value with the round adjustment knob; the adjustment range is +5...+35 °C Set the maximum floor temperature by turning the adjustment screw in the top left corner; the adjustment range is +20...+50 °C. When the thermostat is used to adjust a floor heating element heating a floor made of wood or corresponding material, never set the maximum floor temperature to over +35 °C (factory setting), or according to the floor material manufacturer's instructions. The device measures the temperature inside the floor, which differs from the floor's surface temperature. Freezing protection: Set the adjustment knob to position 5, and the thermostat will keep room temperature at +5 °C. Temperature limiting: There are limiting pins under the adjustment knobs that use to limit the movement of the adjustment knob. Move the pins to the desired position to set the maximum and minimum temperatures. 230V~ / 50Hz / 15A / 3450W / IP 31 / doubleinsulated / sensor: 3 m / NTC 15 kΩ / 25 °C / Operating temperature: -10…+30 °C / switch: 2-pole / screw terminals: max. 2x2.5 mm2/ temperature drop: fixed 5 °C / adjustment range: +5…+ 45 °C / hysteresis +/- 0.4 °C.		
	Includes insert and center plate		
white	**TC-15-13-84**	2TKA00002055	1/10
anthracite	**TC-15-13-81**	2TKA00002056	1/10
aluminium	**TC-15-13-83**	2TKA00002057	1/10

Impressivo

Thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Motor controller 1A and 2,5A, IP21 For controlling the operating speed of fan motors. Nominal voltage: 230V, 50 Hz.		
	Jussi, includes insert, center plate and cover frame		
	Motor controller 0.1-1A **2299UCJ-214**	2TKA000738G1	1/10
	Motor controller 0.1-2,5A **2297UCJ-214**	2TKA000735G1	1/10
	Impressivo, center plate		
white	Dimmer center plate, with neon lamp **6540-84-101**	2TKA001454G1	1/10
anthracite	Dimmer center plate, with neon lamp **6540-81-101**	2TKA001452G1	1/10
aluminium	Dimmer center plate, with neon lamp **6540-83-101**	2TKA001453G1	1/10
	Room thermostat, surface mounting Room thermostat for surface mounting. Does not need a separate bus interface. Thermostat has LCD display and possibility to control fan coil actuator manually.		
white	**6138/11-84-500**	2TKA00000361	1
aluminium	**6138/11-83-500**	2TKA00000359	1

RF-products

Product	Article-No.	Order-No.	Pack/Qty
	RF EnOcean products Radiofrequency operated switches and relays.		
white	Push button EnOcean, 1-gang **1786RF-84 ***	2TKA000548G1	1
anthracite	Push button EnOcean, 1-gang **1786RF-81 ***	2TKA000546G1	1
aluminium	Push button EnOcean, 1-gang **1786RF-83 ***	2TKA000547G1	1
white	Push button EnOcean, 2-gang **1785RF-84**	2TKA000537G1	1
anthracite	Push button EnOcean, 2-gang **1785RF-81 ***	2TKA000535G1	1
aluminium	Push button EnOcean, 2-gang **1785RF-83 ***	2TKA000536G1	1
	Switch actuator EnOcean, 1-fold 10 A, FM **6401/RF**	2TKA001425G1	1
	KNX/EnOcean Gateway, SM **EG/A32.2.1 ***	2TKA00002641	1

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IMPRESSIVO CENTER PLATES FOR JUSSI SIGNALLING PRODUCTS.
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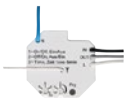
RF-products with battery

Product	Article-No.	Order-No.	Pack/Qty
	1-gang, RF-wireless push buttons		
	1-gang RF		
white	**6731-84-500**	2TKA00001789	1/10
	Wireless Push Button 1-gang RF		
aluminium	**6731-83-500 ***	2TKA00001790	1/10
* By order: delivery time to ask.			
	2-gang, RF-wireless push buttons		
white	**6732-84-500**	2TKA00001792	1/10
aluminium	**6732-83-500 ***	2TKA00001793	1/10
* By order: delivery time to ask.			
	4-gang, RF-wireless push buttons		
white	**6733-84-500**	2TKA00001795	1/10
aluminium	**6733-83-500 ***	2TKA00001796	1/10
* By order: delivery time to ask.			
	**RF-receivers, flushmounted**		
	Watchdog receiver, RF, 230V, 10AX		
	6701-101-500	2TKA000031G1	1/10
	Receiver, RF, reley, 230V, 10AX		
	6702-500	2TKA00001799	1/10
	Switch actuator RF, 230V, 2x3AX		
	6703-500	2TKA00001800	1/10
	Blind actuator, RF, 230V, 2x3A		
	6705-500	2TKA00001801	1/10
	Universal dimming actuator, RF, 230V, 35-210W		
	6704-500	2TKA00001798	1/10
	WaveLINE binary input, 2gang, 230 V~		
	6725-500	2TKA00003004	1/10
	RF-remote control		
	Remote control RF		
	6780-500	2TKA00001802	1/10

Product	Article-No.	Order-No.	Pack/Qty
	RF-sensors *		
	6725-500	2TKA00003004	1/10
	RF window sensor		
white	**6720-64**	2TKA00002201	1/10
	RF window sensor		
steel	**6720-66**	2TKA00002203	1/10
	Universal sensor RF		
white	**6721-64**	2TKA00002205	1/10
* By order: delivery time to ask.			
	RF-displays * LED Display RF		
white	**6730-84**	2TKA00002195	1/10
aluminium	**6730-83**	2TKA00002197	1/10
* By order: delivery time to ask.			
	Bottom parts of the displays *		
	RF relay with installation ring 10AX		
	6404U	2TKA00002452	1/10
	RF dimmer with installation ring 60-450VA		
	6595U	2TKA00002453	1/10
* By order: delivery time to ask.			

Impressivo
Signal

Product	Article-No.	Order-No.	Pack/Qty
	Transformer Small size transformer to be installed in normal mounting box. Short circuit protected. Voltage: 230 V ac / 15 V ac. Power / loading capacity: 2,2 VA / 150 mA.		
	Jussi, includes insert and center plate		
	Transformer **FLM1000**	2TKA002168G1	1/10
	Impressivo, center plate		
white	Center plate, blind **U-84**	2TKA003414G1	1/10
anthracite	Center plate, blind **U-81**	2TKA003412G1	1/10
aluminium	Center plate, blind **U-83**	2TKA003413G1	1/10
	Control Units, 1- and 2-loop Available as 1- or 2-loop. Each loop has a LED and a cancelling/disconnecting button. The LED flashes during alarm. When cancelled/disconnected the LED lits constantly. Possibility to connect closing and opening potential free contacts. Loop controls itself against short circuits and breaks. Function selectors "M" memory ON/OFF and "T" delay 150ms/2,5 sec. Potential free output. Good marking possibilities. Operating voltage: 15 - 28 V ac / 18 - 35 V dc. Current consumption, FEH1001 and FEH1101: 70 mA ac / 40 mA dc, FEH 1002: 110 mA ac / 60 mA dc.		
	Jussi, includes insert and center plate		
	Control Unit, 1-loop **FEH1001**	2TKA002107G1	1/10
	Control Unit, 2-loop **FEH1002**	2TKA002110G1	1/10
	Control Unit, 1-loop, disconnectable **FEH1101**	2TKA002111G1	1/10
	Impressivo, center plate		
white	Center plate, 1-fold **1P-84**	2TKA000632G1	1/10
anthracite	Center plate, 1-fold **1P-81**	2TKA000630G1	1/10
aluminium	Center plate, 1-fold **1P-83**	2TKA000631G1	1/10
white	Center plate, 2-fold **2P-84**	2TKA000893G1	1/10
anthracite	Center plate, 2-fold **2P-81**	2TKA000891G1	1/10
aluminium	Center plate, 2-fold **2P-83**	2TKA000892G1	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Alarm Unit, 1-loop Operates as FEH1001, but has a bigger signal light, which flashes during alarm. When cancelled, it lits constantly. Cancelling/disconnection has its own input. When a push button/switch is connected to this terminal, the device could be cancelled/disconnected from a distance or from several points. Possibility to connect closing and opening potential free contacts. Loop controls itself against short circuits and breaks. Function selector "M" memory ON/OFF. Potential free output. Operating voltage: 15 - 28 V ac / 18 - 35 V dc. Current consumption 110 mA ac / 60 mA dc. Sound intensity/frequency: 78 dB / 2,3 kHz / 30cm.		
	Jussi, includes insert and center plate		
	Alarm Unit, 1-loop **FEH2001**	2TKA002112G1	1/10
	Impressivo, center plate		
white	Center plate, Signal light **V-84**	2TKA003461G1	1/10
anthracite	Center plate, Signal light **V-81**	2TKA003459G1	1/10
aluminium	Center plate, Signal light **V-83**	2TKA003460G1	1/10
	Signal Push Button Signal Push Button with LED. Adressed / non-adressed function. Good marking possibilities. Operating voltage 9,5 - 28 V ac / 9,5 - 35 V dc. Current consumption: 20 mA ac / 10 mA dc. Switching voltage / -current / -power: 30 V ac / 35 V dc / 100 mA ac/dc / 3 VA/W.		
	Jussi, includes insert and center plate		
	Signal Push Button, 1-fold **FAP2001**	2TKA002095G1	1/10
	Impressivo, center plate		
white	Center plate, 1-fold **1P-84**	2TKA000632G1	1/10
anthracite	Center plate, 1-fold **1P-81**	2TKA000630G1	1/10
aluminium	Center plate, 1-fold **1P-83**	2TKA000631G1	1/10

IMPRESSIVO CENTER PLATES FOR JUSSI SIGNALLING PRODUCTS.
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Impressivo
Signal

Product	Article-No.	Order-No.	Pack/Qty
	Signal Push Button with Cord Signal Push Button with Cord corresponds technically to the Signal Push Button FAP2001. Length of the white Cord is 2,5 meters and the red Cord in 8 meters.		
	Jussi, includes insert and center plate		
	Signal Push Button with Cord **FAP3002**	2TKA002098G1	1/10
	FAP3002.PU	2TKA00003391	1/10
	Impressivo, center plate		
white	Center plate, 2-fold **2P-84**	2TKA000893G1	1/10
anthracite	Center plate, 2-fold **2P-81**	2TKA000891G1	1/10
aluminium	Center plate, 2-fold **2P-83**	2TKA000892G1	1/10
	Signal Push Button with Stereo Plug Terminal Signal Push Button with LED. Additional plug for 6.3 mm Jack connector (FAP9001). Adressed / non-adressed function. Good marking possibilities. Operating voltage: 9,5-28 Vac / 9,5-35 Vdc. Current consumption: 20 mA ac / 10 mA dc. Switching voltage / -current / -power: 30 Vac/35 Vdc / 100 mA ac/dc / 3 VA/W.		
	Jussi, includes insert and center plate		
	Signal Push Button with Stereo Plug Terminal **FAP3011**	2TKA002103G1	1/10
	Impressivo, center plate		
white	Center plate, Push button/telecom socket outlet **PT-84**	2TKA003208G1	1/10
anthracite	Center plate, Push button/telecom socket outlet **PT-81**	2TKA003206G1	1/10
aluminium	Center plate, Push button/telecom socket outlet **PT-83**	2TKA003207G1	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Stereo Plug Terminal Stereo Plug Terminal is used for 6.3 mm Jack connector (stereo). It can be used in calling and alarm systems as a socket outlet for connecting the Wire Push Button FAP9001, or as a headphone or loudspeaker terminal. Good marking possibilities.		
	Jussi, includes insert and center plate		
	Stereo Plug Terminal for 6,3mm Jack Plug **FOT3103**	2TKA002180G1	1/10
	Impressivo, center plate		
white	Center plate, Telecom socket outlet **T-84**	2TKA003321G1	1/10
anthracite	Center plate, Telecom socket outlet **T-81**	2TKA003319G1	1/10
aluminium	Center plate, Telecom socket outlet **T-83**	2TKA003320G1	1/10
	Wire Push Button Push Button with 6.3 mm Jack plug (stereo). Closing contact. Lenght 2m.		
	Wire Push Button with 6,3mm Jack Plug **FAP9001**	2TKA002105G1	1/10
	Button / Buzzer A device including a push button as well as a buzzer. The LED of the push button and the buzzer operates in parallel. The buzzer can be cancelled with the push button. In alarm position the LED flickers. When cancelled it lits constantly till the alarm goes off. Good marking possibilities on the push button and the name plate. Operating voltage 9,5 - 28 Vac / 9,5 - 35 Vdc. Current consumption: 45 mA ac / 35 mA dc. Load capacity of the switch: 42 Vac / 60 Vdc, 250 mA ac/dc, 6 VA / 4 W.		
	Jussi, includes insert and center plate		
	Button / Buzzer **FIP1001**	2TKA002144G1	1/10
	Impressivo, center plate		
white	Center plate, 1-fold **1P-84**	2TKA000632G1	1/10
anthracite	Center plate, 1-fold **1P-81**	2TKA000630G1	1/10
aluminium	Center plate, 1-fold **1P-83**	2TKA000631G1	1/10

IMPRESSIVO CENTER PLATES FOR JUSSI SIGNALLING PRODUCTS.
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Impressivo
Signalling Devices

Product	Article-No.	Order-No.	Pack/Qty
	Signal Lights Device with LED signal light. Opal lense. Operating voltage of LED's: 9,5 - 28 V ac / 9,5 - 35 V dc. Current consumption: 60 mA ac / 30 mA dc.		
	Jussi, includes insert and center plate		
red	Signal Light **FIM1000**	2TKA002120G1	1/10
yellow	Signal Light **FIM1010**	2TKA002123G1	1/10
green	Signal Light **FIM1020**	2TKA002125G1	1/10
white	Signal Light **FIM1030**	2TKA002127G1	1/10
	Impressivo, center plate		
white	Center plate, Signal light **V-84**	2TKA003461G1	1/10
anthracite	Center plate, Signal light **V-81**	2TKA003459G1	1/10
aluminium	Center plate, Signal light **V-83**	2TKA003460G1	1/10
	Buzzer Two audio frequencies available. Volume adjustment possible. Operating voltage: 9,5 - 28 V ac / 9,5 - 35 V dc. Current consumption: 40 mA ac / 20 mA dc. Sound intensity / frequency: 70 dB / 250 Hz or 70 dB / 750 Hz (intensity measured at 30 cm distance). Full sound intensity when operating voltage at least 15V ac or 18V dc.		
	Jussi, includes insert and center plate		
	Buzzer **FIM1100**	2TKA002128G1	1/10
	Impressivo, center plate		
white	Center plate, blind **U-84**	2TKA003414G1	1/10
anthracite	Center plate, blind **U-81**	2TKA003412G1	1/10
aluminium	Center plate, blind **U-83**	2TKA003413G1	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Alarm Unit Alarm Unit with flashing LED light and interrupting sound. Operating voltage: 9,5 - 28 V ac / 9,5 - 35 V dc. current consumption: 60 mA ac / 30 mA dc. Sound intensity / frequency: 78 dB / 2,3 kHz (intensity measured at 30 cm distance). Sound disconnectable.		
	Jussi, includes insert and center plate		
yellow	Alarm Unit **FIM1210**	2TKA002135G1	1/10
red	Alarm Unit **FIM1200**	2TKA002131G1	1/10
	Impressivo, center plate		
white	Center plate, Signal light **V-84**	2TKA003461G1	1/10
anthracite	Center plate, Signal light **V-81**	2TKA003459G1	1/10
aluminium	Center plate, Signal light **V-83**	2TKA003460G1	1/10
	Signal Panel Could be used as an 3/6 points alarm receiving panel in calling and alarm systems. With 6 red LED's. Good marking possibilities. Operating voltage: 12 - 24 V ac/dc.		
	Jussi, includes insert and center plate		
	Signal Panel **FIM1300**	2TKA002136G1	1/10
	Impressivo, center plate		
white	Center plate, signal panel **6V-84**	2TKA001578G1	1/10
anthracite	Center plate, signal panel **6V-81**	2TKA001576G1	1/10
aluminium	Center plate, signal panel **6V-83**	2TKA001577G1	1/10
	Disabled WC set, Impressivo Impressivo disabled WC SET contains the following signalling products: 1 pc Transformer, 1 pc 1-loop Alarm Unit, 1 pc Signal Push Button with Draw Cord (calling) and 1 pc Signal Push Button (cancelling). All devices are equipped with Impressivo coverframes.		
	Impressivo Disabled WC, set **FJW1004-84**	2TKA00001119	1/10

IMPRESSIVO CENTER PLATES FOR JUSSI SIGNALLING PRODUCTS.
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Impressivo

Signalling Devices

Product	Article-No.	Order-No.	Pack/Qty
	Jussi Leak Guard The Leak Guard unit operates as the standard Control Unit FEH1001, with the exception that the loop monitors leakage current (10 µA). Tape sensors, conduit pairs or other leakage sensors could be connected to the device. Memory/no memory function. Potential free output. Cancelling button with LED. Operating voltage: 9,5 - 28 V ac / 9,5 - 35 V dc. Current consumption: 75 mA ac / 40 mA dc. Good marking possibilities on the button and name plate.		
	Jussi, includes insert and center plate		
	Leak Guard **FEH2100**	2TKA002115G1	1/10
	Impressivo, center plate		
white	Center plate, 1-fold **1P-84**	2TKA000632G1	1/10
anthracite	Center plate, 1-fold **1P-81**	2TKA000630G1	1/10
aluminium	Center plate, 1-fold **1P-83**	2TKA000631G1	1/10
	Mains Relay With mains relay Jussi leak guard can control 230 V ac magnetic valves.. Controlled by low voltage potential free contact (e.g. switches, push buttons, potential free contacts or alarm panels). Separate transformer not needed. Loading capacity: 10 A / 230 V ac. Fluorescent light load max 300 VA.		
	Jussi, includes insert and center plate		
	Mains Relay **FIR1000**	2TKA002152G1	1/10
	Impressivo, center plate		
white	Center plate, blind **U-84**	2TKA003414G1	1/10
anthracite	Center plate, blind **U-81**	2TKA003412G1	1/10
aluminium	Center plate, blind **U-83**	2TKA003413G1	1/10
	Tape Sensors Self adhesive Leak Guard sensor. Wires connected to sensor by soldering.		
	Tape Sensor, lenght 2 m **FLA2100.02**	2TKA002164G1	1/10
	Tape sensor, lenght 50 m **FLA2100.50**	2TKA002166G1	1

Office Signal

Product	Article-No.	Order-No.	Pack/Qty
	Impressivo, Door Panel The Door Panel can be installed either surface or flush-mounted on top of a 1- or 2-gang mounting box. Compatible with Table Panel FIP2000-8x. Operating voltage: 15 - 28 V ac. Current consumption: 75 mA (max).		
white	Door Panel for office signal system **FIO2000-84**	2TKA002142G1	1/10
	Impressivo Table Panel The Table Panel can be used for controlling the signal lights of Door Panel FIO2000-xx. It also includes a freely adaptable Push Button and Switch, which can be integrated into an existing emergency or assistant call system using the Adapter Relay FIR2000. 2 meters connecting wire. Operating voltage: 15 - 28 V ac.		
white	Table Panel for office signal system **FIP2000-84**	2TKA002148G1	1/10
	Table Panel Terminal Table Panel is connected to a RJ12 terminal. The yellow light could be controlled automatically. FOR2000 could be used in both analog and digital telephone systems. FOT2000 is used in digital telephone systems or when the automatic control of the yellow light is not used.		
	Jussi, includes insert and center plate		
	Table Panel Terminal **FOT2000**	2TKA002177G1	1/10
	Impressivo, center plate		
white	Center plate, 2 x RJ45, dust covers **1819DC-84**	2TKA00001111	1/10
	Adapter Relay The Adapter Relay is used to integrate the Office Signal System with calling- or alarm systems. Operating voltage 15 - 28 V ac.		
	Jussi, includes insert and center plate		
	Adapter Relay **FIR2000**	2TKA002155G1	1/10
	Impressivo, center plate		
white	Center plate, blind **U-84**	2TKA003414G1	1/10
anthracite	Center plate, blind **U-81**	2TKA003412G1	1/10
aluminium	Center plate, blind **U-83**	2TKA003413G1	1/10

IMPRESSIVO CENTER PLATES FOR JUSSI SIGNALLING PRODUCTS.
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Impressivo

LED lights

Product	Article-No.	Order-No.	Pack/Qty

Product	Article-No.	Order-No.	Pack/Qty

Signal light inserts
LED signal light inserts for 230V supply. Center plates V-81, V-83 and V-84 fit to the inserts. There are screw terminals for max 2,5mm² wires. Not extendable.

	Modular		
	Signal light insert, Led 230V/25mA		
white	**2661.09**	2TKA000875G1	1/10
	Signal light insert, Led 230V/25mA		
red	**2661.02**	2TKA000874G1	1/10
	Center plate, Signal light		
white	**V-84**	2TKA003461G1	1/10
	Center plate, Signal light		
anthracite	**V-81**	2TKA003459G1	1/10
	Center plate, Signal light		
aluminium	**V-83**	2TKA003460G1	1/10

Impressivo
Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Claws Claws for 1-gang socket outlets, Euro socket outlets, switches and push switches. Not suitable for 2-gang Impressivo socket outlet inserts. Inserts with claws are also available.		
	Claws for socket outlets and swithces		
	ASE1	2TKA001721G1	10/100
	Screw-mounted rocker frames, IP44 Screw-mounted rocker frame is used with the seals 2463 or 2464 to reach IP44 protection class on switches and push switches. Furthermore, it can be used to connect the switch frame to the insert with screws for improved security.		
	Modular		
	Supporting frame for 1/3-gang rocker, screw fastening		
	2474	2TKA000004G1	20/200
	Supporting frame for 2-gang rocker, screw fastening		
	2475	2TKA000005G1	20/200
	Seal 85mm for 1-gang socket outlet, IP44 1-gang socket outlet inserts installed with the seal and a center plate with hinged lid are IP44. Switches and push buttons installed with the seal and with the screwmounted rocker frames are IP44.		
	2463	2TKA000002G1	20/200
	Seal 100mm for 2-gang socket outlet, IP44 2-gang socket outlet inserts installed with the seal and a center plate with hinged lids are IP44. Switches, push buttons and 1-gang socket outlets with a hinged lid are also IP44, when using the seal with adaptor 2519-xx. Screw mounted rocker frame must be used to reach IP44 protection class.		
	2464	2TKA000003G1	20/200
	Blind center plate, 85mm 85mm blind center plate can be used to cover an empty box. It can be used together with 85mm flush- and surface mounting frames. Flush mounting: On a smooth surface IP21, on a rough surface IP20 (seal can't be used). When installed on surface with 2456.26 and 172xS85-xx, protection class is IP44.		
white	**2538-84**	2TKA000856G1	1/10
anthracite	**2538-81**	2TKA000852G1	1/10
aluminium	**2538-83**	2TKA000854G1	1/10
	Blind center plate, 100mm 100mm blind center plate can be used to cover an empty box. Can be used together with 100mm flush- and surface mounting frames. Flush mounting: On a smooth surface IP21, on a rough surface IP20 (seal can't be used). When istalled on surface the protection class is IP44 if wires are installed downwards.		
white	**2538-100-84**	2TKA000848G1	1/10
anthracite	**2538-100-81**	2TKA000846G1	1/10
aluminium	**2538-100-83**	2TKA000847G1	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Adapter 85/100mm, IP21/IP44 1-gang center plated accessories can be mounted in 100mm cover frames with the adapter. Final IP class of installation is defined by the accessories.		
white	**2519-84**	2TKA000808G1	1/20
anthracite	**2519-81**	2TKA000804G1	1/20
aluminium	**2519-83**	2TKA000806G1	1/20
	Labeling plate Labeling plate for cover frames. Size of text area is max 12 x 52 mm.		
	2752	2TKA00000053	10/100
	Impulse spring Impulse spring for ABB switches, 10 pcs in sales pack		
	PJ4.10	2TKA00003056	10/100

Impressivo

Frames

Product	Article-No.	Order-No.	Pack/Qty
	Flush mounting cover frames 85mm, IP21/IP44 1-gang Flush mounting cover frames for 1-gang devices. Suitable for both horizontal and vertical installation. Standard installation is IP21 on smooth surface. When using seal 2463 installation is IP21 on rough surface. Final IP class of installation is defined by the used center plate (IP21/IP44).		
white	**1721F85-84**	2TKA000287G1	1/10
anthracite	**1721F85-81**	2TKA000283G1	1/10
aluminium	**1721F85-83**	2TKA000285G1	1/10
	Flush mounting cover frames 85mm, IP21/IP44 2-gang		
white	**1722F85-84**	2TKA000337G1	1/5
anthracite	**1722F85-81**	2TKA000333G1	1/5
aluminium	**1722F85-83**	2TKA000335G1	1/5
	Flush mounting cover frames 85mm, IP21/IP44 3-gang		
white	**1723F85-84**	2TKA000376G1	1/5
anthracite	**1723F85-81**	2TKA000372G1	1/5
aluminium	**1723F85-83**	2TKA000374G1	1/5
	Flush mounting cover frames 85mm, IP21/IP44 4-gang		
white	**1724F85-84**	2TKA000409G1	1/5
anthracite	**1724F85-81**	2TKA000407G1	1/5
aluminium	**1724F85-83**	2TKA000408G1	1/5
	Flush mounting cover frames 85mm, IP21/IP44 5-gang		
white	**1725F85-84**	2TKA000434G1	1/5
anthracite	**1725F85-81**	2TKA000432G1	1/5
aluminium	**1725F85-83**	2TKA000433G1	1/5

Product	Article-No.	Order-No.	Pack/Qty
	Flush mounting cover frames 100mm, IP21/IP44 1-gang Flush mounting cover frames for 2-gang devices, such as double socket outlets. Also 1-gang devices, such as switches, can be installed using adapter 2519-xx. Suitable for both horizontal and vertical installation. Standard installation is IP21 on smooth surface. When using seal 2463 installation is IP21 on rough surface. Final IP class of installation is defined by the used center plate (IP21/IP44).		
white	**1721F100-84**	2TKA000279G1	1/10
anthracite	**1721F100-81**	2TKA000275G1	1/10
aluminium	**1721F100-83**	2TKA000277G1	1/10
	Flush mounting cover frames 85mm, IP21/IP44 2-gang		
white	**1722F100-84**	2TKA000329G1	1/5
anthracite	**1722F100-81**	2TKA000325G1	1/5
aluminium	**1722F100-83**	2TKA000327G1	1/5
	Flush mounting cover frames 85mm, IP21/IP44 3-gang		
white	**1723F100-84**	2TKA000369G1	1/5
anthracite	**1723F100-81**	2TKA000365G1	1/5
aluminium	**1723F100-83**	2TKA000367G1	1/5
	Flush mounting cover frames 85mm, IP21/IP44 4-gang		
white	**1724F100-84**	2TKA000405G1	1/5
anthracite	**1724F100-81**	2TKA000403G1	1/5
aluminium	**1724F100-83**	2TKA000404G1	1/5
	Flush mounting cover frames 85mm, IP21/IP44 5-gang		
white	**1725F100-84**	2TKA000430G1	1/5
anthracite	**1725F100-81**	2TKA000428G1	1/5
aluminium	**1725F100-83**	2TKA000429G1	1/5

Impressivo – surface mounting

Switches and push switches IP21

Product	Article-No.	Order-No.	Pack/Qty
	1-gang switches Switch with screwless terminals and lamp possibility. Rocker with clip-on fastening. IP21 when wires are installed downwards. 16AX/250V, 2 X-terminals		
	1-gang 2-way switch		
white	**1066A-84**	2TKA00001601	1/10
anthracite	**1066A-81**	2TKA00001602	1/10
aluminium	**1066A-83**	2TKA00001603	1/10
	1-gang intermediate switch		
white	**1067A-84**	2TKA00001846	1/10
anthracite	**1067A-81**	2TKA00001847	1/10
aluminium	**1067A-83**	2TKA00001848	1/10
	2-gang switches Switch with screwless terminals, no lamp possibility. Rocker with clip-on fastening. IP21 when wires are installed downwards. 16AX/250V, 2 X-terminals		
	2-gang 1-way switch		
white	**1065A-84**	2TKA00001598	1/10
anthracite	**1065A-81**	2TKA00001599	1/10
aluminium	**1065A-83**	2TKA00001600	1/10
	2-gang 2-way switch		
white	**10666A-84**	2TKA00001843	1/10
anthracite	**10666A-81**	2TKA00001844	1/10
aluminium	**10666A-83**	2TKA00001845	1/10
	3-gang switch Switch with screwless terminals, no lamp possibility. Rocker with clip-on fastening. IP21 when wires are installed downwards. 16AX/250V, 2 X-terminals		
white	**10631A-84**	2TKA00001849	1/10
anthracite	**10631A-81**	2TKA00001850	1/10
aluminium	**10631A-83**	2TKA00001851	1/10
	2-pole switch Switch with screwless terminals and lamp possibility. Rocker with clip-on fastening. IP21 when wires are installed downwards. 16AX/250V, 2 X-terminals		
white	**1062A-84**	2TKA00001840	1/10
	1-gang push switch Push switch with screwless terminals and lamp possibility. Rocker with clip-on fastening. Delivered with clear lens. IP21 when the wires are installed downwards. 10A/250V, 2 X-terminals		
white	**1461A-84**	2TKA00001604	1/10
anthracite	**1461A-81**	2TKA00001605	1/10
aluminium	**1461A-83**	2TKA00001606	1/10

Socket outlets IP21

Product	Article-No.	Order-No.	Pack/Qty
	4-gang Schuko socket outlet, IP21 The device is based on two 2-gang socket outlet inserts, which are internally connected. The socket outlet inserts have shutters. There are screwless terminals for each contact of the socket outlet insert for max 4 rigid wires. No X-terminals. IP21 when the wires are installed downwards.		
white	**404EA-84**	2TKA00001613	1/20
anthracite	**404EA-81**	2TKA00001614	1/20
aluminium	**404EA-83**	2TKA00001615	1/20
	2-gang Schuko socket outlet, IP21 Screwless terminals for each contact of the socket outlet for max 4 rigid wires. No X-terminals. The socket outlet insert has shutters. IP21 when the wires are installed downwards.		
white	**402EA-84**	2TKA00001607	1/10
anthracite	**402EA-81**	2TKA00001608	1/10
aluminium	**402EA-83**	2TKA00001609	1/10
	2-gang Schuko socket outlet, surface mounting, IP44 Product includes Schuko socket outlet insert, center plate with lid, surface mountig cover frame and box. The socket outlet insert has shutters and screwless terminals, branching terminals.		
anthracite	**302ESW-81**	2TKA00001754	1/10
	2-gang Schuko outlets with special colour, IP21 Screwless terminals for each contact of the socket outlet for max 4 rigid wires. No X-terminals. The socket outlet insert has shutters. IP21 when the wires are installed downwards. These socket outlets can be used, for instance, in hospitals and offices, when there is a need to limit socket outlet use to certain applications.		
red	**402EA-02**	2TKA00002966	1/10
orange	**402EA-03**	2TKA00002967	1/10
green	**402EA-05**	2TKA00002968	1/10
blue	**402EA-06**	2TKA00002969	1/10
	2-gang Schuko socket outlet, lath installation, IP21 Schuko 2-gang socket outlet for lath installation. There are screwless terminals for each contact of the socket outlet for max 4 rigid wires. No X-terminals. The socket outlet insert has shutters.		
white	**402EL-84**	2TKA00002273	1/10
anthracite	**402EL-81**	2TKA00002274	1/10
aluminium	**402EL-83**	2TKA00002275	1/10
	2-gang Schuko socket outlet, corner installation, IP21 Schuko 2-gang socket outlet for corner installation. There are screwless terminals for each contact of the socket outlet for max 4 rigid wires. No X-terminals. The socket outlet insert has shutters.		
white	**402EE-84**	2TKA00001610	1/20
anthracite	**402EE-81**	2TKA00001611	1/20
aluminium	**402EE-83**	2TKA00001612	1/20

Impressivo – surface mounting

Boxes and accessories

Product	Article-No.	Order-No.	Pack/Qty
	Surface mounting box 85mm, IP21 Surface mounting box for 1-gang devices such as antenna and data outlet and others, insert height max. 26 mm. Large devices such as dimmers doesn't fit in the box. Delivery includes bottom plate and cover. h=41mm		
white	**1721A-84**	2TKA00001616	1/10
anthracite	**1721A-81**	2TKA00001617	1/10
aluminium	**1721A-83**	2TKA00001618	1/10
	Lath installation box 85mm, IP21 Lath installation box for 1-gang devices such as antenna and data outlet and others, insert height max. 26 mm. Large devices such as dimmers doesn't fit in the box. Delivery includes bottom plate and cover.		
white	**1721L-84**	2TKA00002276	1/10
anthracite	**1721L-81**	2TKA00002277	1/10
aluminium	**1721L-83**	2TKA00002278	1/10
	Corner installation box 85mm, IP21 Surface mounting box for 2 devices, also for electronic devices. Horizontal or vertical installation in corners. Use with 85mm 2-gang cover frame.		
white	**1722H-84**	2TKA00002279	1/20
anthracite	**1722H-81**	2TKA00002280	1/20
aluminium	**1722H-83**	2TKA00002281	1/20
	Surface mounting bottom plate, IP21/IP44 Surface mounting bottom plate for flush mounted products, insert height max. 26mm. To be combined with 85mm and 100mm surface mounting cover frames 172xS85-xx and 172xS100-xx. Socket outlets are IP44 when using center plates with hinged lid. Switches and push switches are IP44 when combined with screw fastening rocker. Wires must be installed downwards for IP44 protection class. Dimmers do not fit in the box.		
	2456.26	2TKA000769G1	10/100
	DCL lamp outlet for mounting boxes The DCL outlet can be installed on standard wall mounting boxes (screw distance c/c 60 mm). It is safe and easy to use for the end consumer, as they can snap-in the DCL plug in the socket. The outlet is typically installed on wall but can also be installed in ceiling. 85x85mm		
white	**AKK6-84**	2TKA00000934	10/100
anthracite	**AKK6-81**	2TKA00000936	10/100
aluminium	**AKK6-83**	2TKA00000935	10/100

Product	Article-No.	Order-No.	Pack/Qty
	High surface mounting boxes 80mm, IP20 Surface mounting boxes for high 1-gang devices, such as dimmers, insert height max. 40 mm. Suitable for both horizontal and vertical installation. Delivery includes box and cover frame. h=54mm		
	1-gang		
white	**1721S80-84**	2TKA00000993	1/10
anthracite	**1721S80-81**	2TKA00000991	1/10
aluminium	**1721S80-83**	2TKA00000992	1/10
	2-gang		
white	**1722S80-84**	2TKA00000996	1/5
anthracite	**1722S80-81**	2TKA00000994	1/5
aluminium	**1722S80-83**	2TKA00000995	1/5
	3-gang		
white	**1723S80-84**	2TKA00000999	1/10
anthracite	**1723S80-81**	2TKA00000997	1/10
aluminium	**1723S80-83**	2TKA00000998	1/10

Impressivo – surface mounting

Cover frames

Product	Article-No.	Order-No.	Pack/Qty
	Surface mounting cover frames 85mm, IP21/IP44 1-gang Surface mounting cover frames for 1-gang devices, such as switches and socket outlets. Suitable for both horizontal and vertical installation. To be used with surface mounting box 2456.26. Dimmers do not fit in the frame. Wires must be installed downwards for IP44 protection class. Final IP class of installation is defined by the used center plate (IP21/IP44). h=40mm		
white	**1721S85-84**	2TKA000302G1	1/50
anthracite	**1721S85-81**	2TKA000298G1	1/50
aluminium	**1721S85-83**	2TKA000300G1	1/50
	Surface mounting cover frames 85mm, IP21/IP44 2-gang		
white	**1722S85-84**	2TKA000347G1	1/25
anthracite	**1722S85-81**	2TKA000344G1	1/25
aluminium	**1722S85-83**	2TKA000345G1	1/25
	Surface mounting cover frames 85mm, IP21/IP44 3-gang		
white	**1723S85-84**	2TKA000385G1	1/25
anthracite	**1723S85-81**	2TKA000383G1	1/25
aluminium	**1723S85-83**	2TKA000384G1	1/25
	Surface mounting cover frames 85mm, IP21/IP44 4-gang		
white	**1724S85-84**	2TKA000417G1	1/25
anthracite	**1724S85-81**	2TKA000415G1	1/25
aluminium	**1724S85-83**	2TKA000416G1	1/25

Product	Article-No.	Order-No.	Pack/Qty
	Surface mounting cover frames 100mm, IP21/IP44 1-gang Surface mounting cover frames for 2-gang devices, such as double socket outlets. Also 1-gang devices can be installed using the adaptor 2519-xx. Suitable for both horizontal and vertical installation. To be used with surface mounting box 2456.26. Wires must be installed downwards for IP44 protection class. Final IP class of installation is defined by the used center plate (IP21/IP44). h=40mm		
white	**1721S100-84**	2TKA000295G1	1/50
anthracite	**1721S100-81**	2TKA000291G1	1/50
aluminium	**1721S100-83**	2TKA000293G1	1/50
	Surface mounting cover frames 100mm, IP21/IP44 2-gang		
white	**1722S100-84**	2TKA000342G1	1/25
anthracite	**1722S100-81**	2TKA000340G1	1/25
aluminium	**1722S100-83**	2TKA000341G1	1/25
	Surface mounting cover frames 100mm, IP21/IP44 3-gang		
white	**1723S100-84**	2TKA000381G1	1/25
anthracite	**1723S100-81**	2TKA000379G1	1/25
aluminium	**1723S100-83**	2TKA000380G1	1/25
	Surface mounting cover frames 100mm, IP21/IP44 4-gang		
white	**1724S100-84**	2TKA000413G1	1/20
anthracite	**1724S100-81**	2TKA000411G1	1/20
aluminium	**1724S100-83**	2TKA000412G1	1/20

Impressivo

KNX

Product	Article-No.	Order-No.	Pack/Qty
	Bus Coupler For connecting operating elements such as a push buttons (1-, 2-, 4-fold), motion detectors, room thermostats etc. to the ABB i-bus® KNX system.		
	6120/12-101-500	2TKA00000219	1/10
	Switch sensor, 1/2-gang Flush mounted multifunction push button for ABB i-bus KNX 6120/12-101-500. With labelling field, transparent labelling sheet with standard symbols included in delivery. Support of KNX functions through innovative colour concept yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Cover plate not included.		
white	**6125/02-84-500**	2TKA00000271	1/10
anthracite	**6125/02-81-500**	2TKA00000266	1/10
aluminium	**6125/02-83-500**	2TKA00000269	1/10
	Switch sensor, 2/4-gang Flush mounted multifunction push button for ABB i-bus KNX 6120/12-101-500. With labelling field, transparent labelling sheet with standard symbols included in delivery. Support of KNX functions through innovative colour concept yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Cover plate not included.		
white	**6126/02-84-500**	2TKA00000311	1/10
anthracite	**6126/02-81-500**	2TKA00000297	1/10
aluminium	**6126/02-83-500**	2TKA00000239	1/10
	Switch sensor, 4/8-gang Flush mounted multifunction push button for ABB i-bus KNX 6120/12-101-500. With labelling field, transparent labelling sheet with standard symbols included in delivery. Support of KNX functions through innovative colour concept yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Cover plate not included.		
white	**6127/02-84-500**	2TKA00000327	1/10
anthracite	**6127/02-81-500**	2TKA00000323	1/10
aluminium	**6127/02-83-500**	2TKA00000325	1/10
	Switch sensor, 3/6-gang with IR-receiver Flush mounted multifunction push button with IR-receiver for ABB i-bus KNX 6120/12-101-500. With labelling field, transparent labelling sheet with standard symbols included in delivery. Support of KNX functions through innovative colour concept yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Cover plate not included. Controlling with the IR remote control 6010-25.		
white	**6129/01-84-500**	2TKA00000246	1/10
anthracite	**6129/01-81-500**	2TKA00000242	1/10
aluminium	**6129/01-83-500**	2TKA00000244	1/10

Product	Article-No.	Order-No.	Pack/Qty
	IR remote control Infrared hand-held transmitter. Network-independent remote control for infrared receiver and KNX flushmounted infrared interface (10 consumers switchable in 2 groups, 1 – 5/6 – 10, programming and selection of 2 MEMO memories per address group). Supply: 4 alkaline manganese batteries, IEC LR03 (not included in scope of supply) Range: frontal, approx. 15 m.		
	6010-25	2TKA001017G1	1
	Control element, 2/4gang, with RTC multi-function/colour concept For ABB i-bus® KNX bus coupler 6120/12-101-500, 6120/13-500. Support of KNX functions through innovative colour concept (yellow = lighting, blue = blind, orange = RTC, magenta = scene and white = neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/ value sender/light scenes/fan function). Master/slave configuration. With base-load operation. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in auto- matic mode. Transparent labelling sheet with standard symbols included in delivery. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts left/right, also for selecting setpoint and mode of operation. Display elements: LCD showing operation mode and temperature. Protection class (Device): IP20. Temperature range (Device): -5 °C to 45 °C. Dimensions: (L x W x D): 63 mm x 63 mm.		
grey metallic	**6128/28-803-500**	2TKA00003208	1/10
white	**6128/28-84-500**	2TKA00003206	1/10
anthracite	**6128/28-81-500**	2TKA00003204	1/10
aluminium	**6128/28-83-500**	2TKA00003205	1/10
	Movement detector, with manual operation Flush mounted sensor with Comfort II multi-lens. For ABB i-bus KNX 6120/12-101-500. Movement detector with up to 4 channels. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.) Cover plate not included.		
white	**6122/02-84-500**	2TKA00000233	1/10
anthracite	**6122/02-81-500**	2TKA00000229	1/10
aluminium	**6122/02-83-500**	2TKA00000231	1/10

Impressivo

KNX

Product	Article-No.	Order-No.	Pack/Qty
	1-, 2- and 4-gang switch sensors with bus coupler 1-, 2- and 4-gang standard switch sensor that includes bus coupler. LED for displaying the output. 2 LEDs on each button. Cover plate not included.		
	1-gang pushbuttons		
white	**6125/01-84-500**	2TKA00000262	1/10
anthracite	**6125/01-81-500**	2TKA00000257	1/10
aluminium	**6125/01-83-500**	2TKA00000260	1/10
	2-gang pushbuttons		
white	**6126/01-84-500**	2TKA00000293	1/10
anthracite	**6126/01-81-500**	2TKA00000284	1/10
aluminium	**6126/01-83-500**	2TKA00000288	1/10
	4-gang pushbuttons		
white	**6127/01-84-500**	2TKA00000319	1/10
anthracite	**6127/01-81-500**	2TKA00000315	1/10
aluminium	**6127/01-83-500**	2TKA00000317	1/10
	Busch-Watchdog ® 180 Sensor Standard, Select with integrated bus coupler, FM Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated KNX bus coupler.		
white	**6122/10-84-500**	2TKA00003199	1/10
anthracite	**6122/10-81-500**	2TKA00003197	1/10
aluminium	**6122/10-83-500**	2TKA00003198	1/10

Product	Article-No.	Order-No.	Pack/Qty

Impressivo

KNX

Product	Article-No.	Order-No.	Pack/Qty
	Push-button coupling 2gang with integrated bus coupler Support of KNX functions through innovative color concept yellow = lighting, blue = blind, orange = RTC, magenta = scene and white = neutral/no function assigned) or standard illumination red/green. With middle position. The bus can be connected via enclosed terminal block.		
	Push-button coupling 2gang **6108/06-500**	2TKA00003193	1/10
	Rocker 1gang		
white	**SR-1-84**	2TKA00002776	1/10
anthracite	**SR-1-81**	2TKA00002774	1/10
aluminium	**SR-1-83**	2TKA00002775	1/10
	Push-button coupling 4gang with integrated bus coupler Support of KNX functions through innovative color concept yellow = lighting, blue = blind, orange = RTC, magenta = scene and white = neutral/no function assigned) or standard illumination red/green. With middle position. The bus can be connected via enclosed terminal block.		
	Push-button coupling 4gang **6108/07-500**	2TKA00003194	1/10
	Rocker 2gang left/right		
white	**SR-2-84**	2TKA00002779	1/10
anthracite	**SR-2-81**	2TKA00002777	1/10
aluminium	**SR-2-83**	2TKA00002778	1/10
	Room thermostat, heating/cooling operation Control element with room thermostat function for triggering the heating, ventilation and fancoil actuators. For controlling commercially available valve drives. With display of set-value temperature. Master/ slave configuration. With base-load operation. The bus can be connected via enclosed terminal block.		
	Room thermostat **6108/18-500**	2TKA00003196	1/10
	Thermostat center plate		
white	**CP-RTC-84**	2TKA00002784	1/10
anthracite	**CP-RTC-81**	2TKA00002782	1/10
aluminium	**CP-RTC-83**	2TKA00002783	1/10
	Room Temperature Controller, Commercial, FM Room thermostat without „local operation“ incl. insert for centre plate for cooling element. For controlling commercially available valve drives. Can only be used with a cover plate 2114-xxx or 6541-xxx, with the exception of 6541-20. -21.-260 and -266. For control of up to 5-level ventilation actuators Master/slave configuration. With base-load operation. The bus can be connected via enclosed terminal block.		
	Flush-mounted room thermostat **6108/08-500**	2TKA00003007	1/10
	Center plate with cooling element		
white	**6541-84**	2TKA001459G1	1/10
anthracite	**6541-81**	2TKA001457G1	1/10
aluminium	**6541-83**	2TKA001458G1	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog ® 180 Sensor Standard, Select with integrated bus coupler, FM Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated KNX bus coupler.		
white	**6122/10-84-500**	2TKA00003199	1/10
anthracite	**6122/10-81-500**	2TKA00003197	1/10
aluminium	**6122/10-83-500**	2TKA00003198	1/10
	Push-button coupling 2gang with integrated bus coupler Support of KNX functions through innovative color concept yellow = lighting, blue = blind, orange = RTC, magenta = scene and white = neutral/no function assigned) or standard illumination red/green. With middle position. The bus can be connected via enclosed terminal block.		
	Push-button coupling 2gang **6108/06-500**	2TKA00003193	1/10
	Rocker 1gang		
white	**SR-1-84**	2TKA00002776	1/10
anthracite	**SR-1-81**	2TKA00002774	1/10
aluminium	**SR-1-83**	2TKA00002775	1/10
	Rocker 1gang "lighting" symbol		
white	**SRL-1-84**		1/10
anthracite	**SRL-1-81**		1/10
aluminium	**SRL-1-83**		1/10
	Rocker 1gang "scene" symbol		
white	**SRS-1-84**		1/10
anthracite	**SRS-1-81**		1/10
aluminium	**SRS-1-83**		1/10
	Rocker 1gang "dimming" symbol		
white	**SRD-1-84**		1/10
anthracite	**SRD-1-81**		1/10
aluminium	**SRD-1-83**		1/10
	Rocker 1gang "blinds" symbol		
white	**SRB-1-84**		1/10
anthracite	**SRB-1-81**		1/10
aluminium	**SRB-1-83**		1/10

Impressivo

KNX

Product	Article-No.	Order-No.	Pack/Qty
	Push-button coupling 4gang with integrated bus coupler Support of KNX functions through innovative color concept yellow = lighting, blue = blind, orange = RTC, magenta = scene and white = neutral/no function assigned) or standard illumination red/green. With middle position. The bus can be connected via enclosed terminal block.		
	Push-button coupling 4gang **6108/07-500**	2TKA00003194	1/10
	Rocker 2gang left/right		
white	**SR-2-84**	2TKA00002779	1/10
anthracite	**SR-2-81**	2TKA00002777	1/10
aluminium	**SR-2-83**	2TKA00002778	1/10
	Rocker 2gang "lighting" symbol left		
white	**SRL-2-L-84**		1/10
anthracite	**SRL-2-L-81**		1/10
aluminium	**SRL-2-L-83**		1/10
	Rocker 2gang "scene" symbol left		
white	**SRS-2-L-84**		1/10
anthracite	**SRS-2-L-81**		1/10
aluminium	**SRS-2-L-83**		1/10
	Rocker 2gang "dimming" symbol left		
white	**SRD-2-L-84**		1/10
anthracite	**SRD-2-L-81**		1/10
aluminium	**SRD-2-L-83**		1/10
	Rocker 2gang "lighting" symbol right		
white	**SRL-2-R-84**		1/10
anthracite	**SRL-2-R-81**		1/10
aluminium	**SRL-2-R-83**		1/10
	Rocker 2gang "scene" symbol right		
white	**SRS-2-R-84**		1/10
anthracite	**SRS-2-R-81**		1/10
aluminium	**SRS-2-R-83**		1/10
	Rocker 2gang "dimming" symbol right		
white	**SRD-2-R-84**		1/10
anthracite	**SRD-2-R-81**		1/10
aluminium	**SRD-2-R-83**		1/10
	Rocker 2gang "blinds" symbol		
white	**SRB-2-84**		1/10
anthracite	**SRB-2-81**		1/10
aluminium	**SRB-2-83**		1/10

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog ® 180 Sensor Standard, Select with integrated bus coupler, FM Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated KNX bus coupler.		
white	**6122/10-84-500**	2TKA00003199	1/10
anthracite	**6122/10-81-500**	2TKA00003197	1/10
aluminium	**6122/10-83-500**	2TKA00003198	1/10
	Room thermostat, heating/cooling operation Control element with room thermostat function for triggering the heating, ventilation and fancoil actuators. For controlling commercially available valve drives. With display of set-value temperature. Master/slave configuration. With base-load operation. The bus can be connected via enclosed terminal block.		
	Room thermostat **6108/18-500**	2TKA00003196	1/10
	Thermostat center plate		
white	**CP-RTC-84**	2TKA00002784	1/10
anthracite	**CP-RTC-81**	2TKA00002782	1/10
aluminium	**CP-RTC-83**	2TKA00002783	1/10

Impressivo

ABB-free@home

Product	Article-No.	Order-No.	Pack/Qty
	Power supply ABB-free@home power supply with integrated choke. Fast diagnosis due to LED display for operational readiness and errors. Module width 4 MW. Power supply 640mA 30/230V DIN.		
	PS-M-64.1.1	2TKA00002701	1/10
	System Access Point For commissioning and remote control of the ABB-free@home® system. Allows the execution of astro and time programs.		
	Connector port System access point 230V WL **SAP-S-2**		1/10
	External antenna for SAP-S-2 **SAP-1-WL**		1/10

Product	Article-No.	Order-No.	Pack/Qty
	1gang Sensor unit and different rockers		
	Sensor unit 1gang **SU-F-1.0.1**	2TKA00002717	1/10
	Sensor unit 1gang WL **SU-F-1.0.1-WL**		1/10
	Rocker 1gang		
white	**SR-1-84**	2TKA00002776	1/10
anthracite	**SR-1-81**	2TKA00002774	1/10
aluminium	**SR-1-83**	2TKA00002775	1/10
	2gang Sensor unit and different rockers. Both sides of the rocker are ordered separately.		
	Sensor unit 2gang **SU-F-2.0.1**	2TKA00002719	1/10
	Sensor unit 2gang WL **SU-F-2.0.1-WL**		1/10
	Rocker 2gang left/right		
white	**SR-2-84**	2TKA00002779	1/10
anthracite	**SR-2-81**	2TKA00002777	1/10
aluminium	**SR-2-83**	2TKA00002778	1/10
	Switch actuator sensor Insert and different rockers		
	Switch actuator sensor 1/1gang **SSA-F-1.1.1**	2TKA00002796	1/10
	Switch actuator sensor 1/1gang WL **SSA-F-1.1.1-WL**		1/10
	Rocker 1gang		
white	**SR-1-84**	2TKA00002776	1/10
anthracite	**SR-1-81**	2TKA00002774	1/10
aluminium	**SR-1-83**	2TKA00002775	1/10

Impressivo

ABB-free@home

Product	Article-No.	Order-No.	Pack/Qty
	Switch actuator sensor Insert 2/1gang, 2/2gang and different rockers. Both sides of the rocker are ordered separately.		
	Switch actuator sensor 2/1gang **SSA-F-2.1.1**	2TKA00002797	1/10
	Switch actuator sensor 2/1gang WL **SSA-F-2.1.1-WL**		1/10
	Switch actuator sensor 2/2gang **SSA-F-2.2.1**	2TKA00002798	1/10
	Switch actuator sensor 2/2gang WL **SSA-F-2.2.1-WL**		1/10
	Rocker 2gang left/right		
white	**SR-2-84**	2TKA00002779	1/10
anthracite	**SR-2-81**	2TKA00002777	1/10
aluminium	**SR-2-83**	2TKA00002778	1/10
	Labeling plate Labeling plate cover plates. Useable text area is (12 x 52)mm.		
	2752	2TKA00000053	10/100

Product	Article-No.	Order-No.	Pack/Qty

Impressivo

ABB-free@home

Product	Article-No.	Order-No.	Pack/Qty
	1gang rockers with icon		
	Rocker 1gang "lighting" symbol		
white	**SRL-1-84**		1/10
anthracite	**SRL-1-81**		1/10
aluminium	**SRL-1-83**		1/10
	Rocker 1gang "blinds" symbol		
white	**SRB-1-84**		1/10
anthracite	**SRB-1-81**		1/10
aluminium	**SRB-1-83**		1/10
	Rocker 1gang "scene" symbol		
white	**SRS-1-84**		1/10
anthracite	**SRS-1-81**		1/10
aluminium	**SRS-1-83**		1/10
	Rocker 1gang "dimming" symbol		
white	**SRD-1-84**		1/10
anthracite	**SRD-1-81**		1/10
aluminium	**SRD-1-83**		1/10

Product	Article-No.	Order-No.	Pack/Qty
	2gang rockers with icon		
	Rocker 2gang "lighting" symbol left		
white	**SRL-2-L-84**		1/10
anthracite	**SRL-2-L-81**		1/10
aluminium	**SRL-2-L-83**		1/10
	Rocker 2gang "scene" symbol left		
white	**SRS-2-L-84**		1/10
anthracite	**SRS-2-L-81**		1/10
aluminium	**SRS-2-L-83**		1/10
	Rocker 2gang "dimming" symbol left		
white	**SRD-2-L-84**		1/10
anthracite	**SRD-2-L-81**		1/10
aluminium	**SRD-2-L-83**		1/10
	Rocker 2gang "lighting" symbol right		
white	**SRL-2-R-84**		1/10
anthracite	**SRL-2-R-81**		1/10
aluminium	**SRL-2-R-83**		1/10
	Rocker 2gang "scene" symbol right		
white	**SRS-2-R-84**		1/10
anthracite	**SRS-2-R-81**		1/10
aluminium	**SRS-2-R-83**		1/10
	Rocker 2gang "dimming" symbol right		
white	**SRD-2-R-84**		1/10
anthracite	**SRD-2-R-81**		1/10
aluminium	**SRD-2-R-83**		1/10
	Rocker 2gang "blinds" symbol		
white	**SRB-2-84**		1/10
anthracite	**SRB-2-81**		1/10
aluminium	**SRB-2-83**		1/10

Impressivo

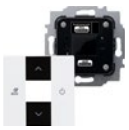
ABB-free@home

Product	Article-No.	Order-No.	Pack/Qty
	Dimming actuator 4gang Multi-channel universal dimming actuator for controlling LEDs, incandescent lamps, 230 V halogen lamps, low-voltage halogen lamps with conventional or electronic transformers, and dimmable energy-saving halogen lamps. For dimmable retrofit LED lamps (LEDi). Increasing the maximum load via channel bridging possible. The outputs can be switched parallel in any combination. Outputs automatically recognise the connected load. In addition, the operating mode can be selected manually. Status indication of the channels via LED.		
	Universal dimmer 4gang **DA-M-0.4.2**	2TKA00002715	1
	Compensator **6596**	2TKA00002992	1
	Dim actuator sensor For dimming 230 V~ loads. With integrated universal dimming actuator for controlling different lamps. The dimming function is available also without prior programming (pre-configured).		
	Dimmer 1/1gang **SDA-F-1.1.1**	2TKA00002800	1/10
	Dimmer 1/1gang WL **SDA-F-1.1.1-WL**		1/10
	Rocker 1gang		
white	**SR-1-84**	2TKA00002776	1/10
anthracite	**SR-1-81**	2TKA00002774	1/10
aluminium	**SR-1-83**	2TKA00002775	1/10
	Compensator **6596**	2TKA00002992	1
	Dimmer 2/1gang **SDA-F-2.1.1**	2TKA00002801	1/10
	Dimmer 2/1gang WL **SDA-F-2.1.1-WL**		1/10
	Rocker 2gang left/right		
white	**SR-2-84**	2TKA00002779	1/10
anthracite	**SR-2-81**	2TKA00002777	1/10
aluminium	**SR-2-83**	2TKA00002778	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Movement detector For automatic switching of ABB-free@home® actuators dependent on movement and brightness.		
white	**MD-F-1.0.1-84**	2TKA00002773	1/10
anthracite	**MD-F-1.0.1-81**	2TKA00002771	1/10
aluminium	**MD-F-1.0.1-83**	2TKA00002772	1/10
	Movement detector/switch actuator For automatic switching of ABB-free@home® actuators dependent on movement and brightness. With integrated switch actuator. Switching function is available also without prior programming (pre-configured).		
white	**MSA-F-1.1.1-84**	2TKA00002805	1/10
anthracite	**MSA-F-1.1.1-81**	2TKA00002803	1/10
aluminium	**MSA-F-1.1.1-83**	2TKA00002804	1/10

Impressivo

ABB-free@home

Product	Article-No.	Order-No.	Pack/Qty
	**Room temperature controller** Control element with room temperature control function for controlling commercially available actuating drives or analogue actuating drives (continuous controllers) in connection with HA-M-0.6.1, HA-M-0.12.1. With display of set-value temperature. Only to be used in combination with ABB-free@home® room temperature controller cover plates CP-RTC-xxx.		
	Room thermostat insert **RTC-F-1**	2TKA00002780	1/10
	Thermostat insert WL **RTC-F-1-WL**		1/10
	Thermostat insert 1gang WL **RTC-F-2.1.1-WL**		1/10
	DP4-T-1	2TKA00003293	1/10
	DP4-1-611	2TKA00003291	1/10
	Flush-mounted installation box for 4,3" Touch panel ABB-free@home® **DP4-F**	2TKA00003295	1/10
	Thermostat center plate		
white	**CP-RTC-84**	2TKA00002784	1/10
anthracite	**CP-RTC-81**	2TKA00002782	1/10
aluminium	**CP-RTC-83**	2TKA00002783	1/10
	Thermostat cover plate fan coil controller		
white	**CP-FCC-84**	2TKA00003234	1/10
anthracite	**CP-FCC-81**	2TKA00003232	1/10
aluminium	**CP-FCC-83**	2TKA00003233	1/10
	4,3" Touch Panel free@home Thermostat		
anthracite	**DP4-1-625**	2TKA00003292	1/10
	Blind actuator sensor For controlling blind and awning motors. With integrated blind actuator. Blind function is available also without prior programming (pre-configured).		
	Blind actuator sensor 1/1gang **SBA-F-1.1.1**	2TKA00002806	1/10
	Blind actuator sensor 1/1gang WL **SBA-F-1.1.1-WL**		1/10
	Blind actuator sensor 2/1gang **SBA-F-2.1.1**	2TKA00003051	1/10
	Blind actuator sensor 2/1gang WL **SBA-F-2.1.1-WL**		1/10
	Rocker 1gang		
white	**SR-1-84**	2TKA00002776	1/10
anthracite	**SR-1-81**	2TKA00002774	1/10
aluminium	**SR-1-83**	2TKA00002775	1/10
	Rocker 1gang "blinds" symbol		
white	**SRB-1-84**		1/10
anthracite	**SRB-1-81**		1/10
aluminium	**SRB-1-83**		1/10

Product	Article-No.	Order-No.	Pack/Qty

Swing®L
Understated beauty

A modest combination of colours and white. A modern square design. A compelling offer of light switches and socket outlets for your daring reconstruction plans. Easy fitting thanks to their flat installation depth. Find fun in the functional.

01 white / white
02 white / light grey
03 ivory / ivory
04 white / creamy
05 white / mocca
06 white / brick colour

Ideal for blocks of flats and refurbishment projects, due to the small installation depth

Swing®L

Selected functions.

01

02

03

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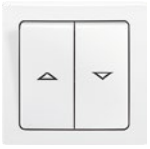
08 

09

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01 Rocker switch 1gang
02 Rocker switch 1gang, with indication or orientation neon lamp
03 Rocker switch 2gang
04 Push switch 1gang, with indication or orientation neon lamp
05 Push switch with bell symbol
06 Dimmer with rotary control
07 Flush-mounted movement detector
08 Push switch / blind control switch
09 Thermostat with rotary temperature setting
10 Antenna socket for TV / radio
11 Antenna socket for TV / radio / satellite
12 Data communication outlet 2gang
13 Telephone connection unit
14 Illumination LED unit
15 Blank cover
16 Cable outlet
17 Socket outlet with earthing pin
18 Socket outlet with earthing pin, shuttered
19 Socket outlet with earthing pin, shuttered, with labelling field
20 Socket outlet with earthing pin, with surge protection
21 Safety socket with earthing pin, with built-in RCD, with shutters
22 SCHUKO® socket outlet
23 Double socket outlet with earth. pins
24 Double socket outlet with earthing pins, with surge protection
25 Double SCHUKO® socket outlet
26 IP 44 rocker switch, 1-gang
27 IP 44 socket outlet with earth. pins

01

02

03

04

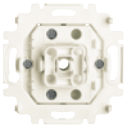
05

1 to 5gang cover frame for horizontal and vertical installation
01 85 mm x 85 mm
02 85 mm x 156 mm
03 85 mm x 227 mm
04 85 mm x 298 mm
05 85 mm x 369 mm

For more information about light switch ranges visit ABB global web sites.

Swing®L

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker switch mechanism, 1gang 1way** [1] With optional illumination. Screw-type terminals. Fixation via screws or claws. 10 AX, 250 V AC	3557-A01440	20

[1] The neon lamp and LED are not part of the switch – see page 11/384.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker switch mechanism, 1gang 2way [1] With optional illumination. Screw-type terminals. Fixation via screws or claws. 10 AX, 250 V AC	3557-A06440	20

[1] The neon lamp and LED are not part of the switch – see page 11/384.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker switch mechanism, intermediate [1] With optional illumination. Screw-type terminals. Fixation via screws or claws. 10 AX, 250 V AC	3557-A07440	20

[1] The neon lamp and LED are not part of the switch – see page 11/384.

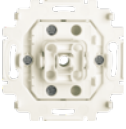
Product	Article-No.	Order-No.	Pack/Qty
	Rocker switch mechanism, DP 1gang 1way [1] Screw-type terminals. Fixation via screws or claws. 10 AX, 250 V AC	3557-A02442	20

[1] The neon lamp and LED are not part of the switch – see page 11/384.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker switch mechanism, 2gang 1way [1] With optional illumination. Screw-type terminals. Fixation via screws or claws. 10 AX, 250 V AC	3557-A05440	20

[1] The neon lamp and LED are not part of the switch – see page 11/384.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker switch mechanism, 2gang 2way Screw-type terminals. Fixation via screws or claws. 10 AX, 250 V AC	3557-A52440	20

Product	Article-No.	Order-No.	Pack/Qty
	**Rocker push-switch mechanism, 1gang 1way** [1] With optional illumination. Screw-type terminals. Fixation via screws or claws. 10 A, 250 V AC	3557-A80440	20

[1] The neon lamp and LED are not part of the switch – see page 11/384.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker push-switch mechanism, 1gang 1way, with N terminal [1] With optional illumination. Screw-type terminals. Fixation via screws or claws. 10 A, 250 V AC	3557-A91440	20

[1] The neon lamp and LED are not part of the switch – see page 11/384.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker For switches 1g1w, 1g2w, intermediate. For 1g1w push-switch.		
white		3557G-A00651 B1	20
ivory		3557G-A00651 C2	20

Product	Article-No.	Order-No.	Pack/Qty
	Rocker with doorbell symbol For 1g1w push-switch.		
white		3557G-A00680 B1	20
ivory		3557G-A00680 C2	20

Product	Article-No.	Order-No.	Pack/Qty
	Rocker with light symbol For 1g1w push-switch.		
white		3557G-A00690 B1	20
ivory		3557G-A00690 C2	20

Product	Article-No.	Order-No.	Pack/Qty
	Rocker divided For switches 2g1w, 2g2w.		
white		3557G-A00652 B1	20
ivory		3557G-A00652 C2	20

Product	Article-No.	Order-No.	Pack/Qty
	Rocker with transparent lens For switches 1g1w, 1g2w, intermediate, 1g1w DP with orientation or indication neon lamp. For 1g1w push-switch with orientation or indication neon lamp.		
white		3557G-A00653 B1	20
ivory		3557G-A00653 C2	20

Swing®L

Rocker switches / push switches

Product	Article-No.	Order-No.	Pack/Qty
	Rocker divided, with transparent lens For 2g1w switch with orientation neon lamp.		
white		3557G-A00654 B1	20
ivory		3557G-A00654 C2	20
	Card switch mechanism, 1gang 1way, with N terminal [1] The contact will close once a card 54 × 86 mm is inserted into the cover slot. Suitable for use with orientation neon lamps 3916-1222x. Screw-type terminals. Fixation via screws or claws. 10 A, 250 V AC		
		3558-A92442	10
	Card switch cover plate		
white		3558G-A00700 B1	10
ivory		3558G-A00700 C2	10

[1] The neon lamp and LED are not part of the switch – see page 11/384.

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Dimmer insert for dimmable LEDs with rotary control and ON/OFF soft-catch [9] [13] Adjustable minimum brightness. Low-noise level thanks to MOSFET electronics. Electronic short-circuit and overload protection. For dimmable retrofi t sources with LEDs (LEDi) at 230 V AC or 12 V AC [11], optimized for dimming Philips Master series retrofi t LEDs. For incandescent lamps, 230V AC tungsten halogen 230 V AC or 12 V AC [11] halogen lamps with conventional transformers or electronic (LC) transformers (version C not allowed). Mix operation of LEDi with conventional loads is possible. Can be combined with 1g2w or 1g2w/intermediate switches (for ON/OFF operation only, brightness control is not possible). min. 2 W/V·A, max. 100 W/V·A for dimmable LEDi sources, 230 V AC min. 4 W/V·A, max. 100 W/V·A for dimmable LEDi sources, 12 V AC (L, LC) [11] min. 10 W/V·A, max. 100 W/V·A for halogen lamps, 12 V AC (L, LC) [11] min. 10 W, max. 100 W for dimmable halogen energy saving lamps, 230 V AC min. 10 W, max. 100 W for vacuum and halogen lamps, 230 V AC 2-wire connection, 230 V AC, 50/60 Hz		
	6523 U-500	6512-0-0307	1

[9] At ambient temperature higher than 35 °C the load must be reduced by approx. 3 % / °C.
[11] With conventional transformers, take ~20 % transformer losses into account.
[13] A neon lamp can be used for orientation illumination (more detailed information is given in switch range chapters).

	Rotary control dimmer insert with switch-on at minimal brightness level [9] With cover plate fastening nut. For ☼ also for certain 230 V AC compact fluorescent lamps with screw cap (energy saving lamps), designed for dimming (using leading-edge phase control). min. 60 W, max. 400 W for vacuum and halogen lamps, 230 V AC min. 10 W, max. 80 W for dimmable compact fluorescent lamps, 230 V AC		
	2200 U-503	6514-0-0111	1

[9] At ambient temperature higher than 35 °C the load must be reduced by approx. 3 % / °C.

	Rotary control dimmer insert with ON/OFF soft-catch [9] [13] For ☼ also for certain 230 V AC compact fluorescent lamps with screw cap (energy saving lamps), designed for dimming (using the leading-edge phase control). Can be combined with 1g2w or 1g2w/intermediate switches (for ON/OFF operation only, brightness control is not possible). min. 60 W, max. 600 W for vacuum and halogen lamps, 230 V AC min. 10 W, max. 100 W for dimmable compact fluorescent lamps, 230 V AC		
	2250 U	6515-0-0704	1

[9] At ambient temperature higher than 35 °C the load must be reduced by approx. 3 % / °C.
[13] A neon lamp can be used for orientation illumination (more detailed information is given in switch range chapters).

Swing®L
Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Rotary control dimmer insert with ON/OFF soft-catch [9) 13)] For ☼ [11)]; also for certain compact fluorescent lamps for 230 V AC with screw cap (energy saving lamps), designed for dimming (using the leading-edge phase control). Can be combined with 1g2w or 1g2w/intermediate switches (for ON/OFF operation only, brightness control is not possible). min. 20 W/V·A, max. 500 W/V·A, for 230 V or ELV lamps, 230 V AC min. 5 W, max. 100 W for dimmable compact fluorescent lamps, 230 V AC		
	2247 U	6512-0-0057	1

[9)] At ambient temperature higher than 35 °C the load must be reduced by approx. 3 % / °C.
[11)] With conventional transformers, take ~20 % transformer losses into account.
[13)] A neon lamp can be used for orientation illumination (more detailed information is given in switch range chapters).

Product	Article-No.	Order-No.	Pack/Qty
	Rotary control dimmer insert with ON/OFF soft-catch [9) 13)] Short-circuit and overload electronic protection. Minimum brightness setting option. For ☼ [11)] Can be combined with 1g2w or 1g2w/intermediate switches (for ON/OFF operation only, brightness control is not possible). min. 200 W/V·A, max. 1000 W/V·A, 230 V AC		
	6520 U-500	6520-0-0227	1

[9)] At ambient temperature higher than 35 °C the load must be reduced by approx. 3 % / °C.
[11)] With conventional transformers, take ~20 % transformer losses into account.
[13)] A neon lamp can be used for orientation illumination (more detailed information is given in switch range chapters).

Product	Article-No.	Order-No.	Pack/Qty
	Rotary control dimmer insert with switch-on at minimal brightness level, combined with ON/OFF soft-catch [9) 13)] For ☼ [11)] The switching part of the insert can be combined with 1g2w or 1g2w/intermediate switches. The dimmed output is independent on the switch. Switch: 6 A; dimmer: min. 60 W/V·A, max. 400 W/V·A, 230 V AC		
	6517 U-101-500	6517-0-0018	1

[9)] At ambient temperature higher than 35 °C the load must be reduced by approx. 3 % / °C.
[11)] With conventional transformers, take ~20 % transformer losses into account.
[13)] A neon lamp can be used for orientation illumination (more detailed information is given in switch range chapters).

Product	Article-No.	Order-No.	Pack/Qty
	Rotary control dimmer insert with ON/OFF soft-catch [9) 13)] Short-circuit and overload electronic protection. For ☼ [12)] Can be combined with 1g2w or 1g2w/intermediate switches (for ON/OFF operation only, brightness control is not possible). min. 40 W/V·A, max. 420 W/V·A, 230 V AC		
	6513 U-102	6513-0-0568	1

[9)] At ambient temperature higher than 35 °C the load must be reduced by approx. 3 % / °C.
[11)] With conventional transformers, take ~20 % transformer losses into account.
[12)] With electronic transformers, take 5 % transformer losses into account.
[13)] A neon lamp can be used for orientation illumination (more detailed information is given in switch range chapters).

Product	Article-No.	Order-No.	Pack/Qty
	Electronic potentiometer insert for 1 -10 V electronics ballasts, for rotary control and switch-on at minimal brightness level For ⊣▭⊢ or for LED control via electronic ballast with 1 - 10 V interface. Max. control current: 50 mA DC Potential-free contact for switching the ballast power supply. It is recommended to use a relay for more than 5 ballasts. 4 A (cos ϕ = 0.9), 3 A (cos ϕ = 0.5) 700 W/V·A, 230 V AC, 50/60 Hz		
	2112 U-101	6599-0-2035	1

Product	Article-No.	Order-No.	Pack/Qty
	DALI Power-potentiometer insert, with rotary control and ON/OFF push operation For central switching and dimming up to 64 DALI devices in accordance with EN 62386. Increased brightness sensitivity setting at slow rotation. Integrated orientation LED illumination (18 colour presets or OFF). Short-circuit and overload electronic protection. DALI cable length: max. 300 m (cores' cross section 1.5 to 2.5 mm²). The brightness level when switched on by brief pressing: the same as it was when last used or pre-selectable. The brightness level when the power supply is restored after power failure: switched off status or pre-selectable (if supported by the DALI device). In active mode the insert serves as a DALI power supply (15.5 V DC / 75 mA) for up to 37 DALI devices (or for up to 111 DALI devices with 3 power-potentiometers in parallel connection). In passive mode the insert behaves as an additional control unit. Parallel interconnection of power-potentiometers: up to 3 pcs in active mode or up to 5 pcs in passive mode. The insert is not suitable for combination with other DALI sensors. Power consumption: max. 2.5 W 4-wire connection in active mode, 2-wire connection in passive mode 230 V AC, 50/60 Hz		
	2117/11 U-500	6599-0-2988	1

Product	Article-No.	Order-No.	Pack/Qty
	DALI potentiometer insert, with rotary control and ON/OFF push operation For central switching and dimming up to 64 DALI devices in accordance with EN 62386. Increased brightness sensitivity setting at slow rotation. Integrated orientation LED illumination (18 colour presets or OFF). An additional DALI power supply is needed (e.g. by Tridonic, Philips, Helvar, or the DALI power-potentiometer 6599-0-2988). Current consumption: 7 - 15 mA The insert is polarity-reversal proof. DALI cable length: max. 300 m (cores' cross section 1.5 to 2.5 mm²) The brightness level when switched on by brief pressing: the same as it was when last used or pre-selectable. The brightness level when the power supply is restored after power failure: switched off status or pre-selectable (if supported by the DALI device). Up to fi ve potentiometers may be connected in parallel. The insert is not suitable for combination with other DALI sensors. 2-wire connection		
	2117 U-500	6599-0-2987	1

Swing®L

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Cover plate for rotary dimmer [16] With fastening nut. With two types of button (for 6514-0-0111 and other devices).		
white		3294G-A00125 B1	5
ivory		3294G-A00125 C2	5/1

[16] Cover illumination with neon lamp or LED is not possible.

Movement detectors

Product	Article-No.	Order-No.	Pack/Qty
	Switch insert for movement detector Switching element: relay Operating temperature: –10 °C to +55 °C 2 300 W for ☼, 1 750 V·A for ⊠ ⊠, 500 V·A / 64 µF pro ⊏⊐ [44] For easy connection, terminal N is doubled. 3-wire connection, 230 VAC		
		3299U-A00006	1

[44] Also for example, for compact 230 V AC lamps (so-called CFL bulbs) or luminaires with LED.

	Switch insert for movement detector Switching element: 2 relays (relay 2 switches on about 3 min after relay 1 switches on, independently of external lighting; relay 2 switches off about 5 min after relay 1) Operating temperature: –10 °C to +55 °C Max. 3 A (cos ϕ > 0,8) [44] One spare fuse is inserted in the fuse box. 4-wire connection, 230 VAC		
		3299U-A00005	1

[44] Also for example, for compact 230 V AC lamps (so-called CFL bulbs) or luminaires with LED.

	Switch insert for movement detector Switching element: triac 5 s before switching off the brightness is reduced Operating temperature: –10 °C to +55 °C 40 - 300 W pro ☼ One spare fuse is inserted in the fuse box. 2-wire connection, 230 V AC		
		3299U-A00001	1

[36] Parallel connection of devices is not allowed. Can not be used for non-ohmic loads (control coils, fluorescent relays, LEDs, etc.).

	Movement detector Detection angle: approx. 180° Adjustable values (on the back of the cover): lighting threshold (1 - 1000 lx); sensitivity; switch-off delay (5 sec - 10 min, or 15 / 30 / 45 / 60 min by pressing integrated button) Operating temperature: –10 °C to +55 °C Need to be used together with a switch insert for movement detector.		
white		3299G-A02180 B1	1
ivory		3299G-A02180 C2	1

Swing®L

Blind control

Product	Article-No.	Order-No.	Pack/Qty
	Blind rocker switch mechanism [3] 1gang 1way switch 10 AX, 250 V AC Screwless terminals. Fixation via screws or claws.		
		3557-A89440	20

[3] A neon lamp or LED cannot be used.

Product	Article-No.	Order-No.	Pack/Qty
	Blind rocker switch mechanism [3] 1gang 1way push-switch 10 A, 250 V AC Screwless terminals. Fixation via screws or claws.		
		3557-A88440	20

[3] A neon lamp or LED cannot be used.

Product	Article-No.	Order-No.	Pack/Qty
	Blind switch rocker with markings For 2g1w blind switch with interlock. For 2g1w blind push-switch with interlock.		
white		3557G-A00662 B1	20
ivory		3557G-A00662 C2	20

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet with earthing pin, shuttered Screw-type terminals. Fixation via screws or claws. IP 40 16 A, 250 V AC		
white		5518G-A02459 B1	10
ivory		5518G-A02459 C2	10

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet with earthing pin Screw-type terminals. Fixation via screws or claws. 16 A, 250 V AC		
white		5518G-A02449 B1	10
ivory		5518G-A02449 C2	10

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet with earthing pin, shuttered, with labelling field Screw-type terminals. Fixation via screws or claws. IP 40 16 A, 250 V AC		
white		5518G-A02452 B1	10
ivory		5518G-A02452 C2	10/1

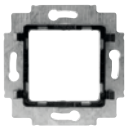
Product	Article-No.	Order-No.	Pack/Qty
	Double socket outlet with earthing pins, shuttered, semifl ush-mounted Screw-type terminals. Fixation via screws only. 16 A, 250 V AC		
		5512J-C02259 B1	10

Product	Article-No.	Order-No.	Pack/Qty
	Double socket outlet with earthing pins, shuttered, with turned upper cavity Screwless terminals. Fixation via screws only. IP 40 16 A, 250 V AC		
white		5513J-C02357 B1	10
white / creamy		5513J-C02357 B1C1	10/1
white / ivory		5513J-C02357 B1C2	10/1
white / mocca		5513J-C02357 B1C3	10/1
white / light grey		5513J-C02357 B1S1	10/1
white / brick colour		5513J-C02357 B1R3	10/1

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet with earthing pin, with surge protection Optical fault signalling. Screw-type terminals. Fixation via screws only. 16 A, 230 V AC		
white		5598G-A02349 B1	1
ivory		5598G-A02349 C2	1

Swing®L
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Double socket outlet with earthing pins, shuttered, with turned upper cavity, with surge protection Optical fault signalling. Screwless terminals. Fixation via screws only. IP 40 16 A, 230 V AC		
white		5593J-C02357 B1	1
white / creamy		5593J-C02357 B1C1	1
white / ivory		5593J-C02357 B1C2	1
white / mocca		5593J-C02357 B1C3	1
white / light grey		5593J-C02357 B1S1	1
white / brick colour		5593J-C02357 B1R3	1
	Safety socket with earthing pin, with built-in RCD, with shutters Residual working current $I_{\Delta n}$: 30 mA Type A, AC and pulse current sensitivity Rated current In: 16 A Rated frequency: 45-60 Hz Trip time at 5× $I_{\Delta n}$: max. 30 ms Rated short-circuit current: 3000 A Impulse current resistance: 3,000 A, 8/20 µs Ambient temperature: -25 ° C to +40 °C Degree of protection: IP 20 Climatic resistance: in accordance with ČSN EN 61008-1 Connection cross-section: 1.5 to 2.5 mm² Built-in depth: 32 mm Additional sockets can be connected to terminals L ', N' they will also be under the control of the current protector. Screwless terminals. 16 A, 230 V AC		
white		5526G-A02369 B1	1
ivory		5526G-A02369 C1	1
	Socket outlet with earthing contacts, shuttered Screw-type terminals. Fixation via screws or claws. 16 A, 250 V AC Screwless terminals. Fixation via screws or claws. 16 A, 250 V AC		
white		5520G-A03457 B1	10/1
ivory		5520G-A03457 C2	10/1
	Socket outlet with earthing contacts, shuttered Screw-type terminals. Fixation via screws or claws. 16 A, 250 V AC Screw-type terminals. Fixation via screws or claws. 16 A, 250 V AC		
white		5518G-A03459 B1	10
ivory		5518G-A03459 C2	10

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet with earthing contacts Screw-type terminals. Fixation via screws or claws. 16 A, 250 V AC		
white		5518G-A03449 B1	10
ivory		5518G-A03449 C2	10
	Double socket outlet with earthing contacts, shuttered Screw-type terminals. Fixation via screws or claws. 16 A, 250 V AC		
white		5512J-C03459 B1	10
ivory		5512J-C03459 C2	10
	**Adapter for Profi l 45 inserts** For fl ush mounting of any Profi l 45 device (see pages 254 - 256) into switch ranges. For the assembly it is necessary to use cover plate 5016.-A00070 .. and the cover frame from the desired switch range.		
		5525U-A00100	5/1
	Socket outlet 45×45 with earthing pin Only for 2× 1.5 mm² or 2× 2.5 mm² conductors. 16 A, 250 V AC		
white (RAL 9010)		5525N-C02347 B	20
carmine (RAL 3003)		5525N-C02347 R1	20

Swing®L

Data connection

Product	Article-No.	Order-No.	Pack/Qty
	Radio/TV socket outlet insert – terminal type (article number **EU 3503**) – loop-through type with 7 dB tap loss (article number **EU 3607**) – loop-through type with 10 dB tap loss (article number **EU 3610**) – loop-through type with 14 dB tap loss (article number **EU 3614**) Nominal impedance of inputs and outputs: 75 Ω For coaxial cables with a diameter of 3.6 to 6.8 mm. Fixation via screws or claws.		
	EU 3503	5011-A3503	1
	EU 3607	5011-A3607	1
	EU 3610	5011-A3610	1
	EU 3614	5011-A3614	1
	Radio/TV/SAT socket outlet insert – terminal type (article number **EU 3303**) Allows passage of a current of 500 mA DC and 22 kHz tone signal for LNB power supply and control. Nominal impedance of inputs and outputs: 75 Ω For coaxial cables with a diameter of 3.6 to 6.8 mm. Fixation via screws or claws.		
	EU 3303	5011-A3303	1
	Cover plate for Radio/TV/SAT socket outlet		
white		5011G-A00300 B1	10
ivory		5011G-A00300 C2	10
	Loudspeaker terminal – black differentiation ring Cross section of connecting wires: max. 4 mm²		
white		1479190-3	10/1
	Loudspeaker terminal – red differentiation ring Cross section of connecting wires: max. 4 mm²		
white		1479191-3	10/1

Product	Article-No.	Order-No.	Pack/Qty
	Modular-Jack communication insert (keystone) – 6-pole RJ 12-6 Cat. 3 (for telephone wiring) For mounting in socket fi xing plates and mounting plates (5014A-B101., 5014.-B0101., 1753-0-8055, 136811-1, 1711277-1, 5014G-A01018 ..).		
		1228.01 RJ 12-6	1
	Communication Modular-Jack insert (keystone) – 8-pole RJ 45-8 Cat. 5e (unshielded) For mounting in socket fi xing plates and mounting plates (5014A-B101., 5014.-B0101., 1753-0-8055, 136811-1, 1711277-1, 5014G-A01018 .., 5014A-A02018 .., 5014H-A01018 .., 5014K-C01018).		
		1208.10 RJ 45-8	10
	Data communication outlet 2gang Connector socket cover With metal fastening bracket. For mounting two communication sockets type Modular Jack (keystone), blind plugs or speaker terminals (max. recommended width 18.3 mm). Hole dimensions: 19.4 x 14.8 mm		
white		5014G-A02018 B1	10
ivory		5014G-A02018 C1	10

Swing®L

Thermostats, timers

Product	Article-No.	Order-No.	Pack/Qty
	Switching unit insert for thermostats or time switch Optional connection of external temperature sensor 3292U-A90100 for floor heating. Optional connection of potential free remote control contact (only for programmable control units 3292.-A10301, 3292.-A20301). Note: In the event of power failure the control unit display goes off. Operating temperature: 0 °C to +50 °C Output: potential free NO relay contact with safety galvanic isolation 16 A (cos ϕ = 1), 230 V AC, 3-wire connection		
		3292U-A00003	1
	Universal thermostat with rotary temperature setting Control unit (must be used with switching unit). Selectable room or fl oor function of the thermostat. Linear temperature setting. Indication of output status by two-colour LED. Push buttons for regulation ON/OFF and for manual temperature reduction (with LED indication). Operating temperature: 0 °C to +55 °C Room thermostat with thermal feedback: Temperature range: approx. +13 °C to +27 °C Adjustable manual temperature reduction: approx. 2 K to 8 K Hysteresis: approx. ±0.25 K Floor thermostat: Temperature setting range: approx. +15 °C to +48 °C Manual temperature reduction: approx. 4 K to 16 K Hysteresis: approx. ±0.5 K The external temperature sensor 3292U-A90100 (not included) must be connected to terminals 1 and 2 of the switching unit.		
white		3292G-A10101 B1	1
ivory		3292G-A10101 C2	1
	Floor heating temperature sensor For thermostat with rotary temperature setting 3292.-A10101, for programmable thermostat 3292.-A10301. Sensor element: PTC thermistor, 2 kΩ at 25 °C Cable: PVC, 4 m length Conductors: 2× 0.35 mm² Cable head: metal, Ø 6 × 18 mm Degree of protection: IP 54		
grey		3292U-A90100	1

LED light

Product	Article-No.	Order-No.	Pack/Qty
	Indication and orientation LED illumination insert Installation depth: 25 mm Screw-type terminals. Fixation via screws only. 10 mA, 230 V AC		
white light		3917U-A00050	1
blue light		3917U-A00051	1
green light		3917U-A00052	1
red light		3917U-A00053	1
	Cover plate for straight LED illumination or for Profi l 45 adapter For LED illumination insert. For Profi l 45 insert adapter.		
white		5016G-A00070 B1	5/1
ivory		5016G-A00070 C2	5/1

Swing®L
Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Compensator 1. Prevents the self-ignition/fl ickering of energy-saving lamps (CFL, LED) in OFF state when orientation illumination is used. This effect is caused by features of built-in ballasts, occures if the illumination is connected between phase and the lamp. The compensator is applicable in the circuits with switches 1g1w, 1g2w, intermediate. (To be connected in parallel to the lamp). 2. Prevents after-glow of extra-low-voltage halogen or LED lamps in the deactivated state due to possible ripple voltage or activation via touch-dimmer without neutral conductor connection. (To be connected in parallel to the primary transformer side or to the lamp). 3. Removes noise generation on electronic transformers in the switched-off state during activation via touch dimmer without neutral conductor connection. (To be connected in parallel to the primary transformer side). 4. Removes ripple voltages on the control line in blind control/group controls with Busch-Jalousiecontrol® II devices. (To be connected between control wire “UP” and N conductor, and between “Down” and N conductor). Dimensions: Ø 22 × 25 mm. Length of wires: approx. 235 mm 250 V AC, 50 Hz		
	6596	6599-0-2290	1
	Orientation universal neon lamp For rocker switches and push-switches of 3557, 3558, 3559 series. – orange light (neon lamp collar is blue) – green light (neon lamp collar is grey) – blue light (neon lamp collar is purple)		
orange light		3916-12221	100/10
green light		3916-12222	100/10
blue light		3916-12223	100/10
	Indication neon lamp For rocker switches and push-switches of 3557, 3558, 3559 series. – orange light (neon lamp collar is green)		
		3916-22221	100/10
	Universal lamp For orientation and indication illumination in doorbell circuits with extra-low voltage (for mechanisms 3557-A80440, 3559-A91445, 3559-A86445). 40 mA, 12 V AC (Article number: **8345-1**) 22 mA, 24 V AC (Article number: **8337-1**)		
	8345-1	1784-0-0289	100/1
	8337-1	1784-0-0032	100/1

Product	Article-No.	Order-No.	Pack/Qty
	Neon lamp, spare For dimmer cover plates with rotary control. 0.8 mA, 230 V AC		
	3855	6599-0-0518	10/1
	Fuse for electronic inserts (spare), slow cut-off characteristics T1.6A/1500 (for 6514-0-0111)		
		GT520216	10
	Fuse for electronic inserts (spare), slow cut-off characteristics T3.15A/1500 (for 6515-0-0704, 6512-0-0057, 6517-0-0018, 6560-0-1205, 3294U-A00130)		
		GT520231	10
	Fuse for electronic inserts (spare), slow cut-off characteristics T6.3A/1500 (for 6520-0-0227)		
		GT520263	10
	Fuse for electronic inserts (spare), fast cut-off characteristics F2.5A/1500 (for 3299.-A121..)		
		GF520225	10
	Fuse for electronic inserts (spare), fast cut-off characteristics F3.15A/1500 (for 3299.-A321..)		
		GF520231	10

Swing®L
Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Cable outlet With strain relief. As adapter from fi xed installation to fl exible 3× 1.5 mm² - 5× 2.5 mm² cable. Terminal block is not included.		
white		3938G-A00034 B1	5/1
ivory		3938G-A00034 C2	5/1
	Blank plate With plastic mounting plate.		
white		3902G-A00001 B1	10
ivory		3902G-A00001 C2	10/1
	Surface mounting box For trunking distribution systems. For flush-mounted switches and semiflush-mounted double socket outlets 5512J-C02259. Internal depth: 26 mm External dimensions: 85 × 85 × 28 mm Screws for fi xation of inserts included.		
white		3900J-C00001 B	10
	Surface mounting box For trunking distribution systems. For double socket outlets 5513J-C02357 .. Internal depth: 26 mm External dimensions: 85 × 109 × 28 mm Screws for fi xation of inserts included.		
white		3900J-C00002 B	10

Swing®L
Cover frames

Product	Article-No.	Order-No.	Pack/Qty
	Cover frame 1gang		
white		3901J-A00010 B1	20
creamy		3901J-A00010 C1	20
ivory		3901J-A00010 C2	20
mocca		3901J-A00010 C3	20
light grey		3901J-A00010 S1	20
brick colour		3901J-A00010 R3	20
	Cover frame 2gang For horizontal and vertical installation.		
white		3901J-A00020 B1	10
creamy		3901J-A00020 C1	10
ivory		3901J-A00020 C2	10
mocca		3901J-A00020 C3	10
light grey		3901J-A00020 S1	10
brick colour		3901J-A00020 R3	10
	Cover frame 3gang For horizontal and vertical installation.		
white		3901J-A00030 B1	10
creamy		3901J-A00030 C1	10/1
ivory		3901J-A00030 C2	10/1
mocca		3901J-A00030 C3	10/1
light grey		3901J-A00030 S1	10/1
brick colour		3901J-A00030 R3	10/1
	Cover frame 4gang For horizontal and vertical installation.		
white		3901J-A00040 B1	10
creamy		3901J-A00040 C1	10/1
ivory		3901J-A00040 C2	10/1
mocca		3901J-A00040 C3	10/1
light grey		3901J-A00040 S1	10/1
brick colour		3901J-A00040 R3	10/1

Product	Article-No.	Order-No.	Pack/Qty
	Cover frame 5gang For horizontal and vertical installation.		
white		3901J-A00050 B1	10/1
creamy		3901J-A00050 C1	10/1
ivory		3901J-A00050 C2	10/1
mocca		3901J-A00050 C3	10/1
light grey		3901J-A00050 S1	10/1
brick colour		3901J-A00050 R3	10/1

Swing®L

Flush mounted switches and socket outlets IP44

Product	Article-No.	Order-No.	Pack/Qty
	Rocker switch mechanism, 1gang 1way, with rocker Screw-type terminals. Fixation via screws or claws. IP 44 10 AX, 250 V AC		
white		3557G-A01940 B1	10/1
ivory		3557G-A01940 C2	10/1
	Rocker switch mechanism, 1gang 2way, with rocker Screw-type terminals. Fixation via screws or claws. IP 44 10 AX, 250 V AC		
white		3557G-A06940 B1	10/1
ivory		3557G-A06940 C2	10/1
	Rocker switch mechanism, intermediate, with rocker Screw-type terminals. Fixation via screws or claws. IP 44 10 AX, 250 V AC		
white		3557G-A07940 B1	10/1
ivory		3557G-A07940 C2	10/1
	Rocker push-switch mechanism, 1gang 1way, with rocker Screw-type terminals. Fixation via screws or claws. IP 44 10 A, 250 V AC		
white		3557G-A80940 B1	10/1
ivory		3557G-A80940 C2	10/1
	Socket outlet with earthing pin, with hinged lid [26) 38)] Screw-type terminals. Fixation via screws or claws. IP 44 16 A, 250 V AC		
white with white hinged lid)		5518G-A02989 B	10
white (with translucent hinged lid)		5518G-A02989 B1	10
ivory		5518G-A02989 C2	10

[26)] The insert meets the specified degree of protection when mounted on a vertical, smooth and non-porous wall.

[38)] The indicated degree of protection is provided only when the lid is closed.

Millenium
Distinct sophistication.

Cool. Conspicuous. Clever. Striking metal light switches in square and ultra slim designs. Millenium surprises with its complexity and functional solutions designed for any interior, any building. A wide range of KNX sensors meet the highest of customer demands. Engineered to offer maximum comfort and happiness.

01 stainless steel
02 silk black
03 antique gold
04 matt gold
05 stainless steel frame - silk black switch
06 silk black frame - stainless steel switch
07 antique gold frame - silk black switch
08 matt gold frame - silk black switch

Millenium

Selected functions.

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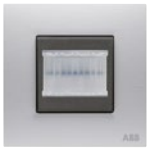
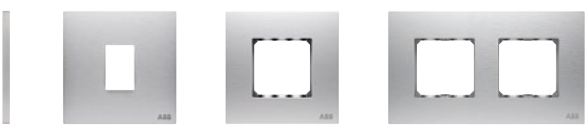


27

01 1gang 1 way switch
02 Double pole switch, with status indicator led
03 1gang 2 way switch, premium rocker
04 Switch, with bell symbol, premium rocker
05 Double pole switch, status indicator led, 45A
06 2gang 1 way switch
07 3gang 2 way switch
08 BS single pole switched socket outlet
09 BS double pole round pin switched socket outlet with led
10 Universal socket outlet
11 2gang computer outlet, RJ45
12 TV / SAT outlet
13 1gang double rotary dimmer
14 Rotary dimmer
15 Thermostat controller, 2 pipe system with blue display
16 Bell push switch DND / MUR by LED signalling
17 2gang switch DND / MUR by LED signaling
18 Blind control switch
19 Card switch
20 USB charging socket
21 Movement detector
22 FM stereo receiver with RDS
23 USB and Bluetooth® entry/exit module
24 Switch 1/2gang ABB-free@home®
25 Switch 2/4gang ABB-free@home®
26 Movement detector ABB-free@home®
27 Room temperature controller ABB-free@home®

01 **02** **03** **04**



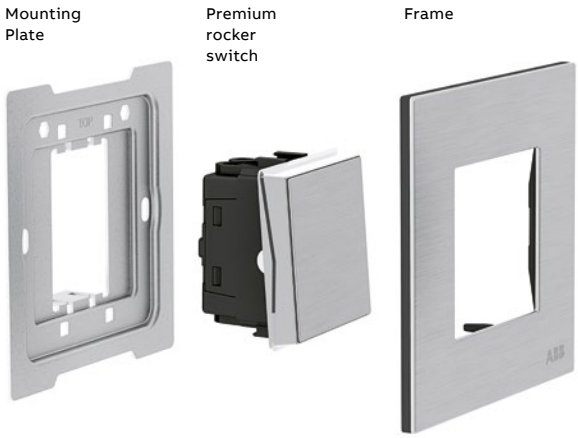
1 to 4gang frame
01 Side view, 4 x 86 mm
02 Frame 1gang, 86 x 86 mm
03 Frame 1gang, 86 x 86 mm
04 Frame 2gang, 86 x 147 mm

For more information about light switch ranges visit ABB global web sites.

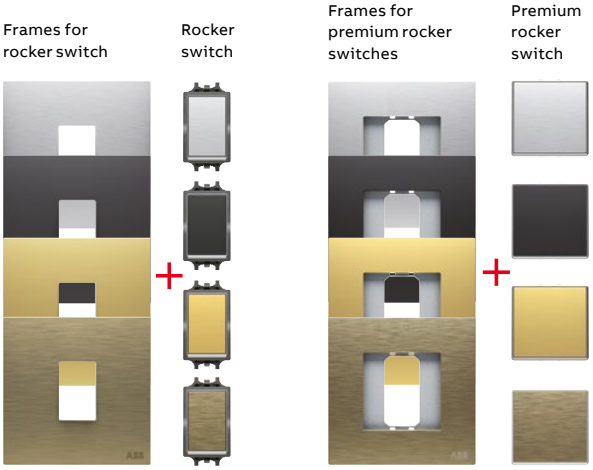
Millenium
Features and benefits.

Millenium's design and functionality converts into numerous technical and installation advantages.

Millenium installation system
Millenium collection is a grid type system enabling combination of colours and products of different dimension and functionality. The three type of switch dimensions together with the KNX sensors have to be composed with the required frame in order to have the right assortment of functionality and design.



- Modern and contemporary finishes made of real stainless steel.
- Slim design with only 4 mm height. Straight and square lines. Rocker with an attractive chrome profile.
- Screwless front plate.
- The design range includes KNX sensors.
- Large variety of socket outlets equipped with shutters (child protection).
- New LED signalling reduces energy consumption.
- KNX sensors included in the range.
- Easy to install, simple and adaptable. Installation on uneven walls is possible.
- 10 years ABB warranty for mechanical switches and socket outlets, 1 year ABB warranty for electronic devices.
- Environment-friendly range through optimized production and distribution process, reduction of raw material consumption, LED lamps used, recyclable packaging, ...
- Ideal collection for all types of homes, hotels, offices, shops, etc.



Millenium
Complete sets (AM).

Millenium offers high quality complete sets. Each unique reference contains mechanism, frame and mounting plate; making easier the ordering, handling and installation. A reliable and complete collection with all functionality at first sight.

ST

SB

MG

AG

Millenium offers a wide and elegant choice of finishes in stainless steel AISI 304 material: from the Brush Stainless Steel, to the soft new touch given by the Silk Black, and the luxury of the sophisticated gold finishes, Matt Gold and Antique Gold.

ST Stainless Steel
SB Silk Black *
MG Matt Gold
AG Antique Gold

* Silk Black not suitable to installation outdoors

Millenium – Complete sets (AM)

1 Gang switches. Rocker

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 1-way, SP 10AX Rated voltage: 250Vac Rated current: 10AX		
Stainless Steel	**AM10120-ST**	2CLA610109N1101	1
	Switch 1-gang, 2-way, SP 10AX Rated voltage: 250Vac Rated current: 10AX		
Stainless Steel	**AM10520-ST**	2CLA610209N1101	1
	Switch 1-gang, intermediate, SP 10AX Rated voltage: 250Vac Rated current: 10AX		
Stainless Steel	**AM11920-ST**	2CLA611009N1101	1
	Switch 1-gang, 1-way, SP 20AX Rated voltage: 250Vac Rated current: 20AX		
Stainless Steel	**AM11020-ST**	2CLA610119N1101	1
	Switch 1-gang, 2-way, SP 20 AX Rated voltage: 250Vac Rated current: 20AX		
Stainless Steel	**AM11520-ST**	2CLA610219N1101	1
	Switch 1-gang, 1-way, DP 20AX Rated voltage: 250Vac Rated current: 20AX Status indicator LED		
Stainless Steel	**AM11120-ST**	2CLA610139N1101	1
	Switch 1-gang, 1-way, DP water heater 20AX Rated voltage: 250Vac Rated current: 20AX Water heater indicator LED		
Stainless Steel	**AM10920-ST**	2CLA610149N1101	1

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 2-way, SP with bell symbol 10AX Rated voltage: 250Vac Rated current: 10AX Bell symbol indicator LED		
Stainless Steel	**AM18120-ST**	2CLA610299N1101	1
	Push-button 1-gang, 1-way, SP 10A Rated voltage: 250Vac Rated current: 10A		
Stainless Steel	**AM43020-ST**	2CLA610409N1101	1
	Push-button 1-gang, 1-way, SP with bell symbol Rated voltage: 250Vac Rated current: 10A Bell symbol indicator LED		
Stainless Steel	**AM42920-ST**	2CLA610449N1101	1

Millenium – Complete sets (AM)

1 Gang switches. Premium rocker

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 1-way, SP premium 10AX Rated voltage: 250Vac Rated current: 10AX Premium size rocker		
Stainless Steel	**AM10144-ST**	2CLA620109N1101	1
	Switch 1-gang, 2-way, SP premium 10AX Rated voltage: 250Vac Rated current: 10AX Premium size rocker		
Stainless Steel	**AM10544-ST**	2CLA620209N1101	1
	Switch 1-gang, intermediate, SP premium 10AX Rated voltage: 250Vac Rated current: 10AX Premium size rocker		
Stainless Steel	**AM11944-ST**	2CLA621009N1101	1
	Switch 1-gang, 1-way, SP premium 20AX Rated voltage: 250Vac Rated current: 20AX Premium size rocker		
Stainless Steel	**AM11044-ST**	2CLA620119N1101	1
	Switch 1-gang, 2-way, SP premium 20AX Rated voltage: 250Vac Rated current: 20AX Premium size rocker		
Stainless Steel	**AM11544-ST**	2CLA620219N1101	1
	Fan isolator 3 poles 10A Rated voltage: 250Vac Rated current: 10A Premium size rocker		
Stainless Steel	**AM13444-ST**	2CLA620509N1101	1
	Switch 1-gang, 2-way, SP premium w/bell symbol 10AX Rated voltage: 250Vac Rated current: 10AX Bell symbol indicator LED Premium size rocker		
Stainless Steel	**AM18144-ST**	2CLA620299N1101	1

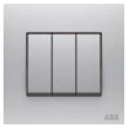
Product	Article-No.	Order-No.	Pack/Qty
	Push-button 1-gang, 1-way, SP premium 10A Rated voltage: 250Vac Rated current: 10A Premium size rocker		
Stainless Steel	**AM43044-ST**	2CLA620409N1101	1
	Push-button 1-gang, 1-way, SP premium w/bell symbol 10A Rated voltage: 250Vac Rated current: 10A Bell symbol indicator LED Premium size rocker		
Stainless Steel	**AM42944-ST**	2CLA620449N1101	1
	Switch 1-gang, 1-way, DP premium 45A Rated voltage: 250Vac Rated current: 45A Status indicator LED Premium size rocker		
Stainless Steel	**AM17744-ST**	2CLA620149N1101	1
Silk Black	**AM17744-SB**	2CLA620149N1501	1
Antique Gold	**AM17744-AG**	2CLA620149N1601	1
Matt Gold	**AM17744-MG**	2CLA620149N1701	1

Millenium – Complete sets (AM)

2 Gang switches

Product	Article-No.	Order-No.	Pack/Qty
	Switch 2-gang, 1-way, SP 10AX Rated voltage: 250Vac Rated current: 2 x 10AX		
Stainless Steel	**AM10244-ST**	2CLA621109N1101	1
	Switch 2-gang, 2-way, SP 10AX Rated voltage: 250Vac Rated current: 2 x 10AX		
Stainless Steel	**AM10644-ST**	2CLA622209N1101	1
	Switch 2-gang, 1-way, SP 20AX Rated voltage: 250Vac Rated current: 2 x 20AX		
Stainless Steel	**AM11444-ST**	2CLA621119N1101	1
	Switch 2-gang, 2-way, SP 20AX Rated voltage: 250Vac Rated current: 2 x 20AX		
Stainless Steel	**AM11644-ST**	2CLA622219N1101	1

3 Gang switches

Product	Article-No.	Order-No.	Pack/Qty
	**Switch 3-gang, 2-way, SP 10AX** Rated voltage: 250Vac Rated current: 10AX Total		
Stainless Steel	**AM10753-ST**	2CLA630209N1101	1
	Switch 3-gang, 2-way, SP 16AX Rated voltage: 250Vac Rated current: 16AX Total		
Stainless Steel	**AM12153-ST**	2CLA630219N1101	1
	Push-button 1-gang, 1-way, SP 10AX Rated voltage: 250Vac Rated current: 10AX Total		
Stainless Steel	**AM43053-ST**	2CLA630409N1101	1

4 Gang switches

	Switch 4-gang, 2-way, SP 10AX Rated voltage: 250Vac Rated current: 4 x 10AX		
Stainless Steel	**AM19188-ST**	2CLA640209N1101	1
	Switch 4-gang, 2-way, SP 20AX Rated voltage: 250Vac Rated current: 4 x 20AX		
Stainless Steel	**AM19588-ST**	2CLA640219N1101	1

Millenium – Complete sets (AM)

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	BS SP switched socket outlet 13A Rated voltage: 250Vac Rated current: 13A Single pole Dual earth with child safety shutter system		
Stainless Steel	**AM23386-ST**	2CLA623739N1101	1
Silk Black	**AM23386-SB**	2CLA623739N1501	1
Antique Gold	**AM23386-AG**	2CLA623739N1601	1
Matt Gold	**AM23386-MG**	2CLA623739N1701	1
	BS DP switched socket outlet 13A Rated voltage: 250Vac Rated current: 13A Double pole Dual earth with child safety shutter system		
Stainless Steel	**AM23786-ST**	2CLA623719N1101	1
Silk Black	**AM23786-SB**	2CLA623719N1501	1
Antique Gold	**AM23786-AG**	2CLA623719N1601	1
Matt Gold	**AM23786-MG**	2CLA623719N1701	1
	BS SP switched socket outlet w/LED 13A Rated voltage: 250Vac Rated current: 13A Single pole Indicator LED Dual earth with child safety shutter system		
Stainless Steel	**AM23486-ST**	2CLA623749N1101	1
Silk Black	**AM23486-SB**	2CLA623749N1501	1
Antique Gold	**AM23486-AG**	2CLA623749N1601	1
Matt Gold	**AM23486-MG**	2CLA623749N1701	1
	BS DP switched socket outlet w/LED 13A Rated voltage: 250Vac Rated current: 13A Double pole Indicator LED Dual earth with child safety shutter system		
Stainless Steel	**AM23886-ST**	2CLA623729N1101	1
Silk Black	**AM23886-SB**	2CLA623729N1501	1
Antique Gold	**AM23886-AG**	2CLA623729N1601	1
Matt Gold	**AM23886-MG**	2CLA623729N1701	1

Product	Article-No.	Order-No.	Pack/Qty
	BS DP switched socket outlet, 2-gang 13A Rated voltage: 250Vac Rated current: 13A Double pole Dual earth with child safety shutter system		
Stainless Steel	**AM239147-ST**	2CLA643719N1101	1
Silk Black	**AM239147-SB**	2CLA643719N1501	1
Antique Gold	**AM239147-AG**	2CLA643719N1601	1
Matt Gold	**AM239147-MG**	2CLA643719N1701	1
	BS DP switched SO w/LED, 2-gang 13A Rated voltage: 250Vac Rated current: 13A Double pole Indicator LED Dual earth with child safety shutter system		
Stainless Steel	**AM240147-ST**	2CLA643729N1101	1
Silk Black	**AM240147-SB**	2CLA643729N1501	1
Antique Gold	**AM240147-AG**	2CLA643729N1601	1
Matt Gold	**AM240147-MG**	2CLA643729N1701	1
	BS DP round pin switched outlet 5A Rated voltage: 250Vac Rated current: 5A Double pole Child safety shutter system		
Stainless Steel	**AM22186-ST**	2CLA623759N1101	1
Silk Black	**AM22186-SB**	2CLA623759N1501	1
Antique Gold	**AM22186-AG**	2CLA623759N1601	1
Matt Gold	**AM22186-MG**	2CLA623759N1701	1
	BS DP round pin switched outlet 15A Rated voltage: 250Vac Rated current: 15A Double pole Child safety shutter system		
Stainless Steel	**AM20986-ST**	2CLA623769N1101	1
Silk Black	**AM20986-SB**	2CLA623769N1501	1
Antique Gold	**AM20986-AG**	2CLA623769N1601	1
Matt Gold	**AM20986-MG**	2CLA623769N1701	1
	BS DP round pin switched outlet w/LED 15A Rated voltage: 250Vac Rated current: 15A Double pole Indicator LED Child safety shutter system		
Stainless Steel	**AM23186-ST**	2CLA623779N1101	1
Silk Black	**AM23186-SB**	2CLA623779N1501	1
Antique Gold	**AM23186-AG**	2CLA623779N1601	1
Matt Gold	**AM23186-MG**	2CLA623779N1701	1

Millenium – Complete sets (AM)

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Universal switched socket outlet 13A Rated voltage: 250Vac Rated current: 13A Child safety shutter system		
Stainless Steel	**AM29486-ST**	2CLA623919N1101	1
Silk Black	**AM29486-SB**	2CLA623919N1501	1
Antique Gold	**AM29486-AG**	2CLA623919N1601	1
Matt Gold	**AM29486-MG**	2CLA623919N1701	1
	Cooker control unit Rated voltage: 250Vac Main switch: Rated current: 45A Double pole Indicator LED Socket outlet: Rated current: 13A Child safety shutter system Indicator LED Flush wall box 45mm		
Stainless Steel	**AM118147-ST**	2CLA643749N1101	1
Silk Black	**AM118147-SB**	2CLA643749N1501	1
Antique Gold	**AM118147-AG**	2CLA643749N1601	1
Matt Gold	**AM118147-MG**	2CLA643749N1701	1

Voice data & information connectors

Product	Article-No.	Order-No.	Pack/Qty
	Telephone outlet RJ11, 1-gang 4 pole UTP		
Stainless Steel	**AM32144-ST**	2CLA611709N1101	1
Silk Black	**AM32144-SB**	2CLA611709N1501	1
Antique Gold	**AM32144-AG**	2CLA611709N1601	1
Matt Gold	**AM32144-MG**	2CLA611709N1701	1
	BT master telephone outlet RJ11/RJ12, 1-gang BT master 6 pole UTP		
Stainless Steel	**AM30544-ST**	2CLA611889N1101	1
Silk Black	**AM30544-SB**	2CLA611889N1501	1
Antique Gold	**AM30544-AG**	2CLA611889N1601	1
Matt Gold	**AM30544-MG**	2CLA611889N1701	1
	BT secondary telephone outlet RJ11/RJ12, 1-gang BT secondary 6 pole UTP		
Stainless Steel	**AM30644-ST**	2CLA611899N1101	1
Silk Black	**AM30644-SB**	2CLA611899N1501	1
Antique Gold	**AM30644-AG**	2CLA611899N1601	1
Matt Gold	**AM30644-MG**	2CLA611899N1701	1
	Computer outlet RJ45 Cat. 5E UTP, 1-gang 8 pole UTP		
Stainless Steel	**AM33144-ST**	2CLA611859N1101	1
Silk Black	**AM33144-SB**	2CLA611859N1501	1
Antique Gold	**AM33144-AG**	2CLA611859N1601	1
Matt Gold	**AM33144-MG**	2CLA611859N1701	1
	Computer outlet RJ45 Cat. 6 UTP, 1-gang 8 pole UTP		
Stainless Steel	**AM33344-ST**	2CLA611869N1101	1
Silk Black	**AM33344-SB**	2CLA611869N1501	1
Antique Gold	**AM33344-AG**	2CLA611869N1601	1
Matt Gold	**AM33344-MG**	2CLA611869N1701	1

Millenium – Complete sets (AM)

Voice data & information connectors

Product	Article-No.	Order-No.	Pack/Qty
	Computer outlet RJ45 Cat. 6A, 1-gang 8 pole Cat 6A		
Stainless Steel	**AM33644-ST**	2CLA611879N1101	1
Silk Black	**AM33644-SB**	2CLA611879N1501	1
Antique Gold	**AM33644-AG**	2CLA611879N1601	1
Matt Gold	**AM33644-MG**	2CLA611879N1701	1
	RJ45 single adapter For connectors type Keystone, AMP, Brand-Rex, Openet-ICS, THT, Leviton, Krone		
Stainless Steel	**AM33544-ST**	2CLA621819N1101	1
Silk Black	**AM33544-SB**	2CLA621819N1501	1
Antique Gold	**AM33544-AG**	2CLA621819N1601	1
Matt Gold	**AM33544-MG**	2CLA621819N1701	1
	Computer outlet RJ45 Cat. 5E UTP, 2-gang 8 pole UTP		
Stainless Steel	**AM33244-ST**	2CLA621859N1101	1
Silk Black	**AM33244-SB**	2CLA621859N1501	1
Antique Gold	**AM33244-AG**	2CLA621859N1601	1
Matt Gold	**AM33244-MG**	2CLA621859N1701	1
	Computer outlet RJ45 Cat. 6 UTP, 2-gang 8 pole UTP		
Stainless Steel	**AM32944-ST**	2CLA621869N1101	1
Silk Black	**AM32944-SB**	2CLA621869N1501	1
Antique Gold	**AM32944-AG**	2CLA621869N1601	1
Matt Gold	**AM32944-MG**	2CLA621869N1701	1
	Computer outlet RJ45 Cat. 6A, 2-gang 8 pole Cat 6A		
Stainless Steel	**AM33744-ST**	2CLA621879N1101	1
Silk Black	**AM33744-SB**	2CLA621879N1501	1
Antique Gold	**AM33744-AG**	2CLA621879N1601	1
Matt Gold	**AM33744-MG**	2CLA621879N1701	1

Product	Article-No.	Order-No.	Pack/Qty
	RJ45 double adapter For connectors type Keystone, AMP, Brand-Rex, Openet-ICS, THT, Leviton, Krone		
Stainless Steel	**AM33444-ST**	2CLA621829N1101	1
Silk Black	**AM33444-SB**	2CLA621829N1501	1
Antique Gold	**AM33444-AG**	2CLA621829N1601	1
Matt Gold	**AM33444-MG**	2CLA621829N1701	1
	TV outlet, 1-gang M type isolated dead-end-feeder.		
Stainless Steel	**AM30144-ST**	2CLA615009N1101	1
Silk Black	**AM30144-SB**	2CLA615009N1501	1
Antique Gold	**AM30144-AG**	2CLA615009N1601	1
Matt Gold	**AM30144-MG**	2CLA615009N1701	1
	TV/SAT outlet F type isolated dead-end-feeder.		
Stainless Steel	**AM31344-ST**	2CLA625009N1101	1
Silk Black	**AM31344-SB**	2CLA625009N1501	1
Antique Gold	**AM31344-AG**	2CLA625009N1601	1
Matt Gold	**AM31344-MG**	2CLA625009N1701	1
	SAT outlet F type isolated dead-end-feeder.		
Stainless Steel	**AM30344-ST**	2CLA615109N1101	1
Silk Black	**AM30344-SB**	2CLA615109N1501	1
Antique Gold	**AM30344-AG**	2CLA615109N1601	1
Matt Gold	**AM30344-MG**	2CLA615109N1701	1
	SAT twin outlet F type F type isolated dead-end-feeder.		
Stainless Steel	**AM32344-ST**	2CLA625109N1101	1
Silk Black	**AM32344-SB**	2CLA625109N1501	1
Antique Gold	**AM32344-AG**	2CLA625109N1601	1
Matt Gold	**AM32344-MG**	2CLA625109N1701	1

Millenium – Complete sets (AM)

Voice data & information connectors

Product	Article-No.	Order-No.	Pack/Qty
	SAT twin outlet F type 2 terminals		
Stainless Steel	**AM34144-ST**	2CLA622919N1101	1
Silk Black	**AM34144-SB**	2CLA622919N1501	1
Antique Gold	**AM34144-AG**	2CLA622919N1601	1
Matt Gold	**AM34144-MG**	2CLA622919N1701	1
	Flex outlet 20A Rated current: 20A		
Stainless Steel	**AM55044-ST**	2CLA620729N1101	1
Silk Black	**AM55044-SB**	2CLA620729N1501	1
Antique Gold	**AM55044-AG**	2CLA620729N1601	1
Matt Gold	**AM55044-MG**	2CLA620729N1701	1

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Double rotary dimmer, 2x1-gang Rated voltage: 230V~ +/-10 50 Hz. Min. power: 20W / VA. Max. power: - Incandescent lamps: 250 W. - Halogen lamps with ferromagnetic transformers: 150 VA. Operating temperature: 0° C to +30° C. For special ambient temperature read the recomendations in the user´s manual.		
Stainless Steel	**AM41244-ST**	2CLA616039N1101	1
Silk Black	**AM41244-SB**	2CLA616039N1501	1
Antique Gold	**AM41244-AG**	2CLA616039N1601	1
Matt Gold	**AM41244-MG**	2CLA616039N1701	1
	Rotary dimmer, 2-gang Rated voltage: 250V~ +/-10 50 Hz. Min. power: 40W / VA. Max. power: - Incandescent lamps: 400W. - Halogen lamps with ferromagnetic transformers: 300 VA. Operating temperature: 0° C to +30° C.		
Stainless Steel	**AM41344-ST**	2CLA626039N1101	1
Silk Black	**AM41344-SB**	2CLA626039N1501	1
Antique Gold	**AM41344-AG**	2CLA626039N1601	1
Matt Gold	**AM41344-MG**	2CLA626039N1701	1

Millenium – Complete sets (AM)

Thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Thermostat 2 pipe w/blue display Rated voltage: 250Vac Rated power: 200W Sensor: NTC Temperature setting: 5° C - 35° C Temp adjustment: +/- 1° C Depth: 25,5 mm.		
Stainless Steel	**AM41786-ST**	2CLA624059N1101	1
Silk Black	**AM41786-SB**	2CLA624059N1501	1
Antique Gold	**AM41786-AG**	2CLA624059N1601	1
Matt Gold	**AM41786-MG**	2CLA624059N1701	1
	Thermostat 4 pipe w/blue display Rated voltage: 250Vac Rated power: 200W Sensor: NTC Temperature setting: 5° C - 35° C Temp adjustment: +/- 1° C Depth: 25,5 mm.		
Stainless Steel	**AM42086-ST**	2CLA624069N1101	1
Silk Black	**AM42086-SB**	2CLA624069N1501	1
Antique Gold	**AM42086-AG**	2CLA624069N1601	1
Matt Gold	**AM42086-MG**	2CLA624069N1701	1

Hotel equipment

Product	Article-No.	Order-No.	Pack/Qty
	Bell push switch DND/MUR w/LED 10A Rated voltage: 230Vac Rated current: 10A Red LED "Do Not Disturb" Green LED "Make Up Room" Premium size rocker		
Stainless Steel	**AM40344-ST**	2CLA621589N1101	1
	Switch DND/MUR w/LED, 2 gang 10A Rated voltage: 230Vac Rated current: 10A Red LED "Do Not Disturb" Green LED "Make Up Room" Double rocker		
Stainless Steel	**AM40444-ST**	2CLA621509N1101	1
	Blind control switch 16AX Rated voltage: 230Vac Rated current: 16AX Outputs: 2 normally open contact Multi-way input terminal (up/down) Double rocker		
Stainless Steel	**AM11844-ST**	2CLA624419N1101	1
	Card switch 16AX Rated voltage: 250Vac Rated current: 16AX Includes indication LED		
Stainless Steel	**AM40244-ST**	2CLA621419N1101	1
Silk Black	**AM40244-SB**	2CLA621419N1501	1
Antique Gold	**AM40244-AG**	2CLA621419N1601	1
Matt Gold	**AM40244-MG**	2CLA621419N1701	1
	Electronic card switch 16AX Rated voltage: 250Vac Rated current: 16AX Includes indication LED Time relay : 5-90 sec. Cards up to 54 mm width.		
Stainless Steel	**AM40544-ST**	2CLA621459N1101	1
Silk Black	**AM40544-SB**	2CLA621459N1501	1
Antique Gold	**AM40544-AG**	2CLA621459N1601	1
Matt Gold	**AM40544-MG**	2CLA621459N1701	1

Millenium – Complete sets (AM)

Hotel equipment

Product	Article-No.	Order-No.	Pack/Qty
	Spare Led for card switches Rated voltage: 250Vac Rated current: 0.7mA Frontal replacement.		
	AM50093-BL	2CLA619309N1001	1
	Shaver socket outlet Rated voltage: 20VA / 230Vac Outputs: 115V and 230V Dimensions: 150x90x54mm Flush wall box not included (45mm depth minimum)		
Stainless Steel	**AM40188-ST**	2CLA680309N1101	1
Silk Black	**AM40188-SB**	2CLA680309N1501	1
Antique Gold	**AM40188-AG**	2CLA680309N1601	1
Matt Gold	**AM40188-MG**	2CLA680309N1701	1

Various

Product	Article-No.	Order-No.	Pack/Qty
	Blank plate Premium size		
Stainless Steel	**AM50444-ST**	2CLA620009N1101	1
Silk Black	**AM50444-SB**	2CLA620009N1501	1
Antique Gold	**AM50444-AG**	2CLA620009N1601	1
Matt Gold	**AM50444-MG**	2CLA620009N1701	1
	Fuse connection unit w/flex outlet 13A Rated voltage: 230Vac Rated current: 13A Fuse size: Ø6.3x25mm Fuse breaking capacity: 6kA 264V~ 50Hz Fuse according to BS1362		
Stainless Steel	**AM50653-ST**	2CLA630809N1101	1
Silk Black	**AM50653-SB**	2CLA630809N1501	1
Antique Gold	**AM50653-AG**	2CLA630809N1601	1
Matt Gold	**AM50653-MG**	2CLA630809N1701	1
	Fuse connection unit w/flex outlet w/LED 13A Rated voltage: 230Vac Rated current: 13A Fuse size: Ø6.3x25mm Fuse breaking capacity: 6kA 264V~ 50Hz Fuse according to BS1362 Status indicator LED		
Stainless Steel	**AM50853-ST**	2CLA630859N1101	1
Silk Black	**AM50853-SB**	2CLA630859N1501	1
Antique Gold	**AM50853-AG**	2CLA630859N1601	1
Matt Gold	**AM50853-MG**	2CLA630859N1701	1
	Switched fuse connection unit w/flex outlet w/LED 13A Rated voltage: 230Vac Rated current: 13A Fuse size: Ø6.3x25mm Fuse breaking capacity: 6kA 264V~ 50Hz Fuse according to BS1362 Status indicator LED		
Stainless Steel	**AM50753-ST**	2CLA630829N1101	1
Silk Black	**AM50753-SB**	2CLA630829N1501	1
Antique Gold	**AM50753-AG**	2CLA630829N1601	1
Matt Gold	**AM50753-MG**	2CLA630829N1701	1
	For use with: AM11120-XX, AMD11120-XX, AM18120-XX, AMD18120-XX, AM42920-XX, AMD42920-XX, AM18144-XX, AMD18144-XX, AM42944-XX and AMD42944-XX.		
Key symbol	**AM50100-CH**	2CLA600100N1101	1
Fan symbol	**AM50200-CH**	2CLA600100N1201	1
Wc symbol	**AM50300-CH**	2CLA600100N1301	1
Room service symbol	**AM50400-CH**	2CLA600100N1401	1
Nurse symbol	**AM50500-CH**	2CLA600100N1501	1
Stop symbol	**AM50600-CH**	2CLA600100N1601	1

Millenium - Grid system for combination (AMD)

Rocker switch

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 1-way, SP 10AX Rated voltage: 250Vac Rated current: 10AX		
Stainless Steel	**AMD10120-ST**	2CLA610100N1101	10
Silk Black	**AMD10120-SB**	2CLA610100N1501	10
Antique Gold	**AMD10120-AG**	2CLA610100N1601	10
Matt Gold	**AMD10120-MG**	2CLA610100N1701	10
	Switch 1-gang, 1-way, SP 20AX Rated voltage: 250Vac Rated current: 20AX		
Stainless Steel	**AMD11020-ST**	2CLA610110N1101	10
Silk Black	**AMD11020-SB**	2CLA610110N1501	10
Antique Gold	**AMD11020-AG**	2CLA610110N1601	10
Matt Gold	**AMD11020-MG**	2CLA610110N1701	10
	Switch 1-gang, 1-way, DP 20AX Rated voltage: 250Vac Rated current: 20AX Status indicator LED		
Stainless Steel	**AMD11120-ST**	2CLA610130N1101	10
Silk Black	**AMD11120-SB**	2CLA610130N1501	10
Antique Gold	**AMD11120-AG**	2CLA610130N1601	10
Matt Gold	**AMD11120-MG**	2CLA610130N1701	10
	Switch 1-gang, 1-way, DP water heater 20AX Rated voltage: 250Vac Rated current: 20AX Water heater indicator LED		
Stainless Steel	**AMD10920-ST**	2CLA610140N1101	10
Silk Black	**AMD10920-SB**	2CLA610140N1501	10
Antique Gold	**AMD10920-AG**	2CLA610140N1601	10
Matt Gold	**AMD10920-MG**	2CLA610140N1701	10
	Switch 1-gang, 2-way, SP 10AX Rated voltage: 250Vac Rated current: 10AX		
Stainless Steel	**AMD10520-ST**	2CLA610200N1101	10
Silk Black	**AMD10520-SB**	2CLA610200N1501	10
Antique Gold	**AMD10520-AG**	2CLA610200N1601	10
Matt Gold	**AMD10520-MG**	2CLA610200N1701	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 2-way, SP 20AX Rated voltage: 250Vac Rated current: 20AX		
Stainless Steel	**AMD11520-ST**	2CLA610210N1101	10
Silk Black	**AMD11520-SB**	2CLA610210N1501	10
Antique Gold	**AMD11520-AG**	2CLA610210N1601	10
Matt Gold	**AMD11520-MG**	2CLA610210N1701	10
	Switch 1-gang, 2-way, SP with bell symbol 10AX Rated voltage: 250Vac Rated current: 10AX Bell symbol indicator LED		
Stainless Steel	**AMD18120-ST**	2CLA610290N1101	10
Silk Black	**AMD18120-SB**	2CLA610290N1501	10
Antique Gold	**AMD18120-AG**	2CLA610290N1601	10
Matt Gold	**AMD18120-MG**	2CLA610290N1701	10
	Switch 1-gang, intermediate, SP 10AX Rated voltage: 250Vac Rated current: 10AX		
Stainless Steel	**AMD11920-ST**	2CLA611000N1101	10
Silk Black	**AMD11920-SB**	2CLA611000N1501	10
Antique Gold	**AMD11920-AG**	2CLA611000N1601	10
Matt Gold	**AMD11920-MG**	2CLA611000N1701	10
	Push-button 1-gang, 1-way, SP 10A Rated voltage: 250Vac Rated current: 10A		
Stainless Steel	**AMD43020-ST**	2CLA610400N1101	10
Silk Black	**AMD43020-SB**	2CLA610400N1501	10
Antique Gold	**AMD43020-AG**	2CLA610400N1601	10
Matt Gold	**AMD43020-MG**	2CLA610400N1701	10
	Push-button 1-gang, 1-way, SP with bell symbol 10A Rated voltage: 250Vac Rated current: 10A Bell symbol indicator LED		
Stainless Steel	**AMD42920-ST**	2CLA610440N1101	10
Silk Black	**AMD42920-SB**	2CLA610440N1501	10
Antique Gold	**AMD42920-AG**	2CLA610440N1601	10
Matt Gold	**AMD42920-MG**	2CLA610440N1701	10

Millenium - Grid system for combination (AMD)

Rocker switch frames

Product	Article-No.	Order-No.	Pack/Qty
	Rocker switch frame 1-gang Includes metal mounting frame Dimensions 86x86 mm.		
Stainless Steel	**AMD5120-ST**	2CLA617100N1101	10
Silk Black	**AMD5120-SB**	2CLA617100N1501	10
Antique Gold	**AMD5120-AG**	2CLA617100N1601	10
Matt Gold	**AMD5120-MG**	2CLA617100N1701	10

Premium rocker switch

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 1-way, SP premium 10AX Rated voltage: 250Vac Rated current: 10AX Premium size rocker		
Stainless Steel	**AMD10144-ST**	2CLA620100N1101	10
Silk Black	**AMD10144-SB**	2CLA620100N1501	10
Antique Gold	**AMD10144-AG**	2CLA620100N1601	10
Matt Gold	**AMD10144-MG**	2CLA620100N1701	10
	Switch 1-gang, 1-way, SP premium 20AX Rated voltage: 250Vac Rated current: 20AX Premium size rocker		
Stainless Steel	**AMD11044-ST**	2CLA620110N1101	10
Silk Black	**AMD11044-SB**	2CLA620110N1501	10
Antique Gold	**AMD11044-AG**	2CLA620110N1601	10
Matt Gold	**AMD11044-MG**	2CLA620110N1701	10
	Switch 1-gang, 2-way, SP premium 10AX Rated voltage: 250Vac Rated current: 10AX Premium size rocker		
Stainless Steel	**AMD10544-ST**	2CLA620200N1101	10
Silk Black	**AMD10544-SB**	2CLA620200N1501	10
Antique Gold	**AMD10544-AG**	2CLA620200N1601	10
Matt Gold	**AMD10544-MG**	2CLA620200N1701	10
	Switch 1-gang, 2-way, SP premium 20AX Rated voltage: 250Vac Rated current: 20AX Premium size rocker		
Stainless Steel	**AMD11544-ST**	2CLA620210N1101	10
Silk Black	**AMD11544-SB**	2CLA620210N1501	10
Antique Gold	**AMD11544-AG**	2CLA620210N1601	10
Matt Gold	**AMD11544-MG**	2CLA620210N1701	10
	Switch 1-gang, 2-way, SP premium w/bell symbol 10AX Rated voltage: 250Vac Rated current: 10AX Bell symbol indicator LED Premium size rocker		
Stainless Steel	**AMD18144-ST**	2CLA620290N1101	10
Silk Black	**AMD18144-SB**	2CLA620290N1501	10
Antique Gold	**AMD18144-AG**	2CLA620290N1601	10
Matt Gold	**AMD18144-MG**	2CLA620290N1701	10

Millenium - Grid system for combination (AMD)

Premium rocker switch

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, intermediate, SP premium 10AX Rated voltage: 250Vac Rated current: 10AX Premium size rocker		
Stainless Steel	**AMD11944-ST**	2CLA621000N1101	10
Silk Black	**AMD11944-SB**	2CLA621000N1501	10
Antique Gold	**AMD11944-AG**	2CLA621000N1601	10
Matt Gold	**AMD11944-MG**	2CLA621000N1701	10
	Push-button 1-gang, 1-way, SP premium 10A Rated voltage: 250Vac Rated current: 10A Premium size rocker		
Stainless Steel	**AMD43044-ST**	2CLA620400N1101	10
Silk Black	**AMD43044-SB**	2CLA620400N1501	10
Antique Gold	**AMD43044-AG**	2CLA620400N1601	10
Matt Gold	**AMD43044-MG**	2CLA620400N1701	10
	Push-button 1-gang, 1-way, SP premium w/bell symbol 10A Rated voltage: 250Vac Rated current: 10A Bell symbol indicator LED Premium size rocker		
Stainless Steel	**AMD42944-ST**	2CLA620440N1101	10
Silk Black	**AMD42944-SB**	2CLA620440N1501	10
Antique Gold	**AMD42944-AG**	2CLA620440N1601	10
Matt Gold	**AMD42944-MG**	2CLA620440N1701	10

Premium rocker frames

Product	Article-No.	Order-No.	Pack/Qty
	Premium rocker switch frame 1-gang Includes metal mounting frame Dimensions 86x86 mm.		
Stainless Steel	**AMD5044-ST**	2CLA617110N1101	10
Silk Black	**AMD5044-SB**	2CLA617110N1501	10
Antique Gold	**AMD5044-AG**	2CLA617110N1601	10
Matt Gold	**AMD5044-MG**	2CLA617110N1701	10
	Premium/double rocker switch frame 2-gang Includes metal mounting frame Dimensions 86x147 mm.		
Stainless Steel	**AMD5244-ST**	2CLA647200N1101	10
Silk Black	**AMD5244-SB**	2CLA647200N1501	10
Antique Gold	**AMD5244-AG**	2CLA647200N1601	10
Matt Gold	**AMD5244-MG**	2CLA647200N1701	10
	Premium/half/double rocker switch frame 3-gang Includes metal mounting frame Dimensions 86x228 mm.		
Stainless Steel	**AMD5344-ST**	2CLA667310N1101	10
Silk Black	**AMD5344-SB**	2CLA667310N1501	10
Antique Gold	**AMD5344-AG**	2CLA667310N1601	10
Matt Gold	**AMD5344-MG**	2CLA667310N1701	10
	Premium/half/double rocker switch frame 4-gang Includes metal mounting frame Dimensions 86x293 mm.		
Stainless Steel	**AMD5444-ST**	2CLA687410N1101	10
Silk Black	**AMD5444-SB**	2CLA687410N1501	10
Antique Gold	**AMD5444-AG**	2CLA687410N1601	10
Matt Gold	**AMD5444-MG**	2CLA687410N1701	10

Millenium - Grid system for combination (AMD)

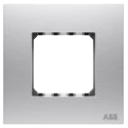
Half/double rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 1-way, half rocker 10AX Rated voltage: 250Vac Rated current: 10AX Half rocker size		
Stainless Steel	**AMD10222-ST**	2CLA680100N1101	10
Silk Black	**AMD10222-SB**	2CLA680100N1501	10
Antique Gold	**AMD10222-AG**	2CLA680100N1601	10
Matt Gold	**AMD10222-MG**	2CLA680100N1701	10
	Switch 1-gang, 2-way, half rocker 10AX Rated voltage: 250Vac Rated current: 10AX Half rocker size		
Stainless Steel	**AMD10622-ST**	2CLA680200N1101	10
Silk Black	**AMD10622-SB**	2CLA680200N1501	10
Antique Gold	**AMD10622-AG**	2CLA680200N1601	10
Matt Gold	**AMD10622-MG**	2CLA680200N1701	10
	Switch 1-gang, intermediate, half rocker 10AX Rated voltage: 250Vac Rated current: 10AX Half rocker size		
Stainless Steel	**AMD12922-ST**	2CLA681000N1101	10
Silk Black	**AMD12922-SB**	2CLA681000N1501	10
Antique Gold	**AMD12922-AG**	2CLA681000N1601	10
Matt Gold	**AMD12922-MG**	2CLA681000N1701	10
	Push button 1-gang, 1-way, half rocker 10A Rated voltage: 250Vac Rated current: 10A Half rocker size		
Stainless Steel	**AMD43222-ST**	2CLA680400N1101	10
Silk Black	**AMD43222-SB**	2CLA680400N1501	10
Antique Gold	**AMD43222-AG**	2CLA680400N1601	10
Matt Gold	**AMD43222-MG**	2CLA680400N1701	10
	Switch 1-gang, 1-way, half rocker 20AX Rated voltage: 250Vac Rated current: 20AX Half rocker size		
Stainless Steel	**AMD11422-ST**	2CLA680110N1101	10
Silk Black	**AMD11422-SB**	2CLA680110N1501	10
Antique Gold	**AMD11422-AG**	2CLA680110N1601	10
Matt Gold	**AMD11422-MG**	2CLA680110N1701	10

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 2-way, half rocker 20AX Rated voltage: 250Vac Rated current: 20AX Half rocker size		
Stainless Steel	**AMD11622-ST**	2CLA680210N1101	10
Silk Black	**AMD11622-SB**	2CLA680210N1501	10
Antique Gold	**AMD11622-AG**	2CLA680210N1601	10
Matt Gold	**AMD11622-MG**	2CLA680210N1701	10
	Switch blind control Rated voltage: 250Vac Rated power: 16AX Output: 2 normally open contact Multi-way input terminal (up/down)		
Stainless Steel	**AMD11844-ST**	2CLA624410N1101	10
Silk Black	**AMD11844-SB**	2CLA624410N1501	10
Antique Gold	**AMD11844-AG**	2CLA624410N1601	10
Matt Gold	**AMD11844-MG**	2CLA624410N1701	10
	Push button 2-gang, DND/MUR with bell symbol 10A Rated voltage: 250Vac Rated power: 10A Do Not Disturb Make Up my Room LED signalling		
Stainless Steel	**AMD40344-ST**	2CLA621580N1101	5
Silk Black	**AMD40344-SB**	2CLA621580N1501	5
Antique Gold	**AMD40344-AG**	2CLA621580N1601	5
Matt Gold	**AMD40344-MG**	2CLA621580N1701	5
	Switch 2-gang, DND/MUR 10AX Rated voltage: 250Vac Rated power: 10AX Do Not Disturb Make Up my Room LED signalling		
Stainless Steel	**AMD40444-ST**	2CLA621500N1101	5
Silk Black	**AMD40444-SB**	2CLA621500N1501	5
Antique Gold	**AMD40444-AG**	2CLA621500N1601	5
Matt Gold	**AMD40444-MG**	2CLA621500N1701	5
	Fan isolator 3 poles double 10A Rated voltage: 250Vac Rated power: 10A 3 poles		
Stainless Steel	**AMD13444-ST**	2CLA620500N1101	10
Silk Black	**AMD13444-SB**	2CLA620500N1501	10
Antique Gold	**AMD13444-AG**	2CLA620500N1601	10
Matt Gold	**AMD13444-MG**	2CLA620500N1701	10

Millenium - Grid system for combination (AMD)

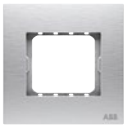
Half/double rocker & other functions frames Triple rocker switch

Product	Article-No.	Order-No.	Pack/Qty
	**Half/double rocker & other functions frame 1-gang** Includes metal mounting frame Dimensions 86x86 mm.		
Stainless Steel	**AMD5144-ST**	2CLA627100N1101	10
Silk Black	**AMD5144-SB**	2CLA627100N1501	10
Antique Gold	**AMD5144-AG**	2CLA627100N1601	10
Matt Gold	**AMD5144-MG**	2CLA627100N1701	10
	Premium/half/double rocker switch frame 2-gang Includes metal mounting frame Dimensions 86x147 mm.		
Stainless Steel	**AMD5244-ST**	2CLA647200N1101	10
Silk Black	**AMD5244-SB**	2CLA647200N1501	10
Antique Gold	**AMD5244-AG**	2CLA647200N1601	10
Matt Gold	**AMD5244-MG**	2CLA647200N1701	10
	Premium/half/double rocker switch frame 3-gang Includes metal mounting frame Dimensions 86x228 mm.		
Stainless Steel	**AMD5344-ST**	2CLA667310N1101	5
Silk Black	**AMD5344-SB**	2CLA667310N1501	5
Antique Gold	**AMD5344-AG**	2CLA667310N1601	5
Matt Gold	**AMD5344-MG**	2CLA667310N1701	5
	Premium/half/double rocker switch frame 4-gang Includes metal mounting frame Dimensions 86x293 mm.		
Stainless Steel	**AMD5444-ST**	2CLA687410N1101	5
Silk Black	**AMD5444-SB**	2CLA687410N1501	5
Antique Gold	**AMD5444-AG**	2CLA687410N1601	5
Matt Gold	**AMD5444-MG**	2CLA687410N1701	5

Product	Article-No.	Order-No.	Pack/Qty
	Switch 3-gang, 2-way, triple rocker 10AX Rated voltage: 250Vac Rated power: 10AX Total		
Stainless Steel	**AMD10753-ST**	2CLA630200N1101	10
Silk Black	**AMD10753-SB**	2CLA630200N1501	10
Antique Gold	**AMD10753-AG**	2CLA630200N1601	10
Matt Gold	**AMD10753-MG**	2CLA630200N1701	10
	Switch 3-gang, 2-way, triple rocker 16AX Rated voltage: 250Vac Rated power: 16AX Total		
Stainless Steel	**AMD12153-ST**	2CLA630210N1101	10
Silk Black	**AMD12153-SB**	2CLA630210N1501	10
Antique Gold	**AMD12153-AG**	2CLA630210N1601	10
Matt Gold	**AMD12153-MG**	2CLA630210N1701	10
	Push button 3-gang, 2-way, triple rocker 10AX Rated voltage: 250Vac Rated power: 10AX Total		
Stainless Steel	**AMD43053-ST**	2CLA630400N1101	10
Silk Black	**AMD43053-SB**	2CLA630400N1501	10
Antique Gold	**AMD43053-AG**	2CLA630400N1601	10
Matt Gold	**AMD43053-MG**	2CLA630400N1701	10

Millenium - Grid system for combination (AMD)

Triple rocker & KNX sensor frames

Product	Article-No.	Order-No.	Pack/Qty
	**Triple rocker switch/KNX sensors frame 1-gang** Includes metal mounting frame Dimensions 86x86 mm.		
Stainless Steel	**AMD5153-ST**	2CLA637100N1101	10
Silk Black	**AMD5153-SB**	2CLA637100N1501	10
Antique Gold	**AMD5153-AG**	2CLA637100N1601	10
Matt Gold	**AMD5153-MG**	2CLA637100N1701	10
	Triple rocker switch/KNX sensors frame 2-gang Includes metal mounting frame Dimensions 86x147 mm.		
Stainless Steel	**AMD5253-ST**	2CLA667200N1101	10
Silk Black	**AMD5253-SB**	2CLA667200N1501	10
Antique Gold	**AMD5253-AG**	2CLA667200N1601	10
Matt Gold	**AMD5253-MG**	2CLA667200N1701	10

Socket outlet

Product	Article-No.	Order-No.	Pack/Qty
	Universal socket outlet Rated voltage/current: 230Vac/13A, 127Vac/15A Child protection Combination with frames AMD5144-XX & AMD5244-XX		
Anthracite	**AMD39144-AN**	2CLA623900N1801	1

USB charger

	USB charger 2A, 1-gang - 1M Input voltage: 110-230V AC ± 10%; 50/60 Hz Input current: <0.2A AC at maximum load Consumption in standby: <10 mW at 230 VAC, without load Nominal output voltage: 5 VDC +5/-5% Output current per plug: 2000mA at 5 V DC Operating temperature: 0ºC to 45ºC Energy efficiency: > 79% Overload protection and auto-restart Combination with frames: AMD5144-XX & AMD5244-XX		
Anthracite	**AMD85222-AN**	2CLA618520N1801	1
	USB charger 1.500mA, 2-gang - 2M "Input voltage: 100 - 240 Vac ±10%; 50/60 Hz. Input current: 0,20 A (with maximum load). Output voltage: 5 Vdc ±5%. Output current: 1.500 mA (total for both gangs). Power consuption in stand-by: <= 0,3W@230Vac. Energy efficiency: >= 71%. Operating temparature: 0ºC to 35ºC. Combination with frames: AMD5144-XX & AMD5244-XX		
Anthracite	**AMD85144-AN**	2CLA628500N1801	1

Millenium - Grid system for combination (AMD)

Voice data & information connectors

Product	Article-No.	Order-No.	Pack/Qty
	Data outlet RJ45 Cat 6 UTP 1-gang - 1M 8 pole UTP Combination with frames: AMD5144-XX & AMD5244-XX		
Anthracite	**AMD33322-AN**	2CLA611860N1801	10
	Data outlet RJ45 Cat 6A UTP 1-gang - 1M 8 pole UTP Combination with frames: AMD5144-XX & AMD5244-XX		
Anthracite	**AMD33422-AN**	2CLA611870N1801	10
	TV/SAT terminal outlet F type - 1M F type isolated dead-end-feeder. Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD30322-AN**	2CLA615000N1801	10
	TV terminal outlet M type - 1M Single TV outlet - Dead-end M type - 9,52 mm. male For 75Ω impedance coaxial cable Avoid small bending radius Frequency range: 5 - 2.400 Mhz Connection loss: 1 dB Isolation: >16 dB Return loss: >7,6 dB DC path (Vdc / mA / Tono): 34 max. / 500 max. / 22kHz - DiSEqC Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD30122-AN**	2CLA615070N1801	10
	TV/SAT terminal outlet F type - 2M F type isolated dead-end-feeder. Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD30344-AN**	2CLA625000N1801	5
	2RCA connection unit Front: 2x RCA connectors (Red / White) Rear: screw terminals (4 wires) Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD55222-AN**	2CLA615520N1801	1

Product	Article-No.	Order-No.	Pack/Qty
	3RCA connection unit Front: 3x RCA connectors (Red / White / Yellow) Rear: screw terminals (6 wires) Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD55322-AN**	2CLA615530N1801	1
	Mini-Jack connection unit Front: 1x Mini-Jack connector (3,5mm stereo audio jack) Rear: screw terminals (3/4 wires) Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD55422-AN**	2CLA615540N1801	1
	VGA connection unit Front: 1x VGA connector (DE-15 connector) Rear: screw terminals (15 wires) Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD55522-AN**	2CLA615550N1801	1
	HDMI connector female Front: 1x HDMI connector (Type A connector) Rear: 1x HDMI connector (Type A connector) fitted at 90º angle Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD55722-AN**	2CLA615570N1801	5
	HDMI connector screwless Front: 1x HDMI connector (Type A connector) Rear: screwless terminals (20 wires) Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD55122-AN**	2CLA615510N1801	1
	USB connector female USB adaptor. No charger Front: 1x USB 2.0 connector (Type A connector) Rear: 1x USB 2.0 connector (Type A connector) fitted at 90º angle Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD55922-AN**	2CLA615590N1801	1
	USB connector w/screw USB adaptor. No charger Front: 1x USB 2.0 connector (Type A connector) Rear: screw terminals (5 wires) Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD55822-AN**	2CLA615580N1801	1

Millenium - Grid system for combination (AMD)

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	LED rotatory/push dimmer - 2M Rated voltage: 230 Vac ± 10%. Frequency: 50 Hz (Nominal power: 250 W/VA) / 60 Hz (Nominal power: 200 W/VA). Power (min./max load): - LEDi: 2 / 100 W/VA (max. 10 lamps). - Dimmable energy saving lamps: 2 / 100 W/VA (max. 10 lamps). - LV LEDi with transformer (only type L or LC): 4 / 100 W/VA (max. 10 lamps). - Incandescent lamps: 10 / 250 W/VA. - Halogen lamps: 10 / 250 W/VA. - LV halogen with transformer (only type L or LC): 10 / 250 W/VA (max. 10 lamps). 2 wire connection. Optional: auxiliary on/off with 2-way switch. Indicator LED lamp included. Back-up fuse: Electronic. Overload protection: Electronic. Ambient temperature: 0° C to +35° C. Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD60344-AN**	2CLA626030N1801	1
	Universal rotatory/push dimmer - 2M Rated voltage: 230 Vac ; 50 Hz. Min. power: 60 W / VA. Max. power: - Incandescent: 500 W. - Halogen lamp with electronic transformer: 500 VA. - Halogen lamp with ferromagnetic transformer: 400 VA. 2 wire connection. Optional: auxiliary control with push-buttons. Indicator LED lamp included. Operating temperature: 0° C to +30° C. Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD60244-AN**	2CLA626020N1801	1
	1-10V rotary dimmer - 2M Rated voltage: 127 - 230 Vac ; 50-60 Hz Dimmable electronic ballast/driver with 1-10V control input. Max. power: - 230 Vac: 700 VA. - 127 Vac: 350 VA. Max. 6 ballasts per device. Indicator LED lamp included. Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD60944-AN**	2CLA626090N1801	1

Motion sensor

Product	Article-No.	Order-No.	Pack/Qty
	110° motion sensor - 2M Rated voltage: 127 - 230 Vac ± 10% ; 50 - 60 Hz Outputs: 1 Normally Open (NO). Potential free Max. power: - Incandescent: 1.800W @230Vac / 1.000W @127Vac - Halogen with electronic o ferromagnetic transformer: 750VA @230Vac / 400VA @127Vac - Fluorescent lamps or motors: 400VA @230Vac / 200VA @127Vac For automatic switching of devices dependent on motion and brightness. With integrated selector switch for ON-AUTOMATIC-OFF in the front side. Switch-off delay: 10 sec to 10 min or short-time pulse 1 sec adjustable (from the front side). Detection range: 5 m radious. Adjustable light set point level for activation (from the front side). Detection angle: 110 ° Mounting height: 1,2 m Auxiliary control with push-buttons Temperature range (Device): -10 °C to 40 °C Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD41144-AN**	2CLA624100N1801	1

Various

	Blank insert 1M Blank insert 1 module Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD50422-AN**	2CLA610000N1801	10
	Buzzer - 2M Rated voltage: 127-230 Vac ; 50-60 Hz. Rated power: 8 VA. Adjustable tone. Acoustic power at 1 meter with cover plate: 75 dB. Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD19144-AN**	2CLA621900N1801	5
	Electronic door bell 230Vac - 2M Rated voltage: 230 Vac ; 50-60 Hz. 4 melodies available. Acoustic power at 1 meter with cover plate: 72 dB. Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD24144-AN**	2CLA622400N1801	5

Millenium - Grid system for combination (AMD)

Sound system

Product	Article-No.	Order-No.	Pack/Qty
	FM stereo receiver with RDS Rated voltage: 230 Vac ±15% / 50-60 Hz Max. consumption:100 mA Stand-by consumption with the display illumination at minimum:0.2 W Stand-by consumption ref. AMD68044-AN + AMD68344-AN9368: 0.6 W Maximum output power: 2+2 W; <1% distorsion (16 W) Speaker Impedance: 16 W (2+2 W audio) Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD68044-AN**	2CLA626800N1801	1
	Input/output , USB & Bluetooth® module Power supply through AUX.: 9 V Bluetooth® v2.1 2.4GHz IEEE 802.15.1 Maximum reach from the module to user's Bluetooth® device: 10 m. Maximum consumption: 175 ~ 200 mA Consumption stand-by: 0.4 W Headphones impedance: 16 ~ 600 Ω (25 + 25 mW audio phones) Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD68344-AN**	2CLA626830N1801	1
	Remote control unit for 9368.1 Power supply: 230 V~ / 127 V~ ; ±15% ; 50-60 Hz Maximum power consumption ref. 9368.2: 15 mA Stand-by consumption with the display illumination at minimum :0.5 W Stand-by consumption ref. AMD68244-AN + AMD68344-AN: 0.9 W Combination with frames AMD5144-XX & 5244-XX		
Anthracite	**AMD68244-AN**	2CLA626820N1801	1

Product	Article-No.	Order-No.	Pack/Qty
	Radio/amplifier module for ceiling with Bluetooth® 9368.1 Bluetooth®: 230 V~ / 127 V~; ±15%; 50-60 Hz Maximum reach from the module to user's Bluetooth® device: 10 m. Maximum power consumption: 200 mA Consumption stand-by: 0.3 W Antenna impedance: 75 Ω Maximum power headphone output: 6+6 W; <1% distortion (4 Ω) Minimum impedance of headphones: 4 Ω (6+6 W audio)		
	9368.1	2CLA936810A1002	10
	Loudspeaker 5" Installation in flush box ref. 9399 drilling 17mm or embedded ring ref. 9399.1 drilling 160mm. Max. Power: 6W Impedance: 16 Ω Response frecuency: 70Hz to 10kHz		
	9329.1	2CLA932910A1001	1
	Flush box for loudspeaker 5"		
	9399	2CLA939900A1001	12
	Embedded ring for loudspeaker 5"		
	9399.1	2CLA939910A1001	12
	Styling grid for loudspeaker 5"		
	9399.2	2CLA939920A1001	12

Millenium - Grid system for combination (AMD)

ABB free@home®

Product	Article-No.	Order-No.	Pack/Qty
	For switching 230 V~ consumers. **With integrated switch actuator.** **Switching function is available also without prior programming (pre-configured).** **Only to be used in combination with ABB-free@home® 1/2-Fold sensor cover plate.** 44 mm. × 44 mm. ×45 mm. Outputs: 1× normally open contact, potential free. Suitable for: ohmic. Rated current: 10 A. Rated power: 2300 W. Suitable for: capacitive. Rated current: 10 AX. Protection class of device: IP 20. Mounting depth: 32 mm.		
	SSA-F-1.1.PB.1	2CKA006220A0232	1
	For dimming 230 V~ loads. **With integrated universal dimming actuator for controlling different lamps.** **The dimming function is available also without prior programming (pre-configured).** **Only to be used in combination with ABB-free@home®** **1/2-Fold sensor cover plate.** 44 mm. × 44 mm. × 45 mm. Outputs: 1× dimming channel. Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Rated power: 10 – 180 W / VA. Suitable for: LEDi and energy-saving bulbs; typical. Rated power: 2 – 80 W / VA. Protection class of device: IP 20. Mounting depth: 32 mm.		
	SDA-F-1.1.PB.1	2CKA006220A0235	1
	For controlling blind and awning motors. With integrated blind actuator. **Blind function is available also without prior programming (pre-configured).** **Only to be used in combination with ABB-free@home®** **1/2-Fold sensor cover plate.** 44 mm. × 44 mm. × 45 mm. Outputs: 1× Change-over contacts/ normally open contact, potential bound. Rated power: 920 VA. Rated current: 4 A. Suitable for: Operating mode blind. Protection class of device: IP 20. Mounting depth: 32 mm.		
	SBA-F-1.1.PB.1	2CKA006220A0237	1

Product	Article-No.	Order-No.	Pack/Qty
	For sending switching, dimming and blind commands to an ABB-free@home® actuator. **Only to be used in combination with ABB-free@home® 1/2-Fold sensor cover plate.** 44 mm. × 44 mm. × 45 mm. Control: Push buttons up/down. LEDS: Used as orientation light or as switching status. Protection class of device: IP 20. Mounting depth: 9 mm.		
	SU-F-1.0.PB.1	2CKA006220A0222	1
	1/2-Fold sensor cover plate Cover plate ABB-free@ home® 1/2-Fold sensor for the SSA-F-1.1.PB.1, SDAF-1.1.PB.1, SBA-F-1.1.PB.1 and SU-F-1.0.PB.1 sensors. Combination with frames AMD5144-XX & AMD5244-XX		
	SR-2-AMAN	2CLA622620N1801	5
	For switching 230 V~ consumers. **With one integrated switch actuator.** **Switching function is available also without prior programming (pre-configured).** **Only to be used in combination with ABB-free@home® 2/4-Fold sensor cover plate.** 44 mm. × 44 mm. ×45 mm. Outputs: 1× normally open contact, potential free. Suitable for: ohmic. Rated current: 10 A. Rated power: 2300 W. Suitable for: capacitive. Rated current: 10 AX. Protection class of device: IP 20. Mounting depth: 32 mm.		
	SSA-F-2.1.PB.1	2CKA006220A0233	1
	For switching 230 V~ consumers. **With two integrated switch actuators.** **Switching function is available also without prior programming (pre-configured).** **Only to be used in combination with ABB-free@home® 2/4-Fold sensor cover plate.** 44 mm. × 44 mm. × 45 mm. Outputs: 2× normally open contact, potential free. Suitable for: ohmic. Rated current: 10 A. Rated power: 2300 W. Suitable for: capacitive. Rated current: 10 AX. Protection class of device: IP 20. Mounting depth: 32 mm.		
	SSA-F-2.2.PB.1	2CKA006220A0234	1

Millenium - Grid system for combination (AMD)

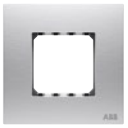
ABB free@home®

Product	Article-No.	Order-No.	Pack/Qty
	For dimming 230 V~ loads. **With integrated universal dimming actuator for controlling different lamps.** **The dimming function is available also without prior programming (pre-configured).** **Only to be used in combination with ABB-free@home® 2/4-Fold sensor cover plate.** 44 mm. × 44 mm. × 45 mm. Outputs: 1× dimming channel. Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Rated power: 10 – 180 W / VA. Suitable for: LEDi and energy-saving bulbs; typical. Rated power: 2 – 80 W / VA Protection class of device: IP 20. Mounting depth: 32 mm.		
	SDA-F-2.1.PB.1	2CKA006220A0236	1
	For controlling blind and awning motors. **With integrated blind actuator.** **Blind function is available also without prior programming (pre-configured).** **Only to be used in combination with ABB-free@home® 2/4-Fold sensor cover plate.** 44 mm. × 44 mm. × 45 mm. Outputs: 1× Change-over contacts/ normally open contact, potentialbound. Rated power: 920 VA. Rated current: 4 A. Suitable for: Operating mode blind. Protection class of device: IP 20. Mounting depth: 32 mm.		
	SBA-F-2.1.PB.1	2CKA006220A0238	1
	For sending switching, dimming and blind commands to an ABB-free@ home® actuator. **Only to be used in combination with ABB-free@home® 2/4-Fold sensor cover plate.** 44 mm. × 44 mm. × 45 mm. Control: Push buttons up/down. LEDS: Used as orientation light or as switching status. Protection class of device: IP 20. Mounting depth: 9 mm.		
	SU-F-2.0.PB.1	2CKA006220A0223	1
	2/4-Fold sensor cover plate Cover plate ABB-free@ home® 2/4-Fold sensor for the SSA-F-2.1.PB.1, SSA-F-2.2.PB.1, SDA-F-2.1.PB.1, SBA-F-2.1PB.1 and SU-F-2.0.PB.1sensors. Combination with frames AMD5144-XX & AMD5244-XX		
	SR-4-AMAN	2CLA622640N1801	5

Product	Article-No.	Order-No.	Pack/Qty
	For controlling the room temperature with thermostat fuctions. Control of conventional actuators or analog actuator (constant regulation) with the HA-M-0.6.1 and HA-M-0.12.1 actuators. **With NOMINAL temperature indication. Only to be used in combination with ABB-free@home® room temperature controller cover plate.** 44 mm. × 44 mm. × 45 mm. Visualization: LCD status mode indicator. Protection class of device: IP 20. Mounting depth: 14 mm.		
	RTC-F-1.PB	2CKA006220A0276	1
	Room temperature controller cover plate. Cover plate ABB-free@ home® for RTC-F-1.PB		
	CP-RTC-AMAN	2CLA624060N1801	5
	Watchdog sensor 180° with lens for the detection of animals. For the automatic switching of the ABB free@home® actuators. **Only to be used in combination with ABBfree@home® Watchdog 180° flush mounted cover plate.** 44 mm. × 44 mm. × 45 mm. Detection range: 6m front, 3m lateral. Angle: 180°. Brightness range: 1-500 Lux. Protection class of device: IP 20. Mounting depth: 9 mm.		
	MSA-F-1.1.PB.1	2CKA006220A0231	1
	Watchdog sensor 180 cover plate. Cover plate ABBfree@home® for Watchdog sensor MSA-F-1.1.PB.1. Combination with frames AMD5144-XX & AMD5244-XX.		
	CP-MD-AMAN	2CLA624160N1801	5
	Light symbol button ABBfree@home® Blind symbol button ABBfree@home® Scene symbol button ABBfree@home® Dimmer symbol button ABBfree@home®		
Light symbol F@H	**SBL-AMAN**	2CLA602610N1801	20
Blind symbol F@H	**SBB-AMAN**	2CLA602620N1801	20
Scene symbol F@H	**SBS-AMAN**	2CLA602630N1801	20
Dimmer symbol F@H	**SBD-AMAN**	2CLA602640N1801	20

Millenium - Grid system for combination (AMD)

Half/double rocker & other functions frames

Product	Article-No.	Order-No.	Pack/Qty
	**Half/double rocker & other functions frame 1-gang** Includes metal mounting frame Dimensions 86 x 86 mm.		
Stainless Steel	**AMD5144-ST**	2CLA627100N1101	10
Silk Black	**AMD5144-SB**	2CLA627100N1501	10
Antique Gold	**AMD5144-AG**	2CLA627100N1601	10
Matt Gold	**AMD5144-MG**	2CLA627100N1701	10
	Premium/half/double rocker switch frame 2-gang Includes metal mounting frame Dimensions 86 x 147 mm.		
Stainless Steel	**AMD5244-ST**	2CLA647200N1101	10
Silk Black	**AMD5244-SB**	2CLA647200N1501	10
Antique Gold	**AMD5244-AG**	2CLA647200N1601	10
Matt Gold	**AMD5244-MG**	2CLA647200N1701	10
	Premium/half/double rocker switch frame 3-gang Includes metal mounting frame Dimensions 86 x 228 mm.		
Stainless Steel	**AMD5344-ST**	2CLA667310N1101	5
Silk Black	**AMD5344-SB**	2CLA667310N1501	5
Antique Gold	**AMD5344-AG**	2CLA667310N1601	5
Matt Gold	**AMD5344-MG**	2CLA667310N1701	5
	Premium/half/double rocker switch frame 4-gang Includes metal mounting frame Dimensions 86 x 293 mm.		
Stainless Steel	**AMD5444-ST**	2CLA687410N1101	5
Silk Black	**AMD5444-SB**	2CLA687410N1501	5
Antique Gold	**AMD5444-AG**	2CLA687410N1601	5
Matt Gold	**AMD5444-MG**	2CLA687410N1701	5

Product	Article-No.	Order-No.	Pack/Qty

Millenium - Grid system for combination (AMD)

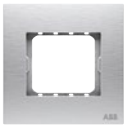
KNX system

Product	Article-No.	Order-No.	Pack/Qty
	2-Fold sensor Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function. Protection class (Device): IP 20. Temperature range (Device): -5 °C to 45 °C. Dimensions: (L x W x D): 53 mm. x 44 mm.		
	AMD72053-AN (6125/20-981-500)	2CKA006115A0443	1
	4-Fold sensor Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function. Protection class (Device): IP 20. Temperature range (Device): -5 °C to 45 °C. Dimensions: (L x W x D): 53 mm. x 44 mm.		
	AMD74053-AN (6126/20-981-500)	2CKA006116A0218	1
	6-Fold sensor Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function. Protection class (Device): IP 20. Temperature range (Device): -5 °C to 45 °C. Dimensions: (L x W x D): 53 mm. x 44 mm.		
	AMD76053-AN (6129/20-981-500)	2CKA006118A0104	1
	6-Fold sensor with IR Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function. Protection class (Device): IP 20. Temperature range (Device): -5 °C to 45 °C. Dimensions: (L x W x D): 53 mm. x 44 mm.		
	AMD76153-AN (6129/21-981-500)	2CKA006118A0107	1

Product	Article-No.	Order-No.	Pack/Qty
	Watchdog 180° flush mounted Movement sensor with up to four channels. Detection range: frontal: 6 m., lateral: 6 m. Detection angle: 180 °. Brightness limit value: 5 Lux - 150 Lux. Mounting height: 1.1 m. Protection class (Device): IP 20. Temperature range (Device): -5 °C to 45 °C. Dimensions: (L x W x D): 53 mm x 44 mm Position for installation: vertical.		
	AMD70153-AN (6122/20-981-500)	2CKA006132A0306	1
	Room thermostat heating/cooling fan coil Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a thermostat for fan coil units in 2 - and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Switch contacts for operating mode selection and dial for setpoint or fan speed adjustment. Display elements: LCD showing operation modes. Protection class (Device): IP 20. Temperature range (Device): -5 °C to 45 °C. Dimensions: (L x W x D): 53 mm. x 44 mm.		
	AMD70053-AN (6124/08-981-500)	2CKA006134A0309	1
	Ceiling light symbol **Blind symbol** **Scene symbol** **Temperature symbol** **Light symbol** **Fan coil symbol** Labelling insert for Millenium control covers 1 /2-gang, 2 / 4-gang, 3 / 6-gang and 3 / 6-gang with infrared		
	AM50701-GR (6123/20-500)	2CKA006123A0001	10
	AM50702-GR (6123/21-500)	2CKA006123A0002	10
	AM50703-GR (6123/22-500)	2CKA006123A0003	10
	AM50704-GR (6123/23-500)	2CKA006123A0004	10
	AM50705-GR (6123/24-500)	2CKA006123A0005	10
	AM50706-GR (6123/26-500)	2CKA006123A0006	10

Millenium - Grid system for combination (AMD)

Triple rocker & KNX sensor frames

Product	Article-No.	Order-No.	Pack/Qty
	**Triple rocker switch/KNX sensors frame 1-gang** Includes metal mounting frame Dimensions 86 x 86 mm.		
Stainless Steel	**AMD5153-ST**	2CLA637100N1101	10
Silk Black	**AMD5153-SB**	2CLA637100N1501	10
Antique Gold	**AMD5153-AG**	2CLA637100N1601	10
Matt Gold	**AMD5153-MG**	2CLA637100N1701	10
	Triple rocker switch/KNX sensors frame 2-gang Includes metal mounting frame Dimensions 86 x 147 mm.		
Stainless Steel	**AMD5253-ST**	2CLA667200N1101	10
Silk Black	**AMD5253-SB**	2CLA667200N1501	10
Antique Gold	**AMD5253-AG**	2CLA667200N1601	10
Matt Gold	**AMD5253-MG**	2CLA667200N1701	10

Special metal mounting plate for KNX sensors

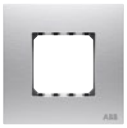
	Special mounting plate KNX sensors 1G		
	AMD5053	2CLA627190N1001	6

Access control KNX

Product	Article-No.	Order-No.	Pack/Qty
	Mifare transponder reader 1) Access Control transponder reader able to be completely integrated into every KNX installation. 2) 1 binary input for connecting cardholder 3) 1 output 4A (24 V AC/DC) Required additional power supply (10…32 V DC/12…24 V AC) Combination with frames AMD5144-XX & AMD5244-XX		
	TR/U 1.1	2CSY235683R2001	1
	Mifare transponder holder Access Control transponder holder able to be completely integrated into every KNX installation. 1) 1 binary input (ON/OFF, dimmer, shutter) 2) 1 output 4A (24 V AC/DC) Required additional power supply (12…24 V AC/DC) Combination with frames AMD5144-XX & AMD5244-XX		
	TH/U 1.1	2CSY265232R2021	1
	Set of 10 transponder cards The transponder card uses passive transponder technology operating in radio frequency (MIFARE technology), without the need for contact between the reader and the card itself. The transponder card is read by swiping it in front of the reader at a maximum distance of 20 mm (can be reduced according to installation environment).		
	TS/T 1	2CSY259412R2041	1
	Software MiniMAC 4.1 Configuration and supervision software for ABB Access Control system. Main functionalities are: management of keys, room state monitoring. Guest check in/check out, front desk room load monitoring, management of guest and employee databases, front desk management of room climate, …		
	SW MiniMAC 4.1	2CSY258202R2051	1

Millenium - Grid system for combination (AMD)

Half/double rocker & other functions frames

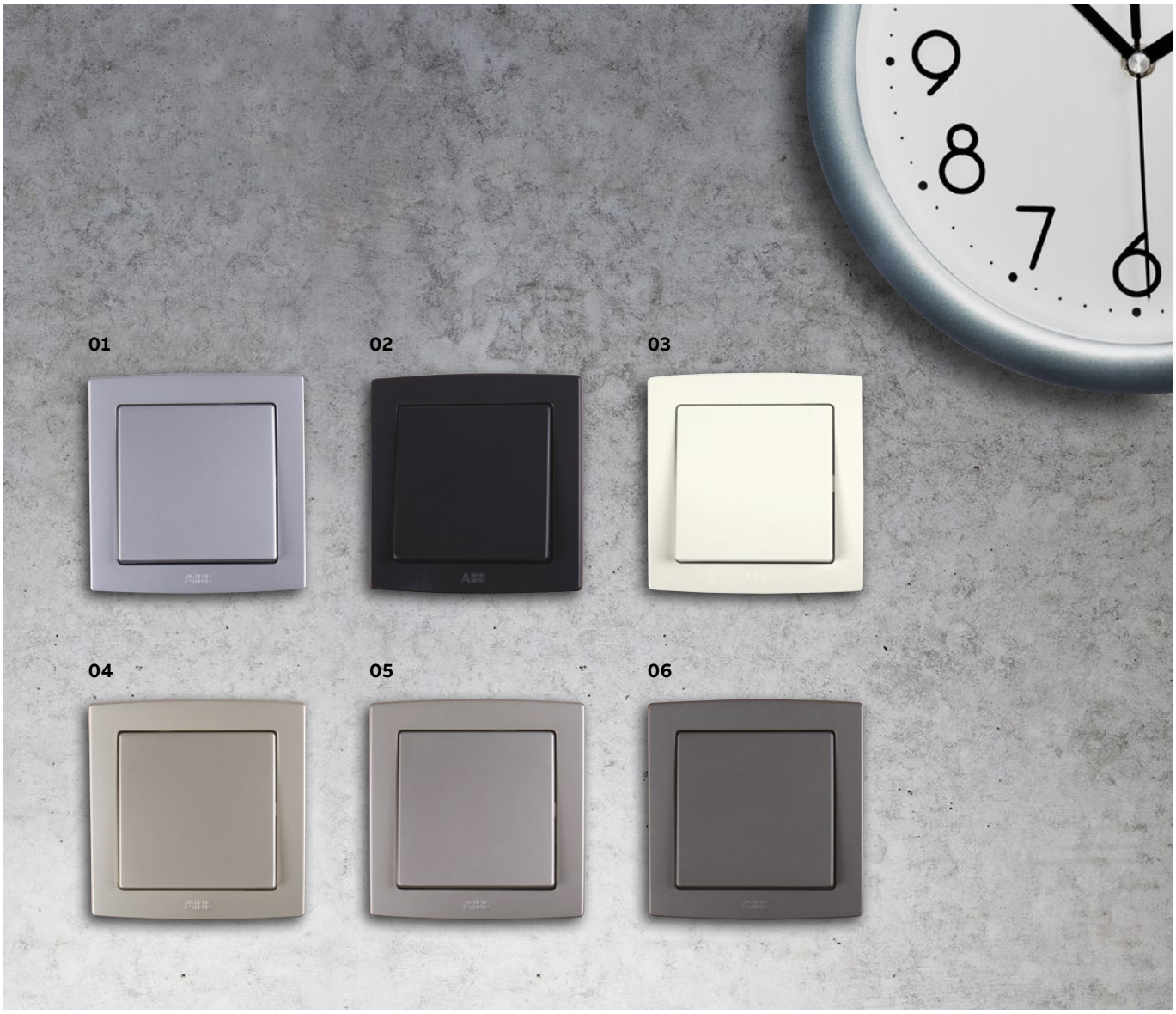
Product	Article-No.	Order-No.	Pack/Qty
	**Half/double rocker & other functions frame 1-gang** Includes metal mounting frame Dimensions 86 x 86 mm.		
Stainless Steel	**AMD5144-ST**	2CLA627100N1101	10
Silk Black	**AMD5144-SB**	2CLA627100N1501	10
Antique Gold	**AMD5144-AG**	2CLA627100N1601	10
Matt Gold	**AMD5144-MG**	2CLA627100N1701	10
	Premium/half/double rocker switch frame 2-gang Includes metal mounting frame Dimensions 86 x 147 mm.		
Stainless Steel	**AMD5244-ST**	2CLA647200N1101	10
Silk Black	**AMD5244-SB**	2CLA647200N1501	10
Antique Gold	**AMD5244-AG**	2CLA647200N1601	10
Matt Gold	**AMD5244-MG**	2CLA647200N1701	10
	Premium/half/double rocker switch frame 3-gang Includes metal mounting frame Dimensions 86 x 228 mm.		
Stainless Steel	**AMD5344-ST**	2CLA667310N1101	5
Silk Black	**AMD5344-SB**	2CLA667310N1501	5
Antique Gold	**AMD5344-AG**	2CLA667310N1601	5
Matt Gold	**AMD5344-MG**	2CLA667310N1701	5
	Premium/half/double rocker switch frame 4-gang Includes metal mounting frame Dimensions 86 x 293 mm.		
Stainless Steel	**AMD5444-ST**	2CLA687410N1101	5
Silk Black	**AMD5444-SB**	2CLA687410N1501	5
Antique Gold	**AMD5444-AG**	2CLA687410N1601	5
Matt Gold	**AMD5444-MG**	2CLA687410N1701	5

Product	Article-No.	Order-No.	Pack/Qty

Concept bs

Concept in every detail.

An eye for detail is the secret to success. LED light shines through a slight curve on square shaped switches and so emphasises the most distinctive feature of the design. A wide choice of colours, comprehensive functionality and quality material brought together. Let the details shine.



01 silver
02 anthracite
03 ivory white
04 pearl gold
05 stainless steel
06 elegant grey

Materials
High quality polycarbonate with improved flame-retardant characteristics and colour stability.

Concept bs

Selected functions.

01

02

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01 Rocker switch 1gang
02 Rocker switch 2gang
03 Rocker switch 3gang
04 Rocker switch 4gang
05 Rocker switch 1gang with LED
06 Rocker switch 2gang with LED
07 Rocker switch 3gang with LED
08 DND/PW/MUR push switch
09 1gang 1 way countdown time switch
10 Rotary dimmer
11 Sound and light control switch
12 Thermostat controller
13 Card switch
14 Emergency switch
15 BS socket outlet
16 BS switched socket outlet
17 BS switched socket outlet with neon
18 BS round pin switched socket outlet
19 BS round pin switched socket outlet with neon
20 Multi-function socket outlet with USB charging
21 1gang switched multi-function socket outlet
22 2gang BS switched socket outlet
23 2gang BS switched socket outlet with neon
24 1gang telephone socket outlet
25 2gang telephone and computer socket outlet
26 TV socket outlet, dead-end feeder
27 Sat socket outlet, isolated

01

02

1 to 5gang cover frame for horizontal installation.
01 88 mm x 90 mm
02 175 mm x 90 mm

Thin design, easy installation. The thickness of the functional part is only 12 mm.

LED indicator light makes switches even more attractive.

For more information about light switch ranges visit ABB global web sites.

Concept bs
Switches

Product	Article-No.	Order-No.	Pack/Qty
	1-gang 1-way switch Rated current: 10AX		
White	**AC101**		15
Silver	**AC101-S**		15
	1-gang 2-way switch Rated current: 10AX		
White	**AC105**		15
Silver	**AC105-S**		15
	Intermediate switch Rated current: 10AX		
White	**AC119**		15
Silver	**AC119-S**		15
	1-gang 1-way switch Rated current: 20AX		
White	**AC110**		15
Silver	**AC110-S**		15
	1-gang 2-way switch Rated current: 20AX		
White	**AC112**		15
Silver	**AC112-S**		15
	1-gang 1-way double pole switch, with marking “On” Rated current: 20AX		
White	**AC111**		15
Silver	**AC111-S**		15

Product	Article-No.	Order-No.	Pack/Qty
	1-gang 1-way push switch Rated current: 10AX		
White	**AC430**		15
Silver	**AC430-S**		15
	1-gang 2-way double pole switch Rated current: 20AX		
White	**AC196**		15
Silver	**AC196-S**		15
	Fan isolator 3 pole Rated current: 10A		
White	**AC134**		15
Silver	**AC134-S**		15
	2-gang 1-way switch Rated current: 10AX		
White	**AC102**		15
Silver	**AC102-S**		15
	2-gang 2-way switch Rated current: 10AX		
White	**AC106**		15
Silver	**AC106-S**		15
	2-gang 1-way switch Rated current: 20AX		
White	**AC114**		15
Silver	**AC114-S**		15

Concept bs
Switches

Product	Article-No.	Order-No.	Pack/Qty
	2-gang 2-way switch Rated current: 20AX		
White	**AC115**		15
Silver	**AC115-S**		15
	2-gang 1-way double pole switch, with marking “On” Rated current: 20AX		
White	**AC113**		15
Silver	**AC113-S**		15
	2-gang 1-way push switch Rated current: 10A		
White	**AC438**		15
Silver	**AC438-S**		15
	3-gang 1-way switch Rated current: 10AX		
White	**AC103**		15
Silver	**AC103-S**		15
	3-gang 2-way switch Rated current: 10AX		
White	**AC107**		15
Silver	**AC107-S**		15
	3-gang 1-way switch Rated current: 16AX		
White	**AC116**		15
Silver	**AC116-S**		15

Product	Article-No.	Order-No.	Pack/Qty
	3-gang 2-way switch Rated current: 16AX		
White	**AC121**		15
Silver	**AC121-S**		15
	4-gang 1-way switch Rated current: 10AX		
White	**AC104**		15
Silver	**AC104-S**		15
	4-gang 2-way switch Rated current: 10AX		
White	**AC108**		15
Silver	**AC108-S**		15
	4-gang 1-way switch Rated current: 16AX		
White	**AC117**		15
Silver	**AC117-S**		15
	3-gang 1-way switch (146 type) Rated current: 10AX		
White	**AC128**		8
Silver	**AC128-S**		8
	3-gang 2-way switch (146 type) Rated current: 10AX		
White	**AC190**		8
Silver	**AC190-S**		8

Concept bs
Switches

Product	Article-No.	Order-No.	Pack/Qty
	3-gang 1-way switch (146 type) Rated current: 20AX		
White	**AC192**		8
Silver	**AC192-S**		8
	3-gang 2-way switch (146 type) Rated current: 20AX		
White	**AC194**		8
Silver	**AC194-S**		8
	4-gang 1-way switch (146 type) Rated current: 10AX		
White	**AC129**		8
Silver	**AC129-S**		8
	4-gang 2-way switch (146 type) Rated current: 10AX		
White	**AC191**		8
Silver	**AC191-S**		8
	4-gang 1-way switch (146 type) Rated current: 20AX		
White	**AC193**		8
Silver	**AC193-S**		8
	4-gang 2-way switch (146 type) Rated current: 20AX		
White	**AC195**		8
Silver	**AC195-S**		8
	1-gang 1-way switch with LED/decorative line Rated current: 10AX		
White	**AC161**		15
Silver	**AC161-S**		15

Product	Article-No.	Order-No.	Pack/Qty
	1-gang 2-way switch with LED/decorative line Rated current: 10AX		
White	**AC164**		15
Silver	**AC164-S**		15
	1-gang 1-way switch with LED/decorative line Rated current: 20AX		
White	**AC170**		15
Silver	**AC170-S**		15
	1-gang 2-way switch with LED/decorative line Rated current: 20AX		
White	**AC172**		15
Silver	**AC172-S**		15
	1-gang 1-way double pole switch with LED/decorative line and marking “On” Rated current: 20AX		
White	**AC171**		15
Silver	**AC171-S**		15
	1 gang 1 way double pole switch with LED/decorative line and marking “On” and “water heater” Rated current: 20AX		
White	**AC171WH**		15
Silver	**AC171WH-S**		15
	2-gang 1-way switch with LED/decorative line Rated current: 10AX		
White	**AC162**		15
Silver	**AC162-S**		15

Concept bs
Switches

Product	Article-No.	Order-No.	Pack/Qty
	2-gang 2-way switch with LED/decorative line Rated current: 10AX		
White	**AC165**		15
Silver	**AC165-S**		15
	2-gang 1-way switch with LED/decorative line Rated current: 20AX		
White	**AC173**		15
Silver	**AC173-S**		15
	2-gang 2-way switch with LED/decorative line Rated current: 20AX		
White	**AC174**		15
Silver	**AC174-S**		15
	2-gang 1-way double pole switch with LED/decorative line and marking “On” Rated current: 20AX		
White	**AC178**		15
Silver	**AC178-S**		15
	3-gang 1-way switch with LED/decorative line Rated current: 10AX		
White	**AC163**		15
Silver	**AC163-S**		15
	3-gang 2-way switch with LED/decorative line Rated current: 10AX		
White	**AC166**		15
Silver	**AC166-S**		15

Product	Article-No.	Order-No.	Pack/Qty
	3-gang 2-way switch with LED/decorative line Rated current: 16AX		
White	**AC175**		15
Silver	**AC175-S**		15
	Push switch with “bell” symbol Rated current: 10A		
White	**AC429**		15
Silver	**AC429-S**		15
	1 gang 1 way double pole switch with LED Rated current: 32A		
White	**AC176**		8
Silver	**AC176-S**		8
	1 gang 1 way double pole switch with LED Rated current: 45A		
White	**AC177**		10
Silver	**AC177-S**		10
	45A double pole switch with neon and 13A switched socket outlet with neon Rated current: 45A-13A		
White	**AC118**		5
Silver	**AC118-S**		5
	1-gang 1-way double pole switch, with marking “On”, with flex outlet Rated current: 20AX		
White	**AC120**		10
Silver	**AC120-S**		10

Concept bs

Switches

Product	Article-No.	Order-No.	Pack/Qty
	1-gang 1-way double pole switch, with marking “On”, “water heater”, with flex outlet Rated current: 20AX		
White	**AC120WH**		10
Silver	**AC120WH-S**		10
	Fused connection unit Rated current: 13A		
White	**AC506**		10
Silver	**AC506-S**		10
	Fused connection unit with neon Rated current: 13A		
White	**AC577**		10
Silver	**AC577-S**		10
	Switched fused connection unit with neon Rated current: 13A		
White	**AC507**		10
Silver	**AC507-S**		10

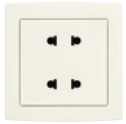
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	BS socket outlet Rated current: 13A		
White	**AC208**		15
Silver	**AC208-S**		15
	BS single pole switched socket outlet Rated current: 13A		
White	**AC224**		15
Silver	**AC224-S**		15
	BS double pole switched socket outlet Rated current: 13A		
White	**AC237**		15
Silver	**AC237-S**		15
	BS single pole switched socket outlet with neon Rated current: 13A		
White	**AC229**		15
Silver	**AC229-S**		15
	BS double pole switched socket outlet with neon Rated current: 13A		
White	**AC238**		15
Silver	**AC238-S**		15
	BS single pole round pin switched socket outlet Rated current: 15A		
White	**AC209**		14
Silver	**AC209-S**		14

Concept bs

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	BS single pole round pin switched socket outlet with neon Rated current: 15A		
White	**AC231**		14
Silver	**AC231-S**		14
	BS round pin socket outlet Rated current: 5A		
White	**AC210**		15
Silver	**AC210-S**		15
	Schuko socket Rated current: 16A		
White	**AC296**		10
	Schuko socket without child protection Rated current: 16A		
White	**AC296-001**		10
	2-gang BS single pole switched socket outlet Rated current: 13A		
White	**AC227**		8
Silver	**AC227-S**		8
	2-gang BS double pole switched socket outlet Rated current: 13A		
White	**AC239**		8
Silver	**AC239-S**		8

Product	Article-No.	Order-No.	Pack/Qty
	2-gang BS single pole switched socket outlet with neon Rated current: 13A		
White	**AC230**		8
Silver	**AC230-S**		8
	2-gang BS double pole switched socket outlet with neon Rated current: 13A		
White	**AC240**		8
Silver	**AC240-S**		8
	**2-gang Euro-American socket outlet** Rated current: 10A		
White	**AC212**		10
Silver	**AC212-S**		10
	2-gang Euro-American switched socket outlet Rated current: 10A		
White	**AC222**		10
Silver	**AC222-S**		10
	2-gang Euro-American switched socket outlet with neon Rated current: 10A		
White	**AC234**		10
Silver	**AC234-S**		10
	Universal socket outlet with surge protection Rated current: 13A *		
White	**AC290**		10
Silver	**AC290-S**		10

[1] Suitable for several loads, time delay: 30±5s.

Concept bs

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Universal socket outlet Rated current: 13A *		
White	**AC291**		10
Silver	**AC291-S**		10
[1] Suitable for several loads, time delay: 30±5s.			
	Switched universal socket outlet Rated current: 13A *		
White	**AC294**		10
Silver	**AC294-S**		10
[1] Suitable for several loads, time delay: 30±5s.			
	Universal socket outlet with voltage indicator (127V: green / 230V: red) Rated current: 13A *		
White	**AC292**		10
Silver	**AC292-S**		10
[1] Suitable for several loads, time delay: 30±5s.			
	Universal socket outlet with USB supply (output: 5V±5%UC, ≤500mA) Rated current: 13A *		
White	**AC293**		8
Silver	**AC293-S**		8
[1] Suitable for several loads, time delay: 30±5s.			

Audio & communication connectors

Product	Article-No.	Order-No.	Pack/Qty
	1-gang telephone outlet, RJ11 4-pole UTP		
White	**AC321**		10
Silver	**AC321-S**		10
	2-gang telephone outlet, RJ11 4-pole UTP		
White	**AC322**		10
Silver	**AC322-S**		10
	1-gang telephone outlet surge protection UTP		
White	**AC326**		10
Silver	**AC326-S**		10
	1-gang computer outlet, RJ45, cat. 5e 8-pole UTP		
White	**AC331**		10
Silver	**AC331-S**		10
	1-gang computer outlet, RJ45, cat. 6 8-pole UTP		
White	**AC333**		10
Silver	**AC333-S**		10
	2-gang computer outlet, RJ45, cat. 5e 8-pole UTP		
White	**AC332**		10
Silver	**AC332-S**		10

Concept bs

Audio & communication connectors

Product	Article-No.	Order-No.	Pack/Qty
	2-gang computer outlet, RJ45, cat.6 8-pole UTP		
White	**AC329**		10
Silver	**AC329-S**		10
	2-gang telephone outlet RJ11, 4-pole & computer outlet RJ45, cat. 5e 8-pole UTP		
White	**AC323**		10
Silver	**AC323-S**		10
	2-gang telephone outlet RJ11, 4-pole & computer outlet RJ45, cat. 6 8-pole UTP		
White	**AC330**		10
Silver	**AC330-S**		10
	1-gang telephone outlet, BT master, RJ11 6-pole UTP		
White	**AC305**		10
Silver	**AC305-S**		10
	1-gang telephone outlet, BT secondary, RJ11 6-pole UTP		
White	**AC306**		10
Silver	**AC306-S**		10
	1-gang TV outlet dead-end feeder		
White	**AC301**		10
Silver	**AC301-S**		10

Product	Article-No.	Order-No.	Pack/Qty
	1-gang TV outlet loop-through, isolated		
White	**AC304**		10
Silver	**AC304-S**		10
	Sat outlet F-type dead-end-feeder, isolated		
White	**AC303**		10
Silver	**AC303-S**		10
	TV outlet connector F-type		
White	**AC307**		10
Silver	**AC307-S**		10
	TV & FM outlet F-type dead-end-feeder, isolated		
White	**AC312**		10
Silver	**AC312-S**		10
	2-gang TV outlet twin isolated, loop-through, isolated		
White	**AC302**		10
Silver	**AC302-S**		10
	TV & telephone outlet UTP		
White	**AC324**		10
Silver	**AC324-S**		10

Concept bs

Audio & communication connectors

Product	Article-No.	Order-No.	Pack/Qty
	Audio outlet 2 terminals		
White	**AC341**		10
Silver	**AC341-S**		10
	Audio outlet 4 terminals		
White	**AC342**		10
Silver	**AC342-S**		10

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Rotary dimmer Power: 25W-600W Lighting: ☼, ⊐⊏⊗ Short circuit protection Ambience temperature: -5-+40°C Base in box: 31.3mm		
White	**AC412**		8
Silver	**AC412-S**		8
	Rotary dimmer Power: 20W/VA-500W/VA Lighting: ☼, ⊐⊏⊗ Provided with terminal for net disconnection devices		
Cover			
White	**6540-84-101**		10
Silver	**6540-83-101**		10
Insert			
	2247 U-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20
	Rotary dimmer Power: 40W/VA-420W/VA Lighting: ☼, ⊐◪⊗ Provided with terminal for net disconnection devices, short-circuit protected, overload-protected		
Cover			
White	**6540-84-101**		10
Silver	**6540-83-101**		10
Insert			
	6513 U-102-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20
	Rotary dimmer Power: 60W/VA-420W/VA Lighting: ☼, ⊐⊏⊗, ⊐◪⊗ Provided with terminal for net disconnection devices		
Cover			
White	**6540-84-101**		10
Silver	**6540-83-101**		10
Insert			
	6591 U-101-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20

Concept bs

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Rotary dimmer slave A maximum of 5 multi-way extensions can be connected to a 6591 U-101-501		
Cover			
White	**6540-84-101**		10
Silver	**6540-83-101**		10
Insert			
	6592 U-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20
	Rotary dimmer Power: 700W/VA Lighting: Control current max. 50mA DC		
Cover			
White	**6540-84-101**		10
Silver	**6540-83-101**		10
Insert			
	2112 U-101-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20
	Rotary dimmer LED Power: 2W/VA-100W/VA Lighting: , With rotary control,soft-catch and with leading edge control		
Cover			
White	**6540-84-101**		10
Silver	**6540-83-101**		10
Insert			
	6523 U-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20

Product	Article-No.	Order-No.	Pack/Qty
	Rotary dimmer DALI DALI Power-potentiometer insert		
Cover			
White	**6540-84-101**		10
Silver	**6540-83-101**		10
Insert			
	2117 U-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20
	Rotary dimmer DALI DALI Power-potentiometer insert With integrated power supply		
Cover			
White	**6540-84-101**		10
Silver	**6540-83-101**		10
Insert			
	2117/11 U-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20
	Touch-type dimmer Power: 60W/VA-420W/VA Lighting: , , Short-circuit protected, overload-protected		
Cover			
White	**6543-84-101**		10
Silver	**6543-83-101**		10
Insert			
	6593 U-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20

Concept bs

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Touch-type dimmer Power: 700W/VA Lighting: ⊣▭⊢ Control current max. 50mA DC operation also possible via conventional push buttons		
Cover			
White	**6543-84-101**		1
Silver	**6543-83-101**		1
Insert			
	6550 U-101-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20
	Dimmer 2-gang Power: 40W/VA-315W/VA Lighting: ☼, ⊣◪⊗ Short-circuit protected, overload-protected		
Cover			
White	**6545-84**		1
Silver	**6545-83**		1
Insert			
	6565 U-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20
	Touch-type dimmer with IR Power: 60W/VA-420W/VA Lighting: ☼, ⊐▭⊗, ⊣◪⊗ Manual/remote control		
Cover			
White	**6066-84**		1
Silver	**6066-83**		1
Insert			
	6593 U-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20

Product	Article-No.	Order-No.	Pack/Qty
	Touch-type dimmer with IR Power: 700W/VA Lighting: ⊣▭⊢ Manual/remote control Control current max. 50mA DC		
Cover			
White	**6066-84**		1
Silver	**6066-83**		1
Insert			
	6550 U-101-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20
	Touch dimmer LED Power: 2W/VA-700W/VA Lighting: ⊐▭⊗, ⊣◪⊗ For incandescent lamps,230V tungsten halogen lamps and low-voltage		
Cover			
White	**6066-84**		1
Silver	**6066-83**		1
Insert			
	6524 U-500		1
Adapter plate			
White	**AC503**		20
Silver	**AC503-S**		20

☼ Incandescent and 230V halogen lamps

⊐▭⊗ Low voltage halogen lamps with conventional transformer. In the case of conventional transformers, take ~20% transformer loss into account.

⊣◪⊗ Low voltage halogen lamps with electronic transformer. In case of electronic transformers, 5% transformer losses.

⊣▭⊢ Fluorescent lamps with electronic ballasts

Concept bs

Function control switches

Product	Article-No.	Order-No.	Pack/Qty
	Thermostat controller with display, 2 pipe system Rated current: 1A Sensor: NTC Temperature setting: 5°C -35°C with sleeping, clock display and turn on/off function 3 inch LCD display Temperature adjustment: ±1°C Depth: 25.5mm		
White	**AC417**		40
Silver	**AC417-S**		40
	Thermostat controller with display, 4 pipe system Rated current: 1A Sensor: NTC Temperature setting: 5°C -35°C with sleeping, clock display and turn on/off function 3 inch LCD display Temperature adjustment: ±1°C Depth: 25.5mm		
White	**AC420**		40
Silver	**AC420-S**		40
	Touch type time delay switch 100W, 230V~ Time delay: 1-3min adjustable Short-circuit protection		
White	**AC414**		8
Silver	**AC414-S**		8
	Volume control switch 5-15W, (0-100)V~ With fire alarm terminal		
White	**AC416**		8
Silver	**AC416-S**		8
	Volume control switch Max.5W, (0-100)V~ With fire alarm terminal Low resistance, average 8 Ohm		
White	**AC416-001**		8
Silver	**AC416-S01**		8

Product	Article-No.	Order-No.	Pack/Qty
	Countdown timer & 1 gang 1 way combination switch 10AX, 250V~ Time setting: 10-120min Two seperate switching contacts		
White	**AC411**		10
Silver	**AC411-S**		10
	Emergency switch 6A, 230V~ Sending alarm signal manually, using key to release		
White	**AC419**		10
Silver	**AC419-S**		10
	Thermostat controller with display, 2 pipe system Rated current: 1A Sensor: NTC Temperature setting: 5°C -35°C 2.5 inch LCD display Temperature adjustment: ±1°C Depth: 25.5mm		
White	**AC424**		40
Silver	**AC424-S**		40
	Thermostat controller with display, 4 pipe system Rated current: 1A Sensor: NTC Temperature setting: 5°C -35°C 2.5 inch LCD display Temperature adjustment: ±1°C Depth: 25.5mm		
White	**AC425**		40
Silver	**AC425-S**		40
	Sound and light control switch 100W, 230V~ Time delay: 1-3min adjustable Sound threshold: 60±5dB Brightness threshold: 0-150Lux adjustable Short-circuit protection		
White	**AC469**		8
Silver	**AC469**		8

Concept bs

Function control switches

Product	Article-No.	Order-No.	Pack/Qty
	4 step rotary switch 300W, 230V~ With high, mid, low fan speed selection		
White	**AC413**		8
Silver	**AC413-S**		8
	Fan Controller 500VA, 250V~, 50Hz		
White	**AC422**		8
Silver	**AC422-S**		8

Hotel series

Product	Article-No.	Order-No.	Pack/Qty
	Card switch Rated current: 20A * Suitable for several loads, time delay: 30±5s		
White	**AC402**		8
Silver	**AC402-S**		8
	Bell push-switch “Do Not Disturb” marking and indicator Rated current: 10A		
White	**AC403-001**		12
Silver	**AC403-S01**		12
	Bell push-switch “Do Not Disturb” & “Please Clean Room” marking and indicator Rated current: 10A		
White	**AC403-002**		12
Silver	**AC403-S02**		12
	Bell push-switch “Do Not Disturb”, & “Please Clean Room”& “Please Wait” marking and indicator Rated current: 10A		
White	**AC403**		12
Silver	**AC403-S**		12
	Shaver socket outlet Input: 230V~, 50Hz/60Hz Output: 115V/230V~, 20VA		
White	**AC401**		1
Silver	**AC401-S**		1

Concept bs

Hotel series

Product	Article-No.	Order-No.	Pack/Qty
	Shaver socket outlet (horizontal) Input: 230V~, 50Hz/60Hz Output: 115V/230V~, 20VA		
White	**AC401-001**		1
Silver	**AC401-S01**		1
	Night light 5W, 230V~		
White	**AC406**		6
Silver	**AC406-S**		6

Various

Product	Article-No.	Order-No.	Pack/Qty
	1-gang blank plate		
White	**AC504**		20
Silver	**AC504-S**		20
	2-gang blank plate		
White	**AC505**		10
Silver	**AC505-S**		10
	1-gang adapter plate for Busch-Jaeger solo / future / carat / pure series (64mm × 64mm)		
White	**AC503**		20
Silver	**AC503-S**		20

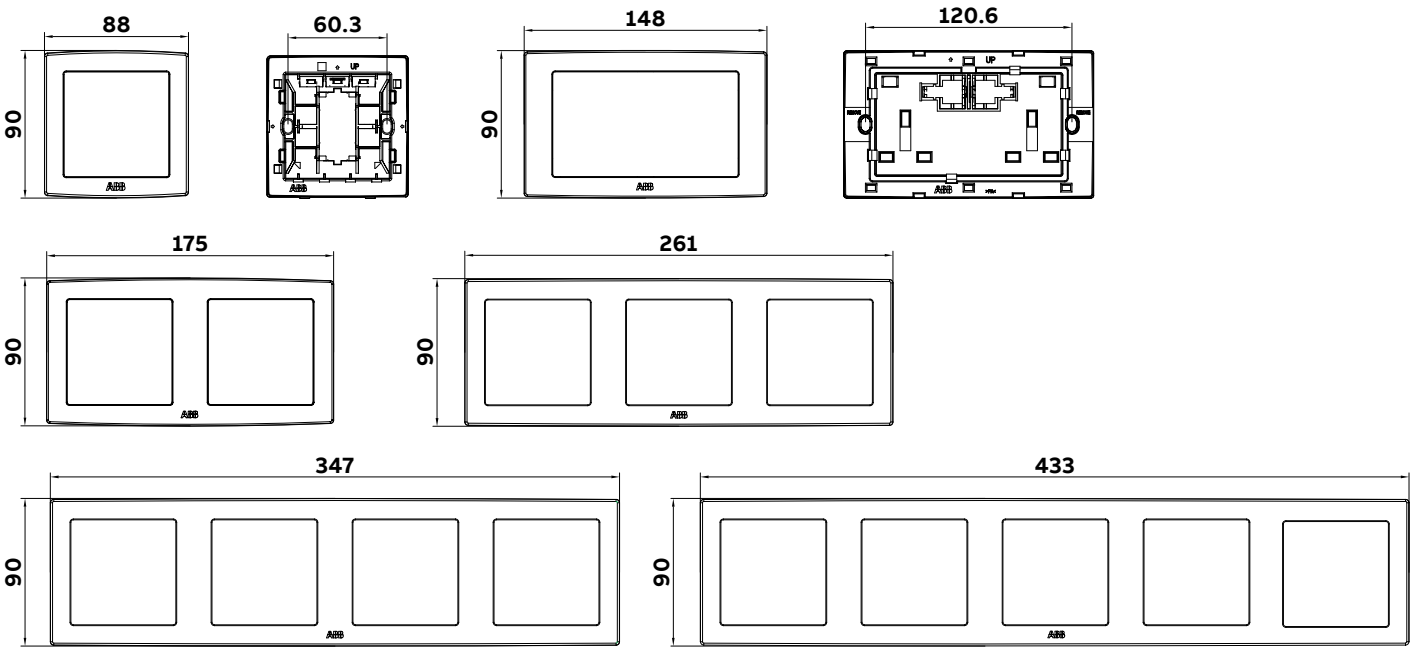
Concept bs

Frames

Product	Article-No.	Order-No.	Pack/Qty
	1-gang frame Concept bs		
White	**AC5101**		60
Silver	**AC5101-S**		60
Chrome	**AC5101-C**		60
	2-gang frame Concept bs for dual gang box (screw hole distance: 26mm)		
White	**AC5201**		30
Silver	**AC5201-S**		30
Chrome	**AC5201-C**		30
	3-gang frame Concept bs (screw hole distance: 26mm)		
White	**AC5103**		30
Silver	**AC5103-S**		30
Chrome	**AC5103-C**		30
	4-gang frame Concept bs (screw hole distance: 26mm)		
White	**AC5104**		30
Silver	**AC5104-S**		30
Chrome	**AC5104-C**		30
	5-gang frame Concept bs (screw hole distance: 26mm)		
White	**AC5105**		1
Silver	**AC5105-S**		1
Chrome	**AC5105-C**		1

Concept bs

Dimensions of Concept bs



Unit: mm

Kalo
Attraction in simplicity.

Elegance lies in simplicity and purity. Kalo is a proof of it. Its pleasant slim design in angelic white, perfectly complements any interior. The blue LED backlight illuminates switches and socket outlets in the dark. When you need to switch on and plug in your appliances, Kalo makes it easy.

01 white

Kalo

Selected functions.

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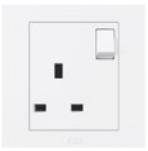
17 

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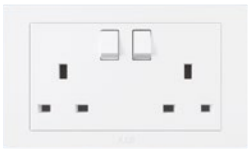
20 

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01 1gang 1 Way Switch
02 2gang 1 Way Switch
03 3gang 1 Way Switch
04 4gang 1 Way Switch
05 1gang 2 Way Switch
06 2gang 2 Way Switch
07 3gang 2 Way Switch
08 4gang 2 Way Switch
09 1gang 1 Way 20AX DP Switch Illuminated
10 1gang Intermediate Switch
11 1gang 1 Way 20AX DP Switch Illuminated - Marked Water Heater
12 1gang 1 Way Push Switch - Marked Bell
13 1gang 1 Way Push Switch
14 1gang 1 Way 32A DP Switch
15 1gang 1 Way 45A DP Switch
16 1gang 15A Switch Socket SP
17 1gang 13A Switch Socket SP
18 2gang 13A Switch Socket SP
19 1gang 13A Switch Socket SP – Illuminated
20 2gang 13A Switch Socket SP - Illuminated
21 1gang Universal Switch Socket SP
22 Cooker Control Unit
23 Shaver Socket
24 1gang TV Outlet - End of Line / Loop Through
25 1gang Sat Outlet
26 1gang Telephone Outlet
27 1gang Data Outlet Cat. 5e / Cat. 6
28 Flex Outlet
29 Fused connection Unit Unswitched with Flex Outlet
30 Fused Connection Unit Switched with Flex Outlet – Illuminated
31 1gang Rotary Dimmer
32 1gang Blank Plate
33 2gang Blank Plate

01

02

01 Side view, 7 x 86 mm
02 1gang 1 Way Switch, 86 x 86 mm

For more information about light switch ranges visit ABB global web sites.

Kalo
Switches

Product	Article-No.	Order-No.	Pack/Qty
	1-gang 1-way switch Rated current: 10 AX Flush-mounted box dimension: 35 mm		
White	**BH101**		10
	2-gang 1-way switch Rated current: 10 AX Flush-mounted box dimension: 35 mm		
White	**BH102**		10
	3-gang 1-way switch Rated current: 10 AX Flush-mounted box dimension: 35 mm		
White	**BH103**		10
	4-gang 1-way switch Rated current: 10 AX Flush-mounted box dimension: 35 mm		
White	**BH104**		10
	1-gang 2-way switch Rated current: 10 AX Flush-mounted box dimension: 35 mm		
White	**BH105**		10
	2-gang 2-way switch Rated current: 10 AX Flush-mounted box dimension: 35 mm		
White	**BH106**		10
	3-gang 2-way switch Rated current: 10 AX Flush-mounted box dimension: 35 mm		
White	**BH107**		10

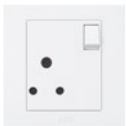
Product	Article-No.	Order-No.	Pack/Qty
	4-gang 2-way switch Rated current: 10 AX Flush-mounted box dimension: 35 mm		
White	**BH108**		10
	1-gang 1-way 20 AX switch Rated current: 20 AX Flush-mounted box dimension: 35 mm		
White	**BH110**		10
	1-gang 1-way 20 AX DP switch Illuminated Rated current: 20 AX Flush-mounted box dimension: 35 mm		
White	**BH111**		10
	1-gang 2-way 20 AX switch Rated current: 20 AX Flush-mounted box dimension: 35 mm		
White	**BH112**		10
	1-gang intermediate switch Rated current: 10 AX Flush-mounted box dimension: 35 mm		
White	**BH119**		10
	1-gang 1-way 20 AX DP switch illuminated – marked water heater Rated current: 20 AX Flush-mounted box dimension: 35 mm		
White	**BH171WH**		10
	1-gang 1-way push switch – marked bell Rated current: 10 A Flush-mounted box dimension: 35 mm		
White	**BH429**		10

Kalo

Switches

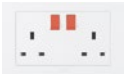
Product	Article-No.	Order-No.	Pack/Qty
	1-gang 1-way push switch Rated current: 10 A Flush-mounted box dimension: 35 mm		
White	**BH430**		10
	1-gang 1-way 32 A DP switch Rated current: 32 A Flush-mounted box dimension: 47 mm		
White	**BH176**		10
	1-gang 1-way 45 A DP switch Rated current: 45 A Flush-mounted box dimension: 47 mm		
White	**BH177**		10
	1-gang 1-way 45 A DP switch – illuminated Rated current: 45 A Flush-mounted box dimension: 47 mm		
White	**BH179**		10

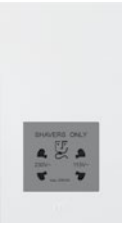
Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	1-gang 15 A switch socket SP Rated current: 15 A Flush-mounted box dimension: 35 mm		
White	**BH209**		10
	1-gang 15 A switch socket SP – illuminated Rated current: 15 A Flush-mounted box dimension: 35 mm		
White	**BH231**		10
	1-gang 15 A switch socket DP – illuminated Rated current: 15 A Flush-mounted box dimension: 35 mm		
White	**BH232**		10
	**1-gang 5 A switch socket SP** Rated current: 5 A Flush-mounted box dimension: 35 mm		
White	**BH220**		10
	1-gang 5 A switch socket DP Rated current: 5 A Flush-mounted box dimension: 35 mm		
White	**BH221**		10
	1-gang 13 A switch socket SP Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH224**		10
	1-gang 13 A switch socket DP Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH237**		10

Kalo

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	2-gang 13 A switch socket SP Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH227**		5
	2-gang 13 A switch socket DP Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH239**		5
	2-gang 13 A switch socket DP – illuminated Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH240**		5
	**2-gang 13 A switch socket SP with red rocker – illuminated** Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH236**		5
	2-gang 13 A switch socket SP with green rocker – illuminated Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH241**		5
	1-gang 13 A switch socket SP – illuminated Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH229**		5
	1-gang 13 A switch socket DP – illuminated Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH238**		5
	2-gang 13 A switch socket SP – illuminated Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH230**		5

Product	Article-No.	Order-No.	Pack/Qty
	1-gang universal switch socket SP Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH294**		10
	**Shaver socket** Input: 230 V, 50 Hz/60 Hz Outlet: 115 V/230 V, 20 VA Flush-mounted box dimension: 47 mm		
White	**BH401**		1
	Cooker control unit Rated current: 45 A / 13 A Flush-mounted box dimension: 47 mm		
White	**BH118**		5

Kalo

Communication outlets

Product	Article-No.	Order-No.	Pack/Qty
	1-gang TV outlet End of line Flush-mounted box dimension: 35 mm		
White	**BH301**		10
	1-gang TV outlet Loop-through Flush-mounted box dimension: 35 mm		
White	**BH304**		10
	1-gang Sat outlet F - type Flush-mounted box dimension: 35 mm		
White	**BH307**		10
	1-gang Sat outlet – 45 degree F - type Flush-mounted box dimension: 35 mm		
White	**BH308**		10
	1-gang telephone outlet RJ11 Flush-mounted box dimension: 35 mm		
White	**BH321**		10
	2-gang telephone outlet RJ11 Cat. 3 Flush-mounted box dimension: 35 mm		
White	**BH322**		10
	1-gang data outlet Cat. 5e RJ45 Cat. 5e Flush-mounted box dimension: 35 mm		
White	**BH331**		10

Product	Article-No.	Order-No.	Pack/Qty
	2-gang data outlet Cat. 5e RJ45 Cat. 5e Flush-mounted box dimension: 35 mm		
White	**BH332**		10
	1-gang data outlet Cat. 6 RJ45 Cat. 6 Flush-mounted box dimension: 35 mm		
White	**BH333**		10
	2-gang data outlet Cat. 6 RJ45 Cat. 6 Flush-mounted box dimension: 35 mm		
White	**BH329**		10
	TV/FM Splitter 5-1000 MHz Flush-mounted box dimension: 27 mm		
White	**BH314**		5

Kalo
Others

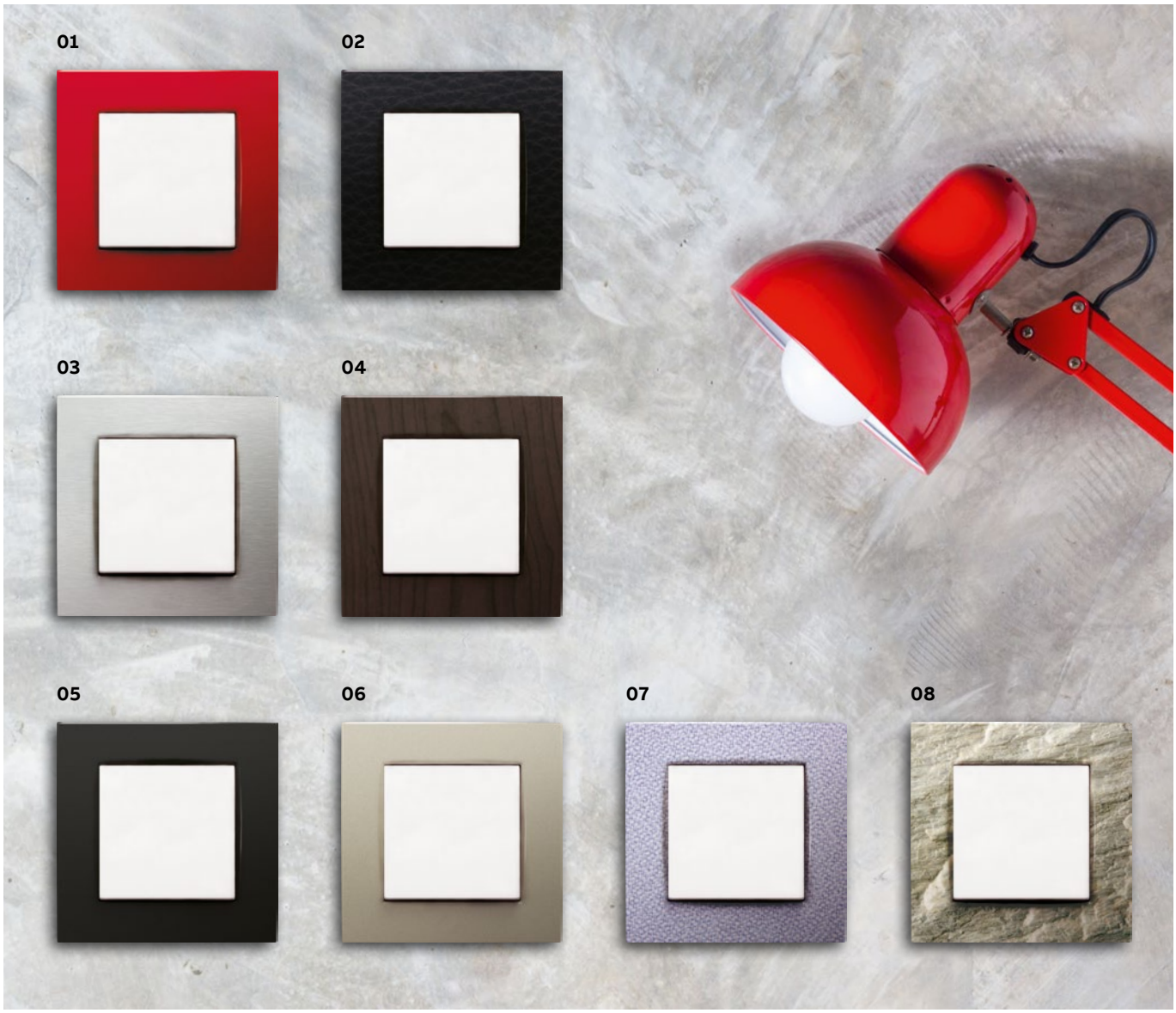
Product	Article-No.	Order-No.	Pack/Qty
	Flex Outlet Rated current: 20 A Flush-mounted box dimension: 35 mm		
White	**BH120**		10
	Flex Outlet 45 A Rated current: 45 A Flush-mounted box dimension: 35 mm		
White	**BH590**		10
	Fused connection unit unswitched with flex outlet Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH506**		10
	Fused connection unit switched with flex outlet – illuminated Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH507**		10
	Fused connection unit switched with flex outlet Rated current: 13 A Flush-mounted box dimension: 35 mm		
White	**BH508**		10
	1-Gang Rotary Dimmer 600 W Flush-mounted box dimension: 35 mm		
White	**BH412**		5
	Fan Regulator 500 VA Flush-mounted box dimension: 35 mm		
White	**BH422**		5

Product	Article-No.	Order-No.	Pack/Qty
	1-gang blank plate Flush-mounted box dimension: 35 mm		
White	**BH504**		10
	2-gang blank plate Flush-mounted box dimension: 35 mm		
White	**BH505**		10

Uni-art

Express yourself.

Eye catching frames with hard-wearing and quality material used. Boasting safety, reliability and environmentally-friendliness. It is the essence of the design. Variety of colours and slim design, fit to any wall. Any style. Uni-art will captivate you with its bold look and strong heart.



01 white / red
02 white / leather
03 white / metal wire-drawing silver
04 white / wood
05 white / black
06 white / metal
07 white / grain
08 white / stone

Uni-art

Selected functions.

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01 1gang 1 way switch
02 2gang 1 way switch
03 3gang 1 way switch
04 1gang 1 way switch with LED*
05 2gang 1 way switch with LED*
06 3gang 1 way switch with LED*
07 1gang 1 way switch with decorative line**
08 2gang 1 way switch with decorative line**
09 3gang 1 way switch with decorative line**
10 1gang 1 way switch with decorative line** and LED*
11 2gang 1 way switch with decorative line** and LED*
12 3gang 1 way switch with decorative line** and LED*
13 1gang 1 way bell push switch
14 Three–hole China socket outlet with switch
15 Three–hole China socket outlet with switch and LED
16 Five–hole China socket outlet
17 Five–hole China socket outlet with switch
18 Movement detector
19 Movement detector with LED indicator
20 Touch dimmer
21 Push switch with Bell symbol/ “DND”/“PW”/“MUR” indicator

* LED lamp in blue, green, yellow or red colour
**Decorative line in silver, red, black, light blue, yellow, green, white or fluorescent colour.

01

1gang cover frame for horizontal and vertical installation
01 86 x 86 mm

For more information about light switch ranges visit ABB global web sites.

Uni-art
Switches

Product	Article-No.	Order-No.	Pack/Qty
	1-gang 1-way switch 10 AX, 250 V~		
White	**AU10144-WW**		5/40
	1-gang 2-way switch 10 AX, 250 V~		
White	**AU10544-WW**		5/40
	1-gang 1-way switch 10 AX, 250 V~		
White	**AU10153-WW**		5/40
	1-gang intermediate switch, 10 AX 10 AX, 250 V~		
White	**AU11953-WW**		5/40
	1-gang 1-way push-switch 10A 10 A, 250 V~		
White	**AU43053-WW**		5/40
	1-gang 2-way switch, 10 AX 10 AX, 250 V~		
White	**AU10553-WW**		5/40
	1-gang 1-way reset switch with LED 5–12 V DC		
White	**AU17653-WW1**		5/40

Product	Article-No.	Order-No.	Pack/Qty
	1-gang 1-way reset switch with LED 5–12 V DC		
White	**AU17653-WW2**		5/40
	1-gang 2-way switch with LED, 10 AX 10 AX, 250 V~		
White	**AU17753-WW**		5/40
	1-gang 1-way switch with LED, 10 AX 10 AX, 250 V~		
White	**AU17653-WW**		5/40
	1-gang 1-way switch with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13153-WW**		5/40
	1 gang 2 way switch with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13553-WW**		5/40
	1-gang 1-way switch with decorative line and LED, 10 AX 10 AX, 250 V~		
White	**AU16153-WW**		5/40
	1-gang 2-way switch with decorative line and LED, 10AX 10 AX, 250 V~		
White	**AU16453-WW**		5/40

Uni-art
Switches

Product	Article-No.	Order-No.	Pack/Qty
	2-gang 1-way switch, 10 AX 10 AX, 250 V~		
White	**AU10244-WW**		5/40
	2-gang 2-way switch, 10 AX 10 AX, 250 V~		
White	**AU10644-WW**		5/40
	2-gang 1-way switch, 10AX 10 AX, 250 V~		
White	**AU10253-WW**		5/40
	2-gang 1-way push switch 10 A 10 A, 250 V~		
White	**AU43853-WW**		5/40
	2-gang 2-way switch, 10AX 10 AX, 250 V~		
White	**AU10653-WW**		5/40
	2-gang 1-way switch with LED, 10AX 10 AX, 250 V~		
White	**AU17853-WW**		5/40
	2-gang 1-way reset switch with LED 5–12 V DC		
White	**AU17853-WW1**		5/40

Product	Article-No.	Order-No.	Pack/Qty
	2-gang 1-way reset switch with LED 5–12 V DC		
White	**AU17853-WW2**		5/40
	2-gang 2-way switch with LED, 10 AX 10 AX, 250 V~		
White	**AU17153-WW**		5/40
	2-gang 1-way switch with LED 5–12 V DC		
White	**AU17853-WW3**		5/40
	2-gang 2-way switch with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13653-WW**		5/40
	2-gang 1-way switch with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13253-WW**		5/40
	2-gang 1-way switch with decorative line and LED, 10 AX 10 AX, 250 V~		
White	**AU16253-WW**		5/40
	2-gang 2-way switch with decorative line and LED, 10 AX 10 AX, 250 V~		
White	**AU16553-WW**		5/40

Uni-art
Switches

Product	Article-No.	Order-No.	Pack/Qty
	3-gang 1-way switch, 10 AX 10 AX, 250 V~		
White	**AU10353-WW**		5/40
	3-gang 2-way switch, 10 AX 10 AX, 250 V~		
White	**AU10753-WW**		5/40
	3-gang 1-way push switch 10 A 10 A, 250 V~		
White	**AU43953-WW**		5/40
	3-gang 1-way switch with LED, 10 AX 10 AX, 250 V~		
White	**AU17953-WW**		5/40
	3-gang 2-way switch with LED, 10 AX 10 AX, 250 V~		
White	**AU17253-WW**		5/40
	3-gang 1-way reset switch with LED 5–12 V DC		
White	**AU17953-WW1**		5/40
	3-gang 1-way switch with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13353-WW**		5/40

Product	Article-No.	Order-No.	Pack/Qty
	3-gang 2-way switch with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13753-WW**		5/40
	3-gang 1-way switch with decorative line and LED, 10 AX 10 AX, 250 V~		
White	**AU16353-WW**		5/40
	3-gang 2-way switch with decorative line and LED, 10 AX 10 AX, 250 V~		
White	**AU16653-WW**		5/40

Uni-art

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	2-gang Euro-American socket outlet, 10 A 10 A, 250 V~		
White	**AU21244-WW**		5/40
	1-gang China socket outlet, 10 A 10 A, 250 V~		
White	**AU20344-WW**		5/40
	1-gang switched China socket outlet, 10 A 10 A, 250 V~		
White	**AU22353-WW**		5/40
	1-gang switched China socket outlet with LED, 10 A 10 A, 250 V~		
White	**AU23353-WW**		5/40
	2-gang Euro-American & China socket outlet, 10 A 10 A, 250 V~		
White	**AU20553-WW**		5/40
	2-gang switched Euro-American & China socket outlet, 10 A 10 A, 250 V~		
White	**AU22553-WW**		5/40
	1-gang China socket outlet, 16 A 16 A, 250 V~		
White	**AU20644-WW**		5/40

Product	Article-No.	Order-No.	Pack/Qty
	1-gang switched China socket outlet, 16 A 16 A, 250 V~		
White	**AU22853-WW**		5/40
	1-gang switched China socket outlet with LED, 16 A 16 A, 250 V~		
White	**AU23653-WW**		5/40
	Universal socket outlet, 10 A 10 A, 250 V~		
White	**AU29144-WW**		5/40
	2-gang socket with USB charging		
White	**AU29344-WW**		5/40

Uni-art

Communication outlets

Product	Article-No.	Order-No.	Pack/Qty
	1-gang telephone outlet, RJ11, 4-pole		
White	**AU32144-WW**		5/40
	1-gang computer outlet, RJ45 Cat 5e, 8-pole		
White	**AU33144-WW**		5/40
	1-gang computer outlet, RJ45 Cat 6, 8-pole		
White	**AU33344-WW**		5/40
	2-gang telephone / computer outlet		
White	**AU32344-WW**		5/40
	2-gang telephone / computer outlet		
White	**AU33044-WW**		5/40
	2-gang telephone outlet, RJ11, 4-pole		
White	**AU32244-WW**		5/40
	2-gang computer outlet, RJ45 Cat 6, 8-pole		
White	**AU32944-WW**		5/40

Product	Article-No.	Order-No.	Pack/Qty
	2-gang computer outlet, RJ45 Cat 5e, 8-pole		
White	**AU33244-WW**		5/40
	1-gang TV outlet, dead-end feeder		
White	**AU30144-WW**		5/40
	1-gang TV outlet, loop-through		
White	**AU30444-WW**		5/40
	1-gang F-type TV outlet		
White	**AU30344-WW**		5/40
	2-gang TV, dead-end feeder/telephone outlet		
White	**AU32444-WW**		5/40
	2-gang TV/FM outlet, dead-end feeder		
White	**AU31244-WW**		5/40
	2-gang TV / computer outlet		
White	**AU32544-WW**		5/40

Uni-art

Communication outlets

Product	Article-No.	Order-No.	Pack/Qty
	2-gang TV / computer outlet		
White	**AU33444-WW**		5/40
	Audio outlet, 2 terminals		
White	**AU34144-WW**		5/40
	Audio outlet, 4 terminals		
White	**AU34244-WW**		5/40
	1-gang telephone outlet with surge protection		
White	**AU32644-WW**		5/40

Function control

Product	Article-No.	Order-No.	Pack/Qty
	Rotary dimmer 25–600W		
White	**AU41244-WW**		4/32
	1-gang 1-way bell push-switch 10A		
White	**AU42953-WW**		5/40
	Time delay switch - Manual operation 100 W, 230 V~		
White	**AU41444-WW**		4/32
	Sound and light control switch 100 W, 230 V~		
White	**AU41544-WW**		4/32
	Volume control switch 0-100 V, 5-15 W		
White	**AU41644-WW**		4/32
	Wall-mounted IR detector 200 W, 230 V~		
White	**AU44253-WW**		3/24
	Card switch, 16 A 16 A, 250 V~		
White	**AU40253-WW**		4/32

Uni-art

Function control

Product	Article-No.	Order-No.	Pack/Qty
	Push switch w/Bell symbol/"DND"/"PW"/"MUR" indicator, 10 A 10 A, 250 V~		
White	**AU40353-WW**		5/40
	Movement detector with LED indicator 0.5–1 W, 230 V~		
White	**AU40653-WW**		4/32
	Touch dimmer 500 W, 230 V~		
White	**AU43744-WW**		4/32

Accessories

Product	Article-No.	Order-No.	Pack/Qty
	1-gang blank plate		
White	**AU50444-WW**		5/40
	LED lamp, 1-gang 1-way		
Blue	**AM541-B**		150
Green	**AM541-G**		150
Gold Yellow	**AM541-GY**		150
Red	**AM541-R**		150
	Plastic flush mounting box		
Black	**AU565**		100

Uni-art
Frames

Product	Article-No.	Order-No.	Pack/Qty
	53×53 frame		
Red film	**AU61153-CR**		20/160
Wood film	**AU61153-CW**		20/160
Leather film	**AU61153-CL**		20/160
Metal Silver effect film	**AU61153-CSB**		20/160
Black film	**AU61153-CB**		20/160
Stone film	**AU61153-CS**		20/160
Fabric film	**AU61153-CC**		20/160
Gold champagne effect film	**AU61153-CM**		20/160
	44×44 frame		
Red film	**AU61144-CR**		20/160
Wood film	**AU61144-CW**		20/160
Leather film	**AU61144-CL**		20/160
Metal Silver effect film	**AU61144-CSB**		20/160
Black film	**AU61144-CB**		20/160
Stone film	**AU61144-CS**		20/160
Fabric film	**AU61144-CC**		20/160
Gold champagne effect film	**AU61144-CM**		20/160

Product	Article-No.	Order-No.	Pack/Qty
	2-gang frame for 53 insert		
White	**AU62153-W**		20/80
	3-gang frame for 53 insert		
White	**AU63153-W**		20/40
	4-gang frame for 53 insert		
White	**AU64153-W**		20/40
	4-gang frame for 53 insert		
	AU64153-PG		20/40
	Transfer frame		
White	**AU61244-W**		240

Uni-art

Insert module – Switch

Product	Article-No.	Order-No.	Pack/Qty
	1-gang 1-way switch module, 10 AX 10 AX, 250 V~		
White	**AU10144-W**		5/40
	1-gang 2-way switch module, 10 AX 10 AX, 250 V~		
White	**AU10544-W**		5/40
	1-gang 1-way switch module, 10 AX 10 AX, 250 V~		
White	**AU10153-W**		5/40
	1-gang 1-way push-switch module, 10 A 10 A, 250 V~		
White	**AU43053-W**		5/40
	1-gang intermediate switch module, 10 AX 10 AX, 250 V~		
White	**AU11953-W**		5/40
	1-gang 2-way switch module with LED, 10 AX 10 AX, 250 V~		
White	**AU17753-W**		5/40
	1-gang 1-way switch module with LED, 10 AX 10 AX, 250 V~		
White	**AU17653-W**		5/40

Product	Article-No.	Order-No.	Pack/Qty
	1-gang 2-way switch module, 10 AX 10 AX, 250 V~		
White	**AU10553-W**		5/40
	1-gang 1-way switch module with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13153-W**		5/40
	1-gang 2-way switch module with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13553-W**		5/40
	1-gang 1-way switch module with decorative line and LED, 10 AX 10 AX, 250 V~		
White	**AU16153-W**		5/40
	1-gang 2-way switch module with decorative line and LED, 10 AX 10 AX, 250 V~		
White	**AU16453-W**		5/40
	2-gang 1-way switch module, 10 AX 10 AX, 250 V~		
White	**AU10244-W**		5/40
	2-gang 2-way switch module, 10 AX 10 AX, 250 V~		
White	**AU10644-W**		5/40

Uni-art

Insert module – Switch

Product	Article-No.	Order-No.	Pack/Qty
	2-gang 1-way switch module, 10 AX 10 AX, 250 V~		
White	**AU10253-W**		5/40
	2-gang 2-way switch module, 10 AX 10 AX, 250 V~		
White	**AU10653-W**		5/40
	2-gang 1-way push-switch module, 10 A 10 A, 250 V~		
White	**AU43853-W**		5/40
	2-gang 1-way switch module with LED, 10 AX 10 AX, 250 V~		
White	**AU17853-W**		5/40
	2-gang 2-way switch module with LED, 10 AX 10 AX, 250 V~		
White	**AU17153-W**		5/40
	2-gang 1-way switch module with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13253-W**		5/40
	2-gang 1-way switch module with decorative line and LED, 10 AX 10 AX, 250 V~		
White	**AU16253-W**		5/40

Product	Article-No.	Order-No.	Pack/Qty
	2-gang 2-way switch module with decorative line and LED, 10 AX 10 AX, 250 V~		
White	**AU16553-W**		5/40
	2-gang 2-way switch module with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13653-W**		5/40
	3-gang 1-way switch module, 10AX 10 AX, 250 V~		
White	**AU10353-W**		5/40
	3-gang 2-way switch module, 10 AX 10 AX, 250 V~		
White	**AU10753-W**		5/40
	3-gang 1-way push-switch module, 10 A 10 A, 250 V~		
White	**AU43953-W**		5/40
	3-gang 1-way switch module with LED, 10 AX 10 AX, 250 V~		
White	**AU17953-W**		5/40
	3-gang 2-way switch module with LED, 10 AX 10 AX, 250 V~		
White	**AU17253-W**		5/40

Uni-art

Insert module – Switch

Product	Article-No.	Order-No.	Pack/Qty
	3-gang 1-way switch module with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13353-W**		5/40
	3-gang 2-way switch module with decorative line, 10 AX 10 AX, 250 V~		
White	**AU13753-W**		5/40
	3-gang 1-way switch module with decorative line and LED, 10 AX 10 AX, 250 V~		
White	**AU16353-W**		5/40
	3 gang 2 way switch module with decorative line and LED, 10AX 10 AX, 250 V~		
White	**AU16653-W**		5/40

Insert module – Socket outlet

Product	Article-No.	Order-No.	Pack/Qty
	2-gang Euro-American socket outlet module, 10 A 10 A, 250 V~		
White	**AU21244-W**		5/40
	1-gang China socket outlet module, 10 A 10 A, 250 V~		
White	**AU20344-W**		5/40
	1-gang China socket outlet module, 16 A 16 A, 250 V~		
White	**AU20644-W**		5/40
	Universal socket outlet module, 10 A 10 A, 250 V~		
White	**AU29144-W**		5/40
	1-gang switched China socket outlet module, 10 A 10 A, 250 V~		
White	**AU22353-W**		5/40
	1-gang switched China socket outlet module with LED, 10 A 10 A, 250 V~		
White	**AU23353-W**		5/40
	2-gang Euro-American & China socket outlet module, 10 A 10 A, 250 V~		
White	**AU20553-W**		5/40

Uni-art

Insert module – Switch

Product	Article-No.	Order-No.	Pack/Qty
	2-gang switched Euro-American & China socket outlet module, 10 A 10 A, 250 V~		
White	**AU22553-W**		5/40
	1-gang switched China socket outlet module, 16 A 16 A, 250 V~		
White	**AU22853-W**		5/40
	1-gang switched China socket outlet module with LED, 16 A 16 A, 250 V~		
White	**AU23653-W**		5/40

Insert module – Communication socket outlet

Product	Article-No.	Order-No.	Pack/Qty
	1-gang telephone outlet module, RJ11, 4-pole		
White	**AU32144-W**		5/40
	2-gang telephone outlet module, RJ11, 4-pole		
White	**AU32244-W**		5/40
	1-gang computer outlet module, RJ45 Cat 5e, 8-pole		
White	**AU33144-W**		5/40
	1-gang computer outlet module, RJ45 Cat 5e, 8-pole		
White	**AU33244-W**		5/40
	1-gang TV outlet module, dead-end feeder		
White	**AU30144-W**		5/40
	1-gang TV outlet module, dead-end feeder		
White	**AU30444-W**		5/40
	2-gang TV/FM outlet module, dead-end feeder		
White	**AU31244-W**		5/40

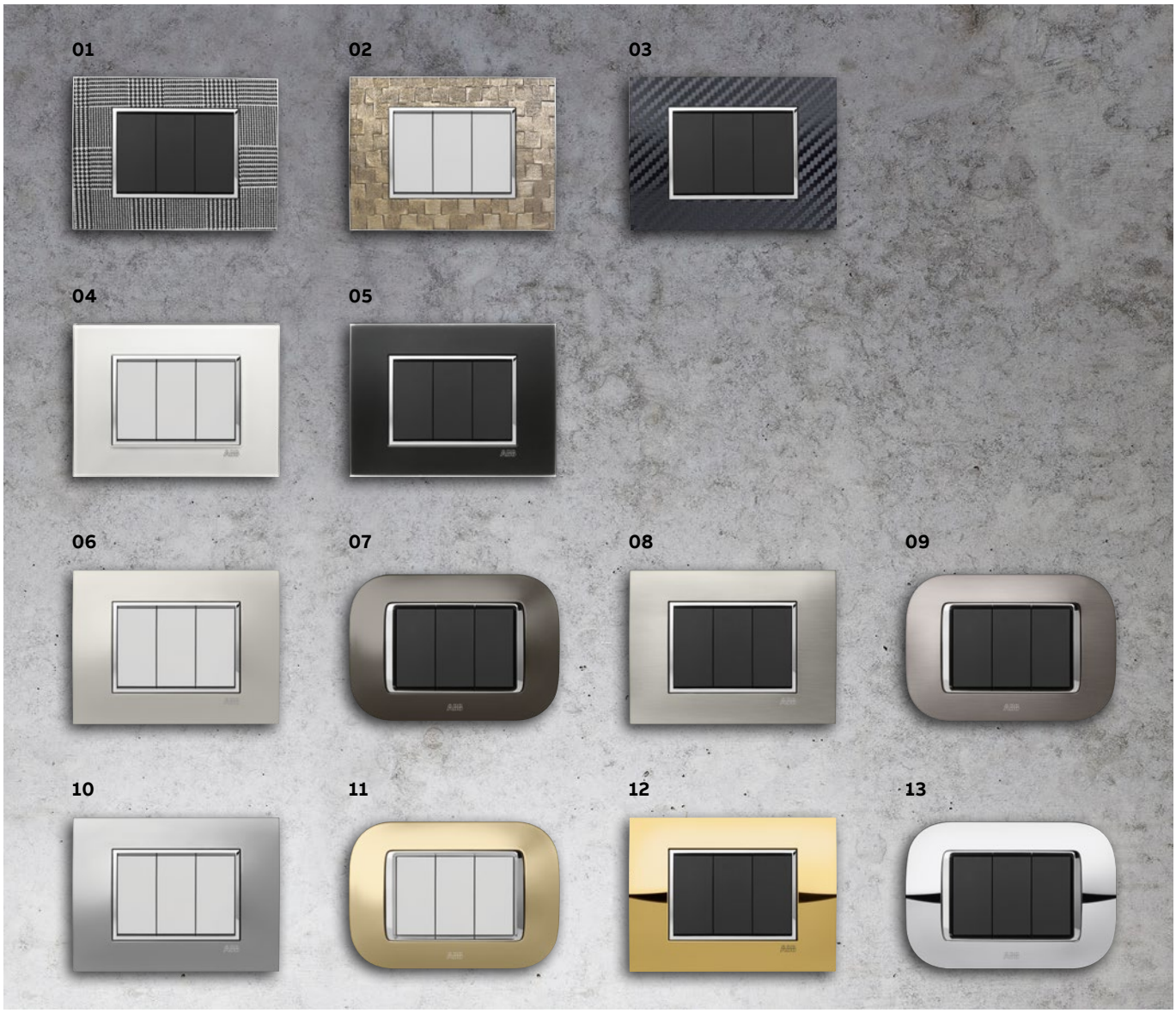
Uni-art

Insert module – Communication socket outlet

Product	Article-No.	Order-No.	Pack/Qty
	2-gang TV and Tel outlet module		
White	**AU32444-W**		5/40
	2-gang Tel and computer outlet module		
White	**AU32344-W**		5/40
	2-gang TV and computer outlet module		
White	**AU32544-W**		5/40
	Audio outlet module, 2 terminals		
White	**AU34144-W**		5/40
	Audio outlet module, 4 terminals		
White	**AU34244-W**		5/40
	1-gang computer outlet module, RJ45 Cat 6, 8-pole		
White	**AU33344-W**		5/40
	1-gang F-type broadband TV outlet module		
White	**AU30344-W**		5/40
	1-gang telephone outlet module with surge protection		
White	**AU32644-W**		5/40

Mylos®
A reflection of you

Italian design with high quality materials. Even in the smallest of details, functionality marries appearance. Ultra-thin square and round frames. Five different materials of Mylos and countless combinations of Mylos Ultra to choose from. Your house is your world. And your world reflects you. Express yourself with Mylos.



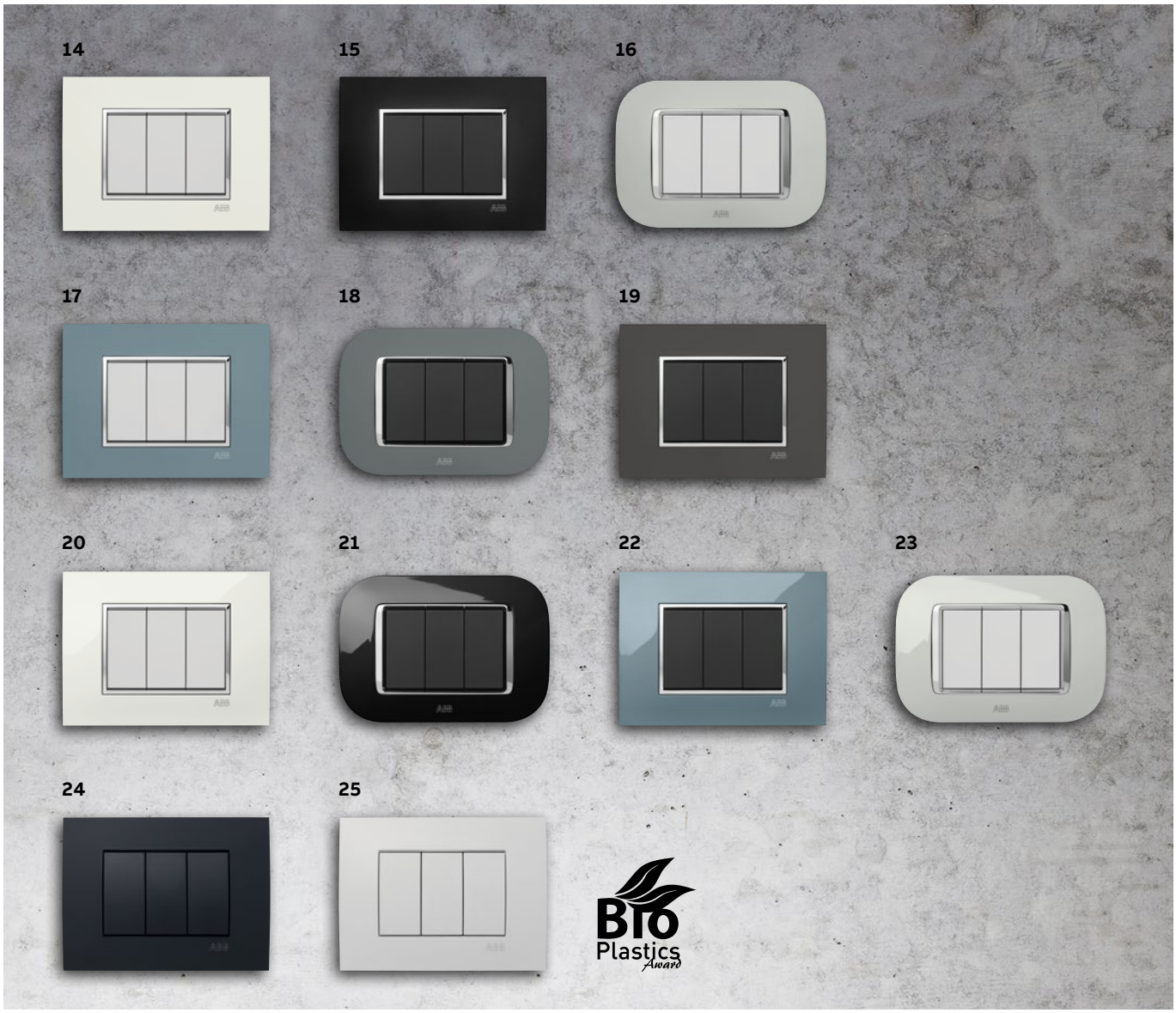
Ultra finishes
01 alcantara*
02 jannelli&volpi*
03 3M*

Crystal finishes
04 satin white (square)
05 satin black (square)

Metal finishes
06 light silver (square**)
07 dark nickel (round**)
08 brushed steel (square**)
09 brushed nickel (round**)
10 satin aluminium (square**)
11 satin gold (round**)
12 glossy gold (square**)
13 glossy chrome (round**)

* Materials freely customizable from the partners' catalogues.
**Finishes from 06 to 23 are available both versions square and round.

Mylos®
Italian design and materials



Velvet finishes
14 white (square**)
15 black (square**)
16 ice (round**)
17 cold grey (square**)
18 graphite (round**)
19 anthracite (square**)

Lucent finishes
20 white alabaster (square**)
21 brilliant black (round**)
22 cool grey (square**)
23 ice (round**)

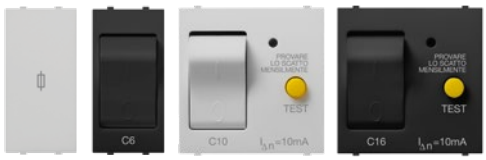
Etik finishes
24 matt black (square)
25 matt white (square)

Mylos®
Selected functions

Control devices
Maximum flexibility in the selection of switches, push switches, two-way switches, intermediate switches, relays and change-over switches. The most common control devices are available in screwless versions, reducing installation times even further. All the conventional control devices, except for relays and change-over switches, can be lit. Switches are available with an incorporated LED to enable all types of functional indication.

Socket outlets
The versions with 2P+E 10-16A socket outlets for 250V lines are available in the Italian and German standards, with safety shutters and side/central earth. For telephone and data transmission applications various types of connectors compatible with the most widespread international wiring standards are available.

Key covers
The key covers in 1 module or 1/2 module versions allow conventional switches to be customised as desired.



Protection devices
These devices intervene in the event of overloads, short circuits and other phenomena that involve a risk for the safety of persons and which compromise proper operation of connected appliances, performing their protection function directly downstream without impacting the power supply to other points in the electrical installation.

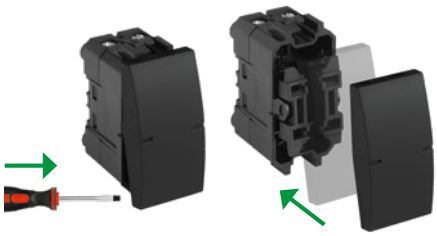
Signalling devices
Warning lights to display the operating status of connected appliances, as well as bells and buzzers. The warning lights are supplied with an incorporated 230V LED, which can be replaced for use under different voltages, if necessary.

Comfort devices
To optimize the operation of electrical appliances and increase the liveability of environments, the range includes devices for programming, adjustment and timing such as time-programmed thermostats, electronic thermostats and dimmers. IR presence detectors and receivers for remote controls complete the product range to guarantee the maximum level of comfort. Removable anti-blackout lights and emergency lights are available with ample operating autonomy.

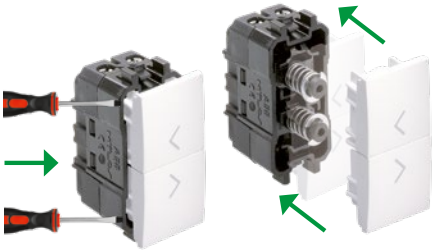
Home and building automation
Mylos represents also a simple and immediate solution to best meet the needs of both residential and building applications. Mylos free@home® and Mylos KNX are, respectively, the home and building automation systems which are perfectly integrated into Mylos aesthetic and functionalities. Both the ranges includes thermostats, rocker switches, actuators, blind actuators and dimmers.

Access Control for hospitality
Based on transponder technology, and exploiting their flexibility and security, ABB's solution for access control is fully compatible with the KNX-standard Home & Building Automation System. The access control system, perfectly integrated into Mylos conventional wiring accessories range, is particularly suitable for hotel applications and allows construction of flexible systems with advanced functions to optimize the services provided to hotel guests.

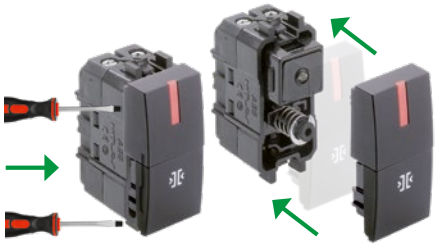
Command devices features.



Standard key cover composition

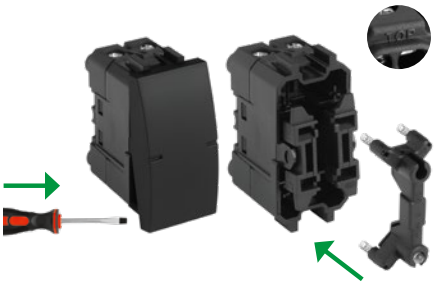


Key cover composition on 2CSY1017MY

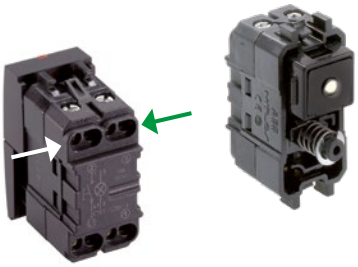


Key cover composition on 2CSY1027MY

LED illumination.



Plug-in LED illumination.
Conventional switches are lit by plug-in LEDs. There is no need for additional wiring because once the device is fixed in place, it is already ready to light up. In this way it is possible to implement night-time location signalling in a very easy manner.

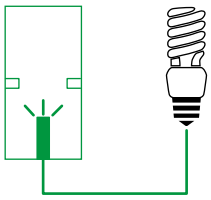


Incorporated LED illumination.
Switches with incorporated LEDs provide maximum freedom for wiring the signalling LED through the presence of dedicated terminals.

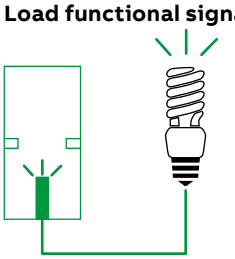
Night-time location signalling

The 2CSY1632MY and 2CSY1633MY LEDs can be added to conventional switches (see page 45) for night-time location. The LED electrically connected in parallel with the ON operating mechanism: it is lit when the load is off (OFF command), and it turns off when the load is powered (ON command).

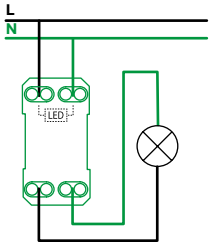
Location signalling (Always ON)



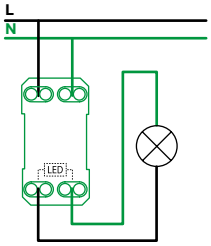
Load functional signalling



Switches with incorporated LED (see page 50) have preinstalled 250V~ LEDs and dedicated terminals for wiring. It is possible to implement any type of functional indication, also with LEDs at different voltages.

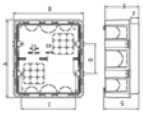
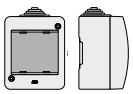
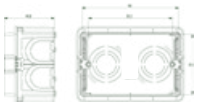
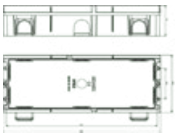
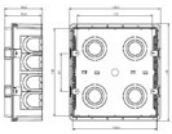


Wiring of double-pole switches 2CSY1006MC/S for Always ON signalling. The LED is built in.



Wiring of double-pole switches 2CSY1006FC/S for load functional indication. The LED is built in.

Installation details

No. Modules	Boxes	Mounting frames	Modules	Cover plate
2 modules			1 + 1 modules 2 modules	
			1 + 1 modules 1 + 1/2 modules	
3 modules			1 + 1 + 1 modules 1 + 2 modules	
4 modules			1 + 1 + 1 + 1 + 1 modules *	
7 modules			1 + 1 + 1 + 1 + 1 + ... modules *	
4+4 modules			1 + 1 + 1 + 1 modules * + 1 + 1 + 1 + 1 modules *	

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*Other modularity configurations available

Mylos® – Conventional switches

Switches

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole switch 16A - 250V~		
	2CSY1001MC	2CSY216055R1001	
	Single-pole switch 16A - 250V~		
	2CSY1001MS	2CSY217395R1001	
	Double-pole switch 16A - 250V~		
	2CSY1002MC	2CSY216065R1002	
	Double-pole switch 16A - 250V~		
	2CSY1002MS	2CSY217405R1002	
	Single pole switch 16A - 250V~ two modules		
	2CSY1001XC	2CSY216075R1001	
	Single pole switch 16A - 250V~ two modules		
	2CSY1001XS	2CSY217415R1001	

Product	Article-No.	Order-No.	Pack/Qty
	Double-pole switch 16A - 250V~ with key control		
	2CSY1007MC	2CSY216355R1007	
	Double-pole switch 16A - 250V~ with key control		
	2CSY1007MS	2CSY217695R1007	
	Double-pole switch 16A - 250V~ with universal key control		
	2CSY1007MCU	2CSY220765R1007	
	Double-pole switch 16A - 250V~ with universal key control		
	2CSY1007MSU	2CSY220775R1007	

Mylos®

Two-way switches – Intermediate switch – Change-over switches

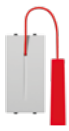
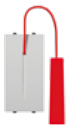
Product	Article-No.	Order-No.	Pack/Qty
	Single-pole two-way switch 16A - 250V~		
	2CSY1003MC	2CSY216085R1003	
	Single-pole two-way switch 16A - 250V~		
	2CSY1003MS	2CSY217425R1003	
	Single-pole two-way switch 16A - 250V~ two modules		
	2CSY1003XC	2CSY216095R1003	
	Single-pole two-way switch 16A - 250V~ two modules		
	2CSY1003XS	2CSY217435R1003	

Product	Article-No.	Order-No.	Pack/Qty
	Intermediate switch 16A - 250V~		
	2CSY1010MC	2CSY216105R1010	
	Intermediate switch 16A - 250V~		
	2CSY1010MS	2CSY217445R1010	
	Intermediate switch 16A - 250V~ two modules		
	2CSY1010XC	2CSY216115R1010	
	Intermediate switch 16A - 250V~ two modules		
	2CSY1010XS	2CSY217455R1010	
	Change-over switch 10A - 250V~ three-position with central OFF		
	2CSY1011MC	2CSY216125R1011	
	Change-over switch 10A - 250V~ three-position with central OFF		
	2CSY1011MS	2CSY217465R1011	

Mylos® – Conventional switches

Push switches

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole push switch 16A - 250V~ normally open		
	2CSY1005MC	2CSY216135R1005	
	Single-pole push switch 16A - 250V~ normally open		
	2CSY1005MS	2CSY217475R1005	
	Single-pole push switch 16A - 250V~ normally closed		
	2CSY1016MC	2CSY216145R1016	
	Single-pole push switch 16A - 250V~ normally closed		
	2CSY1016MS	2CSY217485R1016	
	Double single-pole push switch 16A - 250V~ NO + NO		
	2CSY1017MC	2CSY216155R1017	
	Double single-pole push switch 16A - 250V~ NO + NO		
	2CSY1017MS	2CSY217495R1017	
	Double single-pole push switch 16A - 250V~ NO + NO, with interlock		
	2CSY1018MC	2CSY216165R1018	

Product	Article-No.	Order-No.	Pack/Qty
	Double single-pole push switch 16A - 250V~ NO + NO, with interlock		
	2CSY1018MS	2CSY217505R1018	
	Double single-pole push switch 16A - 250V~ NO+NO modular		
	2CSY1017MY	2CSY223225R1017	
	**Single-pole push switch with pull cord** 16A - 250V~, normally open. Supplied with 2.25 m cord		
	2CSY1020MC	2CSY216175R1020	
	Single-pole push switch with pull cord 16A - 250V~, normally open. Supplied with 2.25 m cord		
	2CSY1020MS	2CSY217515R1020	
	**Single-pole push switch with pull cord** 16A - 250V~, normally closed. Supplied with 2.25 m cord		
	2CSY1021MC	2CSY216185R1021	
	Single-pole push switch with pull cord 16A - 250V~, normally closed. Supplied with 2.25 m cord		
	2CSY1021MS	2CSY217525R1021	
	Single-pole push switch 16A - 250V~, 1 NO + 1 NC, with ON symbol		
	2CSY1022MC	2CSY216195R1022	

Mylos® – Conventional switches

Push switches

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole push switch 16A - 250V~, 1 NO + 1 NC, with ON symbol		
	2CSY1022MS	2CSY217535R1022	
	Single-pole push switch 16A - 250V~, 1 NO + 1 NC, with OFF symbol		
	2CSY1023MC	2CSY216205R1023	
	Single-pole push switch 16A - 250V~, 1 NO + 1 NC, with OFF symbol		
	2CSY1023MS	2CSY217545R1023	
	Single-pole push switch 16A - 250V~, normally open, with bell symbol		
	2CSY1028MC	2CSY216215R1028	
	Single-pole push switch 16A - 250V~, normally open, with bell symbol		
	2CSY1028MS	2CSY217555R1028	
	Single-pole push switch 16A - 250V~, normally open, with key symbol		
	2CSY1029MC	2CSY216225R1029	
	Single-pole push switch 16A - 250V~, normally open, with key symbol		
	2CSY1029MS	2CSY217565R1029	

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole push switch 16A - 250V~, normally open, with stairlight symbol		
	2CSY1030MC	2CSY216235R1030	
	Single-pole push switch 16A - 250V~, normally open, with stairlight symbol		
	2CSY1030MS	2CSY217575R1030	
	Double-pole push switch 16A - 250V~, with key control		
	2CSY1008MC	2CSY216365R1008	
	Double-pole push switch 16A - 250V~, with key control		
	2CSY1008MS	2CSY217705R1008	
	Double-pole push switch 16A - 250V~, with universal key control		
	2CSY1008MCU	2CSY220785R1008	
	Double-pole push switch 16A - 250V~, with universal key control		
	2CSY1008MSU	2CSY220795R1008	

Mylos® – Conventional switches
Relay

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole latching relay with 230V~ coil, output contact 10A		
	2CSY1012MC	2CSY216375R1012	
	Single-pole latching relay with 230V~ coil, output contact 10A		
	2CSY1012MS	2CSY217715R1012	
	Monostable relay with 230V~ coil, output contact 10A		
	2CSY1014MC	2CSY216385R1014	
	Monostable relay with 230V~ coil, output contact 10A		
	2CSY1014MS	2CSY217725R1014	

Mylos® – Screwless switches
Switches

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole switch 16A - 250V~		
	2CSY1001SC	2CSY216395R1001	
	Single-pole switch 16A - 250V~		
	2CSY1001SS	2CSY217735R1001	
	Double-pole switch 16A - 250V~		
	2CSY1002SC	2CSY216405R1002	
	Double-pole switch 16A - 250V~		
	2CSY1002SS	2CSY217745R1002	
	Single-pole switch 16A - 250V~, two modules		
	2CSY1001ZC	2CSY216415R1001	
	Single-pole switch 16A - 250V~, two modules		
	2CSY1001ZS	2CSY217755R1001	

Mylos® – Screwless switches

Two-way switches – Intermediate switch

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole two-way switch 16A - 250V~		
	2CSY1003SC	2CSY216425R1003	
	Single-pole two-way switch 16A - 250V~		
	2CSY1003SS	2CSY217765R1003	
	Single-pole two-way switch 16A - 250V~, two modules		
	2CSY1003ZC	2CSY216435R1003	
	Single-pole two-way switch 16A - 250V~, two modules		
	2CSY1003ZS	2CSY217775R1003	
	Intermediate switch 16A - 250V~		
	2CSY1010SC	2CSY216445R1010	
	Intermediate switch 16A - 250V~		
	2CSY1010SS	2CSY217785R1010	
	Intermediate switch 16A - 250V~, two modules		
	2CSY1010ZC	2CSY216455R1010	
	Intermediate switch 16A - 250V~, two modules		
	2CSY1010ZS	2CSY217795R1010	

Push switches

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole push switch 16A, normally open		
	2CSY1005SC	2CSY216475R1005	
	Single-pole push switch 16A, normally open		
	2CSY1005SS	2CSY217815R1005	

Mylos® – Switches with incorporated LED

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole switch 16A - 250V~ (incorporated LED)		
	2CSY1004FC	2CSY216245R1004	
	Single-pole switch 16A - 250V~ (incorporated LED)		
	2CSY1004FS	2CSY217585R1004	
	Double-pole switch 16A - 250V~, with incorporated LED (functional indication always ON)		
	2CSY1006MC	2CSY216255R1006	
	Double-pole switch 16A - 250V~, with incorporated LED (functional indication always ON)		
	2CSY1006MS	2CSY217595R1006	
	Double-pole switch 16A - 250V~, with incorporated LED (load functional indication)		
	2CSY1006FC	2CSY216265R1006	
	Double-pole switch 16A - 250V~, with incorporated LED (load functional indication)		
	2CSY1006FS	2CSY217605R1006	

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole push switch 16A - 250V~, normally open (incorporated LED)		
	2CSY1015FC	2CSY216275R1015	
	Single-pole push switch 16A - 250V~, normally open (incorporated LED)		
	2CSY1015FS	2CSY217615R1015	
	Single-pole push switch 16A - 250V~, normally open with red diffuser (incorporated LED)		
	2CSY1024MC	2CSY216285R1024	
	Single-pole push switch 16A - 250V~, normally open, with red diffuser (incorporated LED)		
	2CSY1024MS	2CSY217625R1024	
	Single-pole push switch 16A - 250V~, normally open, with green diffuser (incorporated LED)		
	2CSY1025MC	2CSY216295R1025	
	Single-pole push switch 16A - 250V~, normally open, with green diffuser (incorporated LED)		
	2CSY1025MS	2CSY217635R1025	
	Single-pole push switch 16A - 250V~, normally open, with orange diffuser (incorporated LED)		
	2CSY1026MC	2CSY216305R1026	

Mylos® – Switches with incorporated LED

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole push switch, 16A - 250V~, normally open, with orange diffuser (incorporated LED)		
	2CSY1026MS	2CSY217645R1026	
	Single-pole push switch 16A - 250V~, normally open, with white diffuser (incorporated LED)		
	2CSY1027MC	2CSY216315R1027	
	Single-pole push switch 16A - 250V~, normally open, with white diffuser (incorporated LED)		
	2CSY1027MS	2CSY217655R1027	
	Single-pole push switch with warning light 16A - 250V~ normally open, modular (incorporated LED)		
	2CSY1027MY	2CSY223235R1027	
	Single-pole push switch 16A - 250V~, normally open, with backlit label holder, 2 modules (incorporated LED)		
	2CSY1031MC	2CSY216325R1031	
	Single-pole push switch 16A - 250V~, normally open, with backlit label holder, 2 modules (incorporated LED)		
	2CSY1031MS	2CSY217665R1031	
	Single-pole push switch 16A - 250V~, normally open, with backlit label holder, 3 modules (incorporated LED)		
	2CSY1032MC	2CSY216335R1032	

Product	Article-No.	Order-No.	Pack/Qty
	Single-pole push switch 16A - 250V~, normally open, with backlit label holder, 3 modules (incorporated LED)		
	2CSY1032MS	2CSY217675R1032	

Mylos® – Key covers

1 module key covers

Product	Article-No.	Order-No.	Pack/Qty
	Key cover 1 module generic		
	2CSY1501MC	2CSY217335R1501	
	Key cover 1 module generic		
	2CSY1501MS	2CSY218495R1501	
	Key cover 1 module with nurse symbol		
	2CSY1502MC	2CSY220805R1502	
	Key cover 1 module with nurse symbol		
	2CSY1502MS	2CSY220815R1502	
	Key cover 1 module with table lamp symbol		
	2CSY1503MC	2CSY220825R1503	
	Key cover 1 module with table lamp symbol		
	2CSY1503MS	2CSY220835R1503	
	Key cover 1 module with dimmer symbol		
	2CSY1504MC	2CSY220845R1504	
	Key cover 1 module with dimmer symbol		
	2CSY1504MS	2CSY220855R1504	

Product	Article-No.	Order-No.	Pack/Qty
	Key cover 1 module with fan symbol		
	2CSY1505MC	2CSY220865R1505	
	Key cover 1 module with fan symbol		
	2CSY1505MS	2CSY220875R1505	
	Key cover 1 module with telephone symbol		
	2CSY1506MC	2CSY220885R1506	
	Key cover 1 module with telephone symbol		
	2CSY1506MS	2CSY220895R1506	
	Key cover 1 module with door/gate open symbol		
	2CSY1507MC	2CSY220905R1507	
	Key cover 1 module with door/gate open symbol		
	2CSY1507MS	2CSY220915R1507	
	Key cover 1 module with door/gate close symbol		
	2CSY1508MC	2CSY220925R1508	
	Key cover 1 module with door/gate close symbol		
	2CSY1508MS	2CSY220935R1508	

Mylos® – Key covers

1 module key covers

Product	Article-No.	Order-No.	Pack/Qty
	Key cover 1 module with all off symbol		
	2CSY1509MC	2CSY231305R1509	
	Key cover 1 module with all off symbol		
	2CSY1509MS	2CSY231315R1509	
	Key cover 1 module with do not disturb symbol		
	2CSY1524MC	2CSY231325R1524	
	Key cover 1 module with do not disturb symbol		
	2CSY1524MS	2CSY231335R1524	
	Key cover 1 module with make up room symbol		
	2CSY1525MC	2CSY231345R1525	
	Key cover 1 module with make up room symbol		
	2CSY1525MS	2CSY231355R1525	
	Key cover 1 module with light symbol		
	2CSY1526MC	2CSY231365R1526	
	Key cover 1 module with light symbol		
	2CSY1526MS	2CSY231375R1526	

1/2 modules key covers

Product	Article-No.	Order-No.	Pack/Qty
	Key cover 1/2 module generic		
	2CSY1511MC	2CSY217345R1511	
	Key cover 1/2 module generic		
	2CSY1511MS	2CSY218505R1511	
	Key cover1/2 module with red diffuser		
	2CSY1513MC	2CSY217355R1513	
	Key cover 1/2 module with red diffuser		
	2CSY1513MS	2CSY221095R1513	
	Key cover 1/2 module with green diffuser		
	2CSY1514MC	2CSY217365R1514	
	Key cover 1/2 module with green diffuser		
	2CSY1514MS	2CSY221105R1514	
	Key cover 1/2 module with orange diffuser		
	2CSY1515MC	2CSY217375R1515	
	Key cover 1/2 module with red diffuser		
	2CSY1515MS	2CSY221115R1515	

Mylos® – Key covers

1/2 modules key covers

Product	Article-No.	Order-No.	Pack/Qty
	Key cover 1/2 module with clear diffuser		
	2CSY1516MC	2CSY217385R1516	
	Key cover 1/2 module with clear diffuser		
	2CSY1516MS	2CSY221125R1516	
	Key cover 1/2 module with blue diffuser		
	2CSY1517MC	2CSY220945R1517	
	Key cover 1/2 module with blue diffuser		
	2CSY1517MS	2CSY220955R1517	
	Key cover 1/2 module with door vertical arrow		
	2CSY1518MC	2CSY220965R1518	
	Key cover 1/2 module with door vertical arrow		
	2CSY1518MS	2CSY220975R1518	
	Key cover 1/2 module with door horizontal arrow		
	2CSY1519MC	2CSY220985R1519	
	Key cover 1/2 module with door horizontal arrow		
	2CSY1519MS	2CSY220995R1519	

Product	Article-No.	Order-No.	Pack/Qty
	Key cover 1/2 module with door/gate open symbol		
	2CSY1520MC	2CSY221005R1520	
	Key cover 1/2 module with door/gate open symbol		
	2CSY1520MS	2CSY221015R1520	
	Key cover 1/2 module with door door/gate close symbol		
	2CSY1521MC	2CSY221025R1521	
	Key cover 1/2 module with door door/gate close symbol		
	2CSY1521MS	2CSY221035R1521	
	Key cover 1/2 module with make up room symbol		
	2CSY1522MC	2CSY231385R1522	
	Key cover 1/2 module with make up room symbol		
	2CSY1522MS	2CSY231395R1522	
	Key cover 1/2 module with do not disturb symbol		
	2CSY1523MC	2CSY231405R1523	
	Key cover 1/2 module with do not disturb symbol		
	2CSY1523MS	2CSY231415R1523	

Mylos® – Socket outlets

Italian standard socket outlets with safety shutters

Product	Article-No.	Order-No.	Pack/Qty
	2P+E socket outlet 10A - 250V~, P11 type		
	2CSY1101MC	2CSY216485R1101	
	2P+E socket outlet 10A - 250V~, P11 type		
	2CSY1101MS	2CSY217825R1101	
	2P+E socket outlet 10/16A - 250V~, P17/11 type		
	2CSY1103MC	2CSY216495R1103	
	2P+E socket outlet 10/16A - 250V~, P17/11 type		
	2CSY1103MS	2CSY217835R1103	
	2P+E socket outlet 16A - 250V~, P17/11 type, coloured for privileged circuits		
	2CSY1104MR	2CSY216505R1104	
	2P+E socket outlet 16A - 250V~, P17/11 type coloured for privileged circuits		
	2CSY1105MV	2CSY216515R1105	
	2P+E socket outlet 16A - 250V~, P17/11 type coloured for privileged circuits		
	2CSY1106MA	2CSY216525R1106	

Italian/German standard socket outlets with safety shutters and side/central earth

Product	Article-No.	Order-No.	Pack/Qty
	2P+E socket outlet 16A - 250V~, P30 type		
	2CSY1108MC	2CSY216535R1108	
	2P+E socket outlet 16A - 250V~, P30 type		
	2CSY1108MS	2CSY217845R1108	
	2P+E socket outlets 16A - 250V~, P30 type coloured for privileged circuits		
	2CSY1114MR	2CSY216585R1114	
	2P+E socket outlets 16A - 250V~, P30 type coloured for privileged circuits		
	2CSY1115MV	2CSY216595R1115	
	2P+E socket outlets 16A - 250V~, P30 type coloured for privileged circuits		
	2CSY1116MA	2CSY216605R1116	

Mylos® – Socket outlets

Italian/German standard socket outlets with safety shutters and side/central earth

Product	Article-No.	Order-No.	Pack/Qty
	2P+E socket outlet 16A - 250V~, P30/17 type		
	2CSY1109MC	2CSY216545R1109	
	2P+E socket outlet 16A - 250V~, P30/17 type		
	2CSY1109MS	2CSY217855R1109	
	2P+E socket outlets 16A - 250V~, P30/17 type coloured for privileged circuits		
	2CSY1110MR	2CSY216555R1110	
	2P+E socket outlets 16A - 250V~, P30/17 type coloured for privileged circuits		
	2CSY1111MV	2CSY216565R1111	
	2P+E socket outlets 16A - 250V~, P30/17 type coloured for privileged circuits		
	2CSY1112MA	2CSY216575R1112	

British socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet 2P+T 13A UK standard		
	2CSY1134MC	2CSY234403R1134	
	Socket outlet 2P+T 13A UK standard		
	2CSY1134MS	2CSY235423R1134	
	Socket outlet 2P+T 16A UK standard		
	2CSY1164MC	2CSY234383R1164	
	Socket outlet 2P+T 16A UK standard		
	2CSY1164MS	2CSY235413R1164	

Mylos® – Socket outlets

American socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet 2P+T 15A 127V~, US standard		
	2CSY1145MC	2CSY228105R1145	
	Socket outlet 2P+T 15A 127V~, US standard		
	2CSY1145MS	2CSY228115R1145	
	2P socket outlet 16A - Euro-American standard COMING SOON		
	2CSY1146MC	2CSY231655R1146	
	2P socket outlet 16A - Euro-American standard COMING SOON		
	2CSY1146MS	2CSY231665R1146	

French socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	2P+E socket outlet 16A - French standard COMING SOON		
	2CSY1144MC	2CSY231425R1144	
	2P+E socket outlet 16A - French standard COMING SOON		
	2CSY1144MS	2CSY231435R1144	

Mylos® – Socket outlets

Special socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	2P shaver socket outlet with insulating transformer Power supply 230V~ 50/60Hz Output voltage 125V~ (American standard 2P socket outlet) or 230V~ (2P socket outlet, P11 type)		
	2CSY1113MC	2CSY216615R1113	
	2P shaver socket outlet with insulating transformer power supply 230V~ 50/60Hz Output voltage 125V~ (American standard 2P socket outlet) or 230V~ (2P socket outlet, P11 type)		
	2CSY1113MS	2CSY217865R1113	
	2P shaver socket outlet with insulating transformer Power supply 230V~ 50/60Hz Output voltage 125V~ (American standard 2P socket outlet) or 230V~ (2P socket outlet, P11 type)		
	2CSY1161MC	2CSY234373R1161	
	2P shaver socket outlet with insulating transformer Power supply 230V~ 50/60Hz Output voltage 125V~ (American standard 2P socket outlet) or 230V~ (2P socket outlet, P11 type)		
	2CSY1161MS	2CSY235393R1161	
	Flush-mounted 2.1A USB charging unit with type A male connector, 230V power supply, ~ 50 / 60Hz, 5V DC output voltage * Available in 2018		
	2CSY1162MC*	2CSY234062R1162*	
	Flush-mounted 2.1A USB charging unit with type A male connector, 230V power supply, ~ 50 / 60Hz, 5V DC output voltage * Available in 2018		
	2CSY1162MS*	2CSY234072R1162*	

TV/SAT socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Coaxial TV/SAT socket outlets direct, male IEC connector, Ø 9.5 mm, DC		
	2CSY1118MC	2CSY216685R1118	
	Coaxial TV/SAT socket outlets direct, male IEC connector, Ø 9.5 mm, DC		
	2CSY1118MS	2CSY217935R1118	
	Coaxial TV/SAT socket outlets feedthrough, male IEC connector, Ø 9.5 mm, attenuation 7 dB		
	2CSY1132MC	2CSY216695R1132	
	Coaxial TV/SAT socket outlets feedthrough, male IEC connector, Ø 9.5 mm, attenuation 7 dB		
	2CSY1132MS	2CSY217945R1132	
	Coaxial TV/SAT socket outlets feedthrough, male IEC connector, Ø 9.5 mm, attenuation 10 dB		
	2CSY1136MC	2CSY216705R1136	
	Coaxial TV/SAT socket outlets feedthrough, male IEC connector, Ø 9.5 mm, attenuation 10 dB		
	2CSY1136MS	2CSY217955R1136	
	Coaxial TV/SAT socket outlets feedthrough, male IEC connector, Ø 9.5 mm, attenuation 14 dB		
	2CSY1137MC	2CSY216715R1137	
	Coaxial TV/SAT socket outlets feedthrough, male IEC connector, Ø 9.5 mm, attenuation 14 dB		
	2CSY1137MS	2CSY217965R1137	

Mylos® – Socket outlets

TV/SAT socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Coaxial TV/SAT socket outlets direct, female F connector, DC		
	2CSY1140MC	2CSY216725R1140	
	Coaxial TV/SAT socket outlets direct, female F connector, DC		
	2CSY1140MS	2CSY217975R1140	
	Coaxial TV/SAT socket outlets double demixed, feedthrough, male IEC connector, Ø 9.5 mm and female F connector		
	2CSY1133MC	2CSY216735R1133	
	Coaxial TV/SAT socket outlets double demixed, feedthrough, male IEC connector, Ø 9.5 mm and female F connector		
	2CSY1133MS	2CSY217985R1133	
	Coaxial TV/SAT socket outlets double demixed, feedthrough, male IEC connector Ø 9.5 mm and female F connector, attenuation 10 dB		
	2CSY1130MC	2CSY216755R1130	
	Coaxial TV/SAT socket outlets double demixed, feedthrough, male IEC connector Ø 9.5 mm and female F connector, attenuation 10 dB		
	2CSY1130MS	2CSY218005R1130	
	Coaxial TV/SAT socket outlets double demixed, feedthrough, male IEC connector Ø 9.5 mm and female F connector, attenuation 14 dB		
	2CSY1131MC	2CSY216765R1131	

Product	Article-No.	Order-No.	Pack/Qty
	Coaxial TV/SAT socket outlets double demixed, feedthrough, male IEC connector Ø 9.5 mm and female F connector, attenuation 14 dB		
	2CSY1131MS	2CSY218015R1131	
	Terminal resistor 75 Ohm		
	2CSE1610EL	2CSE265160R1610	

Mylos® – Socket outlets

Network and telephone socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	Telephone connector RJ11		
	2CSY1121MC	2CSY216775R1121	
	Telephone connector RJ11		
	2CSY1121MS	2CSY218025R1121	
	Telephone connector RJ12		
	2CSY1122MC	2CSY216785R1122	
	Telephone connector RJ12		
	2CSY1122MS	2CSY218035R1122	
	RJ45 connector Cat.5e, UTP (unshielded)		
	2CSY1124MC	2CSY216795R1124	
	RJ45 connector Cat.5e, UTP (unshielded)		
	2CSY1124MS	2CSY218045R1124	
	RJ45 Cat.5e, FTP (shielded)		
	2CSY1125MC	2CSY216805R1125	

Product	Article-No.	Order-No.	Pack/Qty
	RJ45 Cat.5e, FTP (shielded)		
	2CSY1125MS	2CSY218055R1125	
	RJ45 connector Cat.6, UTP (unshielded)		
	2CSY1127MC	2CSY216815R1127	
	RJ45 connector Cat.6, UTP (unshielded)		
	2CSY1127MS	2CSY218065R1127	
	RJ45 connector Cat.6, FTP (shielded)		
	2CSY1128MC	2CSY216825R1128	
	RJ45 connector Cat.6, FTP (shielded)		
	2CSY1128MS	2CSY218075R1128	
	RJ45 connector Cat.6, FTP (shielded)		
	2CSY1135MC	2CSY216835R1135	
	Adapter for RJ45 connector Keystone type		
	2CSY1135MS	2CSY218085R1135	

Mylos® – Protection devices

Fuse holders and overvoltage limiters

Product	Article-No.	Order-No.	Pack/Qty
	Fuse holder Ø5x20 / Ø6.3x32, 16A		
	2CSY1301MC	2CSY216845R1301	
	Fuse holder Ø5x20 / Ø6.3x32, 16A		
	2CSY1301MS	2CSY218095R1301	
	Surge protection device limiter 75J, 250V~		
	2CSY1302MC	2CSY216855R1302	
	Surge protection device limiter 75J, 250V~		
	2CSY1302MS	2CSY218105R1302	
	Spare protection for surge protection device		
	2CSY1302MY	2CSY221255R1302	

Miniature circuit-breakers – Residual current circuit-breakers

Product	Article-No.	Order-No.	Pack/Qty
	Automatic MCB 1P+N, C6, breaking capacity 1.5kA		
	2CSY1304MC	2CSY216865R1304	
	Automatic MCB 1P+N, C6, breaking capacity 1.5kA		
	2CSY1304MS	2CSY218115R1304	
	Automatic MCB 1P+N, C10, breaking capacity 3kA		
	2CSY1305MC	2CSY216875R1305	
	Automatic MCB 1P+N, C10, breaking capacity 3kA		
	2CSY1305MS	2CSY218125R1305	
	Automatic MCB 1P+N, C16, breaking capacity 3kA		
	2CSY1306MC	2CSY216885R1306	
	Automatic MCB 1P+N, C16, breaking capacity 3kA		
	2CSY1306MS	2CSY218135R1306	
	Automatic RCD 1P+N, C6 - 10 mA, breaking capacity 1.5kA		
	2CSY1307MC	2CSY216895R1307	

Mylos® – Protection devices

Miniature circuit-breakers -
Residual current circuit-breakers

Product	Article-No.	Order-No.	Pack/Qty
	Automatic RCD 1P+N, C6 - 10 mA, breaking capacity 1.5kA		
	2CSY1307MS	2CSY218145R1307	
	Automatic RCD 1P+N, C10 - 10 mA, breaking capacity 3kA		
	2CSY1308MC	2CSY216905R1308	
	Automatic RCD 1P+N, C10 - 10 mA, breaking capacity 3kA		
	2CSY1308MS	2CSY218155R1308	
	Automatic RCD 1P+N, C16 - 10 mA, breaking capacity 3kA		
	2CSY1309MC	2CSY216915R1309	
	Automatic RCD 1P+N, C16 - 10 mA, breaking capacity 3kA		
	2CSY1309MS	2CSY218165R1309	

Mylos® – Signalling devices

Warning lights

Product	Article-No.	Order-No.	Pack/Qty
	Orange warning light (incorporated LED)		
	2CSY1310MC	2CSY216955R1310	
	Orange warning light (incorporated LED)		
	2CSY1310MS	2CSY218205R1310	
	White warning light (incorporated LED)		
	2CSY1311MC	2CSY216965R1311	
	White warning light (incorporated LED)		
	2CSY1311MS	2CSY218215R1311	
	Red warning light (incorporated LED)		
	2CSY1312MC	2CSY216975R1312	
	Red warning light (incorporated LED)		
	2CSY1312MS	2CSY218225R1312	
	Green warning light (incorporated LED)		
	2CSY1313MC	2CSY216985R1313	
	Green warning light (incorporated LED)		
	2CSY1313MS	2CSY218235R1313	

Mylos® – Signalling devices

Bells and buzzers

Product	Article-No.	Order-No.	Pack/Qty
	Electro-mechanical bell 12V, 5VA power, 80dB sound intensity		
	2CSY1317MC	2CSY216995R1317	
	Electro-mechanical bell 12V, 5VA power, 80dB sound intensity		
	2CSY1317MS	2CSY218245R1317	
	Electro-mechanical bell 230V, 8VA power, 80dB sound intensity		
	2CSY1318MC	2CSY217005R1318	
	Electro-mechanical bell 230V, 8VA power, 80dB sound intensity		
	2CSY1318MS	2CSY218255R1318	
	Electro-mechanical buzzer 12V, 5VA power, 70dB sound intensity		
	2CSY1321MC	2CSY217015R1321	
	Electro-mechanical buzzer 12V, 5VA power, 70dB sound intensity		
	2CSY1321MS	2CSY218265R1321	
	Electro-mechanical buzzer 230V, 8VA power, 80dB sound intensity		
	2CSY1322MC	2CSY217025R1322	
	Electro-mechanical buzzer 230V, 8VA power, 80dB sound intensity		
	2CSY1322MS	2CSY218275R1322	

Product	Article-No.	Order-No.	Pack/Qty

Mylos® – Comfort and safety devices

Thermostats and time-programmable thermostats

Product	Article-No.	Order-No.	Pack/Qty
	Electronic time-programmable thermostat day/week programming, summer/winter function, with LCD display, 3 modules, powered by 1.5V AA battery		
	2CSY1201MC	2CSY217065R1201	
	Electronic time-programmable thermostat day/week programming, summer/winter function, with LCD display, 3 modules, powered by 1.5V AA battery		
	2CSY1201MS	2CSY218315R1201	
	Electronic thermostat summer/winter function with LCD display, 3 temperature levels can be set, 3 modules, powered by 1.5V AA battery		
	2CSY1202MC	2CSY217075R1202	
	Electronic thermostat summer/winter function with LCD display, 3 temperature levels can be set, 3 modules, powered by 1.5V AA battery		
	2CSY1202MS	2CSY218325R1202	
	Electronic time-programmable thermostat day/week programming, summer/winter function, with LCD display, 2 modules, 230V~ 50/60Hz power supply		
	2CSY1201XC	2CSY217085R1201	
	Electronic time-programmable thermostat day/week programming, summer/winter function, with LCD display, 2 modules, 230V~ 50/60Hz power supply		
	2CSY1201XS	2CSY218335R1201	
	Electronic thermostat, summer/winter function with LCD display, 3 temperature levels can be set, 2 modules 230V~ 50/60Hz power supply		
	2CSY1202XC	2CSY217095R1202	
	Electronic thermostat, summer/winter function with LCD display, 3 temperature levels can be set, 2 modules 230V~ 50/60Hz power supply		
	2CSY1202XS	2CSY218345R1202	

Dimmers

Product	Article-No.	Order-No.	Pack/Qty
	Electronic dimmer with rotary control for resistive loads 100-500W 230V~ 50/60Hz		
	2CSY1205MC	2CSY217125R1205	
	Electronic dimmer with rotary control for resistive loads 100-500W 230V~ 50/60Hz		
	2CSY1205MS	2CSY218375R1205	
	Electronic dimmer with push-button control for resistive and inductive loads 60-500W (60-500VA) 230V~ 50/60Hz		
	2CSY1206MC	2CSY217135R1206	
	Electronic dimmer with push-button control for resistive and inductive loads 60-500W (60-500VA) 230V~ 50/60Hz		
	2CSY1206MS	2CSY218385R1206	
	Electronic dimmer with rotary control and two-way switch for resistive loads 100-500W 230V~ 50/60Hz		
	2CSY1207MC	2CSY217145R1207	
	Electronic dimmer with rotary control and two-way switch for resistive loads 100-500W 230V~ 50/60Hz		
	2CSY1207MS	2CSY218395R1207	

Mylos® – Comfort and safety devices

Gas detectors

Product	Article-No.	Order-No.	Pack/Qty
	Natural gas electronic detector with acoustic and luminous signal relay output, 1 NO/NC change-over contact 6A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50Hz. Equipped with dedicated frame for installation on type 503 box		
	2CSY1210MC	2CSY217035R1210	
	Natural gas electronic detector with acoustic and luminous signal relay output, 1 NO/NC change-over contact 6A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50Hz. Equipped with dedicated frame for installation on type 503 box		
	2CSY1210MS	2CSY218285R1210	
	Natural gas probe replacement module		
	2CSY1220MC	2CSY221215R1220	
	Natural gas probe replacement module		
	2CSY1220MS	2CSY221225R1220	
	LPG gas electronic detector with acoustic and luminous signal relay output, 1 NO/NC change-over contact 6A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50Hz. Equipped with dedicated frame for installation on type 503 box		
	2CSY1211MC	2CSY217045R1211	
	LPG gas electronic detector with acoustic and luminous signal relay output, 1 NO/NC change-over contact 6A (AC1)/2A (AC15) - 250V~. Power supply 230V~ - 50Hz. Equipped with dedicated frame for installation on type 503 box		
	2CSY1211MS	2CSY218295R1211	
	LPG gas probe replacement module		
	2CSY1223MC	2CSY221235R1223	
	LPG gas probe replacement module		
	2CSY1223MS	2CSY221245R1223	

Emergency lighting

Product	Article-No.	Order-No.	Pack/Qty
	Anti black-out removable light 230V~ Charge reserve 4.5 h and recharge time 10-20 h. To be combined with 230V~ socket outlets		
	2CSY1214MC	2CSY217155R1214	
	Anti black-out removable light 230V~ Charge reserve 4.5 h and recharge time 10-20 h. To be combined with 230V~ socket outlets		
	2CSY1214MS	2CSY218405R1214	
	LED lamp for emergency or stairwell lighting Charge reserve up to 3h and recharge time 12h. Power supply 230V~ - 50Hz. Equipped with dedicated frame for installation on type 503 box		
	2CSY1303MC	2CSY217165R1303	
	Anti-blackout lamp 1M 230V~		
	2CSY1225MC	2CSY228085R1225	
	Anti-blackout lamp 1M 230V~		
	2CSY1225MS	2CSY228095R1225	

Mylos® – Comfort and safety devices

Other devices

Product	Article-No.	Order-No.	Pack/Qty
	IR motion detector with twilight sensor and adjustment of operation time		
	2CSY1216MC	2CSY217195R1216	
	IR motion detector with twilight sensor and adjustment of operation time		
	2CSY1216MS	2CSY218435R1216	
	IR receiver for remote control 1-channel, 230V~		
	2CSY1217MC	2CSY217205R1217	
	IR receiver for remote control 1-channel, 230V~		
	2CSY1217MS	2CSY218445R1217	
	Portable remote control 6 channels / 3 bands		
	2CSE1217EL	2CSE264610R1217	
	Universal badge switch with location light		
	2CSY1426MC	2CSY217225R1426	
	Universal badge switch with location light		
	2CSY1426MS	2CSY218455R1426	

Card holder 3 Modules

Product	Article-No.	Order-No.	Pack/Qty
	Card holder 3 Modules		
	2CSY1427MC	2CSY228055R1427	
	Card holder 3 Modules		
	2CSY1427MS	2CSY228065R1427	

Mylos® – Installation devices, accessories

Blank covers

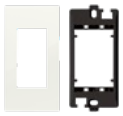
Product	Article-No.	Order-No.	Pack/Qty
	Blank cover 1 module		
	2CSY1601MC	2CSY217235R1601	
	Blank cover 1 module		
	2CSY1601MS	2CSY218465R1601	
	Blank cover, 1/2 module		
	2CSY1600MC	2CSY217245R1600	
	Blank cover 1/2 module		
	2CSY1600MS	2CSY218475R1600	
	Blank cover 1 module with hole for cable outlet, Ø 11.50 mm		
	2CSY1606MC	2CSY217255R1606	
	Blank cover 1 module with hole for cable outlet, Ø 11.50 mm		
	2CSY1606MS	2CSY218485R1606	

Mounting grids

Product	Article-No.	Order-No.	Pack/Qty
	2-modules mounting grid with screws for flush mounted boxes with 60mm or 56x56mm screw distance		
	2CSY1602MY	2CSY217275R1602	
	2-modules mounting grid (with claws) for round box (screw distance 60 mm)		
	2CSY1612MY	2CSY217285R1612	
	3-modules mounting grid for rectangular box (screw distance 83,5 mm)		
	2CSY1603MY	2CSY217295R1603	
	4-modules mounting grid for rectangular box (screw distance 108 mm)		
	2CSY1604MY	2CSY217305R1604	
	7-modules mounting grid for rectangular box (screw distance 100 mm)		
	2CSY1607MY	2CSY217315R1607	
	4+4-modules mounting grid for rectangular box (screw distance 108 mm)		
	2CSY1608MY	2CSY217325R1608	

Mylos® – Installation devices, accessories

1-module enclosures

Product	Article-No.	Order-No.	Pack/Qty
	**1-module frame and 1-module mounting grid**		
	2CSY3102MC	2CSY229385R3102	
	1-module frame and 1-module mounting grid		
	2CSY3102MS	2CSY229395R3102	
	1-module frame with housing		
	2CSY3101MC	2CSY228125R3101	
	1-module frame with housing		
	2CSY3101MS	2CSY228135R3101	

LEDs

Product	Article-No.	Order-No.	Pack/Qty
	LED 250V~, white, to be used with illuminated switches for night-time location		
	2CSY1632MY	2CSY217265R1632	
	LED 250V~, white, to be used with two-way and intermediate switch for night-time location		
	2CSY1633MY	2CSY221265R1633	
	LED 9V, white, replacement for switches with incorporated LEDs		
	2CSY1609MY	2CSY221285R1609	
	LED 12V~, white, replacement for switches with incorporated LEDs		
	2CSY1622MY	2CSY221295R1622	
	LED 24V~, white, replacement for switches with incorporated LEDs		
	2CSY1624MY	2CSY221275R1624	

Mylos® – Installation devices, accessories

DIN rail adapter

Product	**Article-No.**	Order-No.	Pack/Qty
	DIN Rail adapter		
	2CSY1618MY	2CSY228075R1618	

Mylos®
User interfaces

System Access Point

PC

For commissioning and remote control of the ABB-free@home® system.
Allows the execution of Astro and time programs. Commissioning and remote control is executed via web interface or via App. No additional commissioning PC software is required. Connection to the home network via WLAN client mode or via CAT cable.

- Dimensions (H × W × D): 110 mm × 170 mm × 31 mm
- Display: Status LED
- Rated voltage: 230V~
- Rated frequency: 50/60Hz
- Protection class: IP 20

Description	Finishing	Global ID	Product type	Packing
System Access Point	White	6220-0-0136	SAP-S-1-84	1

ABB-free@homeTouch 7"

PC

Touch panel 7” for the centralized management of ABB-free@home® system, that allows the control of up to 16 configurable functions and display of the video image of an ABB Welcome and ABB Welcome M outdoor station. SD card slot for extension of the picture memory. Suitable as room temperature controller extension unit. For surface mounting.

– Dimensions (H × W × D): 155 mm × 218 mm × 29 mm
– Display size: 17,8 cm (7")
– Display resolution: 800 x 480
– Display elements: TFT Touch Display
– Protection class: IP 30

Description	Finishing	Global ID	Product type	Packing
ABB-free@homeTouch 7"	White	8300-0-0356	DP7-S-6XX	1
ABB-free@homeTouch 7"	Black	8300-0-0357	DP7-S-6XX	1

Power supply

The 7" ABB-free@homeTouch device must be powered by the Welcome M power supply and connected to both buses (free@home and Welcome M).
Even when the device is used only with the free@home system, it is necessary to provide for the Welcome M power supply.

Description	Global ID	Product type	Packing
Mini-system controller power supply	WLD101X	M2301	1

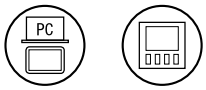
Mylos®

Inputs and Controls

Binary input module, 1 rocker switch, 1 module

1 module device with 1 rocker switch, used as input channel in ABB-free@home® system. Equipped with programming pushbutton for identification. Flush-mounted device.

Description	Finishing	Global ID	Product type	Packing
Binary input module, 1 rocker switch, 1 module	White	2CSYE1012C	2CSYE1012C	1
Binary input module, 1 rocker switch, 1 module	Black	2CSYE1012S	2CSYE1012S	1



2 binary inputs module, 1 rocker switch unit

2 module device with: 1 rocker switch, used as input channel; 2 input channels, used to interface ABB-free@home® system binary inputs. Equipped with LED for functional signaling of the load connected to the device. Flush-mounted device.

Description	Finishing	Global ID	Product type	Packing
2 binary inputs module, 1 rocker switch unit	White	2CSYE1002C	2CSYE1002C	1
2 binary inputs module, 1 rocker switch unit	Black	2CSYE1002S	2CSYE1002S	1

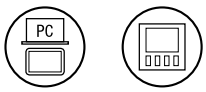


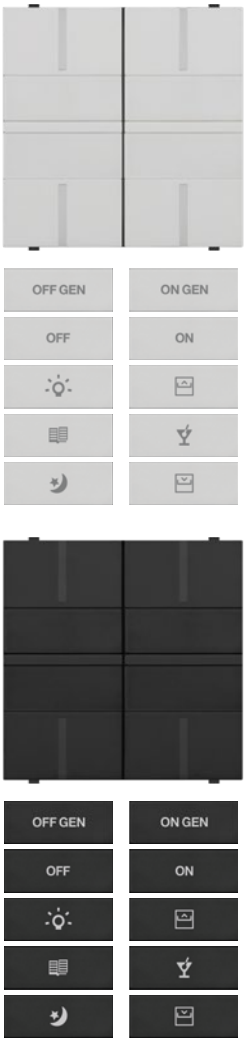
ABB-free@home system, programming via PC and tablet

Mylos Home Automation system, programming via chronothermostat

Mylos®

Inputs and Controls

2 binary inputs module, 2 rocker switches unit



2 module device with: 2 rocker switch, used as input channels; 2 input channels, used to interface ABB-free@home® system binary inputs. Equipped with LED for functional signaling of the load connected to the device. Flush-mounted device.

Description	Finishing	Global ID	Product type	Packing
2 binary inputs module, 2 rocker switches unit	White	2CSYE1003C	2CSYE1003C	1
2 binary inputs module, 2 rocker switches unit	Black	2CSYE1003S	2CSYE1003S	1

PC

Binary inputs, flush-mounted

Conventional push-buttons or auxiliary contacts can be connected to 2 or 4 channels.
Input information can be used to activate system features.
Extension of the connecting cables possible by a maximum of 10 m.

- Voltage-free contacts – Dimensions (H × W × D): 39 mm × 40 mm × 12 mm
- Input current: 0.5 mA – Inputs: 2/4

PC

Description	Finishing	Global ID	Product type	Packing
Binary input, 2gang, flush-mounted		2CDG510002R0011	BI-F-2.0.1	1
Binary input, 4gang, flush-mounted		2CDG510003R0011	BI-F-4.0.1	1

Mylos®
Actuators

Relay actuator unit, 16A

2-module device with 1 16A relay. Equipped with programming pushbuttons for identification and LED for functional signaling. Flush-mounted installation.

Description	Finishing	Global ID	Product type	Packing
Relay actuator unit, 16A	White	2CSYE1101C	2CSYE1101C	1
Relay actuator unit, 16A	Black	2CSYE1101S	2CSYE1101S	1

Relay actuator unit, 16A, 1 rocker switch

2-module device with 1 16A relay with control (pre-programmed association). Equipped with LED for load functional signaling. Flush-mounted installation.

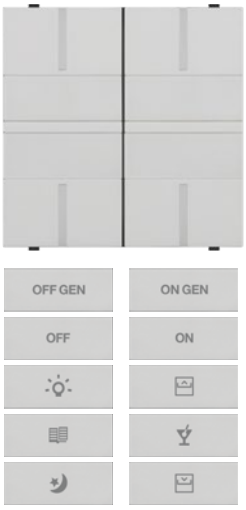
Description	Finishing	Global ID	Product type	Packing
Relay actuator unit, 16A, 1 rocker switch	White	2CSYE1102C	2CSYE1102C	1
Relay actuator unit, 16A, 1 rocker switch	Black	2CSYE1102S	2CSYE1102S	1

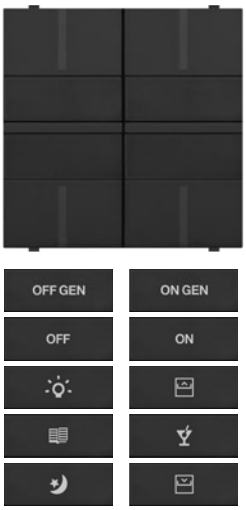
ABB-free@home system, programming via PC and tablet

Mylos Home Automation system, programming via chronothermostat

Mylos®
Actuators

Relay actuator unit, 16A, 2 rocker switches



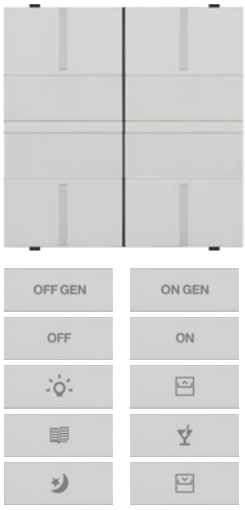


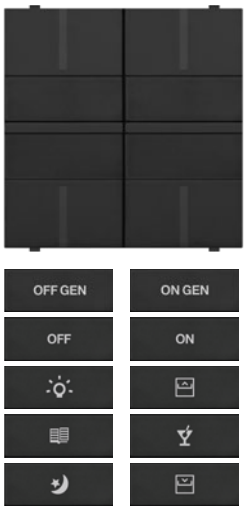
2-module device equipped with: 1 16A relay with control (pre-programmed association with the opportunity to invert the pushbutton to be associated); 1 control to be used as input channel. Equipped with LED for functional signaling of the loads the channels are associated with. Flush-mounted installation.

Description	Finishing	Global ID	Product type	Packing
Relay actuator unit, 16A, 2 rocker switches	White	2CSYE1103C	2CSYE1103C	1
Relay actuator unit, 16A, 2 rocker switches	Black	2CSYE1103S	2CSYE1103S	1

—

2 relay actuators, 2x8A, 2 rocker switches





2-module device with 2 8A relays with control (pre-programmed association can not be changed). Equipped with LED for load functional signaling. Flush-mounted installation.

Description	Finishing	Global ID	Product type	Packing
2 relay actuators, 2x8A, 2 rocker switches	White	2CSYE1106C	2CSYE1106C	1
2 relay actuators, 2x8A, 2 rocker switches	Black	2CSYE1106S	2CSYE1106S	1

ABB-free@home system, programming via PC and tablet

Mylos Home Automation system, programming via chronothermostat

Mylos®

Shutter actuators

230V shutter actuator

2-module device equipped with shutter control actuator.
Equipped with LED for functional signaling. Flush-mounted installation.

Description	Finishing	Global ID	Product type	Packing
230V shutter actuator	White	2CSYE1104C	2CSYE1104C	1
230V shutter actuator	Black	2CSYE1104S	2CSYE1104S	1

230V shutter actuator, 1 rocker switch

2-module device equipped with shutter control actuator and control.
Equipped with LED for functional signaling Flush-mounted installation.

Description	Finishing	Global ID	Product type	Packing
230V shutter actuator, 1 rocker switch	White	2CSYE1105C	2CSYE1105C	1
230V shutter actuator, 1 rocker switch	Black	2CSYE1105S	2CSYE1105S	1

Mylos®
Lighting and Comfort

350W dimmer with rocker switch

2-module device with 350W dimmer and control (pre-programmed association). Suitable for inductive and capacitive load with automatic recognition. Equipped with LED for functional signaling of the load. Flush-mounted installation.

Description	Finishing	Global ID	Product type	Packing
350W dimmer with rocker switch	White	2CSYE1205C	2CSYE1205C	1
350W dimmer with rocker switch	Black	2CSYE1205S	2CSYE1205S	1

1/10V reg dimmer with rocker switch

2-module device with 350W dimmer and control (pre-programmed association). Suitable for inductive and capacitive load with automatic recognition. Equipped with LED for functional signaling of the load. Flush-mounted installation.

Description	Finishing	Global ID	Product type	Packing
1/10V reg dimmer with rocker switch	White	2CSYE1206C	2CSYE1206C	1
1/10V reg dimmer with rocker switch	Black	2CSYE1206S	2CSYE1206S	1

ABB-free@home system, programming via PC and tablet

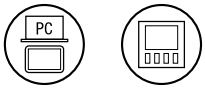
Mylos Home Automation system, programming via chronothermostat

Mylos®
Thermoregulation

Thermostat

2-module thermostat with display. 4 operating modes, centralized management via touch panel or remotely. Timing can be carried out through configuration, using the user interface. Flush-mounted installation.
NOTE: To be match to the 8A actuator relay thermostat (2CSYE1107C S) or to the 6/12-channel temperature control actuator module (2CSYF1431M or 2CSYF1432M)

Description	Finishing	Global ID	Product type	Packing
Thermostat	White	2CSYE1202C	2CSYE1202C	1
Thermostat	Black	2CSYE1202S	2CSYE1202S	1



Relay actuator unit for thermostat, 8A

1-module device with 1 8A relay. To be used as an output channel or as an actuator for thermoregulation. Equipped with programming pushbutton for identification. Flush-mounted installation.

Description	Finishing	Global ID	Product type	Packing
Relay actuator unit for thermostat, 8A	White	2CSYE1107C	2CSYE1107C	1
Relay actuator unit for thermostat, 8A	Black	2CSYE1107S	2CSYE1107S	1

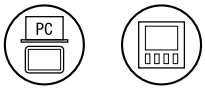


ABB-free@home system,
programming via PC and tablet

Mylos Home Automation system,
programming via chronothermostat

Mylos®
Modular devices

Binary input, 4gang

Interface device for 4 external channels.

- 230V~ inputs
- AC/DC input current In: max 1 mA
- Dimensions (H × W × D): 90 mm × 36 mm × 64 mm
- Inputs: 4
- Protection type: IP 20
- DIN modules: 2

Description	Finishing	Global ID	Product type	Packing
Binary input, 4gang		2CDG510004R0011	BI-M-4.0.1	1

Switch actuator, 4gang

Device with 4 switching channels in ON/OFF mode for managing 4 system's output channels. Manual mode operation.

- Dimensions (H × W × D): 90 mm × 72 mm × 64 mm
- Outputs: 4
- Type of load: AC1
- Nominal current: 16 A, at cos ϕ 0.8
- Nominal voltage: 230 V~
- Type of load: AC3
- Nominal current: 8 A, at cos ϕ 0.45
- Protection type: IP 20
- DIN modules: 4

Description	Finishing	Global ID	Product type	Packing
Switch actuator, 4gang		2CDG510006R0011	SA-M-0.4.1	1

Sensor/Switch actuator, 8/8gang

Device equipped with 8 switching channels in ON/OFF mode with 6A range for managing 8 system's output channels and 8 INPUT channels for interfacing 8 system's binary inputs. Manual mode operation.

- Dimensions (H × W × D): 90 mm × 140 mm × 64 mm
- Outputs: 8 (6 A)
- Inputs: 8
- Type of load: AC1
- Nominal current: 6 A, at cos ϕ 0,8
- Nominal voltage: 230 V~
- Type of load: AC3
- Nominal current: 6 A, at cos ϕ 0.45
- Protection type: IP 20
- DIN modules: 8

Description	Finishing	Global ID	Product type	Packing
Sensor/Switch actuator, 8/8gang		2CDG510007R0011	SA-M-8.8.1	1

Mylos®
Modular devices

Dim actuator, 4gang

PC

Multi-channel universal dimming actuator for controlling LEDs, incandescent lamps, 230 V halogen lamps, low-voltage halogen lamps with conventional or electronic transformers, and dimmable energy-saving halogen lamps. For dimmable retrofit LED lamps (LEDi). Parallel switching of channels for increasing the loads through wire bridges possible. The outputs can be switched parallel in any combination. Outputs automatically recognise the connected load. In addition, the operating mode can be selected manually. Status display of the outputs via LED.

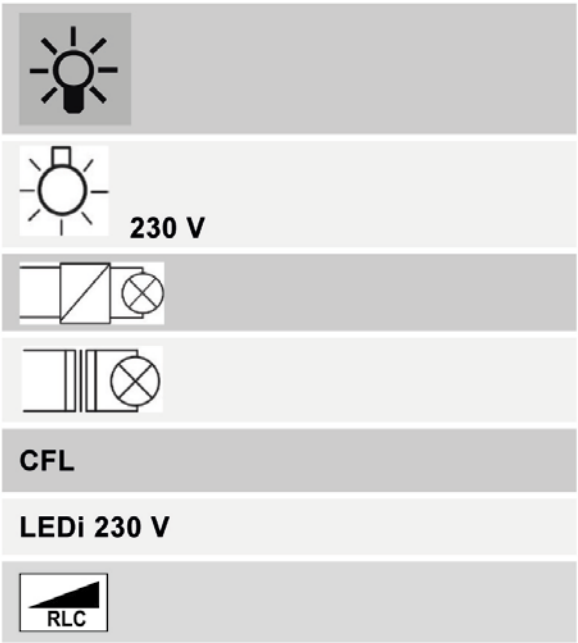
- Display elements: status display of outputs via LED
- Nominal voltage: 230 V~
- Rated frequency: 50 Hz/60 Hz
- Outputs: 4 dimming channels
- Type of load: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformers
- Type of load: LEDi and energy-saving lamps
- Nominal voltage: 2-80 W/VA
- Protection type: IP 20
- DIN modules: 8
- Nominal voltage: 10–315 W/VA

Description	Finishing	Global ID	Product type	Packing
Dim actuator, 4gang		6220-0-0395	DA-M-0.4.1	1

Dim actuator, 4gang

1 x 40 - 1260 W/VA
2 x 20 - 630 W/VA
2 x 20 - 630 W/VA
LEDi + CFL:
tipic. 1 x 8 - 160 W/VA
tipic. 2 x 4 - 120 W/VA
tipic. 4 x 2 - 80 W/VA

Load type



Blind actuator, 4gang

PC

For controlling 4 independent blind or roller shutter drives.
The BUS connection is provided via the enclosed bus terminal.

- Dimensions (H × W × D): 90 mm × 72 mm × 64 mm
- Outputs: 4
- Type of load: AC3
- Nominal current: 6 A, at cos ϕ 0,45
- Nominal voltage: 230 V~
- Protection type: IP 20
- DIN modules: 4

Description	Finishing	Global ID	Product type	Packing
Blind actuator, 4gang		2CDG510011R0011	BA-M-0.4.1	1

Heating actuator, 6gang

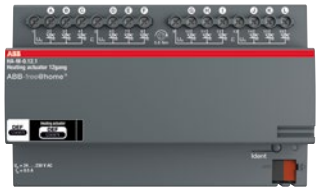
PC

For controlling thermoelectric actuating drives in heating/cooling systems.
The outputs are protected against short-circuit and overload.

- Dimensions (H × W × D): 90 mm × 72 mm × 64 mm
- Outputs: 6
- Type of load: resistive
- Nominal current: 160 mA
- Nominal voltage: 230 V~
- Protection type: IP 20
- DIN modules: 4

Description	Finishing	Global ID	Product type	Packing
Heating actuator, 6gang		2CDG510008R0011	HA-M-0.6.1	1

Heating actuator, 12gang



PC

For controlling thermoelectric actuating drives in heating/cooling systems.
The outputs are protected against short-circuit and overload.

- Dimensions (H × W × D): 90 mm × 144 mm × 64 mm
- Outputs: 12
- Type of load: AC3 resistive
- Nominal current: 160 mA
- Protection type: IP 20
- DIN modules: 8

Description	Finishing	Global ID	Product type	Packing
Heating actuator, 12gang		2CDG510009R0011	HA-M-0.12.1	1

PC — ABB-free@home system, programming via PC and tablet

Mylos Home Automation system, programming via chronothermostat

Mylos®
Modular devices

Power supply 640mA

System power supply. Fast diagnosis due to LED display for operational readiness and errors.

- Dimensions (H × W × D): 90 mm × 72 mm × 64 mm
- Display element: operating/overload LED
- Nominal voltage: 230 V~, +10 %/-15 %
- Secondary: 30 V, +2 V/-2 V
- Rated frequency: 50 Hz/60 Hz
- Outputs: 1
- Nominal current: 640 mA
- Protection type: IP 20
- DIN modules: 4

Description	Finishing	Global ID	Product type	Packing
Power supply 640mA		2CDG510001R0011	PS-M-64.1.1	1

System devices and replacements

BUS cable

Description	Finishing	Global ID	Product type	Packing
BUS cable 100 meters		ED 063 3	ED 063 3	1
BUS cable 500 meters		ED 064 1	ED 064 1	1

ABB-free@home system, programming via PC and tablet

Mylos Home Automation system, programming via chronothermostat

Terminals, rocker covers, labels

Description	Finishing	Global ID	Product type	Packing
BUS connection terminal		EC 732 4	EC 732 4	1/50
Mylos HA/KNX rocker cover (replacement), 1 module	White	2CSYE1501C	2CSYE1501C	4/96
Mylos HA/KNX rocker cover (replacement), 1 module	Black	2CSYE1501S	2CSYE1501S	4/96
Customization labels	White	2CSYE1502C	2CSYE1502C	1/24
Customization labels	Black	2CSYE1502S	2CSYE1502S	1/24
Mylos HA/KNX rocker cover (replacement), 2 modules	White	2CSYE1503C	2CSYE1503C	4/48
Mylos HA/KNX rocker cover (replacement), 2 modules	Black	2CSYE1503S	2CSYE1503S	4/48
Mylos HA/KNX rocker cover (replacement), 2 modules with shutter symbol	White	2CSYE1504C	2CSYE1504C	4/48
Mylos HA/KNX rocker cover (replacement), 2 modules with shutter symbol	Black	2CSYE1505C	2CSYE1504S	4/48
Mylos HA/KNX rocker cover (replacement), 2 modules with dimmer symbol	White	2CSYE1505C	2CSYE1505C	4/48
Mylos HA/KNX rocker cover (replacement), 2 modules with dimmer symbol	Black	2CSYE1505S	2CSYE1505S	4/48

Home automation devices

Temperature control

2CSYE1201C	2CSYE1201S
Time- programmable thermostat	
CEI EN 50090 standards	

Unno

A cocktail of colours.

Create a fun filled home with a variety of colours. Design, technology, respecting the environment, versatility and beauty. It considers it all. Unno makes its mark via a wide range of tones and colours that can form a personalised room or home. Created to meet your decorative and design expectations. You'll find it hard to choose.

BL	White	MD	Tangerine
NG	Black	AR	Blueberry
GP	Silver Gray	LL	Lilac
DO	Golden	MN	Mint
MS	Mustard	CM	Caramel
CT	Chocolate	AZ	Blue

Unno

Selected functions.

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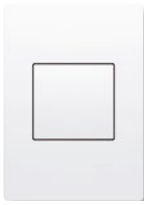

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01 1gang, 1way single pole switch
02 1gang, 2way single pole switch with lamp
03 1gang, 1way push switch with bell symbol
04 1gang, 1way double pole 32A switch
05 Buzzer
06 Universal rotary dimmer
07 RJ11 telephone outlet
08 Type F TV outlet
09 RJ45 Cat. 5E data outlet
10 Cable outlet
11 Nema simple socket outlet
12 Nema duplex socket outlet
13 Brazilian 10A socket outlet
14 Brazilian 20A socket outlet

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Frames 4" x 2"
01 Blank frame, 80 x 115 mm
02 Frame 1 module vertical position, 80 x 115 mm
03 Frame 1 module, 80 x 115 mm
04 Frame 2 modules, 80 x 115 mm
05 Frame 1+1 modules, 80 x 115 mm
06 Frame 3 modules, 80 x 115 mm

Frames 4" x 4"
07 Blank frame, 128 x 115 mm
08 Frame 1+1 modules, 128 x 115 mm
09 Frame 2+2 modules, 128 x 115 mm
10 Frame 1+1+1+1 modules, 128 x 115 mm
11 Frame 3+3 modules, 128 x 115 mm

For more information about light switch ranges visit ABB global web sites.

Unno

Rocker switches

Product	Article-No.	Order-No.	Pack/Qty
	Switch 1-gang, 1-way, SP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screw terminals. Optional: locator LED lamp N1191 BL (127 Vac).		
White	**N1101 BL**	2CLA110100N1102	30
White/Black	**N1101 BN**	2CLA110100N1802	30
	Switch 1-gang, 2-way, SP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 10AX. Screw terminals. Optional: locator LED lamp N1191 BL (127 Vac).		
White	**N1102 BL**	2CLA110200N1102	30
White/Black	**N1102 BN**	2CLA110200N1802	30
	Switch 1-gang, intermediate, SP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screw terminals. Optional: locator LED lamp N1191 BL (127 Vac).		
White	**N1110 BL**	2CLA111000N1102	30
White/Black	**N1110 BN**	2CLA111000N1802	30
	Switch 1-gang, 1-way, DP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 20 AX. Screw terminals.		
White	**N1101.7 BL**	2CLA110170N1102	5
White/Black	**N1101.7 BN**	2CLA110170N1802	5
	Switch 1-gang, 1-way, SP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screw terminals. Included: locator LED lamp N1191 BL (127 Vac).		
White	**N1101.3 BL**	2CLA110130N1102	30
White/Black	**N1101.3 BN**	2CLA110130N1802	30
	Switch 1-gang, 2-way, SP - 1 M Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screw terminals. Included: locator LED lamp N1191 BL (127 Vac).		
White	**N1102.3 BL**	2CLA110230N1102	30
White/Black	**N1102.3 BN**	2CLA110230N1802	30

Product	Article-No.	Order-No.	Pack/Qty
	Push-button, SP with bell symbol - 1M Rated voltage: 110 - 250 Vac. Rated current: 10 AX. Screw terminals. Optional: locator LED lamp N1191 BL (127 Vac).		
White	**N1104 BL**	2CLA110400N1102	30
White/Black	**N1104 BN**	2CLA110400N1802	30
	Locator LED lamp kit - 127 Vac - 1M Suitable for all the switches and push buttons. White light. Rated voltage: 110 - 250 Vac. Rear connection with 2 cables. Rated current: <0,2 mA. Specially designed for CFL and LED lamps.		
White	**N1191 BL**	2CLA119100N1002	10

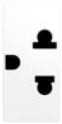
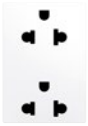
Unno
Dimmers

Product	**Article-No.**	Order-No.	Pack/Qty
	Rotatory/push dimmer 127V - 1M Rated voltage: 110 - 127 Vac. Incandescent lamps: 50 - 500 W. Halogen lamps: 50 - 500 W. Overload and short-circuit protection with fuse (Not resetable).		
White	**N1160 BL**	2CLA116000N1102	10
	Rotatory/push dimmer 220V - 2M Rated voltage: 220 - 230 Vac. Incandescent lamps: 50 - 700 W. Halogen lamps: 50 - 700 W. Overload and short-circuit protection with fuse (Not resetable).		
White	**N1160.1 BL**	2CLA116010N1102	6

Product	**Article-No.**	Order-No.	Pack/Qty

Unno

Socket outlets

Product	Article-No.	Order-No.	Pack/Qty
	American earthed socket outlet - 1M Rated voltage: 125 Vac. Rated current: 15 A. Type B: 2P + E / NEMA 5-15R. Shuttered for child safety. Screw terminals.		
White	**N1128 BL**	2CLA112800N1102	30
	American earthed duplex socket outlet - 3M Rated voltage: 125 Vac. Rated current: 15 A. Type B: 2P + E / NEMA 5-15R. Duplex outlet. Shuttered for child safety. Screw terminals.		
White	**N1328 BL**	2CLA132800N1102	20
	Euro-American unearthed socket outlet - 1M Rated voltage: 125 / 250 Vac. Rated current: 15 / 16A. Type A+C: 2P (non-earthed) / NEMA 1-15R. Screw terminals.		
White	**N1135 BL**	2CLA113500N1102	30
	**Euro-American earthed socket outlet - 1M** Rated voltage: 110 - 250 Vac. Rated current: 15 / 16 A. Type B+C: 2P + E / NEMA 5-15R. Shuttered for child safety. Screw terminals.		
White	**N1138 BL**	2CLA113800N1102	30
	**Euro-American earthed duplex socket outlet - 3M** Rated voltage: 110 - 250 Vac. Rated current: 15 / 16 A. Type B+C: 2P + E / NEMA 5-15R. Shuttered for child safety. Screw terminals.		
White	**N1338 BL**	2CLA133800N1102	20
	Brazilian 10A socket outlet - 1M Rated voltage: 110 - 250 Vac. Rated current: 10 A. Type N: 2P + E. Shuttered for child safety. Screw terminals.		
White	**N1136 BL**	2CLA113600N1102	20
Red	**N1136 RJ**	2CLA113600N7002	20
	Brazilian 20A socket outlet - 1M Rated voltage: 110 - 250 Vac. Rated current: 20 A. Type N: 2P + E. Shuttered for child safety. Screw terminals.		
White	**N1136.2 BL**	2CLA113620N1102	20
Red	**N1136.2 RJ**	2CLA113620N7002	20

Product	Article-No.	Order-No.	Pack/Qty
	USB charger 750mA, 1-gang - 1M Input voltage: 100 - 240 Vac ±10% ; 50/60 Hz. Input current: 0,12 A (with maximum load). Output voltage: 5 Vdc ±5 %. Output current: 750 mA. Power consuption in stand-by: <= 0,3W@230Vac. Energy efficiency: >= 66 %. Operating Temperature: 0º C to 45º C.		
White	**N1185 BL**	2CLA118500N1102	1
	USB charger 2.000mA, 1-gang - 1M Input voltage: 100 - 230 Vac ±10%; 50/60 Hz. Input current: 0,20 A (with maximum load). Output voltage: 5 Vdc ±5%. Output current: 2.000 mA. Power consumption in stand-by: <= 0,01W@230Vac. Energy efficiency: >= 79%. Operating temperature: 0ºC to 45ºC.		
White	**N1185.2 BL**	2CLA118520N1102	1

Unno

Data communication

Product	Article-No.	Order-No.	Pack/Qty
	TV terminal outlet F-type - 1M Single TV outlet - Dead-end. F type. For 75Ω impedance coaxial cable. Frequency range: 0 - 2.000 Mhz. Working voltage: 250 VRMS max. Dielectric withstanding voltage: 500 VRMS min. Contact resistance: - 5 mΩ max. (center contact). - 2 mΩ max. (outer contact). Insulator resistance: 1.000 MΩ min.		
White	**N1150 BL**	2CLA115000N1102	10
	Telephone outlet RJ11 - 1M RJ11 type connector. 4 contacts. Suitable for 2 or 4 contacts jack. Screw terminals.		
White	**N1117 BL**	2CLA111700N1102	10
	Telephone outlet Telebrás type - 2M Outlet for Telebrás type connectors. Screw terminals.		
White	**N1217.1 BL**	2CLA121710N1102	10
	Data outlet RJ45 Cat.5e UTP RJ45 type connector. Cat.5e UTP. In compliance with ANSI/TIA/EIA 568B.2 , ISO/IEC11801 & EN50173. Universal TIA/EIA 568A and 568B labeling. Housing: ABS UL-94-0. Durability: 750 cycles min. (ISO/IEC 11801, IEC 60603-7-4). IDC: PC UL94V-0, Accept 22-26AWG solid wire. Contact: RJ45 8P8C, 3~50 micro-inch gold plating over nickel plated on contact area. Tool-less wiring. To be installed with N2118.1, N2218.1 and N2218.2 cover plates.		
White	**N1118.5 BL**	2CLA111850N1102	10
	Data outlet RJ45 Cat.6 UTP RJ45 type connector. Cat.6 UTP. In compliance with ANSI/TIA/EIA 568B.2 , ISO/IEC11801 & EN50173. Universal TIA/EIA 568A and 568B labeling. Housing: ABS UL-94-0. Durability: 750 cycles min. (ISO/IEC 11801, IEC 60603-7-4). IDC: PC UL94V-0, Accept 22-26AWG solid wire. Contact: RJ45 8P8C, 3~50 micro-inch gold plating over nickel plated on contact area. Tool-less wiring. To be installed with N2118.1, N2218.1 and N2218.2 cover plates.		
White	**N1118.6 BL**	2CLA111860N1102	10

Product	Article-No.	Order-No.	Pack/Qty
	2x RCA connection unit - 1M Front: 2x RCA connectors (Red / White). Rear: screw terminals (4 wires).		
White	**N1155.2 BL**	2CLA115520N1102	1
	3x RCA connection unit - 1M Front: 3x RCA connectors (Red / White / Yellow). Rear: screw terminals (6 wires).		
White	**N1155.3 BL**	2CLA115530N1102	1
	Mini-Jack connection unit - 1M Front: 1x Mini-Jack connector (3,5 mm. stereo audio jack). Rear: screw terminals (3/4 wires).		
White	**N1155.4 BL**	2CLA115540N1102	1
	VGA connection unit - 1M Front: 1x VGA connector (DE-15 connector). Rear: screw terminals (15 wires).		
White	**N1155.5 BL**	2CLA115550N1102	1
	HDMI connection unit - 1M Front: 1x HDMI connector (Type A connector). Rear: screwless terminals (20 wires).		
White	**N1155.6 BL**	2CLA115560N1102	1
	HDMI female-female connection unit - 1M Front: 1x HDMI connector (Type A connector). Rear: 1x HDMI connector (Type A connector) fitted at 90º angle.		
White	**N1155.7 BL**	2CLA115570N1102	1
	USB connection unit - 1M Front: 1x USB 2.0 connector (Type A connector). Rear: screwless terminals (5 wires).		
White	**N1155.8 BL**	2CLA115580N1102	1
	USB female-female connection unit - 1M Front: 1x USB 2.0 connector (Type A connector). Rear: 1x USB 2.0 connector (Type A connector) fitted at 90º angle.		
White	**N1155.9 BL**	2CLA115590N1102	1

Unno

Various

Product	Article-No.	Order-No.	Pack/Qty
	Buzzer - 1M Rated voltage: 110 - 230 Vac. Sound level at 1 meter: 75dB. Adjustable volume with screwdriver.		
White	**N1119 BL**	2CLA111900N1102	10
	Cable outlet - 1M Includes a clamp to fix the cable.		
White	**N1107 BL**	2CLA110700N1102	10
	Blank cover - 1M		
White	**N1100 BL**	2CLA110000N1102	20

Product	Article-No.	Order-No.	Pack/Qty

Unno
Frames

Product	Article-No.	Order-No.	Pack/Qty
	Blank frame With pre-cut for cable outlet. Dimensions: 115 x 80 mm. Not included: mounting plate N1373.9 XX. Flush mounting boxes code: 499.3. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” Brazilian boxes and American boxes.		
White	**N1370 BL**	2CLA137000N1102	10
	1-gang frame - 1 module vertical Dimensions: 115 x 80 mm. Not included: mounting plate N1373.9 XX. Flush mounting boxes code: 499.3. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” Brazilian boxes and American boxes.		
White	**N1371.1 BL**	2CLA137110N1102	10
	1-gang frame - 1 module Dimensions: 115 x 80 mm. Not included: mounting plate N1373.9 XX. Flush mounting boxes code: 499.3. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” Brazilian boxes and American boxes.		
White	**N1371 BL**	2CLA137100N1102	10
	1-gang frame - 2 modules Dimensions: 115 x 80 mm. Not included: mounting plate N1373.9 XX. Flush mounting boxes code: 499.3. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” Brazilian boxes and American boxes.		
White	**N1372 BL**	2CLA137200N1102	10
	2-gang frame - 1+1 modules Dimensions: 115 x 80 mm. Not included: mounting plate N1373.9 XX. Flush mounting boxes code: 499.3. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” Brazilian boxes and American boxes.		
White	**N1371.2 BL**	2CLA137220N1102	10
	1-gang frame - 3 modules Dimensions: 115 x 80 mm. Not included: mounting plate N1373.9 XX. Flush mounting boxes code: 499.3. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” Brazilian boxes and American boxes.		
White	**N1373 BL**	2CLA137300N1102	10

Product	Article-No.	Order-No.	Pack/Qty
	Blank frame With pre-cut for cable outlet. Dimensions: 115 x 128 mm. Not included: mounting plate N1673.9 XX. For 4” x 4” Brazilian boxes.		
White	**N1670 BL**	2CLA167000N1102	10
	2-gang frame - 1+1 modules Dimensions: 115 x 128 mm. Not included: mounting plate N1673.9 XX. For 4” x 4” Brazilian boxes.		
White	**N1671.2 BL**	2CLA167120N1102	10
	2-gang frame - 2+2 modules Dimensions: 115 x 128 mm. Not included: mounting plate N1673.9 XX. For 4” x 4” Brazilian boxes.		
White	**N1672.2 BL**	2CLA167220N1102	10
	4-gang frame - 1+1+1+1 modules Dimensions: 115 x 128 mm. Not included: mounting plate N1673.9 XX. For 4” x 4” Brazilian boxes.		
White	**N1671.4 BL**	2CLA167140N1102	10
	2-gang frame - 3+3 modules Dimensions: 115 x 128 mm. Not included: mounting plate N1673.9 XX. For 4” x 4” Brazilian boxes.		
White	**N1673.2 BL**	2CLA167320N1102	10

Unno

Mounting plates

BL	White	MD	Tangerine
NG	Black	AR	Blueberry
GP	Silver Gray	LL	Lilac
DO	Golden	MN	Mint
MS	Mustard	CM	Caramel
CT	Chocolate	AZ	Blue

Unno

Mounting frames

Product	Article-No.	Order-No.	Pack/Qty
	1-gang mounting frame - 2 modules vertical With colored decorative contour. 2 modules in vertical. For N1371.1 and N1372 frames. Dimensions: 115 x 80 mm. Flush mounting boxes code: 499.3. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” Brazilian boxes and American boxes.		
White	**N1371.9 BL**	2CLA137190N1102	10
Black	**N1371.9 NG**	2CLA137190N1502	10
Silver gray	**N1371.9 GP**	2CLA137190N1302	10
Golden	**N1371.9 DO**	2CLA137190N2702	10
Chocolate	**N1371.9 CT**	2CLA137190N2602	10
Tangerine	**N1371.9 MD**	2CLA137190N2502	10
Blueberry	**N1371.9 AR**	2CLA137190N2402	10
Lilac	**N1371.9 LL**	2CLA137190N2302	10
Mint	**N1371.9 MN**	2CLA137190N2202	10
Mustard	**N1371.9 MS**	2CLA137190N2102	10
Blue	**N1371.9 AZ**	2CLA137190N2002	10

Product	Article-No.	Order-No.	Pack/Qty
	1-gang mounting frame - 3 modules With colored decorative contour. 3 modules. For N1371, N1372, N1371.2 and N1373 frames. Dimensions: 115 x 80 mm. Flush mounting boxes code: 499.3. Frame and mounting plate also suitable for 3 module Italian type boxes, 4”x2” Brazilian boxes and American boxes.		
White	**N1373.9 BL**	2CLA137390N1102	10
Black	**N1373.9 NG**	2CLA137390N1502	10
Silver gray	**N1373.9 GP**	2CLA137390N1302	10
Golden	**N1373.9 DO**	2CLA137390N2702	10
Chocolate	**N1373.9 CT**	2CLA137390N2602	10
Tangerine	**N1373.9 MD**	2CLA137390N2502	10
Blueberry	**N1373.9 AR**	2CLA137390N2402	10
Lilac	**N1373.9 LL**	2CLA137390N2302	10
Mint	**N1373.9 MN**	2CLA137390N2202	10
Mustard	**N1373.9 MS**	2CLA137390N2102	10
Blue	**N1373.9 AZ**	2CLA137390N2002	10

Product	Article-No.	Order-No.	Pack/Qty
	2-gang mounting frame - 3+3 modules With colored decorative contour. 3+3 modules. For N1671.2, N1672.2, N1671.4 and N1673.2 frames. Dimensions: 115 x 128 mm. For 4” x 4” Brazilian boxes.		
White	**N1673.9 BL**	2CLA167390N1102	10
Black	**N1673.9 NG**	2CLA167390N1502	10
Silver gray	**N1673.9 GP**	2CLA167390N1302	10
Golden	**N1673.9 DO**	2CLA167390N2702	10
Chocolate	**N1673.9 CT**	2CLA167390N2602	10
Tangerine	**N1673.9 MD**	2CLA167390N2502	10
Blueberry	**N1673.9 AR**	2CLA167390N2402	10
Lilac	**N1673.9 LL**	2CLA167390N2302	10
Mint	**N1673.9 MN**	2CLA167390N2202	10
Mustard	**N1673.9 MS**	2CLA167390N2102	10
Blue	**N1673.9 AZ**	2CLA167390N2002	10

ocean®

Beauty with inner values.

Fascinates due to its form and colour and has a prize-winning look. This range is convincing not only by design but also by functionality, because it is robust, easy to install and versatile.

01 grey / blue-green
02 alpine white

Materials
Cover: thermoplastic cover (PP), fracture-resistant, UV-resistant, weather-proof, free of PVC and halogen.

ocean®

Selected functions.

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01 Rocker switch 1gang
02 Rocker switch 2gang
03 Rocker switch 1gang with neutral lens
04 Rocker switch 1gang with labelling field
05 Rocker switch 1gang with red neon lens
06 Push-switch 1gang
07 Push-switch 1gang with neutral lens
08 Blind switch with labelling field
09 Key switch
10 SCHUKO® socket outlet with hinged lid
11 SCHUKO® socket outlet With security lock in hinged lid
12 Socket outlet with earthing pin
13 Twilight switch with labelling field
14 SCHUKO® socket outlet 2gang, vertical installation
15 SCHUKO® socket outlet 2gang, horizontal installation
16 SCHUKO® socket outlet 3gang, horizontal installation

For more information about light switch ranges visit ABB global web sites.

ocean®

The specialist for extreme cases.

01 02 03 04

01 Push-button coupling 1/2gang with integrated bus coupler
Article-No. 6108/04-500
02 Push-button for push-button coupling 1/2gang with integrated bus coupler
Article-No. 2601/6 W-54
03 Push-button coupling 2/4gang with integrated bus coupler
Article-No. 6108/05-500
04 Push-button for push-button coupling 2/4gang with integrated bus coupler
Article-No. 2601/5 W-54

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Lighting inserts.

Application for		V	mA	W	Art. No. Order No.	Art. No. Order No.	Art. No. Order No.
Suitable for devices 2601/ . . . 2621/ . . .					Neon/incandescent glow lamps with connecting cable.	Neon/incandescent lamps with E-10 thread	
1.	SM switch/push-switch without serial switch	230	0,6		**8332-1** [2] 1784-0-0016		
2.	SM switch/push-switch without serial switch	230	1,0		**8346-1** [1) 2)] 1784-0-0321		
3.	SM serial switch	230	0,6		**8339-1** [2] 1784-0-0040		
4.	For SM switch/push-button	24	40		**8358** [3] 1784-0-0719		
5.	For SM switch/push-button	12	40		**8335-1** [3] 1784-0-0529		
6.	SM switch/push-switch without serial switch	3, 5, 8	40		**8333-1** [3] 1784-0-0024		
7.	Light signal/warning indicator	230	1,3			**8302** [2] 1780-0-0022	
8.	Light signal	230		3,0		**8340** [3] 1784-0-0222	
9.	Light signal	24		2,0		**8343** [3] 1784-0-0263	
10.	Light signal	12		1,5		**8342** [3] 1784-0-0255	
11.	Light signal	6		1,2		**8341** [3] 1784-0-0248	
12.	Illumination insert						**2152 NLI-53** 1784-0-0777

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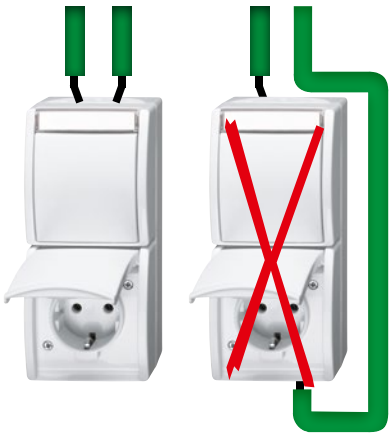
Water protected ranges IP 44.

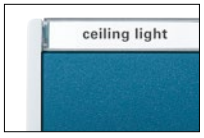
Combination possibility
Using the cable entry, various inserts are freely combinable. In addition to data communication products, other special inserts like key switches, rocker switches, or twilight switches can be fully integrated.

The combination that acts like a single component.
Article-No. 2601/6/20 EW-54
Article-No. 2138 W-54
Article-No. 2661 W-54 with 2863-13-53

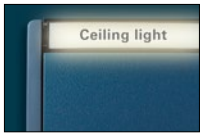
Double cable entry from the top



Due to the large connecting space the power cord for the socket outlet, which is connected to a different electric circuit, can be fed through the shielding up to the socket outlet.

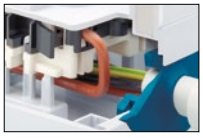


Clear assignment of the consumers
Uniform labelling field for switches and socket outlets (optional).

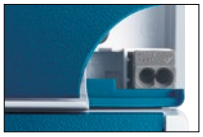


Visible in the dark
Large-area lighting of the labelling field by LED for all switches and push-switches (optional).

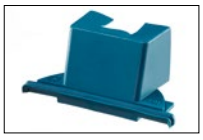
Fast mounting using the PoziDriv screw (+/–), PZ 1 (with triple-pitch fast release stainless steel thread). Same mounting dimensions as the WS range.



Easy connection
Large connection area even for 5 x 2.5 mm² conductors. Easy through--connections underneath the base.



Safe feed-through
Feed-through of earth wire via terminal block.



Colour-matching duct entry
Available in both colours for use in cable ducts.

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IP 44

Product	Article-No.	Order-No.	Pack/Qty
	Rocker switch [1] [2] [3] **1gang 2way** Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/6 W-53-500**	2CKA001085A1637	10/100
alpine white	**2601/6 W-54-500**	2CKA001085A1632	10/100

[1] Label holder 1763-53.
[2] Label holder illuminable with illumination insert 2152 NLI-53.
[3] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Rocker switch [1] [2] [3] **2gang 1way** Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/5 W-53-500**	2CKA001085A1633	10/100
alpine white	**2601/5 W-54**	2CKA001085A1621	10

[1] Label holder 1763-53.
[2] Label holder illuminable with illumination insert 2152 NLI-53.
[3] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Rocker switch [1] [2] [3] **1gang** Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/7 W-53**	2CKA001085A1604	10/100
alpine white	**2601/7 W-54**	2CKA001085A1620	10

[1] Label holder 1763-53.
[2] Label holder illuminable with illumination insert 2152 NLI-53.
[3] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Rocker switch [1] [2] [3] **breaking circuit, 2-pole** Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/2 W-53**	2CKA001085A1605	10/100
alpine white	**2601/2 W-54**	2CKA001085A1627	10

[1] Label holder 1763-53.
[2] Label holder illuminable with illumination insert 2152 NLI-53.
[3] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Rocker switch [1] [2] [3] **1gang 2way** With neutral (transparent) lens. With illumination. Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/6 WGL-53**	2CKA001085A1613	10
alpine white	**2601/6 WGL-54**	2CKA001085A1626	10

[1] Label holder 1763-53.
[2] Label holder illuminable with illumination insert 2152 NLI-53.
[3] Switch illuminable by inserting the lamp 8332-1, 8335-1, 8346-1, 8333-1 and 8358.
[4] Neon lamp 8346-1 included.

	Rocker switch [1] [2] **1gang 2way** With labelling field. Labelling field 57.8 x 9.8 mm Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/6 WN-53-500**	2CKA001085A1635	10/100
alpine white	**2601/6 WN-54**	2CKA001085A1624	10/100

[1] Label holder illuminable with illumination insert 2152 NLI-53.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Rocker switch [1] [2] [3] [4] [5] **1gang 2way** With red neon lens. With neon lamp. With N terminal. Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/6 SKW-53-500**	2CKA001085A1636	10/100
alpine white	**2601/6 SKW-54**	2CKA001085A1622	10

[1] Label holder 1763-53.
[2] Label holder illuminable with illumination insert 2152 NLI-53.
[3] Neon lamp 8346-1 included.
[4] Switch illuminable by inserting the lamp 8332-1, 8335-1, 8346-1, 8333-1 and 8358.
[5] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Rocker switch with marking "Heizung" [1] [2] [3] [4] [5] **1gang 2way** With red neon lens. With neon lamp. With labelling field. Labelling field 57.8 x 9.8 mm With N terminal. Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/6 SKWNH-53**	2CKA001085A1609	10/100
alpine white	**2601/6 SKWNH-54**	2CKA001085A1631	10

[1] Label holder illuminable with illumination insert 2152 NLI-53.
[2] Switch illuminable by inserting the lamp 8332-1, 8335-1, 8346-1, 8333-1 and 8358.
[3] Neon lamp 8346-1 included.
[4] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[5] Neutral labelling field enclosed.

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IP 44

Product	Article-No.	Order-No.	Pack/Qty
	Rocker switch with marking "Heizung" [1) 2) 3) 4) 5)] **breaking circuit, 2-pole** With red neon lens. With neon lamp. With labelling field. Labelling field 57.8 x 9.8 mm Rated voltage: 250 V~ Rated current: 16 AX Protection class (Device): IP 44		
grey / blue-green	**2601/2 SKWNH-53**	2CKA001085A1610	10
alpine white	**2601/2 SKWNH-54**	2CKA001085A1623	10

[1)] Label holder illuminable with illumination insert 2152 NLI-53.
[2)] Switch illuminable by inserting the lamp 8332-1, 8335-1, 8346-1, 8333-1 and 8358.
[3)] Neon lamp 8346-1 included.
[4)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[5)] "Heizung" inscription label also included.

Product	Article-No.	Order-No.	Pack/Qty
	Push-switch [1) 2) 3)] **1gang 1way** SP (operating current), With N terminal. Rated voltage: 250 V~ Rated current: 10 A Protection class (Device): IP 44		
grey / blue-green	**2621 W-53-500**	2CKA001484A0382	10/100
alpine white	**2621 W-54**	2CKA001484A0380	10

[1)] Label holder 1763-53.
[2)] Label holder illuminable with illumination insert 2152 NLI-53.
[3)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Push-switch 1) 2) 3) 4) **1gang 2way** With neutral (transparent) lens. SP, With N terminal. Can be wired for normally open contacts (stand-by current) or normally closed contacts (operating current). Rated voltage: 250 V~ Rated current: 10 A Protection class (Device): IP 44		
grey / blue-green	**2621 W-53-206**	2CKA001484A0054	10
alpine white	**2621 W-54-206**	2CKA001484A0377	10

[1)] Label holder 1763-53.
[2)] Label holder illuminable with illumination insert 2152 NLI-53.
[3)] Switch illuminable by inserting the lamp 8332-1, 8335-1, 8346-1, 8333-1 and 8358.
[4)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Push-switch [1) 2) 3) 4) 5)] **1gang 1way** With neutral (transparent) lens. With illumination. SP (operating current), With N terminal. Rated voltage: 250 V~ Rated current: 10 A Protection class (Device): IP 44		
grey / blue-green	**2621 WGL-53-500**	2CKA001484A0383	10/100
alpine white	**2621 WGL-54**	2CKA001484A0381	10

[1)] Label holder 1763-53.
[2)] Label holder illuminable with illumination insert 2152 NLI-53.
[3)] Push switch illuminable by inserting the lamp 8332-1, 8335-1, 8346-1, 8333-1 and 8358.
[4)] Neon lamp 8346-1 included.
[5)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	Push-switch [1) 2) 3)] **1gang 1way** SP (operating current), With N terminal. With 2 independent answering contacts. With labelling field. Labelling field 57.8 x 9.8 mm Rated voltage: 250 V~ Rated current: 10 A Protection class (Device): IP 44		
grey / blue-green	**2621 WN-53-201**	2CKA001484A0373	10
alpine white	**2621 WN-54-201**	2CKA001484A0378	10

[1)] Label holder illuminable with illumination insert 2152 NLI-53.
[2)] Push switch illuminable by inserting the lamp 8332-1, 8335-1, 8346-1, 8333-1 and 8358.
[3)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	2gang 1way [1) 2) 3)] **2gang 1way, SP (operating current)** 2 actuating covers, 2 x SP, with 2 separate current paths, Without N terminal With labelling field. Labelling field 57.8 x 9.8 mm Rated voltage: 250 V~ Rated current: 10 A Protection class (Device): IP 44		
grey / blue-green	**2621 WN-53-205-101**	2CKA001484A0374	10
alpine white	**2621 WN-54-205-101**	2CKA001484A0379	10

[1)] Label holder 1763-53.
[2)] Label holder illuminable with illumination insert 2152 NLI-53.
[3)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

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IP 44

Product	Article-No.	Order-No.	Pack/Qty
	Symbol for push-switch Protection class (Device): IP 44		
clear--transparent	without symbol **2622 N-101**	2CKA001714A0252	10
clear--transparent	light **2622 LI-101**	2CKA001714A0260	10
clear--transparent	bell **2622 KI-101**	2CKA001714A0278	10
clear--transparent	key **2622 TR-101**	2CKA001714A0286	10
Red	**2622-12-101**	2CKA001714A0294	10
	Blind switch [1) 2) 3)] **Rocker Switch, SP** With interlock. With labelling field. Labelling field 57.8 x 9.8 mm With illumination. Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/4 W-53**	2CKA001085A1612	10
alpine white	**2601/4 W-54**	2CKA001085A1625	10
	Blind switch/push switch, with marking [1) 2) 3)] **push-switch, SP** With interlock. With labelling field. Labelling field 57.8 x 9.8 mm Rated voltage: 250 V~ Rated current: 10 A Protection class (Device): IP 44		
grey / blue-green	**2621/4 W-53**	2CKA001442A0469	10
alpine white	**2621/4 W-54**	2CKA001442A0474	10

[1)] Label holder illuminable with illumination insert 2152 NLI-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Blind switches/push switches prevents fast change over between operating directions.

[1)] Label holder illuminable with illumination insert 2152 NLI-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Blind switches/push switches prevents fast change over between operating directions.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Blind control switch/push-switch [1) 2) 3) 4)] **cover switch, 1gang 2way, DP** For profile semi-cylindrical lock. Key push-switch. Key can only be removed in central position. With labelling field. Labelling field 57.8 x 9.8 mm IP 44 only in combination with appropriate cylindrical locks. Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2712 SLW-53**	2CKA001101A0916	10
alpine white	**2712 SLW-54**	2CKA001101A0924	10
	Key switch [1) 2) 3)] **breaking circuit, 1-pole** For profile semi-cylindrical lock. In switched-on and switched-off status the key can be pulled out in the central position, respectively. With labelling field. Labelling field 57.8 x 9.8 mm IP 44 only in combination with appropriate cylindrical locks. Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2733 SLW-53**	2CKA001101A0917	10
alpine white	**2733 SLW-54**	2CKA001101A0925	10
	Pull cord switch [1) 2) 3)] **1gang 2way** With screw-type terminals. Rated voltage: 250 V~ Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2610/6 W-53**	2CKA001383A0141	10
alpine white	**2610/6 W-54**	2CKA001383A0143	10
	Pullcord fastening Spare part for: 2610/6 UJ-21x, 2610/6 AP, 2610/6 W-5x		
	1797	2CKA001799A0592	10

[1)] See semi-cylindrical lock.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[4)] Labelling strip non-illuminable.

[1)] See semi-cylindrical lock.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Labelling strip non-illuminable.

1) Label holder 1763-53.
2) For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
3) Labelling strip non-illuminable.

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IP 44

Product	Article-No.	Order-No.	Pack/Qty
	Neon indicator [1) 2) 3) 4) 5)] **with E 10-thread** With screw-type terminals. without cover, without lamp, IP 44 only in combination with appropriate covers. Rated voltage: 250 V~ Protection class (Device): IP 44		
grey / blue-green	**2661 W-53**	2CKA001582A0305	10
alpine white	**2661 W-54**	2CKA001582A0328	10

[1)] Label holder 1763-53.
[2)] Label holder illuminable with illumination insert 2152 NLI.
[3)] Indication lamp illuminable using E 10 lamps 8302, 8340, 8341, 8342, 8343.
[4)] Use of the intense-light neon lamp 8340 is recommended in the case of red and green covers.
[5)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Cap **for indication lamp** 2661 W-53		
clear--transparent	**2863-11-53**	2CKA001563A0148	10
red	**2863-12-53**	2CKA001563A0149	10
green	**2863-13-53**	2CKA001563A0150	10

	SCHUKO® socket outlet [1) 2)] **with hinged lid** With screwless terminals. 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20 EW-53-500**	2CKA002083A0845	10/100
alpine white	**20 EW-54-500**	2CKA002083A0846	10/100

[1)] Label holder 1763-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	SCHUKO® socket outlet [1) 2) 3)] **shuttered** With screwless terminals. With hinged lid. 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20 EBW-53**	2CKA002083A0842	10/100
alpine white	**20 EBW-54**	2CKA002083A0843	10

[1)] Label holder 1763-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Increased shock protection.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1)] **with hinged lid and labelling field** With screwless terminals. With labelling field. Labelling field 57.8 x 9.8 mm 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20 EWN-53-500**	2CKA002083A0848	10/100
alpine white	**20 EWN-54**	2CKA002083A0831	10/100

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	SCHUKO® socket outlet [1)] **with green hinged lid** With screwless terminals. 2 P + E, With green hinged lid, SV (RAL 6018). With labelling field. Labelling field 57.8 x 9.8 mm Continuous coloured marking (hinged lid and base). Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20 EWN-13-53**	2CKA002083A0819	10
alpine white	**20 EWN-13-54**	2CKA002083A0837	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	SCHUKO® socket outlet [1)] **with orange hinged lid** With screwless terminals. 2 P + E, With orange hinged lid, ZSV, (RAL 2004). With labelling field. Labelling field 57.8 x 9.8 mm Continuous coloured marking (hinged lid and base). Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20 EWN-14-53**	2CKA002083A0820	10
alpine white	**20 EWN-14-54**	2CKA002083A0838	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	SCHUKO® socket outlet [1)] **with red hinged lid** With screwless terminals. 2 P + E, With red hinged lid, EDP (RAL 6018). With labelling field. Labelling field 57.8 x 9.8 mm Continuous coloured marking (hinged lid and base). Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20 EW/DVN-53**	2CKA002083A0825	10
alpine white	**20 EW/DVN-54**	2CKA002083A0839	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

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IP 44

Product	Article-No.	Order-No.	Pack/Qty
	Combination SCHUKO® socket outlet, with rocker switch [1) 2) 3) 4) 5)] **1gang 2way** For vertical installation. 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/6/20 EW-53**	2CKA001684A0316	5/50
alpine white	**2601/6/20 EW-54**	2CKA001684A0327	5/50

[1)] Label holder 1763-53.
[2)] Label holder of the switch illuminable with illumination insert 2152 NLI-53.
[3)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[4)] Terminals of the socket outlet suitable for loop connection in accordance with VDE 0620-1.
[5)] Instead of the SCHUKO® socket outlets, switches, push-switches, light signals, or SCHUKO® socket outlets with locks can be used.

Product	Article-No.	Order-No.	Pack/Qty
	Combination SCHUKO® socket outlet, with rocker switch [1) 2) 3) 4) 5)] **shuttered** 1gang 2way For vertical installation. 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/6/20 EBW-53**	2CKA001684A0330	5
alpine white	**2601/6/20 EBW-54**	2CKA001684A0331	5

[1)] Label holder 1763-53.
[2)] Label holder of the switch illuminable with illumination insert 2152 NLI-53.
[3)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[4)] Terminals of the socket outlet suitable for loop connection in accordance with VDE 0620-1.
[5)] Instead of the SCHUKO® socket outlets, switches, push-switches, light signals, or SCHUKO® socket outlets with locks can be used.

Product	Article-No.	Order-No.	Pack/Qty
	Combination SCHUKO® socket outlet, with rocker switch [1) 2) 3) 4) 5) 6)] **2gang 1way** For vertical installation. 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Rated current: 10 AX Protection class (Device): IP 44		
grey / blue-green	**2601/5/20EW-53-503**	2CKA001684A0324	5/50
alpine white	**2601/5/20EW-54-503**	2CKA001684A0328	5/50

[1)] Label holder 1763-53.
[2)] Label holder of the switch illuminable with illumination insert 2152 NLI-53.
[3)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[4)] With high cable entry.
[5)] Terminals of the socket outlet suitable for loop connection in accordance with VDE 0620-1.
[6)] Instead of the SCHUKO® socket outlets, switches, push-switches, light signals, or SCHUKO® socket outlets with locks can be used.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1) 2)] With screwless terminals. With security lock in hinged lid. 2 P + E, lockable, 2 keys. Cannot be screwed on or dismounted in closed condition. approx. 200 different locks (unsorted), Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20 EWSL-53-500**	2CKA002083A0847	10/50
alpine white	**20 EWSL-54**	2CKA002083A0832	10

[1)] Label holder 1763-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1) 2)] With screwless terminals. With security lock in hinged lid. 2 P + E, Standard lock with 2 identical keys. Cannot be screwed on or dismounted in closed condition. Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20 EWSL-101-53**	2CKA002083A0823	10
alpine white	**20 EWSL-101-54**	2CKA002083A0833	10

[1)] Label holder 1763-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	2 SCHUKO® socket outlets [1) 2) 3)] With screwless terminals. 2 P + E, With 2 identical security locks in hinged lid and 2 identical keys. Cannot be screwed on or dismounted in closed condition. geminate approx. 200 different locks (unsorted), Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20/20 EWSL-53**	2CKA002083A0816	1/10
alpine white	**20/20 EWSL-54**	2CKA002083A0836	1

[1)] Label holder 1763-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] For operating 2 different circuits in shared rooms via user's meter.

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IP 44

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1) 2) 3)] **2gang** For vertical installation. With screwless terminals. Prewired with hinged lids, 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20-02 EW-53-500**	2CKA002084A0729	5/50
alpine white	**20-02 EW-54**	2CKA002084A0710	5

[1)] Label holder 1763-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Instead of the SCHUKO® socket outlets, switches, push-switches, light signals, or SCHUKO® socket outlets with locks can be used.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1) 2) 3) 4)] **shuttered** 2gang For vertical installation. With screwless terminals. Prewired with hinged lids, 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20-02 EBW-53**	2CKA002084A0719	5
alpine white	**20-02 EBW-54**	2CKA002084A0722	5

[1)] Label holder 1763-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Instead of the SCHUKO® socket outlets, switches, push-switches, light signals, or SCHUKO® socket outlets with locks can be used.
[4)] Increased shock protection.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1) 2)] **2gang** For vertical installation. With screwless terminals. Prewired with hinged lids, With labelling field. Labelling field 57.8 x 9.8 mm 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20-02 EWN-53**	2CKA002084A0702	5
alpine white	**20-02 EWN-54**	2CKA002084A0714	5

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Instead of the SCHUKO® socket outlets, switches, push-switches, light signals, or SCHUKO® socket outlets with locks can be used.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1) 2)] **2gang** For horizontal installation. With screwless terminals. Prewired with hinged lids, 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20/2 EW-53-500**	2CKA002084A0726	5/50
alpine white	**20/2 EW-54-500**	2CKA002084A0727	5/50

[1)] Label holder 1763-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1) 2) 3)] **shuttered** 2gang For horizontal installation. With screwless terminals. Prewired with hinged lids, 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20/2 EBW-53**	2CKA002084A0720	5/50
alpine white	**20/2 EBW-54**	2CKA002084A0723	5

[1)] Label holder 1763-53.
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] Increased shock protection.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1)] **2gang** For horizontal installation. With screwless terminals. Prewired with hinged lids, With labelling field. Labelling field 57.8 x 9.8 mm 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20/2 EWN-53-500**	2CKA002084A0728	5/50
alpine white	**20/2 EWN-54**	2CKA002084A0715	5/50

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

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IP 44

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] **2gang with red hinged lids** For horizontal installation. With screwless terminals. 2 P + E, Prewired With red hinged lid, EDP (RAL 6018). With labelling field. Labelling field 57.8 x 9.8 mm Continuous coloured marking (hinged lid and base). Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20/2 EW/DVN-53**	2CKA002084A0700	5
alpine white	**20/2 EW/DVN-54**	2CKA002084A0713	5

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] [2] [3] **3gang** For horizontal installation. With screw-type terminals. Prewired with hinged lids, 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**2300/3 EW-53**	2CKA002084A0698	1/10
grey / blue-green	**2300/3 EW-53-500**	2CKA002084A0725	1/10
alpine white	**2300/3 EW-54**	2CKA002084A0712	1/10

[1] Label holder 1763-53.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3] Instead of the SCHUKO® socket outlets, switches, push-switches, light signals, or SCHUKO® socket outlets with locks can be used.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] [2] [3] [4] **shuttered** 3gang, For horizontal installation. With screw-type terminals. Prewired with hinged lids, 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**2300/3 EBW-53**	2CKA002084A0721	1/10
alpine white	**2300/3 EBW-54**	2CKA002084A0724	1/10

[1] Label holder 1763-53.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3] Instead of the SCHUKO® socket outlets, switches, push-switches, light signals, or SCHUKO® socket outlets with locks can be used.
[4] Increased shock protection.

Product	Article-No.	Order-No.	Pack/Qty
	SCHUKO® socket outlet [1] [2] **3gang** For horizontal installation. With screw-type terminals. Prewired with hinged lids, With labelling field. 2 P + E, Labelling field 57.8 x 9.8 mm Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**2300/3 EWN-53**	2CKA002084A0704	1/10
alpine white	**2300/3 EWN-54**	2CKA002084A0716	1/10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Instead of the SCHUKO® socket outlets, switches, push-switches, light signals, or SCHUKO® socket outlets with locks can be used.

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet [1] [2] [3] **with earthing pin** With screwless terminals. With hinged lid. Suitable for the countries like Poland, Czech Republic. 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**20 MW-53-500**	2CKA002017A0762	10/100
alpine white	**20 MW-54-500**	2CKA002017A0849	10

[1] Label holder 1763-53.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3] Terminals suitable for loop connection in acc. with IEC 60 884-1.

Product	Article-No.	Order-No.	Pack/Qty
	Socket outlet [1] [2] [3] **with earthing pin** With screw-type terminals. With hinged lid. Shuttered. Suitable for countries like Belgium. 2 P + E, Rated voltage: 250 V~ Rated current: 16 A Protection class (Device): IP 44		
grey / blue-green	**23 MWKS-53-504**	2CKA002017A0763	10/100
alpine white	**23 MWKS-54-504**	2CKA002017A0842	10

[1] Label holder 1763-53.
[2] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3] Terminals suitable for loop connection in acc. with IEC 60 884-1.

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IP 44

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Nema socket outlet [1) 2)] **with yellow hinged lid** With screw-type terminals. 2 P + E, With yellow hinged lid (RAL 1018). With labelling field. Labelling field 57.8 x 9.8 mm Rated voltage: 125 V Rated current: 15 A Protection class (Device): IP 44		
grey / blue-green	**3015 EWN-53**	2CKA002124A0023	10/100
alpine white	**3015 EWN-54**	2CKA002124A0025	10

[1)] Use in accordance with US Standard (e.g. in US military barracks).
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Busch-Nema socket outlet [1) 2)] **with yellow hinged lid** With screw-type terminals. 2 P + E, With yellow hinged lid (RAL 1018). With labelling field. Labelling field 57.8 x 9.8 mm Rated voltage: 125 V Rated current: 20 A Protection class (Device): IP 44		
grey / blue-green	**3016 EWN-53**	2CKA002124A0024	10
alpine white	**3016 EWN-54**	2CKA002124A0026	10

[1)] Use in accordance with US Standard (e.g. in US military barracks).
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Twilight switch [1) 2)] With labelling field. Labelling field 57.8 x 9.8 mm Switch-on/switch-off delay: approx. 3-6 min non-adjustable. Rated voltage: 230 V~ Rated frequency: 50 Hz Rated current: 16 AX Rated power: 3680 W/VA Brightness limit value: 3 Lux - 500 Lux nominal Protection class (Device): IP 44 Temperature range (Device): -35 °C to 55 °C		
grey	**2240 W-53**	2CKA006500A0791	1/10
alpine white	**2240 W-54**	2CKA006500A0792	1/10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] Labelling strip non-illuminable.

Product	Article-No.	Order-No.	Pack/Qty
	Housing 1) 2) 3) 4) 5) **with labelling field** larger installation depth for data communication system, suitable for DCS base 1850 built-in ... 1872 built-in and 1876 built-in, With labelling field. Labelling field 57.8 x 9.8 mm Protection class (Device): IP 44 Mounting depth: 45 mm		
grey / blue-green	**1758 WN-53**	2CKA001724A2751	10
alpine white	**1758 WN-54**	2CKA001724A4264	10

[1)] Not suitable for DCS base 1874 (built-in), 1875 built-in
[2)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[3)] DCS base not included
[4)] IP 44 only with closed hinged lid.
[5)] Not suited for universal modules 0219.

	Empty box [1) 2) 3)] **with labelling field** larger installation depth for pilot devices of 22.5 mm diameter, Standard version, Labelling field 57.8 x 9.8 mm Protection class (Device): IP 44 Mounting depth: 60 mm		
grey / blue-green	**2533 WN-53**	2CKA001724A2752	10
alpine white	**2533 WN-54**	2CKA001724A4281	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] IP 44 only in combination with appropriate control unit
[3)] * e.g. of the companies Lumitas, Moeller, Schlegel, Rafi, Elan.

	Empty box [1) 2) 3)] **with labelling field** larger installation depth for pilot devices of 22.5 mm diameter, with yellow cover (RAL 1018), Labelling field 57.8 x 9.8 mm Protection class (Device): IP 44 Mounting depth: 60 mm		
grey / blue-green	**2533 WN-15-53**	2CKA001724A2753	10
alpine white	**2533 WN-15-54**	2CKA001724A4282	10

[1)] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2)] IP 44 only in combination with appropriate control unit
[3)] * e.g. of the companies Lumitas, Moeller, Schlegel, Rafi, Elan.

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IP 44

Product	Article-No.	Order-No.	Pack/Qty
	FI-SCHUKOMAT, SCHUKO® socket outlets [1) 2) 3)] **with earth leakage circuit breaker** Shuttered. Waterproof. Flush-mounted SCHUKOMAT, VDE 0664. Complete cover, not combinable. DP cut off (P,N) Without PE monitoring. Rated actuating current: 30 mA. Release time: ≤ 30 ms. Short-circuit strength: 1500 A (with 25 A GL fuse). Current surge strength: 250 A (8/20) µs. With fixing claws. Rated frequency: 45-60 Hz. Rated voltage: 230 V~ Rated current: 16 A Protection class (Device): IP 44 Temperature range (Device): -25 °C to 40 °C		
alpine white	**3118 EUGKS-44**	2CKA003116A0647	1
alpine white	**3120 EUGB-44**	2CKA003116A0665	1/10

[1)] Protective measure according to VDE 0100; can be proven or checked using the Profitest 0100S testing device, for example.
[2)] Terminals suitable for loop through connection.
[3)] Increased shock protection.

Product	Article-No.	Order-No.	Pack/Qty

ocean®
Accessories

Product	Article-No.	Order-No.	Pack/Qty
	Cable entry double closed		
blue-green	**2134 W-53**	2CKA001761A1487	10
alpine white	**2134 W-54**	2CKA001761A1507	10
	Cable entry single open		
blue-green	**2136 W-53**	2CKA001761A1489	10
alpine white	**2136 W-54**	2CKA001761A1508	10
	Cable bushing adapter plate for coupling several devices Protection class (Device): IP 44		
blue-green	**2138 W-53**	2CKA001761A1490	10
alpine white	**2138 W-54**	2CKA001761A1509	10
	Cable entry high design		
blue-green	**2139 W-53**	2CKA001761A1491	10
alpine white	**2139 W-54**	2CKA001761A1511	10
	Cable entry For pipes with metric thread M 20 x 1.5. Protection class (Device): IP 44		
blue-green	**2137/10 W-53**	2CKA001761A1503	10
alpine white	**2137/10 W-54**	2CKA001761A1512	10
	Cable entry For pipes with 20 mm diameter unthreaded. Protection class (Device): IP 44		
blue-green	**2137/11 W-53**	2CKA001761A1506	10
alpine white	**2137/11 W-54**	2CKA001761A1513	10
	Cable entry Trunking dimension: 15 x 15 mm or 15 x 30 mm.		
blue-green	**2086 W-53**	2CKA001761A1492	10
alpine white	**2086 W-54**	2CKA001761A1510	10

Product	Article-No.	Order-No.	Pack/Qty
	Label holder [1] with neutral foil 57.8 x 9.8 mm for switches and socket outlets in the ocean® program		
clear--transparent	**1763-53**	2CKA001799A0882	10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	Illumination insert [1] with LED, with optical fibre for uniform illumination of the label holder 1763-53 Rated voltage: 230 V~		
clear--transparent	**2152 NLI-53**	2CKA001784A0777	1

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.

	FI-SCHUKOMAT, SCHUKO® socket outlets [1] [2] [3] **with earth leakage circuit breaker** Shuttered. Waterproof. Surface-mounted SCHUKOMAT, VDE 0664 DP cut off (P,N) Without PE monitoring. Rated actuating current: 30 mA. Release time: ≤ 30 ms. Short-circuit strength: 1500 A (with 25 A GL fuse). Current surge strength: 250 A (8/20) µs. Rated frequency: 45-60 Hz. Rated voltage: 230 V~ Rated current: 16 A Protection class (Device): IP 44 Temperature range (Device): -25 °C to 40 °C		
grey	**3118 WSKS**	2CKA003116A0639	1
grey	**3120 EWB-53**	2CKA003116A0664	1

[1] Protective measure according to VDE 0100; can be proven or checked using the Profitest 0100S testing device, for example.
[2] Connecting terminals approved in accordance with VDE 0620-1 as connectors.
[3] Increased shock protection.

	Mounting plate For individual waterproof/tight SM devices. For fixation with fastening system (fixing screws included in the delivery).		
metal clad	**2609 WS**	2CKA001716A0042	10

Movement detector
For the pleasant feeling of safety.

These innovative and high-quality optical detection systems by Busch-Jaeger simply make life more comfortable. They are alert, helpful, efficient. And they automatically manage many tasks in every sector of the building. Inside and outdoors. When it comes to safety, they know precisely when the light is needed. And other functions such as heating, blinds and air-conditioning are precisely, intelligently and reliably controlled.

Movement detector

Selected functions.

01

02

03

04

05

06

07

08

01 Busch-Watchdog 220 MasterLINE, Colour: white, with anthracite-coloured lens, incl. IR remote control, Article-No.: 6847/8 AGM-204-500

02 Busch-Presence detector KNX, Colour: white, Article-No.: 6131/31-24-500

03 Busch-Presence detector mini KNX, Colour: white, Article-No.: 6131/21-24-500

04 Busch-Watchdog 110 MasterLINE, Colour: white, Article-No.: 6855 AGM-204-500

05 Busch-Watchdog Presence tech BasicLINE Corridor, Article-No.: 6818 U-500

06 Busch-Watchdog 180 flush-mounted comfort sensor, Switch series solo®, Colour: studio white

07 Busch-Comfort switch, Switch series solo®, Colour: studio white

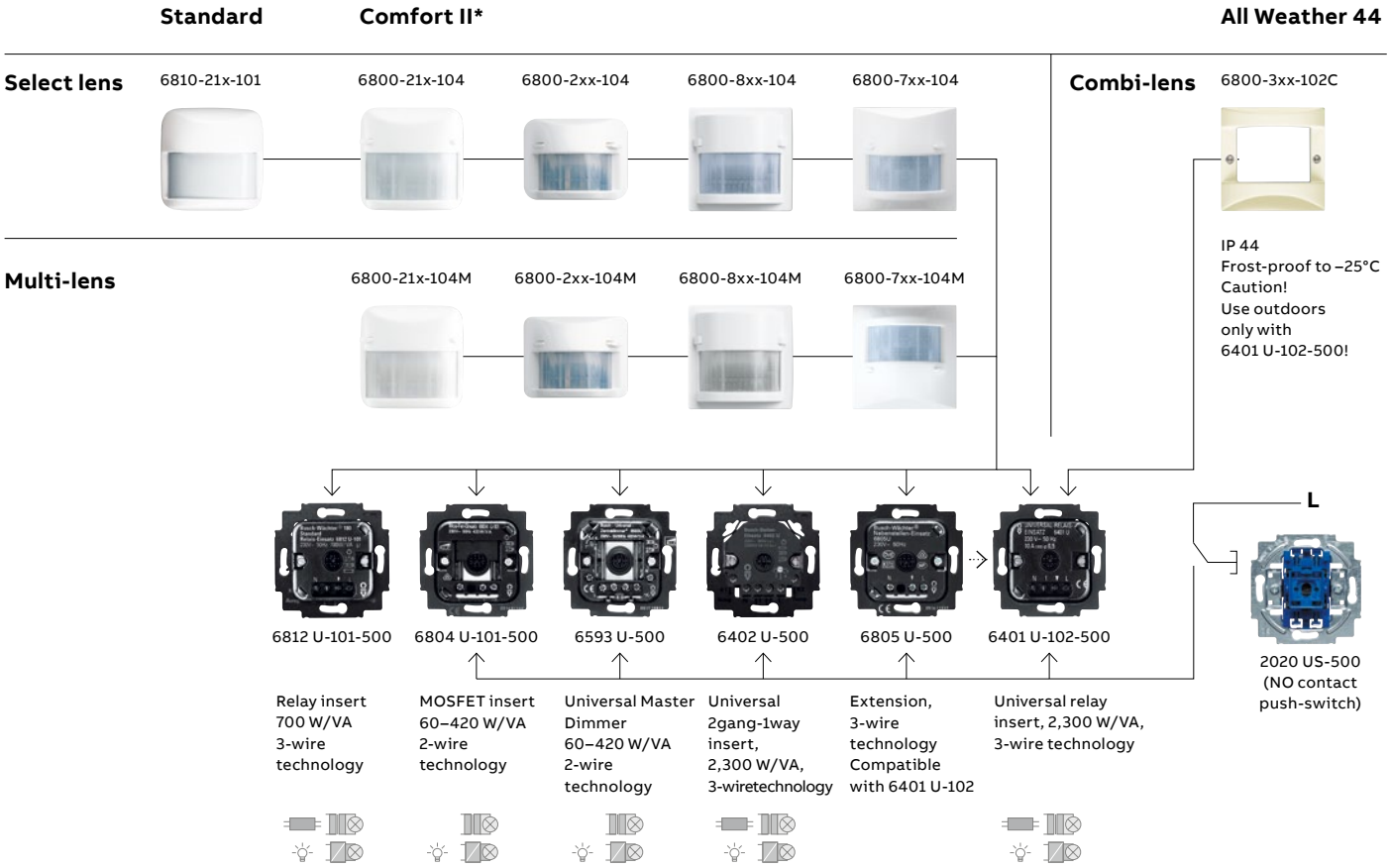
08 Busch-Watchdog ProfessionalLINE

For more information about light switch ranges visit ABB global web sites.

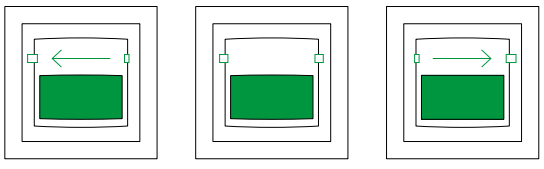
Movement detector

This switch can sense your needs.

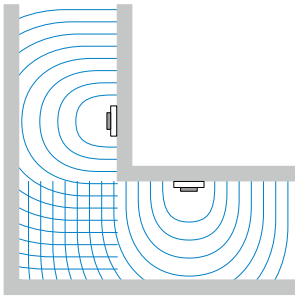
Selection guide: the Busch-Watchdog flush-mounted range



*Switch-off behaviour: In combination with 6593 U (soft OFF function), the Comfort II sensor dims and switches off within 60 seconds.



Slide switch.
Always on, allways off, or automatic mode can be individually selected using the slide switch. Optionally, the slide switch can be fixed to automatic mode using a screw on the back side, e.g. in public buildings.



Application of main and auxiliary units.
If more than only one movement detector is requirement, additional movement detectors can be installed using extension inserts. This makes sense, for example, in the case of L-shaped corridors.

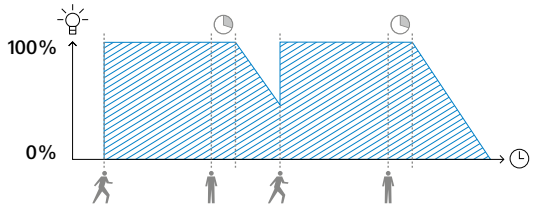
Movement detector

Hands free for the important things Busch-Watchdog 180, flush-mounted.

The convenient home help.
The flush-mounted Busch-Watchdog 180 is the ideal movement detector for the stairwell, hall, bathroom and large rooms without a clear overview. It responds as soon as it registers body heat. And leaves no one standing in the dark. It offers a large range of effectiveness, especially during a frontal approach. As soon as someone enters the door, the switching process is triggered. And it automatically switches off again when the person exits the room.

The convenient combination:
The movement detector and dimmer of ABB/Busch-Jaeger do not suddenly leave you in the dark.

Flush-mounted insert: Dimmer 6593 U-500
Busch-Watchdog sensor: 6800-xx-104M



Light whenever needed.
The flush-mounted Busch-Watchdog 180 Comfort does not switch the light off suddenly but, in connection with a Busch-Dimmer®, dims it slowly within a period of 60 seconds. It does this as soon as it no longer detects movement and the set switch-off delay has expired. This switch-off warning means that one does not immediately stand in the dark but has the opportunity to move into the detection range which then switches back to 100% brightness.

Additional information is available in our range and products brochure.

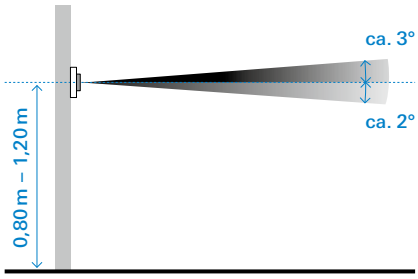
Busch-Watchdog
0001-0-1363

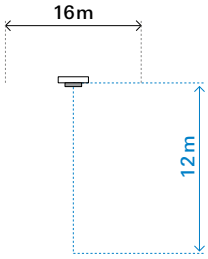
Busch-Watchdog
Presence tech
0001-0-1259

Movement detector

Reliable and uninterrupted surveillance.

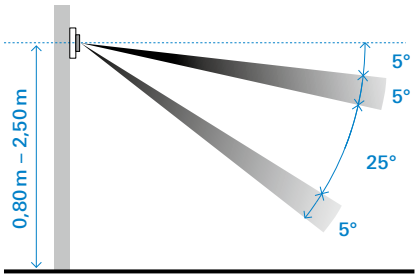
Select lens

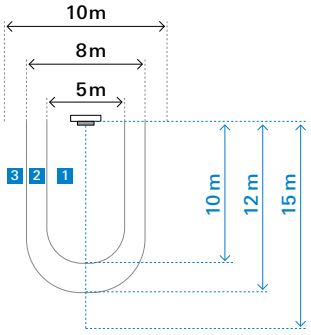




Mounting height of 0.80 m to 1.20 m.

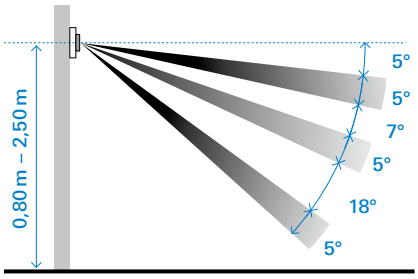
Multi-lens

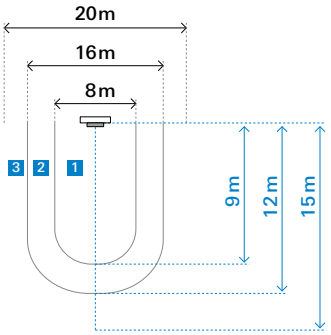




1 Mounting height of 1.20 m.
2 Mounting height of 2 m.
3 Mounting height of 2.50 m.

Combi-lens





1 Mounting height of 1.20 m.
2 Mounting height of 2 m.
3 Mounting height of 2.50 m.

The optimum shape.
A flush-mounted movement detector must match perfectly with its surroundings while at the same time reliably fulfilling its detecting function. The flush-mounted Busch-Watchdog 180 Standard and the flush-mounted Busch-Watchdog 180 Comfort are optimally designed for this. Not too flat and not too high. Nothing escapes their notice. The flush-mounted Busch-Watchdog 180 Standard is available in the design of the Reflex SI Linear switch range. The flush-mounted Busch-Watchdog 180 Comfort on the other hand is available in almost all Busch-Jaeger switch ranges. It additionally has a comfortable sliding switch for individually setting the light control.

Everything under control.
The flush-mounted Busch-Watchdog 180 offers a large range of effectiveness, especially during a frontal approach. As soon as someone enters the door the switching process is triggered. It switches off automatically when exiting. The detection angle is 180° and extends laterally up to the wall. In spite of its compact dimensions it has a transmission range of 12 m frontal and, depending on the model, from 5 to 8 m lateral. Depending on the spatial conditions, the connection of an additional movement detector is recommended, which is connected as extension unit. For example, when an area that does not lie within the detection range is accessed.

Intelligent combination.
The flush-mounted Busch-Watchdog 180 Comfort in connection with a Busch-Dimmer® does not switch the light off suddenly, but dims it slowly within a period of 60 seconds. The switch-off delay time and twilight value can be flexibly set, it is freely selectable up to 30 minutes.

Three lenses for each surveillance situation.
Depending on design and application the Busch-Watchdog models have three different lenses: select lens, multi-lens and combination lens. With the select lens, for example, domestic animals are not detected in the lower area, the multi-lens also detects persons that are on the stairs and the combination lens detects every angle of the surveillance area.

Movement detector

Reliable and uninterrupted surveillance.

The right model for each task.

The select lens.
Monitors an area above approx. 1.20 m.
Small animals are therefore not detected.
Mounting height: 0.80 m to 1.20 m
Detection zone: 12 m frontal, 8 m to each side

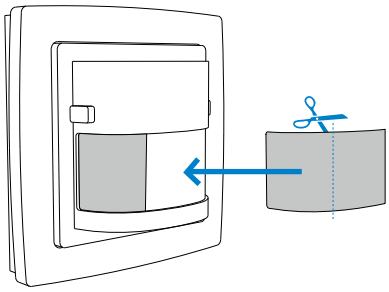
The multi-lens.
Due to its detection range it also detects persons on a staircase.
Mounting height: 1.20 m
Detection zone: 10 m frontal, 2.50 m to each side
Mounting height: 2 m
Detection zone: 12 m frontal, 4 m to each side
Mounting height: 2.50 m
Detection zone: 15 m frontal, 5 m to each side

The combination lens. (Only All Weather 44)
Makes possible the largest detection of the area to be monitored.
Mounting height: 1.20 m
Detection zone: 9 m frontal, 4 m to each side
Mounting height: 2 m
Detection zone: 12 m frontal, 8 m to each side
Mounting height: 2.50 m
Detection zone: 15 m frontal, 10 m to each side

01

02

01 Busch-Watchdog 180 flush mounted standard sensor
02 Busch-Watchdog 180 flush mounted comfort sensor



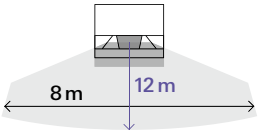
Reducing the detection range of the Busch-Watchdog with the covering foil.

Movement detector

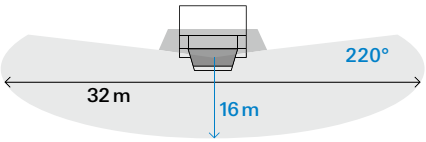
Busch-Watchdog surface-mounted.

Overview of Busch-Watchdog, surface-mounted, detection zones

Busch-Watchdog
70 MasterLINE
6854 AGM-204-500



Busch-Watchdog
220 MasterLINE
6847/11 AGM-204-500

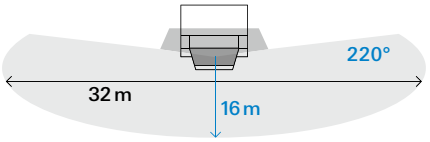


Busch-Watchdog
220 MasterLINE KNX
6179/01-204-500

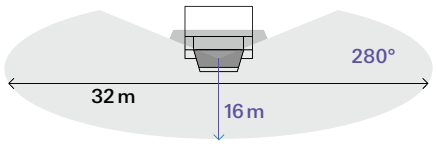
Busch-Watchdog
110 MasterLINE
6855 AGM-204-500

Busch-Watchdog
220 WaveLINE
6847 AGM-204-500

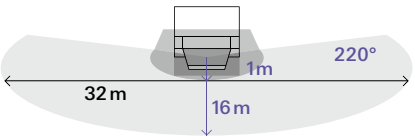
Busch-Watchdog 220 MasterLINE
KNX premium
6179/02-204-500



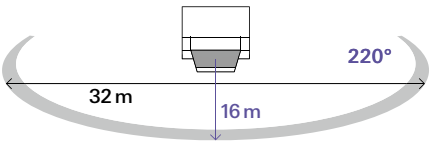
Busch-Watchdog
280 MasterLINE
6867 AGM-204-500



Busch-Watchdog
220 MasterLINE premium.
6848 AGM-204-500



Busch-Watchdog
220 MasterLINE select.
6847 AGS-204-500



Overview Busch-Watchdog serface-mounted

01

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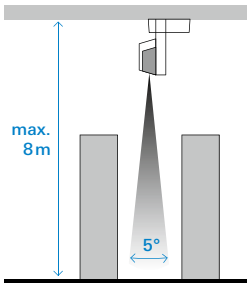
01 Busch-Watchdog 70 and 110 MasterLINE, white
02 Busch-Watchdog 70 and 110 MasterLINE, anthracite
03 Busch-Watchdog 70 and 110 MasterLINE, brown
04 Busch-Watchdog 70 and 110 MasterLINE, silver metallic
05 Busch-Watchdog 220 and 280 MasterLINE, white
06 Busch-Watchdog 220 and 280 MasterLINE, anthracite
07 Busch-Watchdog 220 and 280 MasterLINE, brown
08 Busch-Watchdog 220 MasterLINE, silver metallic, incl. IR remote control
09 Busch-Watchdog 220 MasterLINE, white, lens anthracite
10 Busch-Watchdog 220 ProfessionalLINE

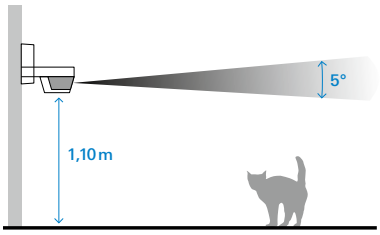
Movement detector

The angle is what matters. Mounting and detection ranges.

Busch-Watchdog 220 MasterLINE select



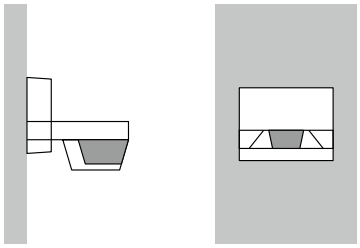
Precise surveillance.
Aside from horizontal mounting, which is ideally suited for the surveillance of houses, properties and parking areas, also vertical mounting is possible. This also allows warehouse thoroughfares on large industrial sites to be monitored so precisely that areas are illuminated only when being approached.



Sees everything. Except small animals.
Practical for the surveillance of outdoor areas: At a mounting height of 1.10 m with a horizontal alignment small animals are not detected by the Busch-Watchdog 220 MasterLINE select.

Mounting possibilities

01



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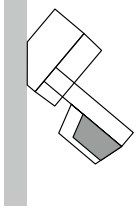

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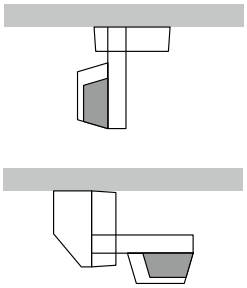
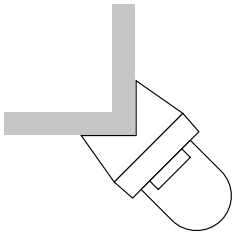


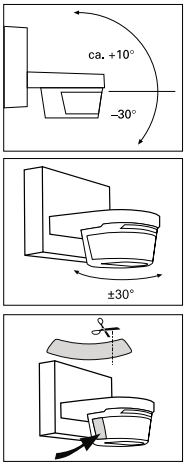
04

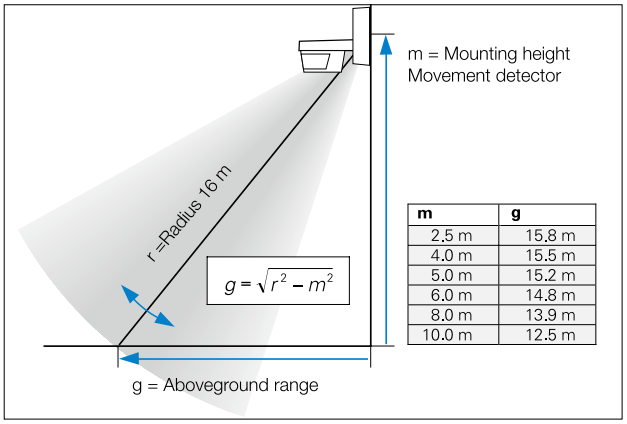


01 Wall mounting
02 Wall mounting with gradient
03 Ceiling mounting with and without corner adapter
04 Corner mounting (using the corner adapter) Busch-Watchdog 280 MasterLINE

Setting the transmission range

- Regulation of the range due to turning, switching, or partially covering
- The optimum mounting height is 2.50 m.
- Automatic range stabilisation for the Busch-Watchdog 70/110 MasterLINE





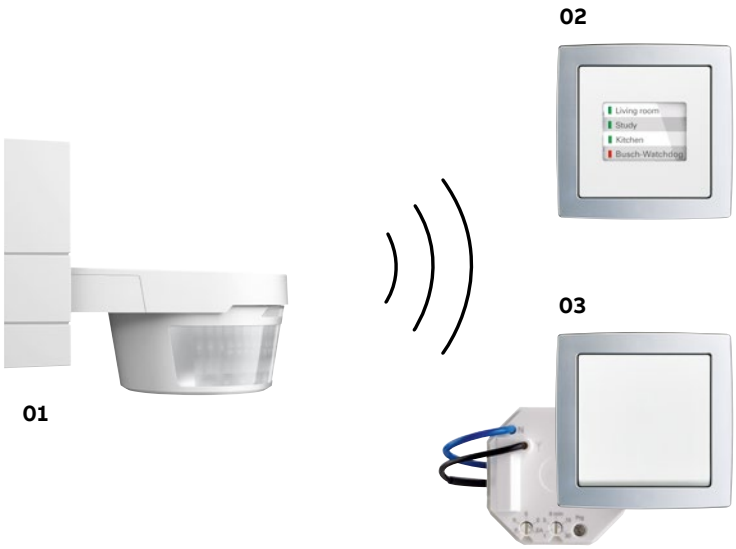
m	g
2.5 m	15.8 m
4.0 m	15.5 m
5.0 m	15.2 m
6.0 m	14.8 m
8.0 m	13.9 m
10.0 m	12.5 m

Movement detector

Extra versatile. Busch-Watchdog 220 WaveLINE.

Special functions of the Busch-Watchdog 220 WaveLINE.
This model was designed especially for living concepts and additionally offers the technology of the Busch-Watchdog 220 MasterLINE. Since it operates with radio signals, the functions of the sensors and actuators are spread over both devices. The sensor can be mounted in any location - preferably where it has the best overview. Several Busch-Watchdog 220 WaveLINE can be assigned to a single actuator. This allows angled and hilly areas to be completely monitored. The device operates without cables. Its operation is especially economical because the high-performance batteries last up to ten years. If it detects a movement, it radios the switch-on signal to the built-in actuator, which can even be installed in a deep flush-mounted socket outlet underneath a push-button. The battery test is carried out on the device. The transmission of a low-battery telegram is possible.

Even without the supply voltage, movement can be reliably detected.
The battery-operated Watchdog sensors can be mounted in any terrain.



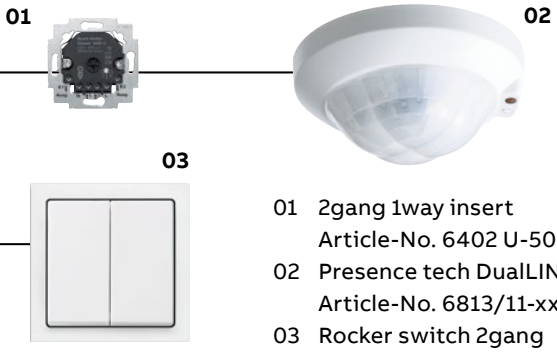
- For properties without a clear overview
- Cableless retrofitting
- Radio control for ideal positioning in the detection range
- Detection and status display
- Battery operated for line-independent mounting

01 Busch-Watchdog 220 WaveLINE
Article-No.: 6747 AGM-204
02 LED display WaveLINE
Article-No.: 6730-xx auf 6404 U
03 Built-in receiver WaveLINE
Article-No.: 6701-101

It is possible to display the detection of a movement using an LED on the Busch-Watchdog.

Movement detector

Presence detector.



01 2gang 1way insert
Article-No. 6402 U-500
02 Presence tech DualLINE
Article-No. 6813/11-xx-500
03 Rocker switch 2gang

The Busch-Watchdog Presence tech DualLINE additionally has a

- Comprehensive logic function
- Partition wall function
- Scene module

Busch-Watchdog presence tech DualLINE

Mounting heights

- The characteristics of detection depend on the mounting height
- As the mounting height increases, the sensitivity and detection density decrease

Application example: DualLINE presence detector

Today, presence detectors are a vital part of all publicly and commercially used buildings and result in great savings. The new Busch-Watchdog presence dualLINE. It doesn't just monitor, it also offers many useful additional functions.

- Control two independent lighting rows by only one presence detector dependent on daylight.
- Either fully automatic or semiautomatic mode: activation and deactivation is controlled only by the presence detector or activation is controlled by a push-switch, while deactivation takes place automatically.
- In fully automatic operation, the presence detector can be switched to continuous OFF using the push-switch; activation using the push-switch is possible at any time.
- Manual continuous lighting is possible via push-switch: the automatic return to automatic mode takes place when no more movement is detected.

Mounting height	Seated persons*	Walking persons
2.0 m	4 m	8 m
2.5 m	6 m	10 m
3.0 m	8 m	12 m
3.5 m	10 m	14 m
4.0 m	12 m**	16 m
5.0 m	16 m**	20 m
> 5.0 m	-	20 m***

* Seat height: 1 m.
** No longer suitable for pure "Desk activities" or switch-off delay > 15 min.
*** Mounting in sports facilities for detection of movement up to 8 m possible.

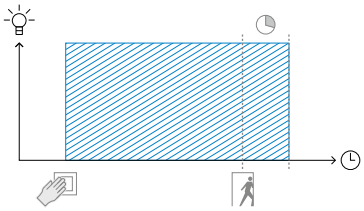
These presence detectors are complete devices with integrated relay.

	BasicLINE mini 6811 EB	**BasicLINE 6814 U**	**BasicLINE Corridor 6818 U**	**Busch-Watchdog BasicLine 6844 AGM-204-500**
Detection range at tangential movement (ø at 2.5 m installation height)	6 m	7 m	24 m	12 m
Connection for push-button		X	X	X
Semi-automatic or automatic		X		
IP 54 (only with surface-mounted housing 6888)			X	X
Remote control 6843			X	

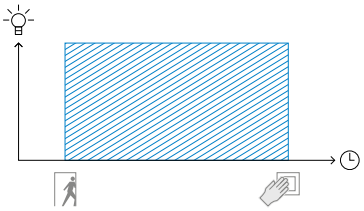
Movement detector

Perfect support. Busch-Comfort switch.

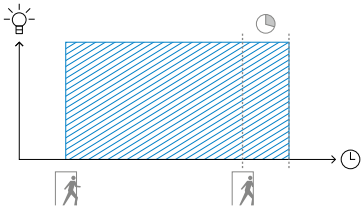
Functional and attractive. The elegant Busch-Comfort switch can be operated just like a normal light switch. However, it offers interesting functions which have not been available in this combination in a device up to the present. Switching contactless, manually or time controlled: The Busch-Comfort switch demonstrates what is expected of technology today.



Time comfort.
Manually on, but switching off automatically. For stairwells as staircase light timer switch. You come home and the light is still on because someone else just came through the corridor. After a few steps you are suddenly in the dark because the set time has expired. The innovative Busch-Watchdogs reliably prevent such, at times dangerous, situations from occurring. They register again when a person is in the corridor and start the selected switch-off delay anew.

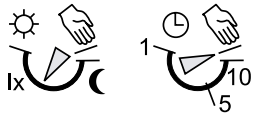


Medium comfort.
Automatic on, but switching off manually.
The angled cellar or workroom. Busch-Comfort switches turn on the light automatically and leave it switched on as long as you need it. If you do not move or you temporarily leave the detection range, the light remains switched on. This allows you to concentrate on your work and decide yourself when it needs to be dark again.



Maximum comfort.
Never switch by hand again.
For transit rooms such as corridor, cellar and toilet. The light is switched on automatically when someone enters the detection range. The switch-off delay can be selected between one to ten minutes. Special safety: If a person again passes through the detection range, the timer setting starts anew from the beginning. Also the brightness threshold from which the light switches itself on can be adapted to the prevailing conditions. This gives you freedom and flexibility - even when the light conditions change. Busch-Comfort switch relay inserts can also be switched in parallel.

Setting options on the back of the control element



Operating mode 1
The lighting is switched on at detection and automatically off.

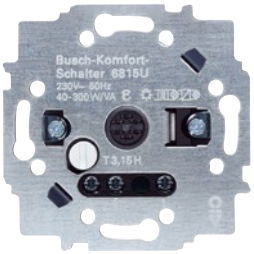
Operating mode 2
Switching on manually, and off automatically.

Operating mode 3
Switching on at detection, and off manually.

Note
The comfort switch changes between selected and manual operating mode with a long press of the button.

The flat lens is available in various finishes tones and matches the colour of the rocker switch.

01



02

01 Busch-Comfort switch insert (6815 U)
2-conductor connection
02 Busch-Comfort switch relay insert (6816 U)
3-conductor connection

Movement detector

Elegance and intelligence. Busch-Comfort switch.

Always a solution that convinces.
The Busch-Comfort switch offers different comfort stages for each requirement. For example, it can be used as fully automatic. In this case it switches the light on and off independently when a movement is registered. And the semi-automatic version leaves the light on until it is switched off manually.

Always at the right time.
Busch-Comfort switches also operate ideally as automatic time control. With this version the light is switched with the press of a button and switched off again after a pre-programmed time if no movement is registered. Of course, they can also be used as a normal light switch that only responds to manual operation.

Informative and stylish.
The integrated sensor does not catch the eye because of its flat construction. And an LED in the lens informs everyone who enters or leaves the room that the light switch must be operated manually. Very useful. The LED at the same time serves as a light for orientation and is therefore a safe signpost in the dark. Aside from their technical qualities the Busch-Comfort switches are also beautiful. Their design impresses with straight-lined, timeless elegance and matches every living room concept. It is available in almost all Busch-Jaeger switch ranges.

Movement detector

Module principle of the electronic inserts and control elements.

	Flush-mounted insert	Switching/dimming capacity	Timer control element		Unit	
			Comfort timer control element 6455-101-500	Standard timer control element 6456-101	Busch-Watchdog presence tech DualLINE 6813/11-xxx	Busch-Watchdog presence tech 6813-xxx-101
Switching	Universal Relay Switch Insert 6401 U-102	2300 W/VA All loads 10 AX	X Timer with maintained contact (for switching lights, pumps etc.)		X*) (either semiautomatic or fully automatic operation)	X*)
	Universal 2gang-1way Insert 6402 U	2300 W/VA All loads 10 AX			X*) (for controlling two independent lighting rows)	X*) (Heating, air conditioning, ventilation function, Output 2 with switch-on/switch-off delay in relation to Output 1)
	Relay Switch Insert 6812 U-101	700 W/VA All loads 3 A			X*) (fully automatic operation only)	X*)
	MOSFET Insert 6804 U-101	60–240 W/VA, 230 V incandescent and halogen lamps, low-voltage halogen lamps with or Busch-electronic transformers			X*) (either semiautomatic or fully automatic operation)	X*)
	Extension Insert 6805 U	Active Watchdog extension for 6401 U-102, 6402 U, 6804 U-101, 6593 U, and 6550 U-101			X*)	X*)
Dimming	Universal Master Dimmer Insert 6593 U	60–420 W/VA, increase with 6594 U up to 735 W/VA 230 V incandescent and halogen lamps, low-voltage halogen lamps with conventional or Busch-electronic transformers	X (Timer with adjustable brightness values)		X*) (constant light regulation, either semiautomatic or fully automatic operation)	X*) (constant light regulation)
	LED-Touch dimmer insert 6524 U		X		X*) (constant light regulation, either semiautomatic or fully automatic operation)	X*) (constant light regulation)
	Memory Touch-Type Controller 6550 U-101	ECG = 0/1–10 V, LEDs with ballast units, 700 W/VA, higher contact load possible with external relay, 50 mA control current	X (Timer with adjustable brightness values)		X*) (constant light regulation, either semiautomatic or fully automatic operation)	X*) (constant light regulation)
	Memory 2gang Dimmer 6565 U	2 x 40-315 W/VA, 230 V incandescent and halogen lamps, low-voltage halogen lamps with electronic transformer				
	Memory Touch Dimmer 6560 U-101	20–500 W/VA, 230 V incandescent and halogen lamps, low-voltage halogen lamps with conventional transformer				
Blind	Blind Basic Insert 6418 U	690 VA, 3 A at cos ϕ 0,5		X (timer with 3-minute contact for shutter, motors or blinds)		
	Blind Control II Insert 6411 U-101/ 6411 U/S-101	690 VA, 3 A at cos ϕ 0,5	X (timer with 3-minute contact for shutter, motors or blinds)			

X Combination possible

*Optional remote-controllable by IR with 6010-25 or Beo6 remote control of Bang & Olufsen.

				Control element				
	Busch-Watchdog sensor All Weather 44 with combi-lense 6800-3x-102C	Busch-Watchdog comfort sensor (multilens) 6800-xxx-104(M)	Busch-Watchdog standard sensor 6810-21x	Busch-Remote control IR control element 6067-xxx-xxx	Busch-Remote control IR control element 6066-xxx-xxx	Busch-Blind control II control element 6430-xxx-xxx	Control Element for Memory 2gang Dimmer 6545-xxx	Busch-Touch dimmer control element 6543-xxx-10x
	X (only 6401 U-102 for outdoor use, frost-proof up to –25°C)	X	X	X*) (latching relay)				X (latching relay)
		X (Output 2 with switch-on/ switch-off delay in relation to Output 1)	X (Output 2 with switch-on/ switch-off delay in relation to Output 1)	X*) (latching relay, 2 normally open contacts, separate slave contact for light and fan control)	X*) (electronic serial switch, remote-controllable, 2 normally open contacts)	X (electronic serial switch, 2 normally open contacts)		X (latching relay, 2 normally open contacts, separate slave contact for light and fan control)
		X	X					
		X	X					
		X	X					
		X (Soft OFF mode: dim down/switch off within the final minute/switch-off warning)	X		X			X
					X			X
	X	X	X		X			X
							X	
								X
						X		
					X	X		

Movement detector

Busch-Watchdog, surface-mounted

Product	Article-No.	Order-No.	Pack/Qty
	Busch-MasterLight® [1] [*] **for wall mounting** Outdoor LED light with display of house number. With integrated twilight sensor; brightness switching threshold is adjustable. Illumination selectable in two brightness stages (approx. 15% / 100%). With extension unit input (switch) for switchover of the brightness stages. With alarm function which can be activated (lamp flashes white / red). With extension unit input (button) for activating the alarm function / colour and light temperature adjustment. Lamp: 5 x white LED, 4 x RGB LED. Colour temperature (at 100% brightness): 4200 K (neutral white) Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Inputs: 2 Polling voltage: 230 V~, Rated power: 11 W Brightness limit value: 3 Lux - 150 Lux Mounting height: 1.8 m Protection class (Device): IP 54 Temperature range (Device): -20 °C to 55 °C Dimensions: (L x W x D): 299 mm x 125 mm x 33 mm		
brown	**8401-201-500**	2CKA008400A0008	1
alpine white	**8401-204-500**	2CKA008400A0005	1
silver metallic	**8401-208-500**	2CKA008400A0006	1
anthracite	**8401-35-500**	2CKA008400A0007	1

[1] Self-adhesive set of numerals, 1 - 999, a - f, enclosed.
[*] Phase-out type

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 70 MasterLINE [1] Electronic movement detector for detecting thermal motion. With display for detection and operation mode. With ground surveillance. With high-quality lens for optimum detection. Adjustment of detection range via rotary control element. Surveillance density: 25 sectors with 100 switching segments. With integrated dismantling protection. With brightness-independent test mode for evaluating the detection zone. Additional possibility for switch-on via normally open push-button switch. Switch-off delay option: 1 / 3 or 5 min. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 6 AX, cos ϕ 0.6 Rated power: 1380 W/VA Detection range: frontal: 12 m, lateral: 4 m Brightness limit value: 3 Lux Up to daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 100 mm x 125 mm x 33 mm		
brown	**6854 AGM-201-500**	2CKA006800A2549	1
white	**6854 AGM-204-500**	2CKA006800A2546	1/10
silver metallic	**6854 AGM-208-500**	2CKA006800A2547	1
anthracite	**6854 AGM-35-500**	2CKA006800A2548	1

[1] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 110 MasterLINE [1] Electronic movement detector for detecting thermal motion. Remote operation via IR remote control 6841-101. Remote configurable via IR service remote control 6842-101. With display for detection and operation mode. With ground surveillance. With high-quality lens for optimum detection. Detection sensitivity adjustable via IR service remote control. Adjustment of detection range via rotary control element. Surveillance density: 25 sectors with 100 switching segments. With integrated dismantling protection. All functions controlled by microprocessor. Continuous light (4 hours), light deactivation (4 hours) and presence simulation can be activated via IR remote control. Reading in the current brightness value as switching threshold via remote control. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With brightness-independent test mode for evaluating the detection zone. Individual adjustment of detection range via enclosed protective foil which can be cut to size. Additional possibility for switch-on via normally open push-button switch. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 10 AX, cos ϕ 0.6 Rated power: 2300 W/VA Detection range: frontal: 12 m, lateral: 4 m Brightness limit value: 3 Lux Up to daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 100 mm x 125 mm x 33 mm		
brown	**6855 AGM-201-500**	2CKA006800A2614	1
white	**6855 AGM-204-500**	2CKA006800A2611	1
silver metallic	**6855 AGM-208-500**	2CKA006800A2612	1
anthracite	**6855 AGM-35-500**	2CKA006800A2613	1

[1] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Movement detector

Busch-Watchdog, surface-mounted

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 220 MasterLINE [1] Electronic movement detector for detecting thermal motion. Remote operation via IR remote control 6841-101. Remote configurable via IR service remote control 6842-101. With display for detection and operation mode. With ground and rear-field detection. With high-quality lens for optimum detection. Detection sensitivity adjustable via IR service remote control. Surveillance density: 84 sectors with 336 switching segments. With integrated dismantling protection. All functions controlled by microprocessor. Continuous light (4 hours), light deactivation (4 hours) and presence simulation can be activated via IR remote control. Reading in the current brightness value as switching threshold via remote control. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With brightness-independent test mode for evaluating the detection zone. Individual adjustment of detection range via enclosed protective foil which can be cut to size. Additional possibility for switch-on via normally open push-button switch. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 16 AX, cos ϕ 0.6 Rated power: 3680 W/VA Detection range: frontal: 16 m, lateral: 16 m Detection angle: 220 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 115 mm x 125 mm x 141 mm		
brown	**6847/11 AGM-201**	2CKA006800A2523	1/10
alpine white	**6847/11 AGM-204**	2CKA006800A2520	1/10
silver metallic	**6847/11 AGM-208**	2CKA006800A2521	1/10
anthracite	**6847/11 AGM-35**	2CKA006800A2522	1/10
	Includes IR remote control		
brown	**6847 AGM-201-500**	2CKA006800A2535	1
alpine white	**6847 AGM-204-500**	2CKA006800A2532	1/10
silver metallic	**6847 AGM-208-500**	2CKA006800A2533	1
anthracite	**6847 AGM-35-500**	2CKA006800A2534	1/10

[1] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 220 MasterLINE [1] **incl. IR remote control** With anthracite-coloured lens. Electronic movement detector for detecting thermal motion. Remote control possible via IR remote control 6841-101 (included in scope of delivery). Remote configurable via IR service remote control 6842-101. With display for detection and operation mode. With ground and rear-field detection. With high-quality lens for optimum detection. Detection sensitivity adjustable via IR service remote control. Surveillance density: 84 sectors with 336 switching segments. With integrated dismantling protection. All functions controlled by microprocessor. Continuous light (4 hours), light deactivation (4 hours) and presence simulation can be activated via IR remote control. Reading in the current brightness value as switching threshold via remote control. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With brightness-independent test mode for evaluating the detection zone. Individual adjustment of detection range via enclosed protective foil which can be cut to size. Additional possibility for switch-on via normally open push-button switch. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 16 AX, cos ϕ 0.6 Rated power: 3680 W/VA Detection range: frontal: 16 m, lateral: 16 m Detection angle: 220 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 115 mm x 125 mm x 141 mm		
white	**6847/8 AGM-204-500**	2CKA006800A2600	1

[1] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Movement detector

Busch-Watchdog, surface-mounted

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 220 MasterLINE select [1] Electronic movement detector for detecting thermal motion. Remote operation via IR remote control 6841-101. Remote configurable via IR service remote control 6842-101. With display for detection and operation mode. With high-quality lens for optimum detection. Detection sensitivity adjustable via IR service remote control. Surveillance density: 28 sectors with 112 switching segments. With integrated dismantling protection. All functions controlled by microprocessor. Continuous light (4 hours), light deactivation (4 hours) and presence simulation can be activated via IR remote control. Reading in the current brightness value as switching threshold via remote control. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With brightness-independent test mode for evaluating the detection zone. Individual adjustment of detection range via enclosed protective foil which can be cut to size. Additional possibility for switch-on via normally open push-button switch. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 16 AX, cos ϕ 0.6 Rated power: 3680 W/VA Detection range: frontal: 16 m, lateral: 16 m Detection angle: 220 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 2.5 m - 8 m alternative: 1.1 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 115 mm x 125 mm x 141 mm		
white	**6847 AGS-204-500**	2CKA006800A2537	1

[1] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 220 MasterLINE premium [1] [2] **incl. IR remote control** Electronic movement detector for detecting thermal motion. For potential-free operation. With 2-zone detection and 2 separate switching outputs. With connectable, movement-independent twilight switching operation. Remote control possible via IR remote control 6841-101 (included in scope of delivery). Remote configurable via IR service remote control 6842-101. With display for detection and operation mode. With ground and rear-field detection. With high-quality lens for optimum detection. Detection sensitivity adjustable via IR service remote control. Surveillance density: 91 sectors with 364 switching segments. With integrated dismantling protection. All functions controlled by microprocessor. Continuous light (4 hours), light deactivation (4 hours) and presence simulation can be activated via IR remote control. Reading in the current brightness value as switching threshold via remote control. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With brightness-independent test mode for evaluating the detection zone. Individual adjustment of detection range via enclosed protective foil which can be cut to size. Additional possibility for switch-on via normally open push-button switch. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 10 AX, cos ϕ 0.6 Rated power: 2300 W/VA Control/Signal outputs: 1, Normally open contact, potential free Rated power: 0.12 - 2300 W/VA Detection range: frontal: 16 m, lateral: 16 m Detection range 2: frontal: 1 m, lateral: 1 m Detection angle: 220 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 115 mm x 125 mm x 141 mm		
brown	**6848 AGM-201-500**	2CKA006800A2581	1
white	**6848 AGM-204-500**	2CKA006800A2578	1
silver metallic	**6848 AGM-208-500**	2CKA006800A2579	1
anthracite	**6848 AGM-35-500**	2CKA006800A2580	1

[1] In combination with a relay/contactor, an RC suppressor 6899 has to be used.
[2] For the activation of additional functions (twilight switch/floating/2-zone operation), the IR service remote control 6842-101 is required.

Movement detector

Busch-Watchdog, surface-mounted

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 280 MasterLINE [1] **incl. IR remote control** Electronic movement detector for detecting thermal motion. Remote control possible via IR remote control 6841-101 (included in scope of delivery). Remote configurable via IR service remote control 6842-101. With display for detection and operation mode. With ground and rear-field detection. With high-quality lens for optimum detection. Detection sensitivity adjustable via IR service remote control. Surveillance density: 110 sectors with 440 switching segments. With integrated dismantling protection. All functions controlled by microprocessor. Always-On (4 hours) and Presencesimulation can be activated via IR-remote control. Reading in the current brightness value as switching threshold via remote control. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With brightness-independent test mode for evaluating the detection zone. Individual adjustment of detection range via enclosed protective foil which can be cut to size. Additional possibility for switch-on via normally open push-button switch. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 16 AX, cos ϕ 0.6 Rated power: 3680 W/VA Detection range: frontal: 16 m, lateral: 16 m Detection angle: 280 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 115 mm x 125 mm x 141 mm		
brown	**6867 AGM-201-500**	2CKA006800A2557	1
white	**6867 AGM-204-500**	2CKA006800A2554	1/10
silver metallic	**6867 AGM-208-500**	2CKA006800A2555	1
anthracite	**6867 AGM-35-500**	2CKA006800A2556	1

[1] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 220 WaveLINE [1] [2] [3] Wireless movement detector for detecting thermal motion. With display for detection and status indication. With ground and rear-field detection. With high-quality lens for optimum detection. Surveillance density: 84 sectors with 336 switching segments. With integrated dismantling protection. All functions controlled by microprocessor. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With automatic battery monitoring. Battery service life: typically 5 years, therefore practically maintenance-free. With brightness-independent test mode for evaluating the detection zone. Individual adjustment of detection range via enclosed protective foil which can be cut to size. Combinable with switch actuator WaveLINE, 1gang, with extension unit 6701-101. Compatible with WaveLINE KNX gateway TP-RF 6770. For standalone and group operation. Switch-off delay: 3 min. (single mode), individually adjustable at actuator (group mode). Send frequency: 868 MHz. Free-field range: approx. 100 m. Rated voltage: 4.5 VDetection range: frontal: 16 m, lateral: 16 m Detection angle: 220 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 115 mm x 125 mm x 141 mm		
brown	**6747 AGM-201-500**	2CKA006700A0038	1
alpine white	**6747 AGM-204-500**	2CKA006700A0035	1
silver metallic	**6747 AGM-208-500**	2CKA006700A0036	1
anthracite	**6747 AGM-35-500**	2CKA006700A0037	1

[1] Battery included in delivery.
[2] Battery type: Lithium batteries 1250 mAh (L92 AAA 1.5 V).
[3] Cannot be comnined with ceiling/corner adapter 6868-...

Movement detector

Busch-Watchdog, surface-mounted

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 90 ProfessionalLINE [1] Electronic movement detector for detecting thermal motion. With display for detection and operation mode. With ground and rear-field detection. With planar compensation: +/- 30°. With high-quality lens for optimum detection. Surveillance density: 50 sectors with 200 switching segments. With brightness-independent test mode for evaluating the detection zone. Additional possibility for switch-on via normally open push-button switch. Switch-off delay option: 1 / 3 or 5 min. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 16 AX, cos ϕ 0.6 Rated power: 3680 W/VA Detection range: frontal: 12 m, lateral: 6 m Detection angle: 90 ° Brightness limit value: 3 Lux / 15 lux / daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 97 mm x 97 mm x 159 mm		
brown	**6853 AGM-201**	2CKA006800A2318	1
alpine white	**6853 AGM-204-500**	2CKA006800A2321	1/10

[1] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 220 ProfessionalLINE [1] **without IR remote control** Electronic movement detector for detecting thermal motion. With display for detection and operation mode. With ground and rear-field detection. With planar compensation: +/- 30°. With high-quality lens for optimum detection. Detection sensitivity selectable in 3 steps. Surveillance density: 84 sectors with 336 switching segments. All functions controlled by microprocessor. Always-On (4 hours) and Presencesimulation can be activated via IR-remote control. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With brightness-independent test mode for evaluating the detection zone. Additional possibility for switch-on via normally open push-button switch. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: ohmic, capacitive and inductive loads Rated current: 16 AX, cos ϕ 0.6 Rated power: 3680 W/VA Detection range: frontal: 16 m, lateral: 16 m Detection angle: 220 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 2.5 m Protection class (Device): IP 55 Temperature range (Device): -25 °C to 55 °C Dimensions: (L x W x D): 97 mm x 97 mm x 159 mm		
brown	**6845/11AGM-201-500**	2CKA006800A2335	1
alpine white	**6845/11AGM-204-500**	2CKA006800A2334	1/10
silver metallic	**6845/11AGM-208-500**	2CKA006800A2337	1
anthracite	**6845/11 AGM-35-500**	2CKA006800A2336	1

[1] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Movement detector

Busch-Watchdog, surface-mounted

Product	Article-No.	Order-No.	Pack/Qty
	WaveLINE switch actuator, 1gang, with extension unit [1]		
	For wireless switching of electrical loads. Functions via radio control: ON/OFF, timer and light scene control. Functions via the extension unit: ON/OFF, timer and sending a radio control telegram. Operation also possible via conventional push-buttons (2020 US, 2012/6 UK). Actuation of the extension unit (via conventional push-button) causes the output to switch and a radio control telegram to be sent. Actuation of extension unit in ON/OFF function: Alternate sending of an ON/OFF telegram. Actuation of extension unit in timer function: Sending of an ON telegram. For Busch-Watchdog WaveLINE. For wall mounted transmitter Waveline 6731-xxx, 6732-xxx und 6733-xxx. For remote control WaveLINE 6780. For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. Compatible with WaveLINE KNX gateway TP-RF 6770. Switch-off delay: Adjustable to 5 seconds, 1-5-15 minutes. Repeater function can be activated for extended range. For universal attachment or installation. 3 wire connection (neutral conductor required). For installation in (deep) flush-mounted boxes to German Standard DIN 49073, Part 1. Controllable up to 32 transmission addresses. Send/receive frequency: 868 MHz. Free-field range: approx. 100 m. Control element: Adjustable potentiometer Display elements: Status indication of output via LED. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Inputs: 1 Polling voltage: 230 V~, Sensing pulse, L-wire Outputs: 1x Normally open contact, potential-bound Suitable for: Resistive load Rated current: 10 A Output voltage: 230 V~ Rated power: 2300 W Suitable for: capacitive Rated current: 10 AX Output voltage: 230 V~ Rated power: 2300 VA Suitable for: inductive Rated current: 10 A, cos ϕ 0.6 Output voltage: 230 V~ Rated power: 2300 VA Protection class (Device): IP 20 Temperature range (Device): -20 °C to 45 °C Dimensions: (L x W x D): 47 mm x 48 mm x 22 mm Mounting depth: 25 mm		
studio white	**6701-101-500**	2CKA006700A0040	1/10

[1] For further information please check the current Online-Catalogue.

Product	Article-No.	Order-No.	Pack/Qty
	Ceiling/corner adapter For Busch-Watchdog 220 MasterLINE. For Busch-Watchdog 220 MasterLINE select. For Busch-Watchdog 220 MasterLINE premium. For Busch-Watchdog 280 MasterLINE. For Busch-Watchdog 220 MasterLINE KNX. For Busch-Watchdog 220 MasterLINE KNX premium. For detection on two sides of the house, in combination with Busch-Watchdog 280. For ceiling mounting of the Busch-Watchdog. To increase the inclination of the Busch-Watchdog 220/280. It is mounted at the corner of the house, on the wall or under the ceiling. For flush or surface wiring. Mounting height: 2.5 m Dimensions: (L x W x D): 102 mm x 125 mm x 55 mm		
brown	**6868-201-500**	2CKA006800A2565	1
white	**6868-204-500**	2CKA006800A2562	1
silver metallic	**6868-208-500**	2CKA006800A2563	1
anthracite	**6868-35-500**	2CKA006800A2564	1
	IR remote control [1] For Busch-Watchdog 110 MasterLINE. For Busch-Watchdog 220 MasterLINE. For Busch-Watchdog 220 MasterLINE select. For Busch-Watchdog 220 MasterLINE premium. For Busch-Watchdog 280 MasterLINE. The following functions can be activated: Activating/deactivating light ON for 4 hours. Activating/deactivating light for 4 hours. Activating/deactivating presence simulation. Setting / resetting current brightness value as limit value to device settings. With coded transmission signal. Power supply: lithium button cell battery Type CR2025. Battery life: typically 2 years. Rated voltage: 3 VProtection class (Device): IP 40 Temperature range (Device): 0 °C to 45 °C Dimensions: (L x W x D): 86 mm x 40 mm x 7 mm		
	6841-101-500	2CKA006800A2585	1

[1] Battery included in delivery.

Movement detector

Busch-Watchdog, surface-mounted

Product	Article-No.	Order-No.	Pack/Qty
	IR service remote control [1] For Busch-Watchdog 110 MasterLINE. For Busch-Watchdog 220 MasterLINE. For Busch-Watchdog 220 MasterLINE select. For Busch-Watchdog 220 MasterLINE premium. For Busch-Watchdog 280 MasterLINE. The following functions/settings can be activated depending on device type: Activating/deactivating light ON for 4 hours. Activating/deactivating light for 4 hours. Activating/deactivating presence simulation. Setting / resetting current brightness value as limit value to device settings. Activating/deactivating test mode. Calling up settings stored in the remote control. Reset to factory default settings. Activate/deactivate dynamic forced switch-off. Activating/deactivating 2-zone operation. Activating/deactivating synchronous mode. Activating/deactivating twilight switch operation. Setting of switch-off delay or short-time pulse. Setting of the brightness limit value. Adjusting the sensitivity. With coded transmission signal. Power supply: lithium button cell battery Type CR2025. Battery life: typically 2 years. Rated voltage: 3 VProtection class (Device): IP 40 Temperature range (Device): 0 °C to 45 °C Dimensions: (L x W x D): 125 mm x 56 mm x 10 mm		
	6842-101-500	2CKA006800A2583	1

[1] Battery included in delivery.

Product	Article-No.	Order-No.	Pack/Qty

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog Presence tech BasicLINE mini [1) 2)] For switching lighting systems that depend on brightness and movement. Detection range (installation height 3m, up to 6m in diameter). Low mounting height due to separate sensor/actuator concept. Continuously variable detection sensitivity. With brightness-independent test mode for evaluating the detection zone. With detection display in test mode. Ceiling installation using integrated spring bracket. Surveillance density: 19 sectors with 76 switching segments. Switch-off delay: approx. 1 sec - 15 min or short-time pulse adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 2000 W Suitable for: Energy-saving bulbs Rated power: 7 - 400 W Suitable for: Fluorescent lamps Rated current: 4 AX, cos ϕ 0.5 Rated power: 1000 W/VA Detection angle: 360 ° Brightness limit value: 10 Lux - 1000 Lux , Daytime operation Mounting height: 2 m - 5 m Protection class (Device): IP 20 Protection class (Sensor): IP 40 Temperature range (Device): 0 °C to 45 °C Mounting depth: 77 mm IEC 60669-2-1		
alpine white	**6811 EB-500**	2CKA006800A2517	1

[1)] When mounting the actuator through the drilled hole of the sensor an installation depth of ≥ 205 mm is to be taken into account.
[2)] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog Presence tech BasicLINE [1) 2)] For switching lighting systems that depend on brightness and movement. Detection range (for installation height of 3 m), circular, up to 8 m in diameter. For semiautomatic and fully automatic operation. Additional activation/deactivation possibility through pushbutton input. Adaptation of the detection range possible using the included masking elements. With brightness-independent test mode for evaluating the detection zone. With detection display in test mode. Mounting possibility in combination with built-in installation boxes and device sockets. Ceiling installation using integrated spring bracket. Adjustment elements accessible on the front side. Low mounting height (31 mm) Surveillance density: 32 sectors with 128 switching segments. Switch-off delay: approx. 5 sec - 30 min or short-time pulse adjustable. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 2000 W Suitable for: Energy-saving bulbs Rated power: 7 - 400 W Suitable for: Fluorescent lamps Rated current: 4 AX, cos ϕ 0.5 Rated power: 1000 W/VA Detection angle: 360 ° Brightness limit value: 10 Lux - 2000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): 0 °C to 45 °C Dimensions: (L x W x D): 111 mm x 111 mm x 59 mm Mounting depth: 41 mm 60669-2-1		
alpine white	**6814 U-500**	2CKA006800A2518	1/24

[1)] The detection range with a central approach is reduced.
[2)] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog Presence tech BasicLINE Corridor [1) 2) 3)] For switching lighting systems that depend on brightness and movement. Detection range (for installation height of 2.5 m, circular, up to 24 m in diameter). Additional activation/deactivation possibility through pushbutton input. Adaptation of the detection range possible using the included masking elements. With brightness-independent test mode for evaluating the detection zone. With detection display in test mode. With automatic motion detection. With automatic sensitivity adaptation. Mounting possibility in combination with built-in installation boxes and device sockets. Ceiling installation using included dust protection socket. Adjustment elements accessible on the front side. Surveillance density: 215 sectors with 860 switching segments. Switch-off delay: approx. 10 sec - 30 min or short-time pulse adjustable. Remote control possible via IR service remote control 6843. Use outdoors possible due to combination with surface-mounted housing 6888. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 2000 W Suitable for: Energy-saving bulbs Rated power: 7 - 400 W Suitable for: Fluorescent lamps Rated current: 4 AX, cos ϕ 0.5 Rated power: 1000 W/VA Detection angle: 360 ° Brightness limit value: 10 Lux - 2000 Lux Mounting height: 2 m - 3 m Protection class (Device): IP 40 Temperature range (Device): -20 °C to 45 °C Dimensions: (L x W x D): 110 mm x 110 mm x 70 mm Mounting depth: 48 mm IEC 60669-2-1		
alpine white	**6818 U-500**	2CKA006800A2519	1/18

[1)] The maximum detection range depends on the mounting site and ambient conditions.
[2)] The detection range with a central approach is reduced.
[3)] In combination with a relay/contactor, an RC suppressor 6899 has to be used.

Product	Article-No.	Order-No.	Pack/Qty
	Surface-mounting box For Busch-Watchdog Presence tech BasicLINE Corridor 6818 U. For surface mounting and increase of the protection type. Protection class (Device): IP 54 Temperature range (Device): -20 °C to 45 °C Dimensions: (L x W x D): 106 mm x 106 mm x 26 mm		
alpine white	**6888**	2CKA006899A2305	1/90

Product	Article-No.	Order-No.	Pack/Qty
	IR service remote control [1)] For Busch-Watchdog Presence tech BasicLINE Corridor 6818 U. The following functions/settings can be implemented. Continuous light on/off (8 h). Setting of the brightness limit value. Setting of the current ambient light value as the brightness limit value. Setting of switch-off delay or short-time pulse. Saving and duplication of the saved values. Activate test mode. Reset to factory default settings. Activation/deactivation of the button lock. Power supply: lithium button cell battery Type CR2032. Range: frontal 3 m Rated voltage: 3 VDimensions: (L x W x D): 106 mm x 50 mm x 8 mm		
alpine white	**6843**	2CKA006800A2511	1/120

[1)] Battery included in delivery.

Product	Article-No.	Order-No.	Pack/Qty
	Protective basket For ceiling presence detectors. for Busch-Watchdog Presence tech (6813-101-500), For Busch-Watchdog Presence tech Dualline 6813/11-xxx. For Busch-Watchdog Presence tech BasicLINE 6814 U. For Busch-Watchdog Presence tech BasicLINE Corridor 6818 U. For all Busch-Smoke alarm detectors ProfessionalLINE. For all Busch-Heat alarm detectors ProfessionalLINE. Busch-Smoke alarm detector 6831-84 and 6832-84. Also applicable in connection with surface-mounted housings 6885-xxx and 6888. For Busch-Presence detector mini KNX 6131/20-xxx and 6131/21-xxx. For Busch-Presence detector KNX 6131/30-xxx and 6131/31-xxx. For Busch-Watchdog Sky KNX 6131/40-24. For Busch-Presence detector Corridor KNX 6131/50-xxx and 6131/51-xxx. Dimensions: (L x W x D): 180 mm x 180 mm x 98 mm		
alpine white	**6898**	2CKA006899A2304	1/12

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog Presence tech [1] For switching and dimming lighting systems that depend on brightness and movement. Detection range (for installation height 3 m): circular, 10 m diameter. For constant light regulation in combination with Dimmer insert 6524 U-500, 6526 U-500, 6593 U-500 or 6550 U-101-500. For heating/air-conditioning/ventilation adjustment in combination with serial insert 6402 U. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For extension insert 6805 U. Remote control possible via IR mobile remote control 6010-25. Intelligent turn-on delay. Surveillance density: 72 sectors with 640 switching segments. Switch-off delay: approx. 10 sec - 30 min or short-time pulse 1 sec adjustable. Detection angle: 360 ° Brightness limit value: 5 Lux - 1000 Lux Mounting height: 2 m - 8 m Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C 60669-2-1, British Standard EN 60669-2-1		
studio white matt	**6813-101-500**	2CKA006800A2178	1/10
aluminium silver	**6813-183-101-500**	2CKA006800A2324	1

[1] Please order the respective flush-mounted insert separately.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog Presence tech DualLINE [1] For switching and dimming lighting systems that depend on brightness and movement. Detection range (for installation height 3 m): circular, 10 m diameter. For constant light regulation in combination with Dimmer insert 6524 U-500, 6526 U-500, 6593 U-500 or 6550 U-101-500. For the control of 2 independent light strips in combination with 2gang 1way unit 6402 U. For semiautomatic and fully automatic operation. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For extension insert 6805 U. Remote control possible via IR mobile remote control 6010-25. Intelligent turn-on delay. Surveillance density: 72 sectors with 640 switching segments. Switch-off delay: approx. 1 sec - 20 min or short-time pulse adjustable. Detection angle: 360 ° Brightness limit value: 5 Lux - 1000 Lux Mounting height: 2 m - 8 m Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C 60669-2-1, British Standard EN 60669-2-1		
studio white matt	**6813/11-24-500**	2CKA006800A2350	1
aluminium silver	**6813/11-183-500**	2CKA006800A2352	1

[1] Please order the respective flush-mounted insert separately.

Product	Article-No.	Order-No.	Pack/Qty
	Surface-mounting box For Busch-Watchdog Presence tech. For the installation of a flush-mounted insert in combination with the Busch-Watchdog Presence tech 6813(/11)-xx-(101) or the Busch-Watchdog Presence tech KNX 6131/10-xxx or Busch-Watchdog Presence tech DualLINE KNX 6131/11-xxx. Protection class (Device): IP 20 Dimensions: (L x W x D): 110 mm x 110 mm x 39 mm		
studio white matt	**6885-500**	2CKA006899A0282	1/10
aluminium silver	**6885-183-500**	2CKA006899A0298	1

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector Compact, relay [1) 2) 3)] **8 metres** Master presence detector with mixed light measurement. For switching lighting systems that depend on brightness and movement. With power relays for LED operation. Detection range (for installation height of 3 m): circular Seated persons: up to Ø 6.5 m, walking persons: up to Ø 8 m. Extension of the detection range by means of master/slave combination. Visible height 23 mm. For semiautomatic and fully automatic operation. Additional activation/deactivation possibility through pushbutton input. With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible. With brightness-independent test mode for evaluating the detection zone. With teach-in function of the brightness switching threshold. With detection display in test mode. Ceiling installation using integrated spring bracket. Twist protection via additional quick tensioning. Adjustment elements accessible on the front side. Surveillance density: 48 sectors with 496 switching segments. Switch-off delay: approx. 1 min. - 30 min. or short-time pulse adjustable. Remote control possible via IR service remote control 6843. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Control element: 2 controllers for setting the brightness switching threshold and switch-off delay. Display elements: LED detection and status indication. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 2300 W Suitable for: 230 V~ LEDi Rated power: 200 W/VA Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.9 Detection angle: 360 ° Brightness limit value: 5 Lux - 2000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 72 mm Mounting depth: 49 mm 60669-2-1		
studio white	**6819/60-24**	2CKA006800A2732	1
matt	**6819/60-24-500**	2CKA006800A2733	1
aluminium	**6819/60-183**	2CKA006800A2766	1
silver	**6819/60-183-500**	2CKA006800A2767	1

[1)] The detection range with a central approach is reduced.
[2)] In combination with a relay/contactor, an RC suppressor 6899 has to be used.
[3)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector Universal, relay [1) 2) 3)] **12 meters** Master presence detector with mixed light measurement. For switching lighting systems that depend on brightness and movement. With power relays for LED operation. Detection range (for installation height of 3 m): circular Seated persons: up to Ø 10 m, walking persons: up to Ø 12 m. Extension of the detection range by means of master/slave combination. Visible height 23 mm. For semiautomatic and fully automatic operation. Additional activation/deactivation possibility through pushbutton input. With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible. With brightness-independent test mode for evaluating the detection zone. With teach-in function of the brightness switching threshold. With detection display in test mode. Ceiling installation using integrated spring bracket. Twist protection via additional quick tensioning. Adjustment elements accessible on the front side. Surveillance density: 72 sectors with 640 switching segments. Switch-off delay: approx. 1 min. - 30 min. or short-time pulse adjustable. Remote control possible via IR service remote control 6843. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Control element: 2 controllers for setting the brightness switching threshold and switch-off delay. Display elements: LED detection and status indication. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 2300 W Suitable for: 230 V~ LEDi Rated power: 200 W/VA Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.9 Detection angle: 360 ° Brightness limit value: 5 Lux - 2000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 72 mm Mounting depth: 49 mm 60669-2-1		
studio white	**6819/30-24**	2CKA006800A2734	1
matt	**6819/30-24-500**	2CKA006800A2735	1
aluminium	**6819/30-183**	2CKA006800A2768	1
silver	**6819/30-183-500**	2CKA006800A2769	1

[1)] The detection range with a central approach is reduced.
[2)] In combination with a relay/contactor, an RC suppressor 6899 has to be used.
[3)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg.

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector Compact, e-contact [1) 2)] **8 metres** Master presence detector with mixed light measurement. For switching lighting systems that depend on brightness and movement. With electronic switch contact for LED operation. Detection range (for installation height of 3 m): circular Seated persons: up to Ø 6.5 m, walking persons: up to Ø 8 m. Extension of the detection range by means of master/slave combination. Visible height 23 mm. For semiautomatic and fully automatic operation. Additional activation/deactivation possibility through pushbutton input. With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible. With brightness-independent test mode for evaluating the detection zone. With teach-in function of the brightness switching threshold. With detection display in test mode. Ceiling installation using integrated spring bracket. Twist protection via additional quick tensioning. Adjustment elements accessible on the front side. Surveillance density: 48 sectors with 496 switching segments. Switch-off delay: approx. 1 min. - 30 min. or short-time pulse adjustable. Remote control possible via IR service remote control 6843. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Control element: 2 controllers for setting the brightness switching threshold and switch-off delay. Display elements: LED detection and status indication. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 3 - 200 W Suitable for: 230 V~ LEDi Rated power: 3 - 200 W/VA Detection angle: 360 ° Brightness limit value: 5 Lux - 2000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 59 mm Mounting depth: 36 mm 60669-2-1		
studio white	**6817/62-24**	2CKA006800A2736	1
matt	**6817/62-24-500**	2CKA006800A2737	1
aluminium	**6817/62-183**	2CKA006800A2770	1
silver	**6817/62-183-500**	2CKA006800A2771	1

[1)] The detection range with a central approach is reduced.
[2)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector Universal, e-contact [1) 2)] **12 meters** Master presence detector with mixed light measurement. For switching lighting systems that depend on brightness and movement. With electronic switch contact for LED operation. Detection range (for installation height of 3 m): circular Seated persons: up to Ø 10 m, walking persons: up to Ø 12 m. Extension of the detection range by means of master/slave combination. Visible height 23 mm. For semiautomatic and fully automatic operation. Additional activation/deactivation possibility through pushbutton input. With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible. With brightness-independent test mode for evaluating the detection zone. With teach-in function of the brightness switching threshold. With detection display in test mode. Ceiling installation using integrated spring bracket. Twist protection via additional quick tensioning. Adjustment elements accessible on the front side. Surveillance density: 72 sectors with 640 switching segments. Switch-off delay: approx. 1 min. - 30 min. or short-time pulse adjustable. Remote control possible via IR service remote control 6843. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Control element: 2 controllers for setting the brightness switching threshold and switch-off delay. Display elements: LED detection and status indication. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 3 - 200 W Suitable for: 230 V~ LEDi Rated power: 3 - 200 W/VA Detection angle: 360 ° Brightness limit value: 5 Lux - 2000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 59 mm Mounting depth: 36 mm 60669-2-1		
studio white	**6817/32-24**	2CKA006800A2738	1
matt	**6817/32-24-500**	2CKA006800A2739	1
aluminium	**6817/32-183**	2CKA006800A2772	1
silver	**6817/32-183-500**	2CKA006800A2773	1

[1)] The detection range with a central approach is reduced.
[2)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector Corridor, relay [1) 2)] **30 meters** Master presence detector with mixed light measurement. For switching lighting systems that depend on brightness and movement. With power relays for LED operation. Detection range (for installation height of 3 m): rectangular Gehende Personen: quer zum Melder 24 m x 3 m, frontal/längs zum Melder 14 m x 3 m. Extension of the detection range by means of master/slave combination. Mounting height 27 mm. For semiautomatic and fully automatic operation. Additional activation/deactivation possibility through pushbutton input. With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible. With brightness-independent test mode for evaluating the detection zone. With teach-in function of the brightness switching threshold. With detection display in test mode. Ceiling installation using integrated spring bracket. Twist protection via additional quick tensioning. Adjustment elements accessible on the front side. Surveillance density: 92 sectors with 368 switching segments Switch-off delay: approx. 1 min. - 30 min. or short-time pulse adjustable. Remote control possible via IR service remote control 6843. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Control element: 2 controllers for setting the brightness switching threshold and switch-off delay. Display elements: LED detection and status indication. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 2300 W Suitable for: 230 V~ LEDi Rated power: 200 W/VA Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.9 Detection angle: 360 ° Brightness limit value: 5 Lux - 2000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 76 mm Mounting depth: 49 mm 60669-2-1		
studio white	**6819/50-24**	2CKA006800A2796	1
matt	**6819/50-24-500**	2CKA006800A2797	1
aluminium	**6819/50-183**	2CKA006800A2798	1
silver	**6819/50-183-500**	2CKA006800A2799	1

[1)] In combination with a relay/contactor, an RC suppressor 6899 has to be used.
[2)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector Universal BT, relay [1) 2) 3) 4)] **12 meters** Master presence detector with mixed light measurement. For switching lighting systems that depend on brightness and movement. With Bluetooth interface for parameterization and operation. Adjustment of all setting options via smartphone or tablet. Light control via smartphone or tablet app. With power relays for LED operation. Detection range (for installation height of 3 m): circular Seated persons: up to Ø 10 m, walking persons: up to Ø 12 m. Extension of the detection range by means of master/slave combination. Visible height 23 mm. For semi-automatic, comfort and fully automatic operation. Additional activation/deactivation possibility through pushbutton input. With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible. With selectable presence simulation in case of non-presence. With integrated storage of ON period (energy monitor). With brightness-independent test mode for evaluating the detection zone. With teach-in function of the brightness switching threshold. With detection display in test mode. Ceiling installation using integrated spring bracket. Twist protection via additional quick tensioning. Adjustment elements accessible on the front side. Surveillance density: 72 sectors with 640 switching segments. Individual deactivation and adjustment of sensitivity of individual sensors possible. Switch-off delay: approx. 1 min. - 30 min. or short-time pulse adjustable. With selectable dynamic switch-off delay. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Control element: 2 controllers for setting the brightness switching threshold and switch-off delay. Display elements: LED detection and status indication. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps Rated power: 2300 W Suitable for: 230 V~ LEDi Rated power: 200 W/VA Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.9 Detection angle: 360 ° Brightness limit value: 5 Lux - 2000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 72 mm Mounting depth: 49 mm 60669-2-1		
studio white	**6819/31-24**	2CKA006800A2740	1
matt	**6819/31-24-500**	2CKA006800A2741	1
aluminium	**6819/31-183**	2CKA006800A2774	1
silver	**6819/31-183-500**	2CKA006800A2775	1

[1)] The detection range with a central approach is reduced.
[2)] In combination with a relay/contactor, an RC suppressor 6899 has to be used.
[3)] Free app for iOS and Android available in the App Store or Play Store.
[4)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty

Busch-Presence detector Universal BT, e-contact [1) 2) 3)]
12 meters
Master presence detector with mixed light measurement.
For switching lighting systems that depend on brightness and movement.
With Bluetooth interface for parameterization and operation.
Adjustment of all setting options via smartphone or tablet.
Light control via smartphone or tablet app.
With electronic switch contact for LED operation.
With selectable soft ON/OFF function.
Detection range (for installation height of 3 m): circular
Seated persons: up to Ø 10 m, walking persons: up to Ø 12 m.
Extension of the detection range by means of master/slave combination.
Visible height 23 mm.
For semi-automatic, comfort and fully automatic operation.
Additional activation/deactivation possibility through pushbutton input.
With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible.
With selectable presence simulation in case of non-presence.
With integrated storage of ON period (energy monitor).
With brightness-independent test mode for evaluating the detection zone.
With teach-in function of the brightness switching threshold.
With detection display in test mode.
Ceiling installation using integrated spring bracket.
Twist protection via additional quick tensioning.
Adjustment elements accessible on the front side.
Surveillance density: 72 sectors with 640 switching segments.
Individual deactivation and adjustment of sensitivity of individual sensors possible.
Switch-off delay: approx. 1 min. - 30 min. or short-time pulse adjustable.
With selectable dynamic switch-off delay.
Suitable for false ceilings with a board thickness from 9 to 25 mm.
Hole size: Ø 68 mm.
Control element: 2 controllers for setting the brightness switching threshold and switch-off delay.
Display elements: LED detection and status indication.
Rated voltage: 110 - 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Outputs: 1x Normally open contact, potential-bound
Suitable for: 230 V incandescent lamps
Rated power: 3 - 200 W
Suitable for: 230 V~ LEDi
Rated power: 3 - 200 W/VA
Detection angle: 360 °
Brightness limit value: 5 Lux - 2000 Lux
Mounting height: 2 m - 4 m
Protection class (Device): IP 40
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 94 mm x 94 mm x 59 mm
Mounting depth: 36 mm
60669-2-1

APP Bluetooth

studio white	**6817/33-24-500**	2CKA006800A2743	1
matt	**6817/33-24**	2CKA006800A2742	1
aluminium	**6817/33-183-500**	2CKA006800A2777	1
silver	**6817/33-183**	2CKA006800A2776	1

[1)] The detection range with a central approach is reduced.
[2)] Free app for iOS and Android available in the App Store or Play Store.
[3)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Product	Article-No.	Order-No.	Pack/Qty

Busch-Presence detector Universal BT, e-contact with sealing ring [1) 2) 3)]
12 meters
Master presence detector with mixed light measurement.
For switching lighting systems that depend on brightness and movement.
With Bluetooth interface for parameterization and operation.
Adjustment of all setting options via smartphone or tablet.
Light control via smartphone or tablet app.
With electronic switch contact for LED operation.
With selectable soft ON/OFF function.
Detection range (for installation height of 3 m): circular
Seated persons: up to Ø 10 m, walking persons: up to Ø 12 m.
Extension of the detection range by means of master/slave combination.
Visible height 23 mm.
For semi-automatic, comfort and fully automatic operation.
Additional activation/deactivation possibility through pushbutton input.
With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible.
With selectable presence simulation in case of non-presence.
With integrated storage of ON period (energy monitor).
With brightness-independent test mode for evaluating the detection zone.
With teach-in function of the brightness switching threshold.
With detection display in test mode.
Ceiling installation using integrated spring bracket.
Twist protection via additional quick tensioning.
Adjustment elements accessible on the front side.
Surveillance density: 72 sectors with 640 switching segments.
Individual deactivation and adjustment of sensitivity of individual sensors possible.
Switch-off delay: approx. 1 min. - 30 min. or short-time pulse adjustable.
With selectable dynamic switch-off delay.
Suitable for false ceilings with a board thickness from 9 to 25 mm.
Hole size: Ø 68 mm.
Control element: 2 controllers for setting the brightness switching threshold and switch-off delay.
Display elements: LED detection and status indication.
Rated voltage: 110 - 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Outputs: 1x Normally open contact, potential-bound
Suitable for: 230 V incandescent lamps
Rated power: 3 - 200 W
Suitable for: 230 V~ LEDi
Rated power: 3 - 200 W/VA
Detection angle: 360 °
Brightness limit value: 5 Lux - 2000 Lux
Mounting height: 2 m - 4 m
Protection class (Device): IP 41
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 94 mm x 94 mm x 59 mm
Mounting depth: 36 mm
60669-2-1

APP Bluetooth

studio white	**6817/93-204**	2CKA006800A2802	1
matt	**6817/93-204-500**	2CKA006800A2803	1
aluminium	**6817/93-183**	2CKA006800A2804	1
silver	**6817/93-183-500**	2CKA006800A2805	1

[1)] The detection range with a central approach is reduced.
[2)] Free app for iOS and Android available in the App Store or Play Store.
[3)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty

Busch-Presence detector Corridor BT, relay [1) 2) 3)]
30 metres
Master presence detector with mixed light measurement.
For switching lighting systems that depend on brightness and movement.
With Bluetooth interface for parameterization and operation.
Adjustment of all setting options via smartphone or tablet.
Light control via smartphone or tablet app.
With power relays for LED operation.
Detection range (for installation height of 3 m): rectangular
Walking persons: crosswise to the detector 30 m x 3 m, frontal 20 m x 3 m.
Extension of the detection range by means of master/slave combination.
Mounting height 27 mm.
For semi-automatic, comfort and fully automatic operation.
Additional activation/deactivation possibility through pushbutton input.
With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible.
With selectable presence simulation in case of non-presence.
With integrated storage of ON period (energy monitor).
With brightness-independent test mode for evaluating the detection zone.
With teach-in function of the brightness switching threshold.
With detection display in test mode.
Ceiling installation using integrated spring bracket.
Twist protection via additional quick tensioning.
Adjustment elements accessible on the front side.
Surveillance density: 92 sectors with 368 switching segments
Individual deactivation and adjustment of sensitivity of individual sensors possible.
Switch-off delay: approx. 1 min. - 30 min. or short-time pulse adjustable.
With selectable dynamic switch-off delay.
Suitable for false ceilings with a board thickness from 9 to 25 mm.
Hole size: Ø 68 mm.
Control element: 2 controllers for setting the brightness switching threshold and switch-off delay.
Display elements: LED detection and status indication.
Rated voltage: 110 - 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Outputs: 1x Normally open contact, potential-bound
Suitable for: 230 V incandescent lamps
Rated power: 2300 W
Suitable for: 230 V~ LEDi
Rated power: 200 W/VA
Suitable for: Fluorescent lamps
Rated current: 10 AX, cos ϕ 0.9
Detection angle: 360 °
Brightness limit value: 5 Lux - 2000 Lux
Mounting height: 2 m - 4 m
Protection class (Device): IP 40
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 94 mm x 94 mm x 76 mm
Mounting depth: 49 mm
60669-2-1

APP Bluetooth

studio white	**6819/51-24**	2CKA006800A2744	1
matt	**6819/51-24-500**	2CKA006800A2745	1
aluminium	**6819/51-183**	2CKA006800A2778	1
silver	**6819/51-183-500**	2CKA006800A2779	1

[1)] The detection range with a central approach is reduced.
[2)] Free app for iOS and Android available in the App Store or Play Store.
[3)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Product	Article-No.	Order-No.	Pack/Qty

Busch-Presence detector Universal BT, DALI [1) 2) 3) 4) 5)]
12 meters
Master presence detector with mixed light measurement.
For regulating and switching of DALI operating devices that depend on brightness and movement.
For DALI broadcast operation (central telegram).
Supplies the required voltage for additional DALI operating units and controllers.
Suitable for up to 45 DALI operating devices.
With additional switching output for the activation of heating, air conditioning and ventilation or for switching additional loads (e.g. panel light).
Configuration possible up to the complete deactivation of the DALI operating devices.
With Bluetooth interface for parameterization and operation.
Adjustment of all setting options via smartphone or tablet.
Light control via smartphone or tablet app.
Detection range (for installation height of 3 m): circular
Seated persons: up to Ø 10 m, walking persons: up to Ø 12 m.
Extension of the detection range by means of master/slave combination.
Visible height 23 mm.
For semi-automatic, comfort and fully automatic operation.
Additional activation/deactivation possibility through pushbutton input.
With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible.
With time-controlled basic illumination function.
With selectable warm-up function for fluorescent lamps.
With 2-step automatic switch-off (according to EnEV / EN 15232).
With time-controlled night anti-glare function.
With selectable presence simulation in case of non-presence.
With integrated storage of ON period (energy monitor).
With brightness-independent test mode for evaluating the detection zone.
With teach-in function of the brightness switching threshold.
With detection display in test mode.
Ceiling installation using integrated spring bracket.
Twist protection via additional quick tensioning.
Adjustment elements accessible on the front side.
Surveillance density: 72 sectors with 640 switching segments.
Individual deactivation and adjustment of sensitivity of individual sensors possible.
Switch-off delay: approx. 1 min. - 30 min. adjustable.
With selectable dynamic switch-off delay.
Suitable for false ceilings with a board thickness from 9 to 25 mm.
Hole size: Ø 68 mm.
Control element: 2 controllers for setting the brightness switching threshold and switch-off delay.
Display elements: LED detection and status indication.
Rated voltage: 110 - 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Outputs: 1x Normally open contact, potential-bound
Suitable for: 230 V incandescent lamps
Rated power: 1380 W • Suitable for: 230 V~ LEDi
Rated power: 200 W/VA • Suitable for: Fluorescent lamps
Rated current: 6 AX, cos ϕ 0.9
Control/Signal outputs: 1, DALI channels, independent
Rated current: 100 mA • Output voltage: 16 V
Detection angle: 360 ° • Brightness limit value: 5 Lux - 2000 Lux
Mounting height: 2 m - 4 m • Protection class (Device): IP 40
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 94 mm x 94 mm x 83 mm
Mounting depth: 60 mm • 60669-2-1

APP Bluetooth DALI

studio white	**6819/35-24**	2CKA006800A2746	1
matt	**6819/35-24-500**	2CKA006800A2747	1
aluminium	**6819/35-183**	2CKA006800A2780	1
silver	**6819/35-183-500**	2CKA006800A2781	1

[1)] The detection range with a central approach is reduced.
[2)] In combination with a relay/contactor, an RC suppressor 6899 has to be used.
[3)] Can also be used as DALI slave presence detector.
[4)] Free app for iOS and Android available in the App Store or Play Store.
[5)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty

Busch-Presence detector Corridor BT, DALI [1) 2) 3) 4)]
30 metres
Master presence detector with mixed light measurement.
For regulating and switching of DALI operating devices that depend on brightness and movement.
For DALI broadcast operation (central telegram).
Supplies the required voltage for additional DALI operating units and controllers.
Suitable for up to 45 DALI operating devices.
With additional switching output for the activation of heating, air conditioning and ventilation or for switching additional loads (e.g. panel light).
Configuration possible up to the complete deactivation of the DALI operating devices.
With Bluetooth interface for parameterization and operation.
Adjustment of all setting options via smartphone or tablet.
Light control via smartphone or tablet app.
Detection range (for installation height of 3 m): rectangular
Walking persons: crosswise to the detector 30 m x 3 m, frontal 20 m x 3 m.
Extension of the detection range by means of master/slave combination.
Mounting height 27 mm.
For semi-automatic, comfort and fully automatic operation.
Additional activation/deactivation possibility through pushbutton input.
With continuous light/continuous off function (4 hours), activation via intelligent extension unit input possible.
With time-controlled basic illumination function.
With selectable warm-up function for fluorescent lamps.
With 2-step automatic switch-off (according to EnEV / EN 15232).
With time-controlled night anti-glare function.
With selectable presence simulation in case of non-presence.
With integrated storage of ON period (energy monitor).
With brightness-independent test mode for evaluating the detection zone.
With teach-in function of the brightness switching threshold.
With detection display in test mode.
Ceiling installation using integrated spring bracket.
Twist protection via additional quick tensioning.
Adjustment elements accessible on the front side.
Surveillance density: 92 sectors with 368 switching segments.
Individual deactivation and adjustment of sensitivity of individual sensors possible.
Switch-off delay: approx. 1 min. - 30 min. adjustable.
With selectable dynamic switch-off delay.
Suitable for false ceilings with a board thickness from 9 to 25 mm.
Hole size: Ø 68 mm.
Control element: 2 controllers for setting the brightness switching threshold and switch-off delay.
Display elements: LED detection and status indication.
Rated voltage: 110 - 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Outputs: 1x Normally open contact, potential-bound
Suitable for: 230 V incandescent lamps
Rated power: 1380 W • Suitable for: 230 V~ LEDi
Rated power: 200 W/VA • Suitable for: Fluorescent lamps
Rated current: 6 AX, cos ϕ 0.9
Control/Signal outputs: 1, DALI channels, independent
Rated current: 100 mA • Output voltage: 16 V
Detection angle: 360 ° • Brightness limit value: 5 Lux - 2000 Lux
Mounting height: 2 m - 4 m • Protection class (Device): IP 40
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 94 mm x 94 mm x 87 mm
Mounting depth: 60 mm • 60669-2-1

APP Bluetooth DALI

studio white	**6819/55-24**	2CKA006800A2748	1
matt	**6819/55-24-500**	2CKA006800A2749	1
aluminium	**6819/55-183**	2CKA006800A2782	1
silver	**6819/55-183-500**	2CKA006800A2783	1

[1)] In combination with a relay/contactor, an RC suppressor 6899 has to be used.
[2)] Can also be used as DALI slave presence detector.
[3)] Free app for iOS and Android available in the App Store or Play Store.
[4)] Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Product	Article-No.	Order-No.	Pack/Qty

Busch-Presence detector Compact, slave [1) 2)]
8 metres
Slave presence detector for extension of the detection range of master presence detectors.
Detection range (for installation height of 3 m): circular
Seated persons: up to Ø 6.5 m, walking persons: up to Ø 8 m.
Visible height 23 mm.
Ceiling installation using integrated spring bracket.
Twist protection via additional quick tensioning.
Surveillance density: 48 sectors with 496 switching segments.
Suitable for false ceilings with a board thickness from 9 to 25 mm.
Hole size: Ø 68 mm.
Rated voltage: 110 - 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Detection angle: 360 °
Mounting height: 2 m - 4 m
Protection class (Device): IP 40
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 94 mm x 94 mm x 72 mm
Mounting depth: 49 mm

studio white	**6819/68-24**	2CKA006800A2750	1
matt	**6819/68-24-500**	2CKA006800A2751	1
aluminium	**6819/68-183**	2CKA006800A2784	1
silver	**6819/68-183-500**	2CKA006800A2785	1

1) The detection range with a central approach is reduced.
2) Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Busch-Presence detector Universal, slave [1) 2)]
12 meters
Slave presence detector for extension of the detection range of master presence detectors.
Detection range (for installation height of 3 m): circular
Seated persons: up to Ø 10 m, walking persons: up to Ø 12 m.
Visible height 23 mm.
Ceiling installation using integrated spring bracket.
Twist protection via additional quick tensioning.
Surveillance density: 72 sectors with 640 switching segments.
Suitable for false ceilings with a board thickness from 9 to 25 mm.
Hole size: Ø 68 mm.
Rated voltage: 110 - 230 V~, +10 % / -10 %
Rated frequency: 50 Hz - 60 Hz
Detection angle: 360 °
Mounting height: 2 m - 4 m
Protection class (Device): IP 40
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 94 mm x 94 mm x 72 mm
Mounting depth: 49 mm

studio white	**6819/38-24**	2CKA006800A2752	1
matt	**6819/38-24-500**	2CKA006800A2753	1
aluminium	**6819/38-183**	2CKA006800A2786	1
silver	**6819/38-183-500**	2CKA006800A2787	1

1) The detection range with a central approach is reduced.
2) Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector Corridor, slave [1] **30 meters** Slave presence detector for extension of the detection range of master presence detectors. Detection range (for installation height of 3 m): rectangular Gehende Personen: quer zum Melder 24 m x 3 m, frontal/längs zum Melder 14 m x 3 m. Mounting height 27 mm. Ceiling installation using integrated spring bracket. Twist protection via additional quick tensioning. Surveillance density: 92 sectors with 368 switching segments. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Detection angle: 360 ° Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 76 mm Mounting depth: 49 mm		
studio white	**6819/58-24**	2CKA006800A2754	1
matt	**6819/58-24-500**	2CKA006800A2755	1
aluminium	**6819/58-183**	2CKA006800A2788	1
silver	**6819/58-183-500**	2CKA006800A2789	1

1) Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector Universal, slave, DALI [1] [2] **12 meters** DALI slave presence detector for extension of the detection range of DALI master presence detectors. For the supply of operating voltage via the DALI master. The communication with the DALI master is carried out via the DALI interface. Detection range (for installation height of 3 m): circular Seated persons: up to Ø 10 m, walking persons: up to Ø 12 m. Visible height 23 mm. Ceiling installation using integrated spring bracket. Twist protection via additional quick tensioning. Surveillance density: 72 sectors with 640 switching segments. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Rated voltage: 95 - 22.5 VDetection angle: 360 ° Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 72 mm Mounting depth: 49 mm **DALI**		
studio white	**6819/39-24**	2CKA006800A2758	1
matt	**6819/39-24-500**	2CKA006800A2759	1
aluminium	**6819/39-183**	2CKA006800A2792	1
silver	**6819/39-183-500**	2CKA006800A2793	1

1) The detection range with a central approach is reduced.
2) Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector Corridor, slave, DALI [1] **30 metres** DALI slave presence detector for extension of the detection range of DALI master presence detectors. For the supply of operating voltage via the DALI master. The communication with the DALI master is carried out via the DALI interface. Detection range (for installation height of 3 m): rectangular Gehende Personen: quer zum Melder 24 m x 3 m, frontal/längs zum Melder 14 m x 3 m. Mounting height 27 mm. Ceiling installation using integrated spring bracket. Twist protection via additional quick tensioning. Surveillance density: 92 sectors with 368 switching segments. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Rated voltage: 95 - 22.5 VDetection angle: 360 ° Mounting height: 2 m - 4 m Protection class (Device): IP 40 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 76 mm Mounting depth: 49 mm **DALI**		
studio white	**6819/59-24**	2CKA006800A2760	1
matt	**6819/59-24-500**	2CKA006800A2761	1
aluminium	**6819/59-183**	2CKA006800A2794	1
silver	**6819/59-183-500**	2CKA006800A2795	1

1) Recommendation: HaloX-O flush-mounted box from Kaiser (article no. 1290-40) with corresponding cover (1290-47 or 1290-85 for exposed concrete) or IBTronic H120-68 from Spelsberg

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector Universal, decor frame [1] Paintable decor frame for individual design. For presence detectors with Compact and Universal lens. For latching onto the presence detector. Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 23 mm		
studio white	**6889/30-24**	2CKA006800A2764	10
matt	**6889/30-24-500**	2CKA006800A2765	10

[1] The decor frame included in the scope of delivery of the presence detector must be removed before mounting.

Product	Article-No.	Order-No.	Pack/Qty
	Busch movement detector Corridor, decor frame [1] Paintable decor frame for individual design. For presence detector with Corridor lens. For latching onto the presence detector. Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 94 mm x 94 mm x 27 mm		
studio white	**6889/50-24**	2CKA006800A2800	10
matt	**6889/50-24-500**	2CKA006800A2801	10

[1] The decor frame included in the scope of delivery of the presence detector must be removed before mounting.

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Busch extension unit coupling [1] For transmitting different control commands via a single conductor wire. For devices with intelligent extension input. For operation via conventional push-buttons 2020 US and 2021/6 U. For operation via conventional 2gang push-buttons 2020 US-205 and 2021/6/6 U. For universal attachment or installation. For installation in (deep) flush-mounted boxes to German Standard DIN 49073, Part 1. Including compact connecting terminal for cable connection. Cable length: approx. 80 mm. Rated voltage: 110 - 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Inputs: 2 Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 33 mm x 45 mm x 8.5 mm		
	6494-500	2CKA006499A0002	1
	6494	2CKA006499A0001	1

[1] To be mounted only in connection with commercially available flush-mounted installation boxes according to DIN 49073 > 40 mm depth gauge or Busch-Jaeger art. no. 3040, 3050 or 3060.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector mini KNX [1] **8 meters** Detection range (for mounting height 2.5 m, 3 m and 4 m): circular. Seated persons Ø: max. 5 m, max. 6.5 m and max. 9 m. Walking persons Ø: max. 6.5 m, max. 8 m and max. 10.5 m. Visible height 16 mm. With 2 channels. Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Using the device as presence and/or movement detectors. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightness-dependent switching of two light bands in the area. With integrated KNX bus coupler. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Suitable for surface mounting installation. Cannot be installed in British Standard or VDE flushmounted box. Recommendation: Installation housing from Kaiser HaloX-O (Art.no. 1290-40) with corresponding cover plates (1290-47 or 1290-85 for fair faced concrete) or IBTronic H120-68 from Spelsberg. Connections: KNX-line: Bus connection terminal Brightness limit value: 1 Lux - 1000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 80 mm x 80 mm x 45 mm Mounting depth: 29 mm		
studio white matt	**6131/20-24-500**	2CKA006132A0342	1
aluminium silver	**6131/20-183-500**	2CKA006132A0343	1

[1] For software and description please check the current Online-Catalogue.

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector mini premium KNX [1] [2] **8 meters** Detection range (for mounting height 2.5 m, 3 m and 4 m): circular. Seated persons Ø: max. 5 m, max. 6.5 m and max. 9 m. Walking persons Ø: max. 6.5 m, max. 8 m and max. 10.5 m. Visible height 16 mm. With 4 channels. For dimming/brightness of the rules to a defined value in a designated collection area. HVAC function for controlling heating and/or cooling systems and ventilation systems in the designated collection area. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light controller with up to two independent channels. Constant light controller with max. 2 outputs for dimming daylight control/rules of two rooflights in the room. Integrated object room temperature controller. 10 freely programmable IR channels (blue and/or white) Incl. 5 logic channels (logic gates, gates, delay and staircase lighting) Evaluation via internal brightness sensor. Weighting of up to 2 external brightness values and the internal brightness sensor possible. The programming button can be activated with the IR transmitter 6010-25 (-500). With integrated KNX bus coupler. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Suitable for surface mounting installation. Cannot be installed in British Standard or VDE flushmounted box. Recommendation: Installation housing from Kaiser HaloX-O (Art.no. 1290-40) with corresponding cover plates (1290-47 or 1290-85 for fair faced concrete) or IBTronic H120-68 from Spelsberg. Connections: KNX-line: Bus connection terminal Brightness limit value: 1 Lux - 1000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 80 mm x 80 mm x 45 mm Mounting depth: 29 mm		
studio white matt	**6131/21-24-500**	2CKA006132A0344	1
aluminium silver	**6131/21-183-500**	2CKA006132A0345	1

[1] For software and description please check the current Online-Catalogue.
[2] HVAC = Heating/ ventilation/air-conditioning

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector KNX [1] **12 meters** Detection range (for mounting height 2.5 m, 3 m and 4 m): circular. Seated persons Ø: max. 8 m, max. 10 m and max. 14 m. Walking persons Ø: max. 10 m, max. 12 m and max. 16 m. Visible height 23 mm. With 2 channels. Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Using the device as presence and/or movement detectors. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightness-dependent switching of two light bands in the area. With integrated KNX bus coupler. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Suitable for surface mounting installation. Cannot be installed in British Standard or VDE flushmounted box. Recommendation: Installation housing from Kaiser HaloX-O (Art.no. 1290-40) with corresponding cover plates (1290-47 or 1290-85 for fair faced concrete) or IBTronic H120-68 from Spelsberg. Connections: KNX-line: Bus connection terminal Brightness limit value: 1 Lux - 1000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 91 mm x 91 mm x 45 mm Mounting depth: 22 mm		
studio white matt	**6131/30-24-500**	2CKA006132A0346	1
aluminium silver	**6131/30-183-500**	2CKA006132A0347	1

[1] For software and description please check the current Online-Catalogue.

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Presence detector premium KNX [1] [2] **12 meters** Detection range (for mounting height 2.5 m, 3 m and 4 m): circular. Seated persons Ø: max. 8 m, max. 10 m and max. 14 m. Walking persons Ø: max. 10 m, max. 12 m and max. 16 m. Visible height 23 mm. With 4 channels. For dimming/brightness of the rules to a defined value in a designated collection area. HVAC function for controlling heating and/or cooling systems and ventilation systems in the designated collection area. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light controller with up to two independent channels. Constant light controller with max. 2 outputs for dimming daylight control/rules of two rooflights in the room. Integrated object room temperature controller. 10 freely programmable IR channels (blue and/or white) Incl. 5 logic channels (logic gates, gates, delay and staircase lighting) Evaluation via internal brightness sensor. Weighting of up to 2 external brightness values and the internal brightness sensor possible. The programming button can be activated with the IR transmitter 6010-25 (-500). With integrated KNX bus coupler. Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Suitable for surface mounting installation. Cannot be installed in British Standard or VDE flushmounted box. Recommendation: Installation housing from Kaiser HaloX-O (Art.no. 1290-40) with corresponding cover plates (1290-47 or 1290-85 for fair faced concrete) or IBTronic H120-68 from Spelsberg. Connections: KNX-line: Bus connection terminal Brightness limit value: 1 Lux - 1000 Lux Mounting height: 2 m - 4 m Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 91 mm x 91 mm x 45 mm Mounting depth: 22 mm		
studio white matt	**6131/31-24-500**	2CKA006132A0348	1
aluminium silver	**6131/31-183-500**	2CKA006132A0349	1

[1] For software and description please check the current Online-Catalogue.
[2] HVAC = Heating/ ventilation/air-conditioning

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog Sky KNX [1] **24 meters** Detection range (for mounting height 6 m and 12 m): circular. Walking persons Ø: max. 18 m and 24 m. Visible height 23 mm. With 2 channels. Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Use of the device as a movement detector. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightness-dependent switching of two light bands in the area. With integrated KNX bus coupler. The programming button can be activated with the IR transmitter 6010-25 (-500). Suitable for false ceilings with a board thickness from 9 to 25 mm. Hole size: Ø 68 mm. Suitable for surface mounting installation. Cannot be installed in British Standard or VDE flushmounted box. Recommendation: Installation housing from Kaiser HaloX-O (Art.no. 1290-40) with corresponding cover plates (1290-47 or 1290-85 for fair faced concrete) or IBTronic H120-68 from Spelsberg. Connections: KNX-line: Bus connection terminal Brightness limit value: 1 Lux - 1000 Lux Mounting height: 4 m - 12 m Protection class (Device): IP 20 Temperature range (Device): -5 °C to 45 °C Dimensions: (L x W x D): 91 mm x 91 mm x 45 mm Mounting depth: 22 mm		
studio white matt	**6131/40-24-500**	2CKA006132A0350	1

[1] For software and description please check the current Online-Catalogue.

	Surface-mounting box **For Busch-Presence detector mini KNX** For installing a Busch-Presence detector mini KNX 6131/20-xxx(-500) or a Busch-Presence detector mini premium KNX 6131/21-xxx(-500). Protection class (Device): IP 20 Dimensions: (L x W x D): 80 mm x 80 mm x 35 mm		
studio white matt	**6131/29-24-500**	2CKA006132A0351	1
aluminium silver	**6131/29-183-500**	2CKA006132A0352	1

Movement detector

Presence detector

Product	Article-No.	Order-No.	Pack/Qty
	Surface-mounting box For Busch-Presence detector KNX, Busch-Watchdog Sky KNX and Busch-Presence detector Corridor KNX For mounting a Busch-Presence detector KNX 6131/30-xxx(-500), a Busch-Presence detector Premium KNX 6131/31-xxx(-500), a Busch-Presence detector Corridor KNX 6131/50-xxx(-500), a Busch-Presence detector Corridor premium KNX 6131/51-xxx(-500) or a Busch-Watchdog Sky KNX 6131/40-24(-500). Protection class (Device): IP 20 Dimensions: (L x W x D): 91 mm x 91 mm x 33 mm		
studio white matt	**6131/39-24-500**	2CKA006132A0353	1
aluminium silver	**6131/39-183-500**	2CKA006132A0354	1

Product	Article-No.	Order-No.	Pack/Qty

Movement detector

Busch-Watchdog presence inserts

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Universal relay switch insert 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog 180 FP sensor for All Weather 44 6800-3x-102C. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For comfort timer control element 6455-101-500. For Busch-Remote control IR control cover 6067-xxx-10x. For control cover with control lamp 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): -25 °C to 55 °C British Standard EN 60669-2-1		
	6401 U-102-500	2CKA006401A0049	1/10
	Busch-Watchdog relay mechanism 3 wire connection (neutral conductor required). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V, +10 % / -10 % Rated frequency: 50 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated power: 700 W/VA Temperature range (Device): 0 °C to 55 °C British Standard EN 60669-2-1		
	6812 U-101-500	2CKA006800A2160	1/10

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog MOS-Fet Insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 60 - 420 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6804 U-101-500	2CKA006800A2219	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Requires an NIS international socket, E-No. 372507676.

	Busch-Universal 2gang 1way insert 3 wire connection (neutral conductor required). For the serial switch operating mode: 2 separate outputs, 2 separate extension inputs. For operation mode timer: output 1 (eg lighting), output 2: ON/Off delay in dependence of output 1 (eg fan control). For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For control cover 6430-xxx-10x and 6543-xxx-10x. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Outputs: 2x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6402 U-500	2CKA006401A0051	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		
neon indicator:	neon lamp 3855, one neon lamp is supplied together with control cover plates 6540-2x.		

Movement detector

Busch-Watchdog presence inserts

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog extension insert [1] 3 wire connection (neutral conductor required). For extending Busch-Watchdog 180 flush-mounted and Busch-Watchdog Presence tech installations. For combination with relay insert 6401 U-102 and 6402 U. For combination with MOS-Fet insert 6804 U-101. For combination with Dimmer insert 6593 U and 6550 U-101. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Control/Signal outputs: 1, electronic output, potential-bound Temperature range (Device): 0 °C to 35 °C		
	6805 U-500	2CKA006800A2161	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1] Not combinable with relay switch insert 6812 U-101.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1] [2] [3] [4] **flush mounted, RLC, 60-420 W** With light-level memory and intelligence for universal operation. Selectable Soft-ON/OFF function and memory function. Capacity expansion via output-side, parallel connectable load line with a power module 6594 U up to 735 W/VA possible. For incandescent lamps, 230 V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers. Short-circuit-proof, overload-protected. With touch control. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Without control cover. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 60 - 420 W/VA IEC 60669-2-1, British Standard EN 60669-2-1 R,L,C		
	6593 U-500	2CKA006590A0171	1/10

[1] In the case of conventional transformers, take ~20% transformer loss into account.
[2] In case of electronic transformers, 5 % transformer losses.
[3] In conjunction with 6800-xxx-104 (M) a Soft Off can be adjusted.
[4] Only in conjunction with standard flush-mounting boxes according to DIN 49073.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-touch dimmer [1] [2] [3] [4] [5] [6] **Flush-mounted, LED, 2-100 W** Touch dimmer. 2-wire connection (neutral conductor not required) Neutral conductor optionally connectable (recommended for the connection of low loads < 10 W/VA). Optimised for dimming of retrofit LED lamps (LEDi). For incandescent lamps, 230V tungsten halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformers and dimmable halogen energy-saving lamps. Mix operaton of LEDi with conventional loads possible. With adjustable minimum brightness. The minimum brightness for the leading edge control can be adjusted using the potentiometer. The potentiometer at the left limit stop corresponds with the trailing edge control mode. Low-noise level by MOSFET transistors. With electronic short-circuit protection. With electronic overload protection. With light-level memory and minimum brightness memory. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Without control cover. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Nominal power: 2 - 100 W/VA (retrofit LED loads). Nominal power: 10 - 200 W/VA (non-LED loads). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Protection class (Device): IP 20 Temperature range (Device): 0 °C to 35 °C IEC 60669-2-1, British Standard EN 60669-2-1 R,L,C LEDi		
	6526 U-500	2CKA006512A0323	1/10

[1] Illuminable with neon lamp. Neon lamp included in delivery with cover plate.
[2] In the case of conventional transformers, take ~20% transformer loss into account.
[3] In case of electronic transformers, 5 % transformer losses.
[4] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[5] Recommendation: Please use loads and types of one producer.
[6] In connection with 6810-21x-101 and 6800-xx-104 (M) only suitable for switching retrofit LEDs (for 2-conductor connection).

Movement detector

Busch-Watchdog presence inserts

Product	**Article-No.**	Order-No.	Pack/Qty
	Busch-touch dimmer [1) 2) 3)] **flush mounted, 1-10V** 3 wire connection (neutral conductor required). For controlling ballast units for fluorescent lamps with control output 1-10 V DC, control current max. 50 mA DC. For control cover with control lamp 6543-xxx-10x. For Busch-Remote control IR control cover 6066-xxx-10x and 6067-xxx-10x. For comfort timer control element 6455-101-500. For Busch-Watchdog 180 flush-mounted Sensor Standard 6810-21x-101. For Busch-Watchdog 180 flush-mounted sensor Comfort II 6800-xxx-104 and 6800-xxx-104M. For Busch-Watchdog Presence tech 6813-xxx-101 und 6813/11-xxx. Combinable with Busch-Watchdog extension insert 6805 U. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). For LED control via control gears Without control cover. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz Rated power: 700 W/VA IEC 60669-2-1, British Standard EN 60669-2-1		
	6550 U-101-500	2CKA006550A0042	1

[1)] Non-illuminable.
[2)] Only in conjunction with standard flush-mounting boxes according to DIN 49073.
[3)] With integrated making-current limiter.

Product	**Article-No.**	Order-No.	Pack/Qty

Movement detector

Busch-Watchdog flush-mounted / sensors

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1] **with select-lens** For automatic switching of devices dependent on motion and brightness. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For Dimmer insert 6593 U. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 18 sectors with 72 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 12 m, lateral: 8 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
	future® linear		
anthracite	**6800-81-104**	2CKA006800A2268	1
ivory white	**6800-82-104**	2CKA006800A2099	1/10
aluminium silver [2]	**6800-83-104**	2CKA006800A2325	1
studio white	**6800-84-104**	2CKA006800A2101	1/10
studio white, matt [2]	**6800-884-104**	2CKA006800A2497	1
black matt [2]	**6800-885-104**	2CKA006800A2506	1
	solo®		
ivory white	**6800-82-104**	2CKA006800A2099	1/10
studio white	**6800-84-104**	2CKA006800A2101	1/10
grey metallic [2]	**6800-803-104**	2CKA006800A2484	1
	Busch-axcent®		
studio white	**6800-84-104**	2CKA006800A2101	1/10
	carat®		
anthracite	**6800-81-104**	2CKA006800A2268	1
ivory white	**6800-82-104**	2CKA006800A2099	1/10
studio white	**6800-84-104**	2CKA006800A2101	1/10
	pure stainless steel [2]		
stainless steel	**6800-866-104**	2CKA006800A2343	1

[1] Please order the respective flush-mounted insert separately.
[2] Surface painted.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II [1] [2] **with multi-lens** For automatic switching of devices dependent on motion and brightness. For down-to-ground detection. For relay inserts 6401 U-102, 6402 U and 6812 U-101. For MOS-Fet insert 6804 U-101. For extension insert 6805 U. With integrated selector switch for ON-AUTOMATIC-OFF (lockable). Soft phase-out: In combination with the 6593 U (mode of operation: Soft OFF) the illumination is dimmed down within 60 sec and switched off. Surveillance density: 28 sectors with 112 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. Detection range: frontal: 15 m, lateral: 5 m, Mounting height: 2.5 m Detection range 2: frontal: 10 m, lateral: 2.5 m, Mounting height: 1.2 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
	future® linear		
anthracite	**6800-81-104M**	2CKA006800A2269	1
ivory white	**6800-82-104M**	2CKA006800A2100	1/10
aluminium silver [3]	**6800-83-104M**	2CKA006800A2327	1
studio white	**6800-84-104M**	2CKA006800A2102	1/10
studio white, matt [3]	**6800-884-104M**	2CKA006800A2498	1
black matt [3]	**6800-885-104M**	2CKA006800A2500	1
	solo®		
ivory white	**6800-82-104M**	2CKA006800A2100	1
studio white	**6800-84-104M**	2CKA006800A2102	1/10
grey metallic [3]	**6800-803-104M**	2CKA006800A2485	1
	Busch-axcent®		
studio white	**6800-84-104M**	2CKA006800A2102	1/10
	carat®		
anthracite	**6800-81-104M**	2CKA006800A2269	1
ivory white	**6800-82-104M**	2CKA006800A2100	1
studio white	**6800-84-104M**	2CKA006800A2102	1/10
	pure stainless steel [3]		
stainless steel	**6800-866-104M**	2CKA006800A2344	1

[1] installation: slide switch top.
[2] Please order the respective flush-mounted insert separately.
[3] Surface painted.

Movement detector

Busch-Watchdog flush-mounted / sensors

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Watchdog 180 flush-mounted comfort sensor II for All Weather 44 [1) 2)] **with combi-lens** For automatic switching of devices dependent on motion and brightness. For use outdoors. For down-to-ground detection. For Busch-Universal relay switch insert 6401 U-102. IP 44 only in conjunction with cover frames All Weather 44. Surveillance density: 40 sectors with 160 switching segments. Switch-off delay: 10 sec to 30 min or short-time pulse 1 sec adjustable. With screw-type terminal. Detection range: frontal: 15 m, lateral: 10 m, Mounting height: 2.5 m Detection range 2: frontal: 9 m, lateral: 4 m, Mounting height: 1.2 m Detection angle: 180 ° Brightness limit value: 5 Lux Up to daytime operation Mounting height: 0.8 m - 1.2 m alternative: 2.5 m Protection class (Sensor): IP 44 Temperature range (Device): -25 °C to 55 °C Position for installation: vertical		
brown	**6800-31-102C**	2CKA006800A2353	1
white	**6800-32-102C**	2CKA006800A1898	1
aluminium silver	**6800-33-102C**	2CKA006800A2354	1
alpine white	**6800-34-102C**	2CKA006800A1674	1
anthracite	**6800-35-102C**	2CKA006800A1740	1

[1)] Delivered with sealing ring.
[2)] Please order the respective flush-mounted insert separately.

Product	Article-No.	Order-No.	Pack/Qty
	RC suppressor For protection against the damage or destruction of electronic devices due to overvoltages. For wiring network-interconnected inductivities (e.g.. relay, protection, fluorescent lamps, transformers, etc.). Eliminates functional disturbances on electronic devices, e.g. automatic circuit reclosure (clocking) of a movement detector. Dimensions: diameter 25 mm, length 35 mm, length of the connecting cable approx. 100 mm. Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz		
	6899	2CKA006899A0231	10

Product	Article-No.	Order-No.	Pack/Qty

Movement detector

Busch-Comfort switch

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch relay mechanism [1) 2) 3)] 3 wire connection (neutral conductor required). For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer. Rated power: 2300 W/VA Suitable for: 230 V halogen lamps Rated power: 1200 W Suitable for: Fluorescent lamps Rated current: 10 AX, cos ϕ 0.5 Rated power: 2300 VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6816 U-500	2CKA006800A2621	1/10

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Output can be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch 2-wire insert [1) 2) 3) 4) 5) 6)] 2-wire connection (neutral conductor not required) For Busch-Comfort switch sensors 6815-xxx. Operation in 1gang 2way installations via push switch-unit for combination with flush-mounted units. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Suitable for: 230 V incandescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional transformers or Busch Electronic Transformer. Rated power: 40 - 300 W/VA Temperature range (Device): 0 °C to 35 °C British Standard EN 60669-2-1		
	6815 U	2CKA006800A2270	1/10
Mounting boxes:	35 mm deep flush 1gang or Dual Box 3070-2/35 BSDB.		
Cover frames:	1gang frame 1721 BS-2xG or Dual Box frame 1722 BSDB-2xG.		
2gang product combinations:	2gang combination with adapter plate APBS in Dual Box only.		

[1)] In case of electronic transformers, 5 % transformer losses.
[2)] In the case of conventional transformers, take ~20% transformer loss into account.
[3)] Not suitable for the activation of energy-saving lamps, conventional and electronic ballast units and LED lamps.
[4)] Not suitable for activating the staircase time delay.
[5)] Cannot be used to control relais.
[6)] Output cannot be connected in parallel.

Product	Article-No.	Order-No.	Pack/Qty
	Busch-Comfort switch control element [1)] **with neon lamp** For 2-wire insert 6815 U. For relay insert 6816 U. Adjustable operating mode: semiautomatic mode, automatic switch-on, manual switch-off. Adjustable operating mode: automatic timer, manual switch-on, automatic (timer and motion-controlled) switch-off. Adjustable operating mode: automatic mode, automatic (motion-controlled) switch-on and switch-off. Push switch function possible at all times. Switch-off delay: 1 to 10 min., adjustable. Surveillance density: 9 sectors with 28 switching segments. Detection range: frontal: 5 m, lateral: 3 m Detection angle: 170 ° Brightness limit value: 0.5 Lux - 300 Lux , Daytime operation Mounting height: 0.8 m - 1.2 m Protection class (Sensor): IP 20 Temperature range (Device): 0 °C to 35 °C		
	future® linear		
anthracite	**6815-81**	2CKA006800A2284	1/10
ivory white	**6815-82**	2CKA006800A2285	1/10
aluminium silver [2)]	**6815-83**	2CKA006800A2342	1/10
studio white	**6815-84**	2CKA006800A2286	1/10
studio white, matt [2)]	**6815-884**	2CKA006800A2499	1/10
black matt [2)]	**6815-885**	2CKA006800A2501	1/10
	solo®		
ivory white	**6815-82**	2CKA006800A2285	1/10
studio white	**6815-84**	2CKA006800A2286	1/10
grey metallic [2)]	**6815-803**	2CKA006800A2481	1/10
	Busch-axcent®		
studio white	**6815-84**	2CKA006800A2286	1/10
	carat®		
anthracite	**6815-81**	2CKA006800A2284	1/10
ivory white	**6815-82**	2CKA006800A2285	1/10
studio white	**6815-84**	2CKA006800A2286	1/10
	pure stainless steel		
stainless steel	**6815-866**	2CKA006800A2345	10/10

[1)] Please order the respective flush-mounted insert separately.
[2)] Surface painted.

Movement detector

Proximity switch

Product	Article-No.	Order-No.	Pack/Qty
	Proximity switch 3 wire connection (neutral conductor required). Relay insert with proximity sensor. For contactless ON/OFF switching of electric loads, e.g. lights. For switching incandescent lamps, 230 V tungsten halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are actuated via transformers. Switches when detecting an approach at < approx. 5 cm. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Rated voltage: 230 V~, +10 % / -10 % Rated frequency: 50 Hz - 60 Hz Outputs: 1x Normally open contact, potential-bound Suitable for: 230 V incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are operated via transformers. Rated current: 10 AX Rated power: 2300 W/VA Temperature range (Device): -25 °C to 55 °C British Standard EN 60669-2-1		
	6406 U	2CKA006400A0034	1
	Cover plate For proximity switch 6406 U.		
	future® linear		
ivory white	**6476-82**	2CKA006470A0003	10
studio white	**6476-84**	2CKA006470A0004	10
	solo®		
ivory white	**6476-82**	2CKA006470A0003	10
studio white	**6476-84**	2CKA006470A0004	10
	Busch-axcent®		
studio white	**6476-84**	2CKA006470A0004	10
	carat®		
ivory white	**6476-82**	2CKA006470A0003	10
studio white	**6476-84**	2CKA006470A0004	10

Product	Article-No.	Order-No.	Pack/Qty
	Twilight switch [1] [2] With labelling field. Labelling field 57.8 x 9.8 mm Switch-on/switch-off delay: approx. 3-6 min non-adjustable. Rated voltage: 230 V~ Rated frequency: 50 Hz Rated current: 16 AX Rated power: 3680 W/VA Brightness limit value: 3 Lux - 500 Lux nominal Protection class (Device): IP 44 Temperature range (Device): -35 °C to 55 °C		
grey	**2240 W-53**	2CKA006500A0791	1/10
alpine white	**2240 W-54**	2CKA006500A0792	1/10

[1] For compatible lettering software, visit www.BUSCH-JAEGER-labelingtool.com.
[2] Labelling strip non-illuminable.

Electrical installation solutions for buildings
Installation materials

Index

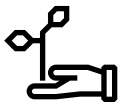
Introduction	12/2
Conduits and accessories	12/4
Flush mounted boxes	12/5
Surface mounted boxes	12/8
ABB Tailor made	12/10

Installation materials

ABB installation materials are continuously developed in cooperation with installers, paying close attention to easy and quick installation, high quality and reliability. They are designed to be compatible with each other and suitable for different installation situations and building methods.

ABB installation materials are:

- **Future oriented.** Offering customized solutions, following trends and future requirements for building constructions like prefabrication and modularity, supported by BIM models.



- **Environmentally friendly.** Choosing the materials with minimal environmental impact, minimizing waste and managing product environmental data in a transparent way.

- **Well documented.** The right information always easily available for each customer. Products are fully documented including ETIM data supporting digital sales.

Advantages of ABB installation materials:

- **Wide choice** of installation materials, meeting different worldwide requirements and installation habits.
- **Efficient, easy and fast installation.** Products are easy and fast to install and they enable efficient installation of wiring accessories and KNX products. Effective project execution brings overall cost-efficiency.
- **Reliable connections** in hollow, concrete and stone structures. Faulty installations are expensive and difficult to fix. Therefore we put effort in ensuring that the connections are reliable.
- **Quality material with specific properties used.** Material properties are selected to withstand demanding environments like fire, high temperature variations, frost, rain, etc.
- **Environmentally friendly.** Products are halogen free.
- **Safety.** Installation materials are designed to meet the highest requirements in regard to health and safe operation.
- **Special applications available.** Special applications to fire retardant walls and exterior walls (airtight solutions) are available.
- **Innovation based on cooperation with a customers and their needs**

Installation materials
A comprehensive offering

Conduits and accessories

Piping materials and accessories are developed to work as a system with ABB installation boxes and are easy to adapt to different installations. The piping materials ensure a safe and cost-efficient installation. Product range offers great variety of products as conduit extensions and adaptors, conduit bends, conduit end pieces and sleeves and accessories for concrete casting applications. Product colour coding helps customers to choose easier the right accessory size.

Conduit extensions and adaptors

Conduit bends

Concrete casting accessories

Conduit end pieces and sleeves

Other conduit accessories

Flush mounted boxes

A wide variety of flush mounted junction and installation boxes, accompanied with accessories, helps installers work in an efficient and flexible way. The customer will find a suitable solution for any type of building or wall: brick or solid walls, various hollow or dry walls. Special solutions like for fire retardant walls or air tight and sound proof walls are also available (complying with relevant standards). The products are made of high quality halogen free plastic materials.

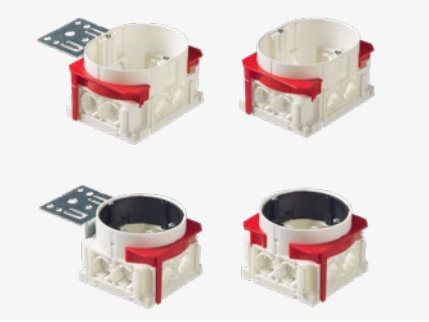
Hollow wall boxes

HW52-F

3050-H

System Ideal

System ABB



Nordic smart boxes

AUS74 front mounted boxes range

Installation materials
A comprehensive offering

Hollow wall boxes for special applications

HW52-F BW
Fire retardant

BWCV165B
Fire retardant ceiling box

HW52F-IGD
Soundproof and airtight insert for HW52-F

Solid (brick) wall boxes

MD4050

DD-12
RFID detector

3040-U

—

Concrete boxes

Concrete boxes used in precast concrete constructions as well as on site casting with moulds

C80r-16/19

MGD50

G153

G251

AU5.2

AU8.73

—

DCL Lighting outlets EN61995

Installation materials
A comprehensive offering

Surface mounted boxes

Discover growing portfolio of ABB surface mounted junction boxes for different types of applications. Boxes come in different shapes, sizes and IP ratings to match to each application requirement. Different colours of AP9 boxes can be used to improve the overview of different installations (e.g. green boxes for KNX, red boxes for fire or alarm systems etc.). The surface mounted box solutions are fast and reliable in all conditions.

Indoors

AP6

AP12

4206-D

4201-D

3611

3611W2

3611GB4

3640-D

3640W4

Indoors

3640W2-G

3640GB33

Outdoors or wet spaces

AP7

AP75

3665

AP9

AP10

Special applications

KM8/16
Cable joint for underground use

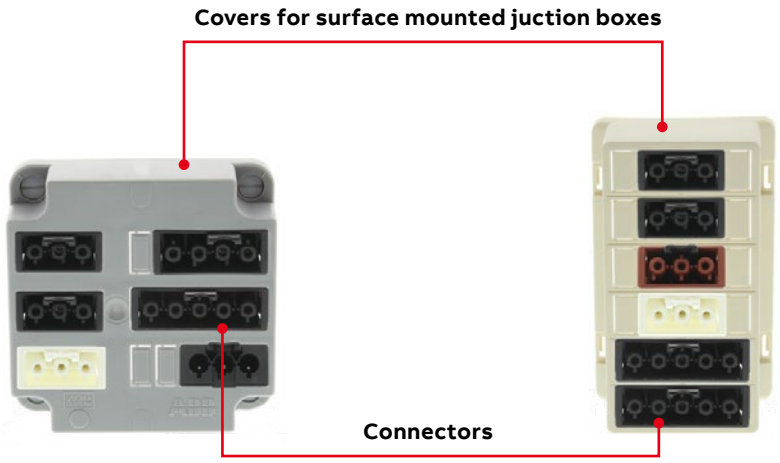
Installation materials
ABB Tailor-Made

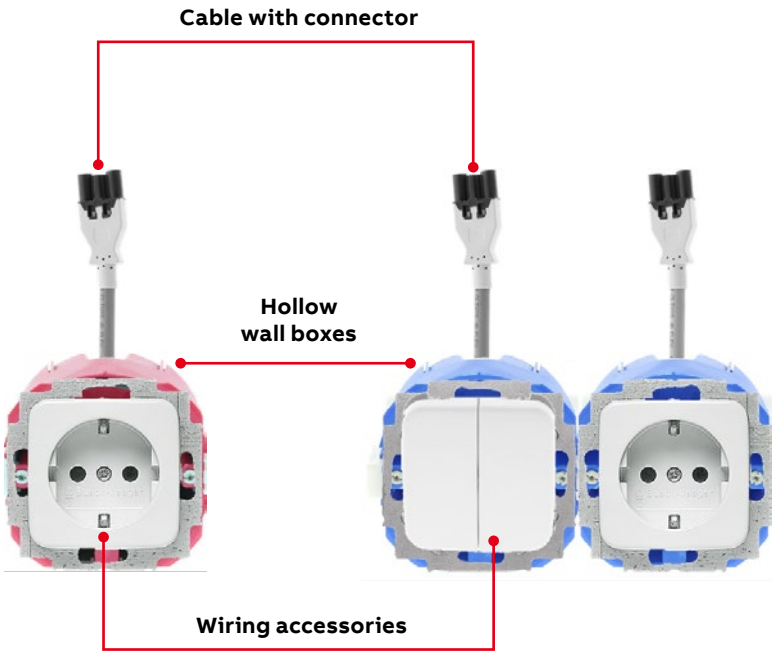
ABB Tailor-Made is a concept that conveys convenience, efficiency, speed and time savings. Standard ABB products are re-configured to a customer's specification, ready for installation; Tailor-Made.

A smart combination of boxes, wiring accessories and covers with plug & play connectors guarantees efficient, quick and highly reliable installation.

Through all the preparations in the design phase and the assembly of parts by ABB, the installation will be effortless and at lightning speed.

Examples:





We listen to our customers. We develop and improve our products together with our customers to meet their needs and special requirements. Contact us and tell us your demand.

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Electrical installation solutions for buildings

Intelligent Building Solutions

Index

ABB i-bus® KNX	**13/2**
Overview	13/2
Power Supply	13/4
System Infrastructure and Interfacing	13/9
Connection and Wiring	13/14
Multifunction Room Automation	13/16
Inputs	13/25
Outputs	13/31
Shading Control	13/38
Lighting Control	13/45
Movement and Presence Detection	13/59
Heating, Ventilation and Air Conditioning	13/67
Automation, Logic and Time Control	13/85
Visualisation, Display and Signalling	13/89
Energy Management	13/96
Safety and Monitoring	13/101
Security	13/102
Guest Room Management	13/120

User Operation – Design Ranges	**13/126**
Unique diversity of the range	13/126
Functional Overview	13/128
ABB-tacteo	13/140
Busch-priOn®	13/148
ClimaECO Sensors	13/158
Standard Control Elements	13/162
Multifunction Control Elementss	13/164
Movement Detectors	13/168
Room Thermostats	13/170
Frames	13/171
Busch-triton®	13/178
Push Button Coupling Unit	13/183
Millenium	13/202
Zenit	13/208
Mylos	13/218

WaveLINE Wireless Control	**13/236**
Overview	13/236
Transmitter	13/238
Actuators, RF/ KNX Media Converters	13/241
Window Sensor, Universal Detector	13/243

You may also visit our KNX website:

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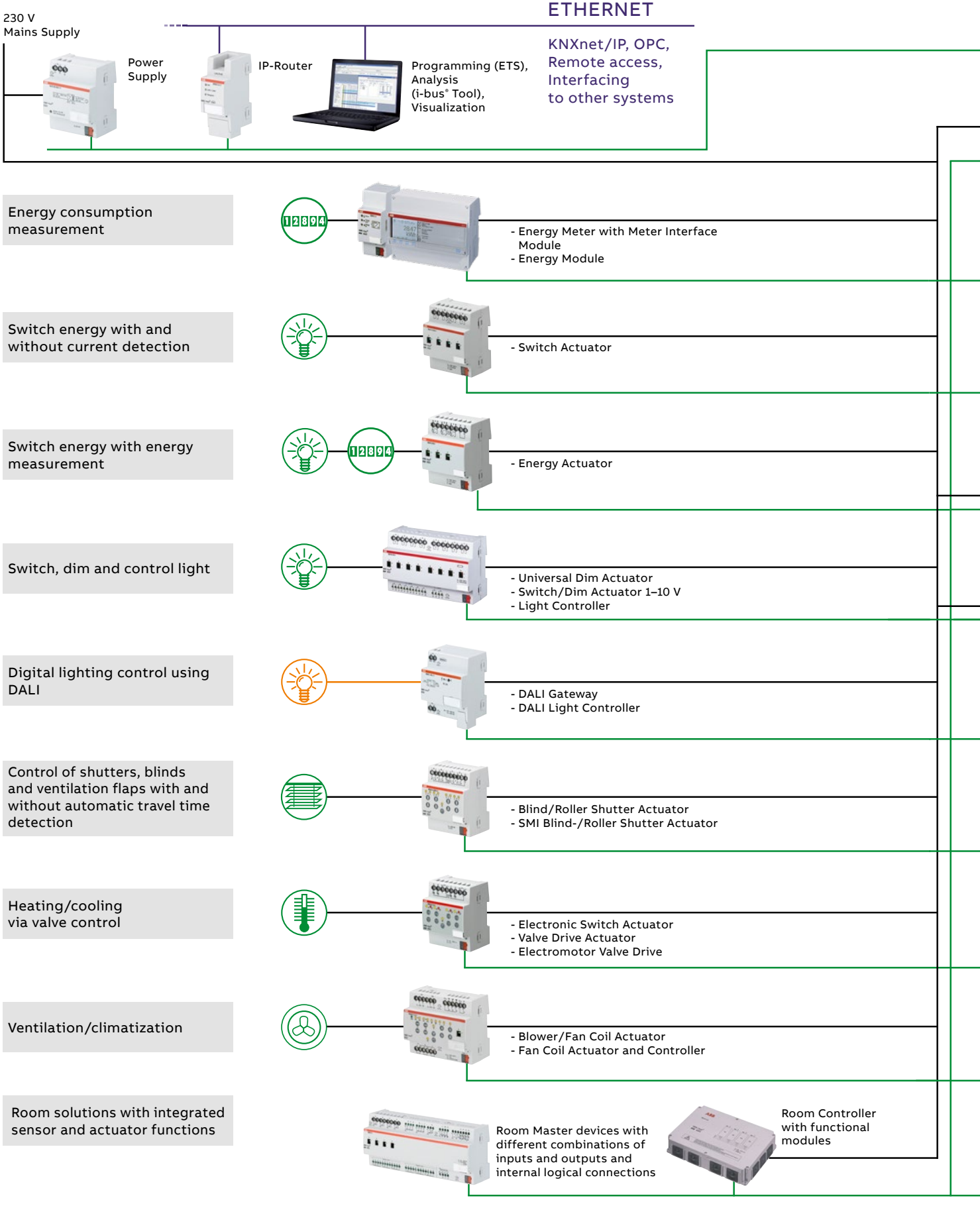
ABB i-bus® KNX – Overview

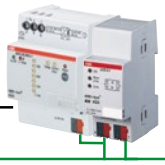


KNX-Main Line/TP

Line 1 2 3 4 ... ... 13 14 15

- 64 devices/line
- 15 lines/area with superordinated main line
- max. 15 areas with superordinated area line

Power Supply



Line Coupler

- Binary Input

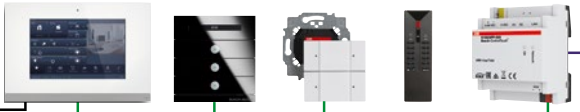
Detect and evaluate switching commands

- Analogue Input

Capture, evaluate and monitor physical values

- Weather Station and Weather Sensor

Evaluate and monitor meteorological data (wind, temperature, rain, etc.)



Remote control via internet

Display operating conditions and control functions

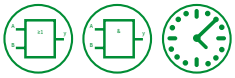
- Presence Detector
- Movement Sensor
- Light Sensor

Lighting Control

Detect presence and movement

Measure brightness levels

- Logic Module
- Application Unit Logic
- Application Unit Time
- Time Switch

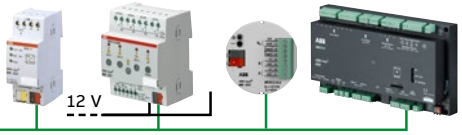


Perform logical operations and trigger timer-controlled functions

- Room Thermostat
- Air Quality Sensor

Capture, evaluate, monitor and control room conditions, temperature, air quality, etc.

- Security Terminal
- Security Module
- KNX Security Panel
- Fault Monitoring Unit
- Monitoring Unit
- Data Logging Unit



Security System

Monitor operating conditions, signal technical faults, recognize hazards and trigger alarms

- Transponder Reader
- Transponder Holder
- Transponder Card
- Configuration Software

Access Control system for hotel rooms

Intelligent Building Solutions

ABB i-bus® KNX – Power Supply

	Standard			Diagnostic		Uninter-ruptible
	SV/S 30.160.1.1	**SV/S 30.320.1.1**	**SV/S 30.640.3.1**	**SV/S 30.320.2.1**	**SV/S 30.640.5.1**	**SU/S 30.640.1**
General						
Supply voltage	100 – 240 V AC (85...265 V AC)	100 – 240 V AC (85...265 V AC)	100 – 240 V AC (85...265 V AC)	100 – 240 V AC (85...265 V AC)	100 – 240 V AC (85...265 V AC)	230 V AC (210...240 V AC)
Type of installation	MDRC	MDRC	MDRC	MDRC	MDRC	MDRC
Module width (18 mm)	4	4	4	4	4	8
Rated current I_n	160 mA	320 mA	640 mA	320 mA	640 mA	640 mA
Rated voltage U_n	30 V DC	30 V DC	30 V DC	30 V DC	30 V DC	30 V DC
Back-up						
Mains failure back-up time without battery	200 ms	200 ms	200 ms	200 ms	200 ms	200 ms
Mains failure back-up time with new, fully charged battery up to	–	–	–	–	–	AM/S: 10 min SAK7: 2.5 h 2 x SAK7: 5 h 2 x SAK12: 11 h 2 x SAK7: 16 h
Choke						
Integrated choke	■	■	■	■	■	■
Extra Voltage output without choke (30 V DC)	–	–	■	–	■	–
Operation and indication						
Short-circuit and overload indication	■	■	■	■	■	■
Output voltage indication	■	■	■	■	■	■
Overload indication	■	■	■	■	■	■
Bus current indication	–	–	–	■	■	–
Telegram traffic indication	–	–	–	■	■	–
Communication error indication	–	–	–	■	■	–
Bus reset button and indication	–	–	–	■	■	–
Mains voltage indication	■	■	■	■	■	■
Battery voltage indication	–	–	–	–	–	■
Reporting						
Floating contact for fault reporting	–	–	–	–	–	■
Commissioning and diagnostic functions						
Control and diagnosis via ABB i-bus® Tool	–	–	–	■	■	–

■ = Function is supported

– = Function is not supported

SV/S 30.160.1.1

Power Supply Standard, 160 mA, MDRC

KNX power supplies generate and monitor the KNX system voltage (SELV). The bus line is decoupled from the power supply by an integrated choke.
The voltage output is short-circuit and overload protected.
The two-color LED indicates device output status. With two-coloured status indicator and wide range input from 85…265 V AC, 50/60 Hz.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SV/S 30.160.1.1	2CDG110144R0011		0.30	1

SV/S 30.320.1.1

Power Supply Standard, 320 mA, MDRC

KNX power supplies generate and monitor the KNX system voltage (SELV). The bus line is decoupled from the power supply by an integrated choke.
The voltage output is short-circuit and overload protected.
The two-color LED indicates device output status.
With two-coloured status indicator and wide range input from 85…265 V AC, 50/60 Hz.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SV/S 30.320.1.1	2CDG110166R0011		0.30	1

SV/S 30.640.3.1

Power Supply Standard, 640 mA, MDRC

KNX power supplies generate and monitor the KNX system voltage (SELV). The bus line is decoupled from the power supply by an integrated choke. The voltage output is short-circuit and overload protected.
The two-color LED indicates device output status.
Device type SV/S 30.640.3.1 has an additional 30 V DC short-circuit and overload protected voltage output that can be used to power an additional bus line (in combination with a separate choke).
With two-coloured status indicator and wide range input from 85…265 V AC, 50/60 Hz.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SV/S 30.640.3.1	2CDG110167R0011		0.30	1

Intelligent Building Solutions

ABB i-bus® KNX – Power Supply

SV/S 30.320.2.1

Power Supply with Diagnostics, 320 mA, MDRC

Compact Power Supply with integrated choke. Quick diagnostics by LED display and ETS communication objects. Analysis of the operating state and the bus line possible by means of ABB i-bus® Tool.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SV/S 30.320.2.1	2CDG110145R0011		0.26	1

SV/S 30.640.5.1

Power Supply with Diagnostics, 640 mA, MDRC

Compact Power Supply with integrated choke. Quick diagnostics by LED display and ETS communication objects. Analysis of the operating state and the bus line possible by means of ABB i-bus® Tool. Additional voltage output to supply an additional line in conjunction with an additional choke.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SV/S 30.640.5.1	2CDG110146R0011		0.26	1

SU/S 30.640.1

Uninterruptible Power Supply, 640 mA, MDRC

Power supply with integrated choke for supplying a bus line from an uninterrupted supply. Quick diagnostics via LED display for operational readiness, fault and battery level as well as a floating contact for a fault signal indication. The accumulator module or up to 2 rechargeable batteries can be charged in normal operation by the voltage supply. The bus voltage is provided by the batteries in the event of a mains failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	8	SV/S 30.640.5.1	GHQ6310049R0111		0.55	1

AM/S 12.1

Battery Module, 12 V DC, MDRC

With lead-gel battery for use in uninterruptible power supply SU/S 30.640.1 and for maintaining the bus voltage during a mains failure for 10 minutes (at full load). Connection is made via 4-core standard cable.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	8	AM/S 12.1	GHQ6310062R0111		0.81	1

KS/K 4.1

KS/K 2.1

Cable Sets

For connection of sealed lead gel batteries SAK7, SAK12 and SAK17 to the uninterruptible KNX power supply SU/S 30.640.1 or the uninterruptible power supply NTU/S 12.2000.1.
If only one battery is connected, the basic cable set KS/K 4.1 with integrated temperature sensor is to be used. In case two batteries are connected in parallel, the basic cable set KS/K 4.1 is to be used for the first battery and the extension cable set KS/K 2.1 is to used for the second battery. It is not permitted to connect more than two batteries in parallel.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Basic	–	KS/K 4.1	GHQ6301910R0001		0.18	1
Extension	–	KS/K 2.1	GHQ6301910R0011		0.12	1

SAK17, SAK12, SAK7

Sealed Lead Acid Batteries, 12 V DC

For maintaining the bus voltage during a mains failure. For connection to the uninterruptible power supply SU/S 30.640.1 or the uninterruptible power supply NTU/S 12.2000.1. A maximum of two batteries of the same type can be connected in parallel. For connection, the cable sets KS/K 4.1 and KS/K 2.1 are to be used.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
7 Ah	–	SAK7	GHV9240001V0011		2.98	1
12 Ah	–	SAK12	GHV9240001V0012		4.66	1
17 Ah	–	SAK17	GHV9240001V0013		7.15	1

DR/S 4.1

Choke, MDRC

The device can be used together with the SV/S 30.640.5 to supply a second line. Integrated reset button for resetting the bus devices. Connection via connection terminals.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	DR/S 4.1	2CDG110029R0011		0.16	1

NTI/Z 28.30.1

Commissioning Power Supply, 28 V DC, 30 mA

For temporary power supply of KNX devices during commissioning. The Euroconnector and plug-in terminal provide faster connection and supply of devices with manual operation (e.g. FCA/S).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	NTI/Z 28.30.1	2CDG110096R0011		0.14	1

Intelligent Building Solutions

ABB i-bus® KNX – Power Supply

CP-D 24/2.5

Power Supply Units, MDRC

The supply units that can be used universally as auxiliary power supply in KNX installations or other SELV applications. The devices supply a regulated output voltage of 12 V DC or 24 V DC with a maximum output current of 0.42 A up to 4.2 A. The units are protected against overload, the output being able to sustain a continuous short circuit. LED indication of the status of the supply and output voltage. With a width between one to five modules only, the CP-D range power supplies are ideally suited for the installation in distribution panels. Optimized for world-wide applications: The CP-D power supplies can be supplied with a rated voltage of 100 – 240 V AC.

Description	Mod. width	Order details			Price 1 piece	Weight 1 piece	Pack unit
		Type code		Order code		kg	pc.
12 V DC, 0.83 A	1	CP-D 12/0.83	**NEW**	1SVR427041R1000		0.07	1
12 V DC, 2.1 A	3	CP-D 12/2.1	**NEW**	1SVR427043R1200		0.20	1
24 V DC, 0.42 A	1	CP-D 24/0.42	**NEW**	1SVR427041R0000		0.07	1
24 V DC, 1.3 A	3	CP-D 24/1.3	**NEW**	1SVR427043R0100		0.20	1
24 V DC, 2.5 A	4	CP-D 24/2.5		2CDG120037R0011		0.25	1
24 V DC, 4.2 A	5	CP-D 24/4.2	**NEW**	1SVR427045R0400		0.39	1
Redundancy Unit for decoupling of two CP-D power supply units	2	CP-D RU	**NEW**	1SVR427049R0000		0.08	1

NT/S 12.1600

Power Supply Units, MDRC

to be discontinued

For connection of sealed lead gel batteries SAK7, SAK12 and SAK17 to the uninterruptible KNX power supply SU/S 30.640.1 or the uninterruptible power supply NTU/S 12.2000.1. If only one battery is connected, the basic cable set KS/K 4.1 with integrated temperature sensor is to be used. In case two batteries are connected in parallel, the basic cable set KS/K 4.1 is to be used for the first battery and the extension cable set KS/K 2.1 is to used for the second battery. It is not permitted to connect more than two batteries in parallel.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
12 V DC, 1.6 A	4	NT/S 12.1600	GHQ6050056R0002		0.26	1
24 V DC, 1.6 A	4	NT/S 24.800	GHQ6050057R0002		0.26	1

NTU/S 12.2000.1

Uninterruptible Power Supply, 12 V DC, 2 A, MDRC

Power supply with integrated choke for supplying a bus line from an uninterrupted supply. Quick diagnostics via LED display for operational readiness, fault and battery level as well as a floating contact for a fault signal indication. The accumulator module or up to 2 rechargeable batteries can be charged in normal operation by the voltage supply. The bus voltage is provided by the batteries in the event of a mains failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	8	NTU/S 12.2000.1	2CDG110070R0011		0.43	1

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ABB i-bus® KNX – System Infrastructure and Interfacing

	IP Router IPR/S 3.1.1		**IP Router IPR/S 3.5.1**	**IP Interface IPS/S 3.1.1**		**Line Coupler LK/S 4.2**	
General							
Auxiliary voltage	10...30 V DC or PoE IEEE 802.3af class 1		10...30 V DC or PoE IEEE 802.3af class 1	10...30 V DC or PoE IEEE 802.3af class 1		–	
Type of installation	MDRC		MDRC	MDRC		MDRC	
Application	IP Router/ 1.1	IP Router/ 2.0	IP Router Secure/ 1.0	IP Interface/ 1.1	IP Interface/ 2.0	Couple/1.1 or Repeat/1.1	Couple Repeat/2.1
ETS	ETS 3	ETS 4/5	ETS 5	ETS 3	ETS 4/5	ETS 3	ETS 4/5
Software functions							
KNX Secure	–	–	■	–	–	–	–
Number of tunneling servers	1	5	5	1	5	–	–
Number of unicast connections	10	10	10	–	–	–	–
Monitoring of bus voltage failure	■	■	■	–	–	–	–
Filter Group telegrams main group 0...13	■	■	■	–	–	■	■
Filter Group telegrams main group 14...31	–	■ (ETS 4.1.7 or higher)	■	–	–	–	■
Function Repeater	–	–	–	–	–	■	■
Commissioning and diagnostic functions							
Control and diagnosis via ABB i-bus® Tool	■	■	■	■	■	■	■
Firmware update (ABB i-bus® Tool)	■	■	■	■	■	–	–
Unicast parameterization (ABB i-bus® Tool)	■	■	■	–	–	–	–

■ = Function is supported

– = Function is not supported

Intelligent Building Solutions

ABB i-bus® KNX – System Infrastructure and Interfacing

LK/S 4.2

Line Coupler, MDRC

The line coupler is used in larger installations to connect KNX lines or areas. The lines or areas are galvanically isolated from one another. Telegrams can be filtered to simultaneously reduce the telegram traffic between lines or areas. With ETS 4 (V4.1.2 and higher) the complete group address range of the main groups 0...31 can be filtered. Within a line, the LK/S 4.2 can also be used as a line amplifier (repeater).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	LK/S 4.2	2CDG110171R0011		0.1	1

IPR/S 3.1.1

IP Router, MDRC

Connects the KNX bus with the Ethernet network. The device uses the KNXnet/IP protocol for communication (Routing and Tunneling). It can be used as a fast line and area coupler. The full filter table for main groups 0-31 is supported. KNX devices can be programmed via the LAN using ETS. For this and further clients 5 Tunneling Servers are available. The IP address can be fixed or can be received from a DHCP server. Power supply via 12…30 V DC or PoE (IEEE 802.3af class 1). The KNX Standard Communication (Multicast) can be switched off. In this case, up to 10 IPR/S 3.1.1 can communicate using unicast communication.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	IPR/S 3.1.1	2CDG110175R0011		0.11	1

IPR/S 3.5.1

IP Router Secure, MDRC NEW

Connects the KNX bus with the Ethernet network and encrypts communication on the IP backbone. The device uses the KNXnet/IP Secure protocol for communication (Routing and Tunneling). It can be used as a fast line and area coupler. The full filter table for main groups 0-31 is supported. KNX devices can be programmed via the LAN using ETS. For this and further clients 5 Secure Tunneling Servers are available. The IP address can be fixed or can be received from a DHCP server. Power supply via 12…30 V DC or PoE (IEEE 802.3af class 1). The KNX Standard Communication (Multicast) can be switched off. In this case, up to 10 IPR/S 3.5.1 can communicate using unicast communication.
Available September 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	IPR/S 3.5.1	2CDG110176R0011			1

IPR/S 2.1

IP Router, MDRC

to be discontinued

Connects the KNX bus with the Ethernet network. The device uses the KNXnet/IP protocol for communication (Routing and Tunneling). It can be used as a fast line and area coupler. KNX devices can be programmed via the LAN using ETS. For this and further clients 1 Tunneling Server is available. The IP address can be fixed or can be received from a DHCP server. Power supply via 12…30 V DC.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	IPR/S 2.1	2CDG110061R0011		0.11	1

IPS/S 3.1.1

IP Interface, MDRC

Connects the KNX bus with the Ethernet network. The device uses the KNXnet/IP protocol for communication (Tunneling). KNX devices can be programmed via the LAN using ETS. For this and further clients 5 Tunneling Servers are available. The IP address can be fixed or can be received from a DHCP server. Power supply via 12..30 V DC or PoE (IEEE 802.3af class 1).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	IPS/S 3.1.1	2CDG110177R0011		0.11	1

8186/03-500

IP Patch Panel PoE, MDRC

For the setup of small and medium-sized network installations. For the power supply of up to 3 terminal devices such as IP telephone or IP webcams direct via the network cable.
For all PoE applications of class 0 to 3, such as IP telephone, IP cameras, WLAN access points or PoE switches. External power supply via 8186/04 necessary.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	8186/03-500	2CKA008100A0344			1

8186/04-500

IP Power Supply PoE

For the setup of small and medium-sized network installations. For the power supply of patch panel PoE 3gang 8186/03. Nominal voltage: 100 – 240 V.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	8186/04-500	2CKA008100A0346			1

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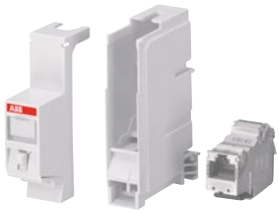
ABB i-bus® KNX – System Infrastructure and Interfacing



IPM/S 1.1

IP Patch Module, MDRC

The IP Patch Module consists of an RJ-45 module and a mounting adapter for rail mounting.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	1	IPM/S 1.1	2CDG120036R0011		0.1	1

USB/S 1.1

USB Interface, MDRC

For connection of a PC via the USB port for programming and diagnostics from ETS3. Display of connection and data transfer via LED.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	USB/S 1.1	2CDG110008R0011		0.12	1

LL/S 1.1

Optical Fibre Interface, MDRC

The device is used to couple two sections of an bus line using an optical fibre link. Ideal for bridging longer distances or to avoid having to implement lightning and overvoltage protection when laying cables between buildings. Two devices are needed to complete a transmission link.

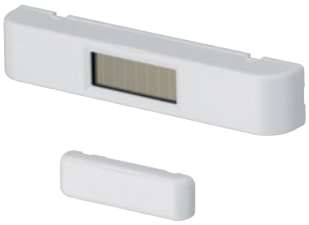
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	LL/S 1.1	GHQ6050053R0001		0.28	1

EG/A 32.2.1

KNX/EnOcean Gateway, SM

To connect and integrate EnOcean devices into KNX networks with bidirectional data exchange. The KNX/EnOcean Gateway sends its data within the 868.3 MHz frequency band which is only approved for EnOcean in the European Union incl. Switzerland, Turkey & Norway. Please ensure that the product is suitable for application in the intended country of final installation and use before purchase. Dimensions: (L x W x H) 100 x 70 x 28.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	EG/A 32.2.1	2CDG120047R0011		0.1	1



MKE/A 1.868.1

Magnetic Contact EnOcean

The Magnetic Contact EnOcean is a surface mounted device for windows or doors recognizing opening or closing. The magnetic contact EnOcean communicates on this with a gateway via radio.
The frequency is 868.3 MHz. The interior range is up to 30 m, typically 5 – 10 m, depending on the structural conditions. When using the ABB i-bus® KNX/EnOcean Gateway EG/A 32.2.1, to link to the KNX-Bus, the signal strength can be measured with the ABB i-bus® Tool.
The magnetic contact supplies itself with power via a solar cell and does not require a battery or other supply voltage.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	MKE/A 1.868.1	2CDG120048R0011		0.1	1

6770-500

KNX TP/RF WaveLine Gateway, SM

Media converter with internal antenna for conversion of KNX RF WaveLine radio signals to KNX twisted pair networks with 24 channels. For the evaluation and transfer of up to 24 channels each with 4 sub-channels as transmitter or receiver. Simple operation due to “programming button” and display on the device. Is surface-mounted. The KNX/WaveLine Gateway is powered via KNX and does not require an additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6770-500	2CKA006770A0002			1

WaveLINE components are available in chapter WaveLINE wireless control.

Intelligent Building Solutions

ABB i-bus® KNX – Connection and Wiring

DSM/S 1.1

Diagnosis and Protection Module, MDRC

Enables quick diagnosis of the bus state and indicates telegram traffic via an LED. A bus fault is indicated by contacts. The DSM also suppresses transient overvoltages and interference voltage spikes on the bus and thus protects the connected devices.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	DSM/S 1.1	2CDG110060R0011		0.11	1

VB/K ...

Wiring Jumpers

For the interconnection of devices with a bus connection terminal. The vertical and horizontal versions are matched to typical wiring applications.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
horizontal, 100 mm	–	VB/K 100.1	GHQ6301908R0003		0.06	10
horizontal, 200 mm	–	VB/K 200.1	GHQ6301908R0001		0.07	10
vertical, 270 mm	–	VB/K 270.1	GHQ6301908R0002		0.11	10
vertical, 360 mm	–	VB/K 360.1	GHQ6301908R0004		0.16	10

PS 1/4/6-KNX

PS-END 1-S

Busbars

For interconnection of the phase supply to multiple input terminals on devices such as SD/S, SA/S, 6197, ... They reduce the wiring effort and ensure safe interconnection. The PS 1/4/6 is prefabricated and can be used immediately. The PS 1/60/6 is cut to the desired length and sealed with end caps.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1 phase, 4 contacts	–	PS 1/4/6-KNX	2CDG924003R0011		0.012	10
1 phase, 60 contacts	–	PS 1/60/6-KNX	2CDG924004R0011		0.11	1
End Cap	–	PS-END 1-S	2CDL000001R0001		0.001	25

US/E 1

Connection Terminals

For connecting bus devices as well as for looping through or branching the bus cable. Available in black/red for use as bus connecting terminal, in blue as bus connecting terminal with surge protector and in white/yellow for use as a connecting terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
black/red	–	BUSKLEMME	GHQ6301901R0001		0.01	50
white/yellow	–	KLEMME	GHQ6301902R0001		0.1	50
with surge protector	–	US/E 1	GHQ6310009R0001		0.01	1

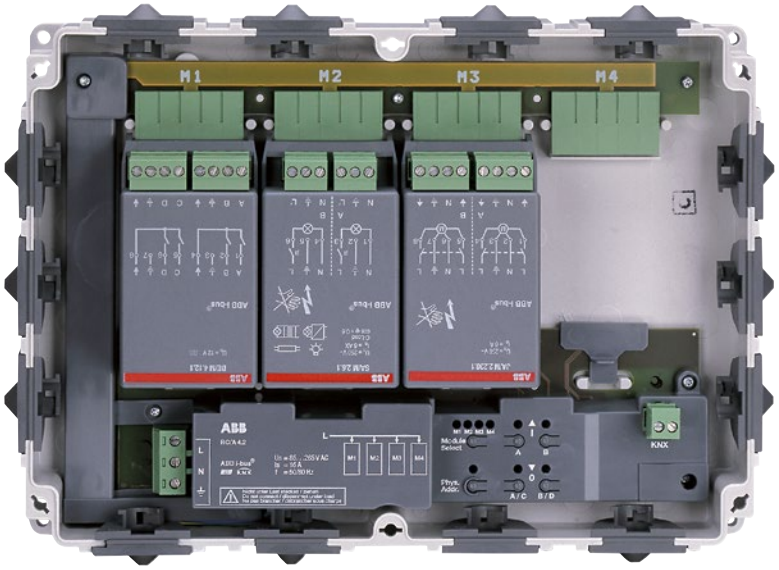
Label Carrier

Snap-on label carrier consisting of transparent carrier plate and insertable blank paper labels.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Label Carrier, 50 pcs.	–	STR/Z 1.50.1	2CDG110149R0011		0.04	1

Intelligent Building Solutions

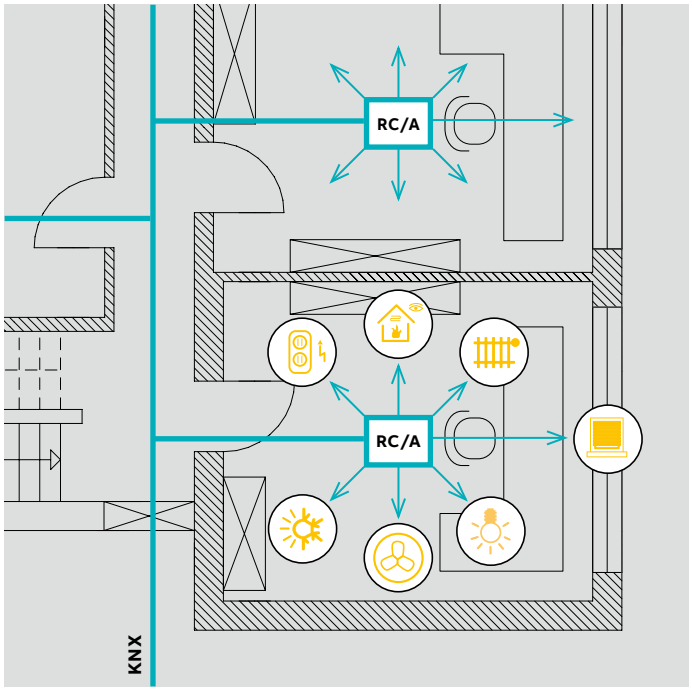
ABB i-bus® KNX – Multifunction Room Automation – Room Controller



The fundamental principle: One device per room
A single Room Controller controls all the room functions.
This “one device per room” principle economically and flexibly provides KNX functionality: With 4 or 8 modules, which are simply inserted into the basis device, all loads in this room (lights, blinds, heating, etc.) can be controlled.

Economic security from the outset
The installation concept of the Room Controller, particularly the simple plug-in module concept, provides security and reliability.

- **When planning the infrastructure of a building:**
  - It can be undertaken without exact knowledge of the subsequent user demands.
- **During commissioning:**
  - When user demands have been determined, they are implemented by simple insertion of modules.
- **In operation in a building:**
  - Modifications to the room utilisation are easy to implement.
  - The changes to the cable routing are limited to the room concerned.



Improved fire protection included
The significant reduction in the wiring also considerably reduces the fire load and thus improves safety for persons and assets.

Save on energy and not on comfort
Each room is used differently. The different module assignments of the Room Controller can be configured accordingly.
Just three examples of special building functions that can be implemented with the device.

In the lighting sector
Constant lighting control is not the only conceivable solution.
A high level of comfort can be assured by the control of different light scenes.

Blinds and roller shutters
Not only do they provide pleasant shading, they also assist in responsible use of energy. Intelligent facade controls move the blinds to suit the position of the sun.

Heating/Ventilation/Air conditioning
The control of electrothermal valves on radiators is no problem for the “electronic switch actuator” module of the Room Controller. The ventilation can also be integrated into this automatic control.

Intelligent Building Solutions

ABB i-bus® KNX – Multifunction Room Automation

Overview of switching performance

	SA/M 2.6.1	SA/M 2.16.1	SD/M 2.6.2	LR/M 1.6.2	UD/M 1.300.1	ES/M 2.230.1	ES/M 2.24.1
Outputs							
Load circuits	2 relay outputs	2 relay outputs, floating	2 relay outputs	1 relay output	Semiconductor output, dimmed via phase interval or phase control	2 semiconductor outputs for resistive loads, inrush current: max. 1 A, continuous current: max. 700 mA	2 semiconductor outputs for resistive loads, inrush current: max. 1 A, continuous current: max. 700 mA
U_n rated voltage	250/440 V AC	250/440 V AC	250/440 V AC	250/440 V AC	115/230 V AC	115/230 V AC	24 V AC/DC
I_n rated current	6 AX	16 A	6 AX	6 AX		700 mA	700 mA
Control outputs	–	–	2 x 1…10 V DC (passive)	1 x 1…10 V DC (passive)	–	–	–
Max. control current	–	–	30 mA	30 mA	Max. output power 300 VA at 230 V AC 150 VA at 127 V AC Min. output power: 2 VA	–	–
Max. cable length	–	–	100 m	100 m	–	–	–
Switching current per output							
AC3 operation (cos ϕ = 0.45) EN 60 947-4-1	6 A / 230 V	8 A / 230 V	6 A / 230 V	6 / 230 V	–	–	–
AC1 operation (cos ϕ = 0.45) EN 60 947-4-1	6 A / 230 V	16 A / 230 V	6 A / 230 V	6 A / 230 V	–	–	–
Fluorescent lighting load AX to EN 60 669	6 A / 250 V (70 µF)	16 A / 250 V (70 µF)	6 A / 250 V (70 µF)	6 A / 250 V (70 µF)	–	–	–
Minimum switching capacity	100 mA / 12 V 100 mA / 24 V	100 mA / 12 V 100 mA / 24 V	100 mA / 12 V 100 mA / 24 V	100 mA / 12 V 100 mA / 24 V	–	–	–
DC current switching capacity (resistive load)	6 A / 24 V=	16 A / 24 V=	6 A / 24 V=	6 A / 24 V=	–	–	–

– = Not applicable

Overview of switching performance

	SA/M 2.6.1	SA/M 2.16.1	SD/M 2.6.2	LR/M 1.6.2	UD/M 1.300.1	ES/M 2.230.1	ES/M 2.24.1
Lamp loads at 230 V AC							
– Incandescent lamp load	1380 W	2300 W	1380 W	1380 W	–	–	–
Fluorescent lamps T5 / T8							
– Uncompensated	1380 W	2300 W	1380 W	1380 W	–	–	–
– Parallel compensated	1380 W	1500 W	1380 W	1380 W	–	–	–
– DUO connection	1380 W	1500 W	1380 W	1380 W	–	–	–
Low-volt halogen lamps							
– Inductive transformer	1200 W	1200 W	1200 W	1200 W	–	–	–
– Electronic transformer	1380 W	1500 W	1380 W	1380 W	–	–	–
– Halogen lamp 230 V	1380 W	2300 W	1380 W	1380 W	–	–	–
Dulux lamp							
– Uncompensated	1100 W	1100 W	1100 W	1100 W	–	–	–
– Parallel compensated	1100 W	1100 W	1100 W	1100 W	–	–	–
Mercury-vapour lamp							
– Uncompensated	1380 W	2000 W	1380 W	1380 W	–	–	–
– Parallel compensated	1380 W	2000 W	1380 W	1380 W	–	–	–
Switching capacity							
– Max. peak inrush-current Ip (150 µs)	400 A	400 A	400 A	400 A	–	–	–
– Max. peak inrush-current Ip (250 µs)	320 A	320 A	320 A	320 A	–	–	–
– Max. peak inrush-current Ip (600 µs)	200 A	200 A	200 A	200 A	–	–	–
Number of electronic ballasts (T5/T8, single element)							
– 18 W (ABB EVG 1x18 CF)	23	23	23	23	–	–	–
– 24 W (ABB EVG-T5 1x24 CY)	23	23	23	23	–	–	–
– 36 W (ABB EVG 1x36 CF)	14	14	14	14	–	–	–
– 58 W (ABB EVG 1x58 CF)	11	11	11	11	–	–	–
– 80 W (Helvar EL 1x80 SC)	10	10	10	10	–	–	–

Further technical specifications can be found in the corresponding product manuals at www.abb.com/knx

—
– = Not applicable

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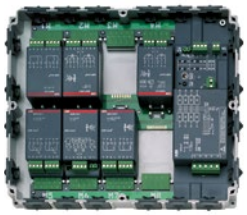
ABB i-bus® KNX – Multifunction Room Automation – Room Controller Basis Devices



Configuration example RC/A 8.1

Room Controller

The Room Controller controls all the functions in the room as a central device. Due to its modular design, it can be adapted flexibly to the required functionality.
On-site installation enables short assembly and commissioning times. A structured cable entry creates clarity and flexibility for changes in function – both during planning and operation.

Special features

- Height 50 mm: optimised for underfloor installation or suspended ceilings
- Room Controller counts as just one bus device
- Robust housing, IP 54 degree of protection
- Manual operation for immediate testing – even without bus voltage
- Comprehensive software functionality

RC/A 4.2

Room Controller, Basis Device for 4 Modules, SM

It accommodates up to 4 plug-in modules and controls their functions. The RC/A 4.2 communicates as a bus device. Any module type can be plugged into each module slot. A manual control for module function test is integrated. Dimensions: (H x W x D) 200 x 275 x 50.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	RC/A 4.2	2CDG110104R0011		0.98	1

RC/A 8.2

Room Controller, Basis Device for 8 Modules, SM

It accommodates up to 8 plug-in modules and controls their functions. Any module type can be plugged into each module slot. The inserted module is automatically detected. The manual operation facility enables an immediate function test even when bus voltage is not applied. Dimensions: (H x W x D) 270 x 316 x 50.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	RC/A 8.2	2CDG110106R0011		1.695	1

Intelligent Building Solutions

ABB i-bus® KNX – Multifunction Room Automation – Room Controller Function Modules

BE/M 4.230.1

Binary Input Modules, 4-fold

Each of the modules provides 4 inputs. There are 3 module types available for the connection of 115/230 V, 12/24 V (AC or DC) or floating contacts to cover all demands.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
230 V	–	BE/M 4.230.1	2CDG110005R0011		0.13	1
12/24 V	–	BE/M 4.24.1	2CDG110006R0011		0.13	1
Contact Scanning	–	BE/M 4.12.1	2CDG110007R0011		0.13	1

SA/M 2.6.1

Switch Actuator Module, 2-fold, 6 A

For switching loads up to 16 A at a maximum continuous current of 6 A.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SA/M 2.6.1	2CDG110002R0011		0.17	1

SA/M 2.16.1

Switch Actuator Module, 2-fold, 16 A, floating contact

For switching two loads up to 16 A. The switched voltage is independent of the basic device and is connected directly to the module.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SA/M 2.16.1	2CDG110100R0011		0.16	1

JA/M 2.230.1

Shutter Actuator Modules, 2-fold

For controlling two independent blind or shutter drives. There are two module types available for 115/230 V AC or 24 V DC drives.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
230 V AC	–	JA/M 2.230.1	2CDG110003R0011		0.17	1
24 V DC	–	JA/M 2.24.1	2CDG110004R0011		0.17	1

SD/M 2.6.2

Switch/Dim Actuator Module, 2-fold, 6 AX

It enables the switching and dimming of two groups of luminaries in conjunction with electronic ballasts via a 1…10 V control voltage. Enhanced switching capacity.
(Replaces the SD/M 2.6.1).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SD/M 2.6.2	2CDG110107R0011		0.17	1

Intelligent Building Solutions

ABB i-bus® KNX – Multifunction Room Automation – Room Controller Function Modules

LR/M 1.6.2

Light Controller Module, 1-fold, 6 AX

Enables switching and dimming of a lighting group via 1...10 V control voltage. The device can be used for constant lighting control in conjunction with Light Sensor LF/U 2.1. (Replaces the LR/M 1.6.1).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	LR/M 1.6.2	2CDG110108R0011		0.13	1

UD/M 1.300.1

Universal Dim Actuator Module, 1-fold, 300 VA

For dimming incandescent lamps, 230 V or low-voltage halogen lamps up to 300 W/VA. The automatic load detection detects the connected load and optimises the control. The minimum load is just 2 W.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	UD/M 1.300.1	2CDG110012R0011		0.18	1

ES/M 2.230.1

Electronic Switch Actuator Module, 2-fold

With 2 overload-proof outputs for noiseless control of heating systems and chilled ceilings via thermoelectric valve drives. Two module types for voltages from 115/230 V or 24 V (AC or DC) are available.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
115/230 V	–	ES/M 2.230.1	2CDG110013R0011		0.15	1
24 V	–	ES/M 2.24.1	2CDG110014R0011		0.15	1

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ABB i-bus® KNX – Multifunction Room Automation – Room Master

	Room Master Basic RM/S 1.1	Room Master Premium RM/S 2.1	Room Master RM/S 3.1	Room Master RM/S 4.1
General				
Supply voltage	KNX	KNX	KNX	KNX
Type of installation	MDRC	MDRC	MDRC	MDRC
Module width (18 mm)	8	12	12	8
Current consumption, bus	< 12 mA	< 24 mA	< 12 mA	< 12 mA
Inputs				
Binary inputs (for potential free contacts via contact scanning)	8	18	12	8
Outputs				
Switching capacity 20 A (16 AX) [1]	1	3	4	–
Switching capacity 16 A (10 AX) [2]	2	1	–	–
Switching capacity 6 A [3]	3 (configurable as switch or fan outputs)	12 (3 configurable as switch or fan outputs)	–	8
0.5 A electronic (electrothermal or motor valve drive control)	4	4	–	–
6 A changeover contact (Blind or Shutter control)	–	1	4 (configurable also as switch outputs)	–
Functions				
Lighting control (Switching)	■	■	■	■
Heating/Cooling (Electrothermal or motor valve drive control, 3-level fan speed control)	■	■	■	■
Shading control (Shutter, blinds or curtains)	–	■	–	–
Control of further loads via switched electrical sockets	■	■	■	■
Internal connection of inputs and outputs without group adresses	■	■	■	■
Scenes	■	■	■	■
Room scenarios	■	■	■	■
Application with preconfigured inputs and outputs	■	■	–	–
Programmable with predefined and tested example projects (ETS 4) for different fields of application (office, schools, hotel rooms, ...)	–	–	■	–
Planning templates	–	–	■	–

■ = Function is supported

– = Function is not supported

1) = Switching capacity, see Switch Actuators SA/S x.16.5.1

2) = Switching capacity, see Switch Actuators SA/S x.10.2.1

3) = Switching capacity, see Switch Actuators SA/S x.6.1.1

Intelligent Building Solutions

ABB i-bus® KNX – Multifunction Room Automation – Room Master

RM/S 1.1

RM/S 2.1

RM/S 3.1

RM/S 4.1

Room Master

The Room Master is a KNX device with a combination of inputs and outputs. The quantities, technical data and the functions of these inputs and outputs are compiled, so that overall control of all the functions in rooms of a live-in character or apartments, are implemented via a device. Typical areas of application of the Room Master are hotel rooms, hospital rooms as well as apartments in institutions for residential care or in student residential homes. The Room Master with its compact design covers all the basic requirements for Lighting control Heating/Air conditioning Shading control (shutters, blinds or curtains - with the RM/S 2.1) Control of further loads via switched electrical sockets Function extensions are possible at any time, e.g. devices for dimming via ABB i-bus® KNX.

Overview of the inputs and outputs

	RM/S 1.1	RM/S 2.1	RM/S 3.1	RM/S 4.1	Application possibilities
Binary inputs via contact scanning	8	18	12	8	For connection of switches or push-buttons (light on/off, shutter up/down,etc.) or sensors (window contacts, door contacts, water sensors, condensation water sensors, hotel acrd readers, etc.)
Outputs 20 A (16 AX)	1	3	4	–	Bathroom fan, switching of electrical sockets
Outputs 16 A (10 AX)	2	1	–	–	Auxiliary electrical heating of fan-coil units (at RM/S 1.1 and 2.1), lighting
Outputs 6 A	3	12	–	8	3-speed fan control (at RM/S 1.1 and 2.1), lighting
Outputs 0.5 A electronic	4	4	–	–	Valve control (heating, cooling)
Outputs 6 A changeover contact	–	1	4 (config-urable as switch outputs too)	–	Blind or roller blind control

- RM/S 1.1 and RM/S 2.1 are preprogrammed ex factory
- RM/S 3.1 and RM/S 4.1 are programmable with predefined and tested example projects (ETS 4) for different fields of application (office, schools, hotel rooms, ...)
- Commissioning of the preprogrammed devices on the construction site without notebook and ETS programming. With the electrical connection all room functions are available.
- Optional functional extensions via integration into KNX networks with ETS software.

Further information about Room Master on www.abb.com/knx

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Inputs, Outputs, Fan Coil	8	RM/S 1.1	2CDG110094R0011		0.45	1
Inputs, Outputs, Blind Control, Fan Coil	12	RM/S 2.1	2CDG110095R0011		0.76	1
Inputs, Outputs, Blind Control or Outputs	12	RM/S 3.1	2CDG110165R0011		0.55	1
Inputs, Outputs	8	RM/S 4.1	2CDG110170R0011		0.3	1

Intelligent Building Solutions

ABB i-bus® KNX – Inputs

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ABB i-bus® KNX – Inputs

Wide-range inputs and a streamlined range – The ABB i-bus® KNX Binary Inputs.

ABB i-bus® KNX Binary Inputs serve as an interface for operation of KNX systems via conventional push buttons and switches as well as for processing binary signals (signalling contacts).

In contrast to the existing solutions, where the input voltages of 24 V and 230 V required separate devices, the Binary Inputs now feature **wide-range inputs**, which can process voltage signals ranging from 10 to 230 V AC/DC. This offers the **installer significantly greater flexibility.**

In addition to two devices with 4 and 8 wide-range inputs, the ABB i-bus® KNX Binary Input product range is rounded off by two devices with 4 and 8 inputs with scanning voltage. On these types, a pulsed scanning voltage is provided for connection of floating contacts from the device.

With an identical range of applications, the number of ABB i-bus® KNX Binary Inputs is now reduced from 6 types to 4.

All Binary Inputs feature **a high-quality membrane keypad for comfortable manual operation and display of the device functions.** Input states can be simulated at the device, so that the conventional push buttons, switches or floating contacts do not need to be connected for commissioning purposes. The device functions can be easily tested during commissioning in this way.

The Binary Inputs are powered via the KNX and do not require an additional power supply.

The software functionality of the Binary Inputs has also been extended. It is now possible to send **several switching telegrams with just a single push of a button.**
Especially useful, just as in the case of the Switch Actuators, it is also possible **to copy the channels of the device in the ETS.** The parameters and group addresses of a channel can be simply transferred to other channels in this way. This simplifies project engineering and helps reduce sources of error.

Application
- Operation of KNX systems via conventional push buttons and switches
- Processing of binary signals (signalling contacts)

Benefits
- Flexible application due to wide-range inputs
- Reduced stock requirement due to streamlined product range
- Simplified commissioning using the copy function

Product
- BE/S 4.20.2.1 with 4 inputs for contact scanning and manual operation
- BE/S 4.230.2.1 with 4 wide-range inputs and manual operation
- BE/S 8.20.2.1 with 8 inputs for contact scanning and manual operation
- BE/S 8.230.2.1 with 8 wide-range inputs and manual operation

	BE/S 4.20.2.1	BE/S 4.230.2.1	BE/S 8.20.2.1	BE/S 8.230.2.1	US/U 2.2	US/U 4.2	US/U 12.2
General							
Voltage range	–	10…230 V	–	10…230 V	–	–	–
Voltage type	–	AC/DC	–	AC/DC	–	–	–
Contact scanning	■	–	■	–	■	■	■
Inputs	4	4	8	8	2	4	12
Type of installation	MDRC	MDRC	MDRC	MDRC	FM	FM	FM
Module width (space unit)	2	2	4	4	–	–	–
Switch sensor							
Send switch value after any edge	■	■	■	■	■	■	■
Send switch value after signal length and/or cyclically	■	■	■	■	■	■	■
Send switch value 1 cyclically	■	■	■	■	■	■	■
Send switch value 2	■	■	■	–	–	–	–
Send switch value 3	■	■	■	–	–	–	–
Difference between short and long operation	■	■	■	■	■	■	■
Dim sensor							
Start-stop dimming, step-by-step dimming	■	■	■	■	■	■	■
One-touch dimming	■	■	■	■	■	■	■
Shutter Sensor							
Shutter operation via a push button/switch	■	■	■	■	■	■	■
Shutter operation via two push buttons/switches	■	■	■	■	■	■	■
Value/Forced operation							
1 bit [0/1], 2 bit forced operation	■	■	■	■	■	■	■
1/2/4 bytes	■	■	■	■	■	■	■
Signed	■	■	■	■	–	–	–
3 byte, time, weekday	■	■	■	■	–	–	–
Control scene							
8 bit scene	■	■	■	■	■	■	■
Store scene	■	■	■	■	■	■	■
Switching sequence							
Several preset sequences can be set	■	■	■	■	■	■	■
Link several push buttons in a switching sequence (actuating number)	■	■	■	■	■	■	■

—

■ = Function is supported

– = Function is not supported

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ABB i-bus® KNX – Inputs

	BE/S 4.20.2.1	BE/S 4.230.2.1	BE/S 8.20.2.1	BE/S 8.230.2.1	US/U 2.2	US/U 4.2	US/U 12.2
Multiple operation							
Telegram for long operation	■	■	■	■	■	■	■
Multiple operation can be set	■	■	■	■	■	■	■
Pulse counter							
Adjustable data type and threshold values	■	■	■	■	■	■	–
Temporary counter activation	■	■	■	■	■	■	–
Send counter level cyclically	■	■	■	■	■	■	–
Manual operation							
Energy-saving mode	■	■	■	■	–	–	–
Enable/release manual operation	■	■	■	■	–	–	–
Manual operating status	■	■	■	■	–	–	–
Enable/release manual operation button per input	■	■	■	■	–	–	–
Input LED can be inverted	■	■	■	■	–	–	–
Special functions							
Copying and exchanging parameter settings	■	■	■	■	–	–	–
Enable/disable input	■	■	■	■	■	■	■
Adjustable debounce time and minimum signal time	■	■	■	■	■	■	■
Limit the number of telegrams	■	■	■	■	■	■	■
Device sends an “In operation” telegram	■	■	■	■			
Heating valve control (electric relay)	–	–	–	–	■	■	■
Switch LEDs	–	–	–	–	■	■	■

■ = Function is supported

– = Function is not supported

BE/S 8.230.2.1

Binary Inputs, 10 – 230 V AC/DC, MDRC

Detects AC/DC signals in the voltage range from 12...230 V. The state of the input is displayed via yellow LEDs. The binary inputs enable detection of independent input signals. The devices feature a manual operation pushbutton for each channel. The devices are powered via the ABB i-bus® and do not require an additional power supply.

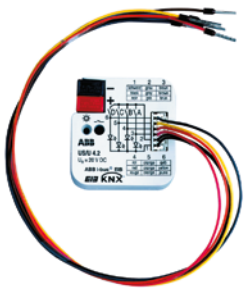
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	2	BE/S 4.230.2.1	2CDG110091R0011		0.12	1
8-fold	4	BE/S 8.230.2.1	2CDG110093R0011		0.23	1

BE/S 4.20.2.1

Binary Inputs, Contact Scanning, MDRC

Scans floating contacts with internally generated scanning voltage. The state of the input is displayed via yellow LEDs. The binary inputs enable detection of independent input signals. The devices feature a manual operation pushbutton for each channel. The devices are powered via the ABB i-bus® and do not require an additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	2	BE/S 4.20.2.1	2CDG110090R0011		0.12	1
8-fold	4	BE/S 8.20.2.1	2CDG110092R0011		0.23	1



US/U 4.2

Universal Interface, FM

The universal interface has 2, 4 or 12 channels which can be parametrised as inputs or outputs with the ETS software. Conventional push-buttons, auxiliary contacts, LEDs and the electronic relay ER/U can be connected. The connecting cables can be extended up to 10 m. The contact scanning voltage and the supply voltage for the LEDs are made available by the device, the series resistors for the LEDs are integrated.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	–	US/U 2.2	GHQ6310074R0111		0.06	1
4-fold	–	US/U 4.2	GHQ6310070R0111		0.06	1
12-fold	–	US/U 12.2	2CDG110065R0011		0.06	1

Intelligent Building Solutions

ABB i-bus® KNX – Inputs

AE/S 4.1.1.3

AE/A 2.1

WZ/S 1.3.1.2

WES/A 3.1

WS/S 4.1.1.2

Analogue Input

Used wherever analogue variables should be detected. The sophisticated housing concept of the surface mounted device and the screw terminals of the MDRC device enable quick and clear wiring and improve the speed of connection of the sensors.
Comprehensive range of adjustment for many typical sensors (1 – 10 V, 0(4) – 20 mA, 0 – 1 V, PT 100, PT 1000,...) for detection of temperature, brightness, fill levels, etc.
For active sensors the auxiliary voltage is supplied by AE/S 4.1.1.3; in case of AE/A 2.1 a separate auxiliary voltage supply is required.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, MDRC	4	AE/S 4.1.1.3	2CDG110190R0011		0.27	1
2-fold, SM	–	AE/A 2.1	2CDG110086R0011		0.30	1

Weather Unit, MDRC and Weather Sensor, SM

It is used to detect and process weather data from weather sensor. It supplies data for twilight and brightness levels in 3 directions, rain, temperature, information on day/night, wind speed, date and time. An additional input for the connection of a PT - 1000 sensor is provided. Four value memories which can store up to 24 values each are available. The Weather Unit WZ/S 1.3.1.2 can be operated either with the new Weather Sensor WES/A 3.1 or with the former sensor WES/A 2.1. The Weather Unit also provides the supply voltage for the connected sensor. The Weather Unit has to be supplied with a operating voltage of 85 to 265 V AC. The Weather Unit supports the ABB i-bus® Tool for advanced diagnosis and improved commissioning.
The Weather Sensor WES/A 3.1 detects twilight, brightness in three directions, rain, temperature, day/night, wind speed and the date and time using a GPS module. An additional heating transformer is not required. The new Weather Sensor WES/A 3.1 can be connected to the new Weather Unit WZ/S 1.3.1.2 or to the former Weather Unit WZ/S 1.1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Weather Unit	4	WZ/S 1.3.1.2	2CDG110184R0011		0.20	
Weather Sensor	–	WES/A 3.1	2CDG120046R0011		0.17	

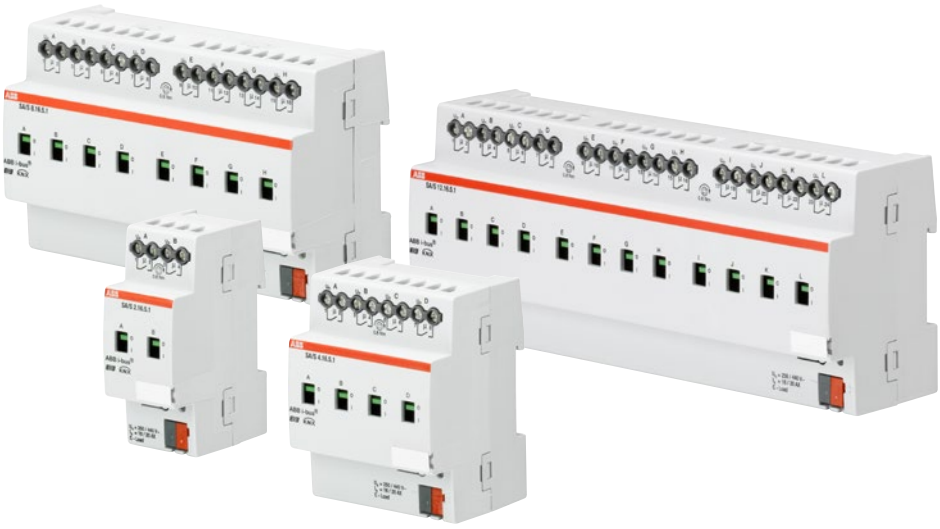
Weather Station, 4-fold, MDRC

All common weather sensors for wind speed, wind direction, rain, amount of rain, brightness, light intensity, pyranometers, twilight, air pressure, humidity or temperature can be connected to the device. The power supply generates the 24 V DC voltage for external sensors (max. 300 mA). The device can be operated with 85 to 265 V AC, 50/60 Hz. The application software is configured for the detection of weather based data and enables quick sensor programming. The Weather Station supports the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	WS/S 4.1.1.2	2CDG110191R0011		0.27	

Intelligent Building Solutions

ABB i-bus® KNX – Outputs – A Complete Switch Actuator Range



Switch Actuators are responsible for reliable switching of different electrical loads in the KNX system.
Many different load situations are possible. ABB offers a suitable Switch Actuator for all application areas. The range has been rounded off with a series. Now 16/20 AX C-Load Switch Actuators with and without a current detection feature are available; each featuring 2, 4, 8 or 12 outputs.

In the following table, you will find an overview of the ABB i-bus® Switch Actuators and their type designations:

–	SA/S 2.6.2.1	SA/S 2.10.2.1	SA/S 2.16.2.1	SA/S 2.16.5.1	SA/S 2.16.6.1
SA/S 4.6.1.1	SA/S 4.6.2.1	SA/S 4.10.2.1	SA/S 4.16.2.1	SA/S 4.16.5.1	SA/S 4.16.6.1
SA/S 8.6.1.1	SA/S 8.6.2.1	SA/S 8.10.2.1	SA/S 8.16.2.1	SA/S 8.16.5.1	SA/S 8.16.6.1
SA/S 12.6.1.1	SA/S 12.6.2.1	SA/S 12.10.2.1	SA/S 12.16.2.1	SA/S 12.16.5.1	SA/S 12.16.6.1

Note:
The codes represent the following:

SA/S		=	**S**witch **A**ctuator, DIN Rail mounting
SA/S **x.**	x	=	Number of outputs
SA/S 8.**y.**	y	=	Rated current in Ampere A
SA/S 8.16.**1**	1	=	Standard without manual operation
SA/S 8.16.**2**	2	=	With manual operation
SA/S 8.16.**5**	5	=	C-Load (200 µF)
SA/S 8.16.**6**	6	=	C-Load with current detection
SA/S 8.16.6.**z**	z	=	Version

Intelligent Building Solutions

ABB i-bus® KNX – Outputs

The following table provides and overview of the rated values, switching performance, lamp loads or the number of lamps, which can be connected to a contact:

	SA/S 4.6.1.1 SA/S 8.6.1.1 SA/S 12.6.1.1	SA/S 2.6.2.1 SA/S 4.6.2.1 SA/S 8.6.2.1 SA/S 12.6.2.1	SA/S 2.10.2.1 SA/S 4.10.2.1 SA/S 8.10.2.1 SA/S 12.10.2.1	SA/S 2.16.2.1 SA/S 4.16.2.1 SA/S 8.16.2.1 SA/S 12.16.2.1	SA/S 2.16.5.1 SA/S 4.16.5.1 SA/S 8.16.5.1 SA/S 12.16.5.1	SA/S 2.16.6.1 SA/S 4.16.6.1 SA/S 8.16.6.1 SA/S 12.16.6.1
I_n rated current (A)	6 A	6 AX	10 AX	16 A	16/20 AX C-Load	16/20 AX C-Load
U_n rated voltage (V)	250/440 V AC	250/440 V AC	250/440 V AC	250/440 V AC	250/440 V AC	250/440 V AC
AC1 operation (cos ϕ = 0.8) DIN EN 60947-4-1	6 A	6 A	10 A	16 A	20 A	20 A
AC3 operation (cos ϕ = 0.45) DIN EN 60947-4-1	6 A	6 A	8 A	–[4]	16 A	16 A
C-Load switching capacity	–	–	–	–	20 A	20 A
Fluorescent lighting load AX to EN 60669-1	6 A (35 µF) [3]	6 AX (140 µF) [3]	10 AX (140 µF) [3]	16 A (70 µF) [3]	20 AX (200 µF) [3]	20 AX (200 µF) [3]
Minimum switching capacity	10 mA/12 V	100 mA/12 V	100 mA/12 V	100 mA/12 V	100 mA/12 V	100 mA/12 V
DC current switching capacity (resistive load)	6 A/24 V =	6 A/24 V =	10 A/24 V =	16 A/24 V =	20 A/24 V =	20 A/24 V =
Mechanical service life	> 10^7	> 3 x 10^6	> 3 x 10^6	> 3 x 10^6	> 10^6	> 10^6
Electronic endurance to IEC 60947-4-1:						
– Rated current AC1 (240 V/0.8)	100,000	100,000	100,000	100,000	100,000	100,000
– Rated current AC3 (240 V/0.45)	15,000	30,000	30,000	30,000	30,000	30,000
– Rated current AC5a (240 V/0.45)	15,000	30,000	30,000	30,000	30,000	30,000
Incandescent lamp load at 230 V AC	1,200 W	1,380 W	2,500 W	2,500 W	3,680 W	3,680 W
Fluorescent lamp T5 / T8:						
– Uncorrected	800 W	1,380 W	2,500 W	2,500 W	3,680 W	3,680 W
– Parallel compensated	300 W	1,380 W	1,500 W	1,500 W	2,500 W	2,500 W
– DUO circuit	350 W	1,380 W	1,500 W	1,500 W	3,680 W	3,680 W
Low-voltage halogen lamps:						
– Inductive transformer	800 W	1,200 W	1,200 W	1,200 W	2,000 W	2,000 W
– Electronic transformer	1,000 W	1,380 W	1,500 W	1,500 W	2,500 W	2,500 W
Halogen lamp 230 V	1,000 W	1,380 W	2,500 W	2,500 W	3,680 W	3,680 W
Dulux lamps:						
– Uncorrected	800 W	1,100 W	1,100 W	1,100 W	3,680 W	3,680 W
– Parallel compensated	800 W	1,100 W	1,100 W	1,100 W	3,000 W	3,000 W
Mercury-vapour lamps:						
– Uncorrected	1,000 W	1,380 W	2,000 W	2,000 W	3,680 W	3,680 W
– Parallel compensated	800 W	1,380 W	2,000 W	2,000 W	3,000 W	3,000 W
Sodium-vapour lamps:						
– Uncorrected	1,000 W	1,380 W	2,000 W	2,000 W	3,680 W	3,680 W
– Parallel compensated	800 W	1,380 W	2,000 W	2,000 W	3,000 W	3,000 W
Max. peak inrush-current Ip (150 µs)	200 A	400 A	400 A	400 A	600 A	600 A
Max. peak inrush-current Ip (250 µs)	160 A	320 A	320 A	320 A	480 A	480 A
Max. peak inrush-current Ip (600 µs)	100 A	200 A	200 A	200 A	300 A	300 A
Number of electronic ballasts (T5/T8, single element): [2]						
18 W (ABB ballasts 1 x 18 SF)	10 ballasts	23 ballasts	23 ballasts	23 ballasts	26[1] ballasts	26[1] ballasts
24 W (ABB ballasts 1 x 24 CY)	10 ballasts	23 ballasts	23 ballasts	23 ballasts	26[1] ballasts	26[1] ballasts
36 W (ABB ballasts 1 x 36 CF)	7 ballasts	14 ballasts	14 ballasts	14 ballasts	22 ballasts	22 ballasts
58 W (ABB ballasts 1 x 58 CF)	5 ballasts	11 ballasts	11 ballasts	11 ballasts	12[1] ballasts	12[1] ballasts
80 W (Helvar EL 1 x 80 SC)	3 ballasts	10 ballasts	10 ballasts	10 ballasts	12[1] ballasts	12[1] ballasts

1) = The number of ballasts is limited by the protection with B16/B20 circuit-breakers.

2) = For multiple element lamps or other types, the number of electronic ballasts must be determined using the peak inrush current of the electronic ballasts.

3) = The maximum peak inrush current may not be exceeded.

4) = Not intended for AC3 operation, see Technical Data for maximum AC3 current.

The following table provides an overview of the functions possible with the Switch Actuators and their application programs:

	SA/S 4.6.1.1 SA/S 8.6.1.1 SA/S 12.6.1.1	SA/S 2.6.2.1 SA/S 4.6.2.1 SA/S 8.6.2.1 SA/S 12.6.2.1	SA/S 2.10.2.1 SA/S 4.10.2.1 SA/S 8.10.2.1 SA/S 12.10.2.1	SA/S 2.16.2.1 SA/S 4.16.2.1 SA/S 8.16.2.1 SA/S 12.16.2.1	SA/S 2.16.5.1 SA/S 4.16.5.1 SA/S 8.16.5.1 SA/S 12.16.5.1	SA/S 2.16.6.1 SA/S 4.16.6.1 SA/S 8.16.6.1 SA/S 12.16.6.1
Type of installation	MDRC	MDRC	MDRC	MDRC	MDRC	MDRC
Number of outputs	4/8/12	2/4/8/12	2/4/8/12	2/4/8/12	2/4/8/12	2/4/8/12
Module width (space unit)	4/6/8	2/4/8/12	2/4/8/12	2/4/8/12	2/4/8/12	2/4/8/12
Manual operation	–	■	■	■	■	■
Contact position display	–	■	■	■	■	■
I_n rated current (A)	6 A	6 AX	10 AX	16 A	16/20 AX C-Load	16/20 AX C-Load
Current detection	–	–	–	–	–	■
Switch function						
– ON/OFF delay	■	■	■	■	■	■
– Staircase light	■	■	■	■	■	■
– Warning before end of staircase lighting	■	■	■	■	■	■
– Staircase lighting time set via object	■	■	■	■	■	■
– Flashing	■	■	■	■	■	■
– Switch response can be set (N.O./N.C.)	■	■	■	■	■	■
– Thresholds	■	■	■	■	■	■
Current detection	–	–	–	–	–	■
– Threshold value monitoring	–	–	–	–	–	■
– Measured value detection	–	–	–	–	–	■
Function Scene	■	■	■	■	■	■
Function Logic						
– Logic AND function	■	■	■	■	■	■
– Logic OR function	■	■	■	■	■	■
– Logic XOR function	■	■	■	■	■	■
– Gate function	■	■	■	■	■	■
Priority object/forced operation	■	■	■	■	■	■
Heating/fan control						
– Switch ON/OFF (2 point control)	■	■	■	■	■	■
– Cyclical fault monitoring	■	■	■	■	■	■
– Automatic purging	■	■	■	■	■	■
Fan Coil control [1)]	■	■	■	■	■	■
Special functions						
– Default position on bus voltage failure/recovery	■	■	■	■	■	■
– Status messages	■	■	■	■	■	■

—

■ = Function is supported

– = Function is not supported

1) = See special
ABB i-bus® KNX devices of the HVAC area, e.g. Blower actuator FCL/S or Fan Coil actuator FCA/S.

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ABB i-bus® KNX – Outputs

SA/S 8.6.1.1

Switch Actuator, 6 A, MDRC

Using floating contacts it switches 4, 8 or 12 independent electrical loads. The 6 A-AC3 devices are suited for switching resistive, inductive and capacitive loads. Please note: Increased module width compared to previous generation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	4	SA/S 4.6.1.1	2CDG110152R0011		0.18	1
8-fold	6	SA/S 8.6.1.1	2CDG110153R0011		0.27	1
12-fold	8	SA/S 12.6.1.1	2CDG110154R0011		0.35	1

SA/S 8.6.2.1

Switch Actuator with manual Operation, 6 A, MDRC

Switches 2, 4, 8 and 12 independent electrical loads using floating contacts. Every output can be operated manually and features display of the switching state. The 6 A-AC3 devices are suited for switching resistive, inductive and capacitive loads.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.6.2.1	2CDG110180R0011		0.18	1
4-fold	4	SA/S 4.6.2.1	2CDG110181R0011		0.29	1
8-fold	8	SA/S 8.6.2.1	2CDG110182R0011		0.51	1
12-fold	12	SA/S 12.6.2.1	2CDG110183R0011		0.74	1

SA/S 4.10.2.1

Switch Actuator, 10 AX, MDRC

Switches 2, 4, 8 and 12 independent electrical loads using floating contacts.
Every output can be operated manually and features display of the switching state.
The 10AX-AC1 devices are especially suited for switching resistive, inductive and capacitive loads such as fluorescent lighting (AX) compliant to EN 60669.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.10.2.1	2CDG110155R0011		0.18	1
4-fold	4	SA/S 4.10.2.1	2CDG110156R0011		0.29	1
8-fold	8	SA/S 8.10.2.1	2CDG110157R0011		0.51	1
12-fold	12	SA/S 12.10.2.1	2CDG110158R0011		0.74	1

SA/S 8.16.2.1

Switch Actuator, 16 A, MDRC

Switches 2, 4, 8 and 12 independent electrical loads using floating contacts.
Every output can be operated manually and features display of the switching state.
The 16A-AC1 devices are suited for switching resistive, inductive and capacitive loads.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.16.2.1	2CDG110159R0011		0.18	1
4-fold	4	SA/S 4.16.2.1	2CDG110160R0011		0.29	1
8-fold	8	SA/S 8.16.2.1	2CDG110161R0011		0.51	1
12-fold	12	SA/S 12.16.2.1	2CDG110162R0011		0.74	1

SA/S 12.16.5.1

Switch Actuator, 16/20 AX, C-Load, MDRC

Uses floating contacts to switch independent electrical loads via ABB i-bus® KNX. Every output can be operated manually and features display of the switching state. The 16AX-AC3, C-Load devices are especially suited for switching loads with high surge currents such as luminaries with ballasts or fluorescent lighting (AX) according to EN 60669.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.16.5.1	2CDG110132R0011		0.19	1
4-fold	4	SA/S 4.16.5.1	2CDG110133R0011		0.31	1
8-fold	8	SA/S 8.16.5.1	2CDG110134R0011		0.59	1
12-fold	12	SA/S 12.16.5.1	2CDG110137R0011		0.85	1

SA/S 8.16.6.1

Switch Actuator with Current Detection, 16/20 AX, C-Load, MDRC

Switches with floating contacts, 2, 4, 8 or 12 independent electrical loads with high surge currents. The Switch Actuators feature a circuit for high precision current detection for each output that is used to monitor the connected circuits. Every output can be operated manually and features display of the switching state. The 16/20A, C-Load devices are especially suited for switching loads with high surge currents such as luminaries with ballasts or fluorescent lighting (AX) according to EN 60669.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	2	SA/S 2.16.6.1	2CDG110112R0011		0.21	1
4-fold	4	SA/S 4.16.6.1	2CDG110113R0011		0.38	1
8-fold	8	SA/S 8.16.6.1	2CDG110114R0011		0.69	1
12-fold	12	SA/S 12.16.6.1	2CDG110138R0011		0.90	1

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ABB i-bus® KNX – Outputs

6151/11 U-500

Switch Actuator, 1-fold, FM

For switching 230 V~ consumers. Equipped with two extension inputs which depending on parameterization can act directly on the switching output or alternatively as binary inputs on the KNX bus. One Normally open contact, potential free; switching voltage: 230 V AC; 50/60 Hz; max. switching current: 16 A; switching capacity: up to 2.500 W depending on the consumer. Rated voltage: 230 V~, +10% / –10%, 50 Hz – 60 Hz. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6151/11 U-500	2CKA006151A0245		0.11	1

IO/S 4.6.1.1

I/O Actuator, 6 A, MDRC

For the control of loads in residential areas, typically in hotel rooms and apartments.
The I/O Actuators provide binary inputs for the connection of conventional push-buttons and outputs for switching loads. Inputs and outputs can be internally connected by ETS.
By integrating the devices into KNX networks further functions can be realised: e.g. central control or room based emergency calls to a control centre.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	4	IO/S 4.6.1.1	2CDG110168R0011		0.17	1
8-fold	8	IO/S 8.6.1.1	2CDG110169R0011		0.30	1

AA/S 4.1.2

AA/A 2.1.2

Analogue Actuator

The Analogue Actuators convert KNX telegrams in voltage or current signals. These analogue output signals are used to influence regulatory processes. For example, devices for heating, air conditioning or ventilation applications can be adjusted in their operation depending on the information, which are transmitted via the bus system. The Analogue Actuators are available in a 4-fold DIN rail version and a 2-fold device with surface mounting housing. The ABB i-bus® Tool is supported for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, MDRC	4	AA/S 4.1.2	2CDG110202R0011		0.19	1
2-fold, SM	4	AA/A 2.1.2	2CDG110203R0011		0.30	1

EQmatic Energy Analyzer

Energy management is getting smarter

Identify energy guzzlers and sustainably reduce energy costs – ABB's EQmatic Energy Analyzer makes it possible. The intelligent energy meter from the EQmatic range uses M-Bus to read, save, and analyze energy consumption data from electric, gas, water, and heat meters. It accesses meters via an intuitive, web-based user interface, which can be flexibly configured to meet specific demands. Especially practical: the energy meters can be extended at any time when needed. **abb.com/buildings**

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ABB i-bus® KNX –Shading Control

Modern building installation enables a high degree of functionality and simultaneously complies with increased security requirements. Due to the structured installation of the electrical components, it is possible to carry out rapid planning, installation and setup as well as achieve cost benefits during operation.

Modern sun protection devices have a significant role, as they must fulfil many demands:

- Anti-glare protection (e.g. PC workstations)
- Utilization of daylight by tracking the sun‘s position and directing available daylight
- Protecting furniture and carpets from fading
- Regulating the room temperature (overheating protection in summer; harvesting the available energy on cold days)
- Providing protection from people looking in from the outside
- Protection against intruders.

With the Blind/Roller Shutter Actuators JRA/S, the complex requirements on a sustainable and energy efficient automatic sun protection control can be implemented in offices, residential and functional buildings via ABB i-bus® KNX.

The Blind/Roller Shutter Actuators are ideal for the control of drives in the area of sun protection:

- Blinds, exterior blinds, slat blinds and panel curtains
- Roller shutters, roller blinds, screens, vertical blinds
- Awnings, pleated blinds, pleated curtains, etc.

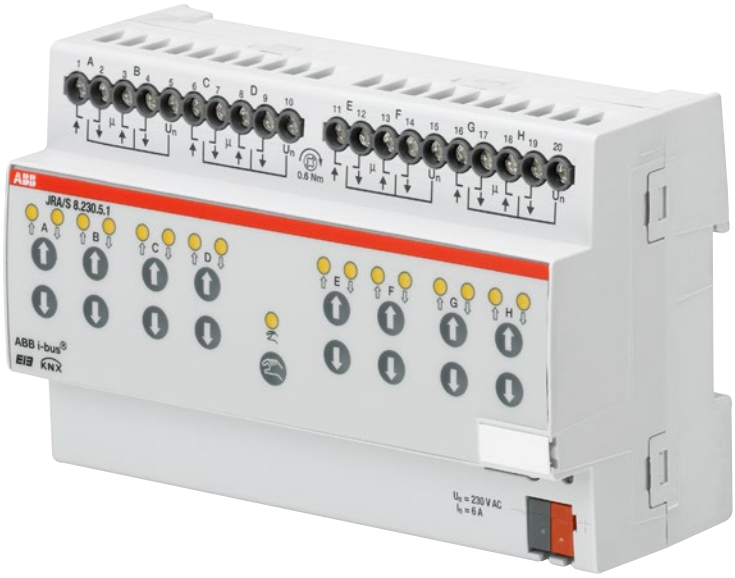
Optimum room air quality via automatic ventilation

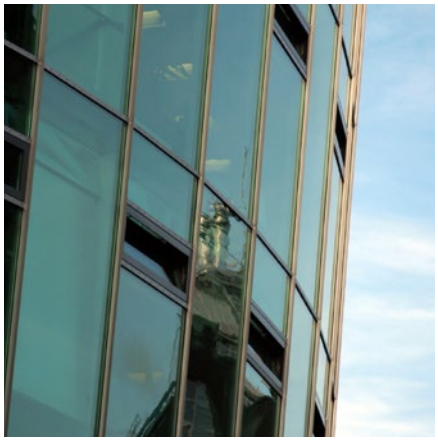
The demands for the reduction of energy consumption often results in poor ventilation in today‘s heavily insulated buildings. The quality of the room air does not comply with the desired and required level.

Natural ventilation is often an effective and efficient method for exchanging the “used” room air and improving the air quality in the room. If the air quality in the room is monitored with sensors (temperature, humidity, CO_2 concentration), the ventilation flaps can be opened automatically and in good time ensuring that the air quality is kept in a comfortable range.

Blind/Roller Shutter Actuators are ideal for control of ventilation elements such as

- Ventilation flaps
- Roof hatches, skylights
- Windows, doors and gates





Automatic travel detection
Travel times for the connected drives can be easily determined during operation with the automatic travel detection feature. It saves time during setup. Furthermore, compensation of age and weather-related length changes to blinds or roller shutters is assured. It facilitates precise positioning of the blinds/shutter when using sun position-dependent control.

Diagnostics
Enhanced diagnostic messages can be issued with the Blind/Roller Shutter Actuators. They are particularly useful during setup or in the event of faults. It is possible, for example, to detect and signal if the power supply to a drive is interrupted.

Copy and exchange
This function allows parameter settings of an output to be copied or exchanged with other freely selectable outputs.
This is possible within a device or in conjunction with several devices. Copy and exchange is useful particularly on projects, where all drives of a facade are controlled identically.
It shortens the setup process and reduces the possible sources of error with parameterization.

Integration in the room temperature control
The intelligent and networked blind and roller shutter control plays an important role in the energy efficient usage of a building. The level of sunlight in the room and heating up due to the sun‘s energy can be controlled in conjunction with the room climate control. The software function “overheat control” prevents unintentional overheating of a room. The blinds are closed in good time. The shutter control can be actively involved in the room temperature control – a requirement for implementing high-efficient buildings compliant to EN 15232.

Intelligent Building Solutions

ABB i-bus® KNX –Shading Control

	Standard					SMI	
	JRA/S X.230.5.1	**JRA/S 4.24.5.1**	**JRA/S X.230.2.1**	**JRA/S X.230.1.1**	**JRA/S 6.230.3.1**	**SJR/S 4.24.2.1**	**JA/S 4.SMI.1M**
General							
Supply voltage	KNX	KNX	KNX	KNX	KNX	KNX	KNX
Nominal voltage	230 V AC	24 V DC	230 V AC	230 V AC	230 V AC	24 V DC	230 V AC
Auxiliary voltage	–	–	–	–	–	230 V AC	230 V AC
Type of installation			MDRC			MDRC	
Module width (18 mm)	2-fold: 4 4-fold: 4 8-fold: 8	4-fold: 4	2-fold: 4 4-fold: 4 8-fold: 8	2-fold: 4 4-fold: 4 8-fold: 8	4-fold: 12	4-fold: 4	4-fold: 4
Number of outputs	X = 2, 4, 8	4	X = 2, 4, 8	X = 2, 4, 8	6	4 x 4 SMI LoVo (broadcast)	4 x 4 SMI (broadcast)
Manual operation	■	■	■	–	–	■	■
Inputs							
Internal connection between Inputs and Outputs	–	–	–	–	■	–	–
Blind/shutter control; dimming and switching control; value sending	–	–	–	–	■	–	–
Manual functions							
Disable/enable manual operation	■	■	■	–	–	■	■
Status manual operation	■	■	■	–	–	■	■
Operating modes							
Control with slat adjustment (blinds, etc.)	■	■	■	■	■	■	■
Control without slat adjustment (shutters, awnings, etc.)	■	■	■	■	■	■	■
Ventilation flaps, switch mode	■	■	■	■	■	–	–
Direct mode							
Limit UP/DOWN/STOP	■	■	■	■	–	■	■
Slat adjustment	■	■	■	■	■	■	■
Position height/slat [0…255]	■	■	■	■	■	■	■
Preset Move to position/Set position	■	■	■	■	–	■	■
Limited UP/DOWN	■	■	■	■	–	■	■
Enable limitation	■	■	■	■	–	■	■
Trigger travel detection	■	■	–	–	–	–	–
Trigger reference movement	■	■	■	■	■	–	–
8-bit scene	■	■	■	■	■	■	■

■ = Function is supported

– = Function is not supported

	Standard					SMI	
	JRA/S X.230.5.1	**JRA/S 4.24.5.1**	**JRA/S X.230.2.1**	**JRA/S X.230.1.1**	**JRA/S 6.230.3.1**	**SJR/S 4.24.2.1**	**JA/S 4.SMI.1M**
Safety							
Wind/Rain/Frost alarm	■	■	■	■	■	■	■
Disable control	■	■	■	■	–	■	■
Forced operation (1-bit and 2-bit)	■	■	■	■	–	■	■
Reaction after bus voltage failure/recovery, programming	■	■	■	■	■	■	■
Automatic mode							
Activation of automatic control	■	■	■	■	■	■	■
Position height/ slat position if sunny	■	■	■	■	■	■	■
Presence	■	■	■	■	–	■	■
Heating/Cooling	■	■	■	■	–	■	■
Overheat control	■	■	■	■	–	–	–
Enable/disable automatic control	■	■	■	■	■	■	■
Enable/disable direct operation	■	■	■	■	■	■	■
Status messages							
Height/slat [0…255]	■	■	■	■	■	■	■
Upper/lower end position	■	■	■	■	■	■	■
Operability	■	■	■	■	■	■	■
Automatic	■	■	■	■	■	■	■
Status byte (2-byte)	■	■	■	■	■	–	–
SMI	–	–	–	–	–	■	■
Positions/limit position	–	–	–	–	–	■	■
Auxiliary voltage	–	–	–	–	–	■	■
SMI Diagnostic byte	–	–	–	–	–	■	■
Various							
Automatic travel detection	■	■	–	–	–	–	–
Time-delayed switching of drives	■	■	■	■	–	■	■
Limit rate of telegrams	■	■	■	■	■	–	–
Transmission and switching delay	■	■	■	■	–	–	–
In operation function	■	■	■	■	■	–	–
Request status values	■	■	■	■	■	–	–
Extended setting options for drives and blinds/shutters	■	■	■	■	■	■	■
Total turning of slats after move down command	■	■	■	■	–	–	–
Position of slat after arriving on lower end position	■	■	■	■	■	■	■
Commissioning and diagnostic function							
Control and diagnosis via ABB i-bus® Tool	■	■	■	■	–	–	–
Binary Outputs							
Relay output 6 A (number of outputs)	x = 2, 4, 8	4	x = 2, 4, 8	x = 2, 4, 8	6	–	–
Forced operation	■	■	■	■	■	–	–
Time function							
Staircae lighting, flashing, On/Off delay	–	–	–	–	■	–	–
Logic	–	–	–	–	■	–	–
Scene	–	–	–	–	■	–	–

—

■ = Function is supported

– = Function is not supported

Intelligent Building Solutions

ABB i-bus® KNX –Shading Control

JRA/S 8.230.5.1

Blind/Roller Shutter Actuator with Travel Detection and Manual Operation, 230 V AC, MDRC

For the control of independent 230 V AC drives via ABB i-bus® KNX. The devices are designed for positioning blinds, roller shutters, awnings and other shading products as well as for controlling doors, windows and ventilation flaps. Additional auxiliary voltage is not needed. The travel times of the drive are detected automatically via current detection. To protect the drives, the output contacts are electromechanically locked against each other. Push buttons are located at the front of the device to control the outputs e.g. during commissioning. The current status of the output is displayed via LEDs.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	JRA/S 2.230.5.1	2CDG110124R0011		0.21	1
4-fold	4	JRA/S 4.230.5.1	2CDG110125R0011		0.25	1
8-fold	8	JRA/S 8.230.5.1	2CDG110126R0011		0.46	1

JRA/S 4.24.5.1

Blind/Roller Shutter Actuator with Travel Detection and Manual Operation, 4-fold, 24 V DC, MDRC

For the control of up to 4 independent 24 V DC drives via ABB i-bus® KNX. The device is designed for positioning blinds, roller shutters, awnings and other shading products as well as for controlling doors, windows and ventilation flaps. Additional auxiliary voltage is not needed. The travel times of the drive are detected automatically via current detection. Push buttons are located at the front of the device to control the outputs e.g. during commissioning. The current status of the output is displayed via LEDs.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	JRA/S 4.24.5.1	2CDG110128R0011		0.21	1

JRA/S 2.230.2.1

Blind/Roller Shutter Actuator with Manual Operation, 230 V AC, MDRC

For the control of independent 230 V AC drives via ABB i-bus® KNX. The devices are designed for positioning blinds, roller shutters, awnings and other shading products as well as for controlling doors, windows and ventilation flaps. Additional auxiliary voltage is not needed. To protect the drives, the output contacts are electromechanically locked against each other. Push buttons are located at the front of the device to control the outputs e.g. during commissioning. The current status of the output is displayed via LEDs.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	JRA/S 2.230.2.1	2CDG110120R0011		0.21	1
4-fold	4	JRA/S 4.230.2.1	2CDG110121R0011		0.25	1
8-fold	8	JRA/S 8.230.2.1	2CDG110122R0011		0.46	1

JRA/S 2.230.1.1

Blind/Roller Shutter Actuator, 230 V AC, MDRC

For the control of independent 230 V AC drives via ABB i-bus® KNX. The devices are designed for positioning blinds, roller shutters, awnings and other shading products as well as for controlling doors, windows and ventilation flaps. Additional auxiliary voltage is not needed. To protect the drives, the output contacts are electromechanically locked against each other.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	JRA/S 2.230.1.1	2CDG110129R0011		0.21	1
4-fold	4	JRA/S 4.230.1.1	2CDG110130R0011		0.25	1
8-fold	8	JRA/S 8.230.1.1	2CDG110131R0011		0.46	1

JRA/S 6.230.3.1

Blind/Roller Shutter Actuator with Binary Inputs, 6-fold, 230 V, MDRC NEW

For the control of 6 independent Blind/ Roller drives or air dampers. Via the 12 binary input a direct operation of the outputs is possible with conventional switch sensors. The binary inputs may also be used for other operations (e.g. switching, dimming). To protect the drives, the output contacts are electromechanically locked against each other.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	12	JRA/S 6.230.3.1	2CDG110208R0011		0.55	1

6152/11 U-500

Shutter Actuator, 1-fold, FM

For controlling blind or awning motors. With 3 inputs and 1 change-over output – normally open contact, potential-bound –. Rated voltage: 230 V~, +10% / – 10%, 50 Hz – 60 Hz. Input polling voltage: 5 V. Output rated current: 3 A, cos ϕ 0.8, Output voltage: 250 V~.
The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6152/11 U-500	2CKA006152A0040		0.11	1

6173/11 U-500

Combi Actuator, FM

For controlling blind or awning motors. For connecting thermoelectric actuating drives. With 3 inputs and 2 outputs. A first output (O1) allows the control of electrically-operated Venetian blinds, roller shutters, awnings, venting louvers or similar blinds for 230 V AC mains voltage. One additional electronic switching output (O2) allows silent control of electrothermal valve drives for heating or cooling systems. The bus can be connected via enclosed terminal block. Rated voltage: 230 V~, +10% / –10%, 50 Hz – 60 Hz. Input polling voltage 5V. O1 Rated current 3 A, cos ϕ 0.8; Output voltage: 250 V~. O2: Rated current: 25 mA, cos ϕ 1, Output voltage: 250 V~.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6173/11 U-500	2CKA006151A0249		0.11	1

Intelligent Building Solutions

ABB i-bus® KNX –Shading Control

JA/S 4.SMI.1M

SMI Shutter Actuator with Manual Operation, 4-fold, MDRC

It controls four independent groups (broadcast) with up to four SMI (Standard Motor Interface) drives (230 V) for positioning blinds, roller shutters, awnings and other shading products. Status signals (motor fault, direction of movement) can also be sent from the SMI drive on the bus. Push buttons are located at the front of the device to control the outputs e.g. during commissioning. The current status of the output is displayed via LEDs.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	JA/S 4.SMI.1M	2CDG110028R0011		0.25	1

SJR/S 4.24.2.1

SMI Blind/Roller Shutter Actuator, 4-fold, LoVo, MDRC

It controls four independent groups (broadcast) with up to four SMI (Standard Motor Interface) LoVo drives for positioning blinds, roller shutters, awnings and other shading products. Status signals (motor fault, direction of movement) can also be sent from the SMI drive on the bus. Push buttons are located at the front of the device to control the outputs e.g. during commissioning. The current status of the output is displayed via LEDs.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SJR/S 4.24.2.1	2CDG110143R0011		0.25	1

JSB/S 1.1

Shutter Control Unit, MDRC

Controls shutter and blind actuators according to the position of the sun. The shutter control unit contains the functions of anti-glare protection and daylight redirection for up to 4 facades. Automatic shading can be implemented for every building and climatic control can be supported by the comprehensive range of parameter settings in the ETS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	JSB/S 1.1	GHQ6310084R0111		0.12	1

Intelligent Building Solutions

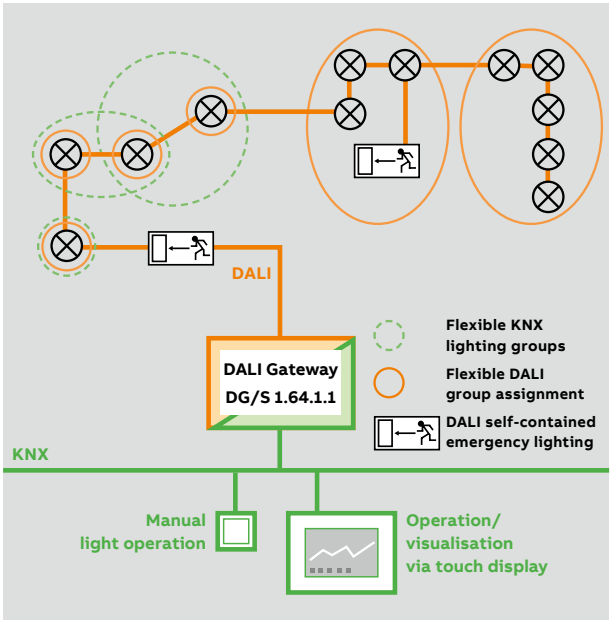
ABB i-bus® KNX – Lighting Control – DALI

The ABB DALI Gateways are used to interface between DALI (Digital Addressable Lighting Interface) and KNX installations. Two new Gateways will be available in April 2017: DG/S 1.64.1.1 DALI-Gateway (1fold) and DG/S 2.64.1.1 DALI Gateway (2fold). Both incorporate the DALI power supply.

Both Gateways are equipped with emergency lighting function, support the DALI standard EN 62386-202 that specifies DALI emergency lighting (self-contained).

DALI-Gateway DG/S 1.64.1.1
Flexibility by controlling light individually per device or in groups

The DG/S 1.64.1.1 DALI-Gateway (1fold) can install up to 64 DALI devices both via 16 flexible DALI (orange lined group) and KNX lighting groups (green dotted lined group), each with one or more DALI participants. Control and Monitoring via KNX. Control and status feedback can also be carried out via Broadcast. 16 independent Lighting scenes are available.



DALI-Gateway DG/S 2.64.1.1
Maximum flexibility combined with highest amount of DALI participants and groups, to meet all customer needs

The DG/S 2.64.1.1 DALI-Gateway (2fold) can install up to 2 x 64 DALI devices both via 2 x 16 flexible DALI (orange lined group) and KNX lighting groups (green dotted lined group), each with one or more DALI participants. Control and Monitoring via KNX. Control and status feedback can also be carried out via Broadcast. 2 x 16 independent Lighting scenes are available.

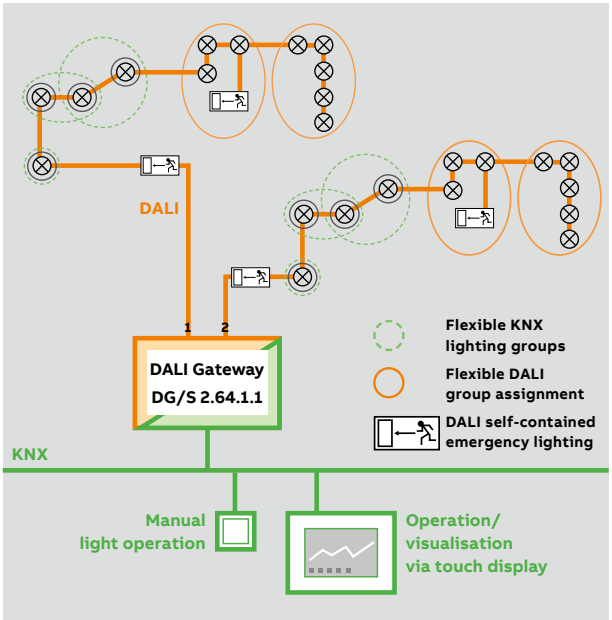


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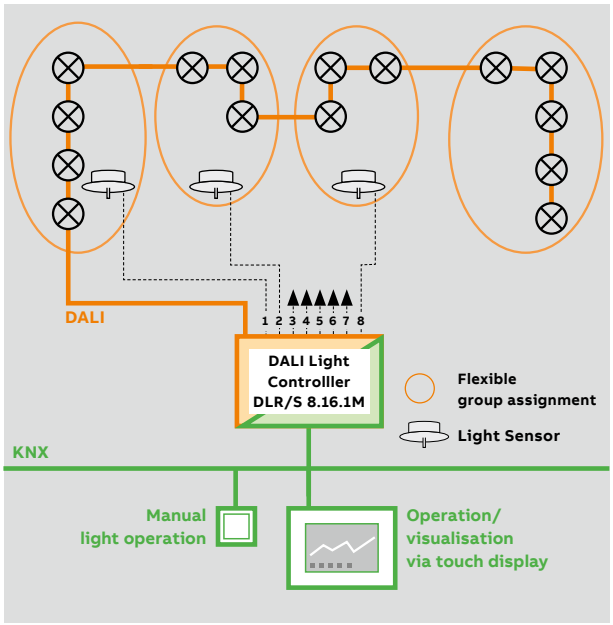
ABB i-bus® KNX – Lighting Control – DALI

DALI Light Controller DLR/S 8.16.1M
Energy through constant lighting control

Control via 16 lighting groups. Up to 8 lighting groups can be controlled with 8 light sensors. Master-slave, staircase light and Scene mode round off the functions.



DALI Light Controller DLR/A 4.8.1.1
Decentralized Constant Lighting Control

The new DALI Light Controller DLR/A 4.8.1.1 is a surface mounting device for switching and dimming of 8 independent lighting groups. A maximum of 64 DALI devices can be connected. The device can be used for 4-fold constant lighting control in connection with 4 Light Sensors LF/U 2.1. Furthermore staircase lighting and master / slave functions are provided. Fault feedback messages, e.g. concerning ballast or lamp failures, can be programmed and activated via KNX. The compact surface-mounted housing allows the decentralized installation in the underfloor or in false ceilings – optimal for the use with Room Controller RC/A.

DALI Gateway DG/S 8.1
The proven technology

Lighting groups are formed via “rigid” hardware wiring.
Fast commissioning as no addressing is necessary.
No readdressing when a ballast is exchanged. 8 x 16 DALI devices.

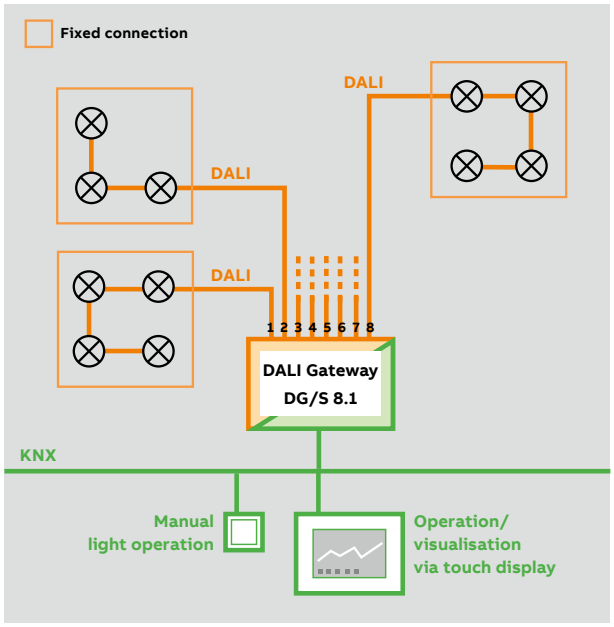


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ABB i-bus® KNX – Lighting Control – DALI

	Gateways			Light Control	
	DG/S 1.64.1.1	**DG/S 2.64.1.1**	**DG/S 8.1**	**DLR/S 8.16.1M**	**DLR/A 4.8.1.1**
General					
Supply voltage	100 – 240 V AC (85...265 V AC ; 110...240 V DC)	100 – 240 V AC (85...265 V AC ; 110...240 V DC)	100 – 240 V AC (85...265 V AC ; 110...240 V DC)	100 – 240 V AC (85...265 V AC ; 110...240 V DC)	100 – 240 V AC (85...265 V AC ; 110...240 V DC)
Type of installation	MDRC	MDRC	MDRC	MDRC	SM
Module width (18 mm)	4	4	6	6	220 x 147 x 50 mm
Number of outputs	1	2	8	1	1
Light sensor inputs	–	–	–	8	4
Degree of protection	IP20	IP20	IP20	IP20	IP54
Integrated power supply	■	■	■	■	■
Number of DALI participants	64	2 x 64	8 x 16	64	64
Broadcast control	■	■	■	■	■
Number of group control	16	2 x 16	–	16	8
Individual control	64	2 x 64	–	–	–
Self-contained emergency lighting, IEC 62 386-202	■	■	–	–	–
Manual operation	■	■	■	■	■
Functions					
Enable/disable DALI address assignment	■	■	–	■	■
Switching, dimming, set brightness	■	■	■	■	■
Slave	■	■	■	■	■
Staircase lighting	■	■	■	■	■
Burn-in	■	■	■	■	■
Scenes	■	■	■	■	■
Forced	■	■	–	■	■
Sequence	–	–	–	–	–
Emergency lighting test	■	■	–	–	–
Partial failure	■	■	–	–	–
Constant light control	–	–	–	■	■
Reaction on KNX bus voltage failure	■	■	■	■	■
Reaction on KNX voltage recovery	■	■	■	■	■
Reaction on DALI bus voltage failure	■	■	■	■	■
Reaction on DALI voltage recovery	■	■	■	■	■
Power on level	■	■	–	■	■
Device or lamp fault	■	■	■	■	■
Cyclic monitoring telegram	■	■	■	■	■
DALI telegram rate modifiable	■	■	–	–	–
Commissioning and diagnostic functions					
Control and diagnosis via ABB i-bus® Tool	■	■	–	■	■
Device assignment	■	■	–	■	■
Group assignment	■	■	–	■	■
Fault DALI device	■	■	■	■	■
Fault lamp	■	■	■	■	■
Function test	■	■	■	■	■
Constant light control	–	–	–	■	■
Emergency lighting	■	■	–	–	–

■ = Function is supported

– = Function is not supported

DG/S 1.64.1.1

DALI-Gateway, Basic, 1-fold, MDRC

The device is used to interface between DALI and KNX installations and incorporates the DALI power supply. One DALI output for up to 64 DALI Slaves. Control and status feedback is carried out via KNX per DALI slave (64), with lighting groups (16), together in broadcast or per scenes (16). Extensive fault and error messages are available. Self-contained emergency converter (64) acc. EN 62386-202 will be supported. By means of KNX and emergency converter, different emergency tests (e.g. function and duration test) can be triggered. Feedback is sent. Slave-, staircase-, force-, block- and scene- function are integrated. DALI telegram rate can change. For diagnostic use and individual change of the DALI address or group assignment a separate ABB i-bus® Tool is available.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	DG/S 1.64.1.1	2CDG110198R0011		0.133	1

DG/S 2.64.1.1

DALI-Gateway, Basic, 2-fold, MDRC

The device is used to interface between DALI and KNX installations and incorporates the DALI power supply. Two DALI output for up to 2 x 64 DALI Slaves. Control and status feedback is carried out via KNX per DALI slave (2 x 64), with lighting groups (2 x 16), together in two broadcasts or per scenes (2 x 16). Extensive fault and error messages are available. Self-contained emergency converter (2 x 64) acc. EN 62386-202 will be supported. By means of KNX and emergency converter, different emergency tests (e.g. function and duration test) can be triggered. Feedback is sent. Slave-, staircase-, force-, block- and scene- function are integrated. DALI telegram rate can change. For diagnostic use and individual change of the DALI address or group assignment a separate ABB i-bus® Tool is available.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	DG/S 2.64.1.1	2CDG110199R0011		0.15	1

DG/S 8.1

DALI Gateway, 8-fold, MDRC

For controlling up to 128 DALI devices. There are 8 separate, independent DALI outputs/ channels available. Up to 16 DALI devices can be connected per channel. The DALI power supply is integrated in the gateway. The functions of switching, dimming, set values and fault indication for lamps and electronic ballasts are available for each output. It is possible to set the lamp burn-in time and 16 light scenes. Commissioning is simplified as no addressing or commissioning of the DALI devices is necessary.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	DG/S 8.1	2CDG110025R0011		0.31	1

Intelligent Building Solutions

ABB i-bus® KNX – Lighting Control – DALI

DLR/S 8.16.1M

DALI Light Controller, 8-fold, MDRC

For switching and dimming of 16 independent lighting groups. A maximum of 64 DALI devices can be connected. The device can be used for 8-fold constant lighting control in connection with eight Light Sensors LF/U 2.1. Fault feedback messages can be programmed and activated via KNX. With comfortable manual operation and status display.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	DLR/S 8.16.1M	2CDG110101R0011		0.26	1

DLR/A 4.8.1.1

DALI Light Controller, 4-fold, SM

Surface mounting device for switching and dimming of 16 independent groups of luminaries. Up to 64 DALI participants can be connected to one DALI control line. When combined with the light sensor LF/U 2.1 the device can be used as a 8-fold light controller for constant light control. Additionally a staircase and master/slave function is integrated.
A great number of status feedback e.g. lamp and ballast fault can be transferred from DALI to KNX. With this functions the DALI light controller is a key factor in every energy efficient building automation. With his surface mounting housing it is possible to insert the device central in false ceiling or underfloor installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	DLR/A 4.8.1.1	2CDG110172R0011		0.66	1

Intelligent Building Solutions

ABB i-bus® KNX – Lighting Control

	Universal Dim Actuators			LED Dimmer with constant curve	
	UD/S x.210.2.1	**UD/S 2.300.2**	**6197/x-101-500 (x=12-15, 52, 53)**	**6155/30-500 1–4-fold**	**6155/40-500 1–4-fold with power supply**
General					
Supply voltage	110 – 230 V AC ± 10 %, 50/60 Hz	230 V -15/+10 %, 50/60 Hz	230 V AC ± 10 %, 50/60 Hz	12...24 V DC	230 V AC ± 10%, 50/60 Hz
Type of installation	MDRC	MDRC	MDRC	Wall (surface)	Wall (surface)
Module width (18 mm)	6/8	4	8/12	–	–
Number of outputs	4/6	2	1, 4, 6	4	4
Maximum load per channel	4 x 210 W (bridged 1 x 800 W)/ 6 x 210 W (bridged 1 x 1200 W)	2 x 300 W, or 1x 500 W/VA	210, 315, 600, 1260, 2400 VA	1 x 10 A/ 4 x 2.5 A	1 x 4 A/ 4 x 1 A
Incoming supply	4/6 phase inputs	2 phase inputs	3 phase inputs	1 phase input	1 phase input
Load types					
230 V incandescent lamps	■	■	■	–	–
230 V halogen lamps	■	■	■	–	–
Low-voltage halogen lamps with conventional transformers or electronic transformers	■	■	■	–	–
LED strips or 12/24 V lamps	–	–	–	■	■
LED Retrofit 230 V	■	–	■ 1)	–	–
Grouping of channels for load increase	■	■ 2)	■	■	■
Switching					
Brightness value when turned on	■	■	■	■	■
Dimming speed for switching on and off	■	■	■	■	■
Dimming					
Min. and max. dimming values	■	■	■	■	■
Switching on/off via rel. dimming	■	■	■	■	■

■ = Function is supported

– = Function is not supported

1) = Selected LED retrofit lamps are tested and approved. Restrictions have to be observed Details see Busch-Dimmer® Tool (www.busch-jaeger.com)

2) = One channel uses 500 W

Intelligent Building Solutions

ABB i-bus® KNX – Lighting Control

	Universal Dim Actuators			LED Dimmer with constant curve	
	UD/S x.210.2.1	UD/S 2.300.2	6197/x-101-500 (x=12-15, 52, 53)	6155/30-500 1–4-fold	6155/40-500 1–4-fold with power supply
Further functions					
Forced operation	■	■	–	–	–
Dimming curve adjustment	■	■	■	–	–
Reaction on bus voltage failure	■	■	■	–	–
Behavior on bus voltage recovery	■	■	■	■	■
Status feedback	■	■	■	■	■
Blocking channel	■	■	■	■	■
Scenes	■	■	■	■	■
Phase angle control: automatic, leading or trailing edge	■	■	■	–	–
Additional logic functions	■	–	■	–	–
Staircase lighting	■	■	■	–	–

■ = Function is supported

– = Function is not supported

	Switch/Dim Actuators			Constant Light Control	
	SD/S 2.16.1	**SD/S 4.16.1**	**SD/S 8.16.1**	**LR/S 2.16.1**	**LR/S 4.16.1**
General					
Supply voltage	KNX	KNX	KNX	KNX	KNX
Type of installation	MDRC	MDRC	MDRC	MDRC	MDRC
Module width (18 mm)	4	6	8	4	6
Number of outputs 1-10 V (passive)	2	4	8	2	4
Manual operation	■	■	■	■	■
Maximum current per control output	100 mA	100 mA	100 mA	100 mA	100 mA
Maximum cable length at maximum load (100 mA)	70 m (cable cross-section 0.8 mm^2) 100 m (cable cross-section 1.5 mm^2)	70 m (cable cross-section 0.8 mm^2) 100 m (cable cross-section 1.5 mm^2)	70 m (cable cross-section 0.8 mm^2) 100 m (cable cross-section 1.5 mm^2)	70 m (cable cross-section 0.8 mm^2) 100 m (cable cross-section 1.5 mm^2)	70 m (cable cross-section 0.8 mm^2) 100 m (cable cross-section 1.5 mm^2)
Light sensor (LF/U 2.1)	–	–	–	2	4
Maximum cable length per sensor (P-YCYM or J-Y(ST)Y cable (SELV), diameter 0.8 mm	–	–	–	100 m	100 m
Power loss per device at max. load	2.6 W	5.2 W	10.4 W	2.6 W	5.2 W
Switching capacity					
Rated current I_n	16 A AC1	16 A AC1	16 A AC1	16 A AC1	16 A AC1
Rated voltage U_n	250/440 V AC	250/440 V AC	250/440 V AC	250/440 V AC	250/440 V AC
AC1 operation (cos ϕ = 0.8) DIN EN 60 947-4-1	16 A	16 A	16 A	16 A	16 A
AC3 operation (cos ϕ = 0.45) DIN EN 60 947-4-1	8 A/ 230 V	8 A/ 230 V	8 A/ 230 V	8 A/ 230 V	8 A/ 230 V
Fluorescent lighting load AX DIN EN 60 669-1	10 A (140 µF) 1)	10 A (140 µF) 1)	10 A (140 µF) 1)	10 A (140 µF) 1)	10 A (140 µF) 1)
Minimum switching capacity	100 mA/12 V	100 mA/12 V	100 mA/12 V	100 mA/12 V	100 mA/12 V
DC current switching capacity (resistive load)	10 A/24 V DC	10 A/24 V DC	10 A/24 V DC	10 A/24 V DC	10 A/24 V DC
Mechanical service life	> 3 x 10^6	> 3 x 10^6	> 3 x 10^6	> 3 x 10^6	> 3 x 10^6
Electronic endurance to DIN IEC 60 947-4-1					
Rated current AC1 (240 V/cos ϕ = 0.8)	100,000	100,000	100,000	100,000	100,000
Rated current AC3 (240 V/cos ϕ = 0.45)	30,000	30,000	30,000	30,000	30,000
Rated current AC5a (240 V/cos ϕ = 0.45)	30,000	30,000	30,000	30,000	30,000
Incandescent lamp load at 230 V AC	2,300 W	2,300 W	2,300 W	2,300 W	2,300 W
Fluorescent lamps T5/T8					
Uncorrected	2,300 W	2,300 W	2,300 W	2,300 W	2,300 W
Parallel compensated	1,500 W	1,500 W	1,500 W	1,500 W	1,500 W
DUO circuit	1,500 W	1,500 W	1,500 W	1,500 W	1,500 W
Low-voltage halogen lamps					
Inductive transformer	1,200 W	1,200 W	1,200 W	1,200 W	1,200 W
Electronic transformer	1,500 W	1,500 W	1,500 W	1,500 W	1,500 W
Halogen lamp 230 V	2,500 W	2,500 W	2,500 W	2,500 W	2,500 W
Dulux lamps					
Uncorrected	1,100 W	1,100 W	1,100 W	1,100 W	1,100 W
Parallel compensated	1,100 W	1,100 W	1,100 W	1,100 W	1,100 W
Mercury-vapour lamps					
Inductive transformer	2,000 W	2,000 W	2,000 W	2,000 W	2,000 W
Electronic transformer	2,000 W	2,000 W	2,000 W	2,000 W	2,000 W

—

■ = Function is supported

– = Function is not supported

1) = The maximum peak inrush current may not be exceeded

Intelligent Building Solutions

ABB i-bus® KNX – Lighting Control

	Switch/Dim Actuators			Constant Light Control	
	SD/S 2.16.1	SD/S 4.16.1	SD/S 8.16.1	LR/S 2.16.1	LR/S 4.16.1
Sodium-vapour lamps					
Inductive transformer	2,000 W	2,000 W	2,000 W	2,000 W	2,000 W
Electronic transformer	2,000 W	2,000 W	2,000 W	2,000 W	2,000 W
Max. peak inrush-current I_p (150 µs)	400 A	400 A	400 A	400 A	400 A
Max. peak inrush-current I_p (250 µs)	320 A	320 A	320 A	320 A	320 A
Max. peak inrush-current I_p (600 µs)	200 A	200 A	200 A	200 A	200 A
Number of ballasts (T5/T8, single element) e.g.[1)]					
18 W (ABB EVG 1 x 18 SF)	23	23	23	23	23
24 W (ABB EVG 1 x 24 CY)	23	23	23	23	23
36 W (ABB EVG 1 x 36 CF)	14	14	14	14	14
58 W (ABB EVG 1 x 58 CF)	11	11	11	11	11
80 W (Helvar EL 1 x 80 SC)	10	10	10	10	10

	Switch/Dim Actuators			Constant Light Control	
	SD/S 2.16.1	SD/S 4.16.1	SD/S 8.16.1	LR/S 2.16.1	LR/S 4.16.1
Functions					
Brightness control	–	–	–	■	■
Brightness value	■	■	■	■	■
Dimming speed for transition brightness values	■	■	■	■	■
Min. and max. value limits	■	■	■	■	■
Set switching on and off via value	■	■	■	■	■
Presets	■	■	■	■	■
Scenes	■	■	■	■	■
Switch					
Brightness value when turned on	■	■	■	■	■
Dimming speed for switching on and off	■	■	■	■	■
Dimming					
Dimming speed can be changed via KNX	■	■	■	■	■
Min. and max. dimming values	■	■	■	■	■
Switching on/off via rel. dimming	■	■	■	■	■
Forced operation					
2-bit coded forced operation	■	■	■	■	■
Behaviour after voltage recovery	■	■	■	■	■
Block Activate output via 1-bit object	■	■	■	■	■
Special					
4-point characteristic adjustment	■	■	■	■	■
Preference with bus voltage failure	■	■	■	■	■
Status feedback	■	■	■	■	■
Additional					
Slave mode e.g. for integration in the constant lighting control	■	■	■	■	■
Staircase lighting	■	■	■	■	■
Prewarning via dimming and/or KNX object	■	■	■	■	■
Commissioning and diagnostic functions					
Control and diagnosis via ABB i-bus® Tool	–	–	–	■	■

■ = Function is supported

– = Function is not supported

1) = For multiple element lamps or other types, the number of electronic ballasts must be determined using the peak inrush current of the electronic ballasts

LR/S 4.16.1

Light Controller, 16 A, MDRC

The device enables the switching and dimming of 2 or 4 independent lighting circuits in conjunction with electronic ballasts. In combination with the Light Sensor LF/U 2.1, the device can be used for constant lighting control. 2 or 4 light sensors can be connected to the controller for precise detection of the lighting conditions.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	LR/S 2.16.1	2CDG110087R0011		0.25	1
4-fold	6	LR/S 4.16.1	2CDG110088R0011		0.40	1

LF/U 2.1

Light Sensor, FM

Used for implementing constant lighting control applications in conjunction with light controllers LR/S, LR/M, DLR/S 8.16.1M or DLR/A 4.8.1.1. The scope of delivery includes different optical rods, the connection terminals and the cover for discrete fitting in a room.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	LF/U 2.1	2CDG110089R0011		0.07	1

SD/S 8.16.1

Switch/Dim Actuator, 16 A, MDRC

Used for switching and dimming of 2, 4 or 8 independent groups of luminaries with electronic ballasts with 1 – 10 V control interfaces. On each channel the power supply of the ballasts is switched by a floating load relay (16 A – AC1). Every output can be operated manually and features display of the switching state. The device can assume a range of applications thanks to the programming options. The switching load is identical to the SA/S x.16.2.1 range (see Standard Outputs – Overview).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
2-fold	4	SD/S 2.16.1	2CDG110079R0011		0.21	1
4-fold	6	SD/S 4.16.1	2CDG110080R0011		0.32	1
8-fold	8	SD/S 8.16.1	2CDG110081R0011		0.56	1

Intelligent Building Solutions

ABB i-bus® KNX – Lighting Control

UD/S 4.210.2.1

LED Dimmer, 4-fold, 210 W/VA, MDRC **NEW**

Multichannel universal dimming actuator optimized for dimming of retrofit LED lamps (LEDi). Also suitable for dimming of incandescent lamps, low-voltage halogen lamps with conventional or electronic transformers, 230 V incandescent halogen lamps and dimmable halogen energy-saving lamps. Automatic load detection (deactivatable). One separate N-terminal per channel. Channel bridging possible in order to increase the maximum load. Outputs can be switched in parallel as required. Minimum load: 2 W. Manual operation on the device is possible also without bus voltage or in unprogrammed state. One LED control button per channel (including status indication) for ON and OFF switching as well as for up and down dimming. Programming of the device is possible without connecting 230 V supply voltage. Comprehensive test and diagnostic functions via the i-bus® Tool. Fast parameterization in the ETS by means of copyable channel templates. With integrated bus coupler.
Rated power at 230 V ~:

- 230 V ~ incandescent and halogen lamps: 4 x 210 W/VA to 1 x 800 W/VA.
- Dimmable 230 V ~ LEDi: 4 x 210 W/VA to 1 x 800 W/VA in trailing edge mode, 4 x 80 W/VA to 1 x 200 W/VA in leading edge mode.
- Inductive L-transformers with LED/low-voltage halogen lamps: 4 x 210 W/VA to 1 x 800 W/VA.
- Electronic C-transformers with LED/low voltage halogen lamps: 4 x 210 W/VA to 1 x 800 W/VA.
- Electronic LC transformers with LED/low-voltage halogen lamps: 4 x 80 W/VA to 1 x 200 W/VA.

Recommendation: Always use bulbs of one type and manufacturer.
Available June/July 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	6	UD/S 4.210.2.1	2CKA006197A0047			1

UD/S 6.210.2.1

LED Dimmer, 6-fold, 210 W/VA, MDRC **NEW**

Multichannel universal dimming actuator optimized for dimming of retrofit LED lamps (LEDi). Also suitable for dimming of incandescent lamps, low-voltage halogen lamps with conventional or electronic transformers, 230 V incandescent halogen lamps and dimmable halogen energy-saving lamps. Automatic load detection (deactivatable). One separate N-terminal per channel. Channel bridging possible in order to increase the maximum load. Outputs can be switched in parallel as required. Minimum load: 2 W. Manual operation on the device is possible also without bus voltage or in unprogrammed state. One LED control button per channel (including status indication) for ON and OFF switching as well as for up and down dimming. Programming of the device is possible without connecting 230 V supply voltage. Comprehensive test and diagnostic functions via the i-bus® Tool. Fast parameterization in the ETS by means of copyable channel templates. With integrated bus coupler.
Rated power at 230 V ~:

- 230 V ~ incandescent and halogen lamps: 6 x 210 W/VA to 1 x 1200 W/VA.
- Dimmable 230 V ~ LEDi: 6 x 210 W/VA to 1 x 1200 W/VA in trailing edge mode, 6 x 80 W/VA to 1 x 240 W/VA in leading edge mode.
- Inductive L-transformers with LED/low-voltage halogen lamps: 6 x 210 W/VA to 1 x 1200 W/VA.
- Electronic C-transformers with LED/low voltage halogen lamps: 6 x 210 W/VA to 1 x 1200 W/VA.
- Electronic LC transformers with LED/low-voltage halogen lamps: 6 x 80 W/VA to 1 x 240 W/VA.

Recommendation: Always use bulbs of one type and manufacturer.
Available June/July 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
6-fold	8	UD/S 6.210.2.1	2CKA006197A0049			1

UD/S 2.300.2

Universal Dim Actuator, 2-fold, 300 VA, MDRC

For switching and dimming of incandescent lamps, 230 V halogen lamps or low-voltage halogen lamps which are powered by wound or electronic transformers (automatic load detection). Output power 2 x 300 VA or 1 x 500 VA up to 45 °C ambient temperature at a minimum load of just 2 W. Both outputs are independent of one another and can be supplied by different phases. Comprehensive application program with scene and time functions.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	UD/S 2.300.2	2CDG110074R0011		0.24	1

6197/13-101-500

Universal Dim Actuator, MDRC

Multi-channel universal dimming actuator for control of incandescent lamps, 230 V halogen lamps, lowvoltage halogen lamps with conventional or electronic transformers and dimmable energy-efficient lamps. Optimized for dimming of Philips retrofit LEDs (LEDi).
Parallel connection of channels to increase load capacity via wire jumpers possible.
Status/state indication of the outputs via LED. Local operation even without bus voltage or in non-programmed state possible.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, 210 VA*	8	6197/12-101-500	2CKA006197A0036		0.42	1
4-fold, 315 VA	8	6197/13-101-500	2CKA006197A0037		0.42	1
6-fold, 315 VA	12	6197/14-101-500	2CKA006197A0038		0.91	1
4-fold, 600 VA	12	6197/15-101-500	2CKA006197A0039		0.91	1
1-fold, 1.260 VA	12	6197/52-101-500	2CKA006197A0040			1
1-fold, 2.400 VA	12	6197/53-101-500	2CKA006197A0041			1

* to be discontinued

6155/30-500

Build-In-Dimmer with constant curve for LED-strips RGBW, 4fold

Build-in LED-Dimmer for LED strips with constant curve. To control RGB or RGBW-LEDs. Grouping of channels possible. With Master/Slave-function and internal load management. Connections: KNX-line: Bus connection terminal. Rated voltage: 12 - 24 V. Output voltage: 12 V. Secondary: 24 V. Rated frequency: 600 Hz. Outputs: 4x dimming channel. Suitable for: DC. Rated current: 10 A. Rated power: 240 W. Protection class (Device): IP 20.
Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 33 mm x 53 mm x 95 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6155/30-500	2CKA006151A0254			1

Intelligent Building Solutions

ABB i-bus® KNX – Lighting Control

6155/40-500

Build-In-Dimmer with constant curve for LED-strips RGBW, 4fold, with integrated power supply

Build-in LED-Dimmer for LED strips with constant curve. To control RGB or RGBW-LEDs. With integrated power adapter. Grouping of channels possible. With Master/Slave-function and internal load management. Connections: KNX-line: Bus connection terminal. Rated voltage: 230 V~. Output voltage: 24 V~. Rated frequency: 600 Hz. Outputs: 4x dimming channel. Suitable for: DC. Rated current: 4 A. Rated power: 100 W. Protection class (Device): IP 20. Temperature range (Device):– 5 °C to 45 °C.
Dimensions: (L x W x D): 45 mm x 53 mm x 226 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6155/40-500	2CKA006151A0256			1

HS/S 4.2.1

Outside Light Sensor Interface, MDRC

The device is used for the connection and evaluation of up to 3 Outside Light Sensors LFO/A 1.1. The Outside Light Sensors can be analysed individually or combined. Amongst others 10 logical switching channels for the evaluation of threshold values are provided. Threshold values can be adjusted directly on the device. The device can be used as a twilight switch (1 ... 100 lux) or as a light value switch (100 ... 20.000 lux). One Outside Light Sensor LFO/A 1.1 is supplied with the device.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	3	HS/S 4.2.1	2CDG120044R0011		0.24	1

LFO/A 1.1

Build-In-Dimmer with constant curve for LED-strips RGBW, 4fold, with power supply

Build-in LED-Dimmer for LED strips with constant curve. To control RGB or RGBW-LEDs. With integrated power adapter. Grouping of channels possible. With Master/Slave-function. Connections: KNX-line: Bus connection terminal. Rated voltage: 230 V~. Output voltage: 24 V~. Rated frequency: 600 Hz. Outputs: 4x dimming channel. Suitable for: DC. Rated current: 4 A. Rated power: 100 W. Protection class (Device): IP 20. Temperature range (Device):– 5 °C to 45 °C.
Dimensions: (L x W x D): 45 mm x 53 mm x 226 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	LFO/A 1.1	2CDG120045R0011		0.05	1

Intelligent Building Solutions

ABB i-bus® KNX – Movement and Presence Detection

	Mini Basic **6131/20-xxx-500**	**Mini Premium** **6131/21-xxx-500**	**Basic** **6131/30-xxx-500**	**Premium** **6131/31-xxx-500**	**Sky** **6131/40-xxx-500**	**Corridor Basic** **6131/50-xxx-500**	**Corridor Premium** **6131/51-xxx-500**
General							
Supply voltage	KNX	KNX	KNX	KNX	KNX	KNX	KNX
Type of installation	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted	flush-mounted/ surface-mounted
Programming button accessible from outside	■	■	■	■	–	■	■
Detection range diameter (sitting / walking person)						**Corridor: only walking person**	**Corridor: only walking person**
Installation height 2.5 m	Max. 5.0 m/ 6.5 m	Max. 5.0 m/ 6.5 m	Max. 8.0 m/ 10.0 m	Max. 8.0 m/ 10.0 m	–	Frontal: max. 18 x 2,5 m; Lateral: max. 24 x 2,5 m	Frontal: max. 18 x 2,5 m; Lateral: max. 24 x 2,5 m
Installation height 3.0 m	Max. 6.5 m/ 8.0 m	Max. 6.5 m/ 8.0 m	Max. 10.0 m/ 12.0 m	Max. 10.0 m/ 12.0 m	–	Frontal: max. 20 x 3 m; Lateral: max. 30 x 3 m	Frontal: max. 20 x 3 m; Lateral: max. 30 x 3 m
Installation height 4.0 m	Max. 9.0 m/ 10.5 m	Max. 9.0 m/ 10.5 m	Max. 14.0 m/ 16.0 m	Max. 14.0 m/ 16.0 m	–	Frontal: max. 20 x 3 m; Lateral: max. 30 x 3 m	Frontal: max. 20 x 3 m; Lateral: max. 30 x 3 m
Installation height 6.0 m	–	–	–	–	Max. 18.0 m	–	–
Installation height 12.0 m	–	–	–	–	Max. 24.0 m	–	–
Number of channels							
Movement detector	2	4 in total	2	4 in total	2	2	4 in total
Constant light switch	2	4 in total	2	4 in total	2	2	4 in total
Combination	1 x each	4 in total	1 x each	4 in total	1 x each	1 x each	4 in total
Constant light controller	–	2	–	2	–	–	2
Heating/cooling/ventilation systems (HVAC)	–	1	–	1	–	–	1
Infrared receiver, can be operated via IR remote control 6010-25	–	10 button pairs + 4 single buttons/ 24 single buttons	–	10 button pairs + 4 single buttons/ 24 single buttons	(only red for activation of the programming mode)	–	10 button pairs + 4 single buttons/ 24 single buttons
Two power-off stages							
Movement detector	■	■	■	■	■	■	■
Constant light control	–	■	–	■	–	–	■

■ = Function is supported

– = Function is not supported

Intelligent Building Solutions

ABB i-bus® KNX – Movement and Presence Detection

	Mini Basic 6131/20-xxx-500	Mini Premium 6131/21-xxx-500	Basic 6131/30-xxx-500	Premium 6131/31-xxx-500	Sky 6131/40-xxx-500	Corridor Basic 6131/50-xxx-500	Corridor Premium 6131/51-xxx-500
Application							
Surveillance detector	■	■	■	■	■	■	■
Movement detector	■	■	■	■	■	■	■
Presence detector	■	■	■	■	–	■	■
Constant light switch	■	■	■	■	■	■	■
Controller independent of movement	–	■	–	■	–	–	■
Various							
Integrated object room temperature controller with temperature sensor	–	1	–	1	–	–	1
Brightness measurement	■	■	■	■	■	■	■
Calibration of brightness sensor via ETS group objects	■	■	■	■	■	■	■
Programming mode can be activated via IR remote control 6010-25	–	■	–	■	■	–	■
Programming LED can be activated via ETS group objects	■	■	■	■	■	■	■
Number of logic functions (4 different ones)	–	5	–	5	–	–	5

■ = Function is supported

– = Function is not supported

6131/20-24-500

Busch-Presence detector mini KNX
8 meter
Detection range (for mounting height 2.5 m, 3 m and 4 m): circular.
Seated persons Ø: 5 m, 6,5 m and 9 m.
Walking persons Ø: 6,5 m, 8 m and 10,5 m.
Visible height 16 mm. With 2 channels.
Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Using the device as presence and/or movement detectors. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightnessdependent switching of two light bands in the area. With integrated KNX bus coupler. Connections: KNX-line: Bus connection terminal. Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 80 mm x 80 mm x 45 mm. Mounting depth: 29 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/20-24-500	2CKA006132A0342		0.13	1
aluminium silver	–	6131/20-183-500	2CKA006132A0343		0.13	1

6131/21-24-500

Busch-Presence detector mini premium KNX
8 meter
Detection range (for mounting height 2.5 m, 3 m and 4 m): circular.
Seated persons Ø: 5 m, 6,5 m and 9 m.
Walking persons Ø: 6,5 m, 8 m and 10,5 m.
Visible height 16 mm. With 4 channels. For dimming/brightness of the rules to a defined value in a designated collection area. HVAC function for controlling heating and/or cooling systems and ventilation systems in the designated collection area. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light controller with up to two independent channels. Constant light controller with max. 2 outputs for dimming daylight control/rules of two rooflights in the room. Integrated object room temperature controller. 10 freely programmable IR channels (white). Incl. 5 logic channels (logic gates, gates, delay and staircase lighting). Weighting of up to 2 external brightness values and the internal brightness sensor possible. With integrated KNX bus coupler. Connections: KNX-line: Bus connection terminal.
Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 80 mm x 80 mm x 45 mm.
Mounting depth: 29 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/21-24-500	2CKA006132A0344		0.13	1
aluminium silver	–	6131/21-183-500	2CKA006132A0345		0.13	1

Intelligent Building Solutions

ABB i-bus® KNX – Movement and Presence Detection

6131/30-24-500

Busch-Presence detector KNX
12 meter
Detection range (for mounting height 2.5 m, 3 m and 4 m): circular.
Seated persons Ø: 8 m, 10 m and 14 m.
Walking persons Ø: 10 m, 12 m and 16 m.
Visible height 23 mm. With 2 channels. Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Using the device as presence and/or movement detectors. Detectors application with 2 power off stages. Detectors application with integrated monitoring function.
Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightnessdependent switching of two light bands in the area. With integrated KNX bus coupler. Connections: KNX-line: Bus connection terminal.
Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 91 mm x 91 mm x 45 mm. Mounting depth: 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/30-24-500	2CKA006132A0346		0.15	1
aluminium silver	–	6131/30-183-500	2CKA006132A0347		0.15	1

6131/31-24-500

Busch-Presence detector premium KNX
12 meter
Detection range (for mounting height 2.5 m, 3 m and 4 m): circular.
Seated persons Ø: 8 m, 10 m and 14 m.
Walking persons Ø: 10 m, 12 m and 16 m.
Visible height 23 mm.With 4 channels. For dimming/brightness of the rules to a defined value in a designated collection area. HVAC function for controlling heating and/or cooling systems and ventilation systems in the designated collection area. Detectors application with 2 power off stages. Detectors application with integrated monitoring function.
Constant light controller with up to two independent channels. Constant light controller with max. 2 outputs for dimming daylight control/rules of two rooflights in the room. Integrated object room temperature controller. 10 freely programmable IR channels (white). Incl. 5 logic channels (logic gates, gates, delay and staircase lighting). Weighting of up to 2 external brightness values and the internal brightness sensor possible. With integrated KNX bus coupler. Connections: KNX-line: Bus connection terminal.
Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 91 mm x 91 mm x 45 mm. Mounting depth: 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/31-24-500	2CKA006132A0348		0.15	1
aluminium silver	–	6131/31-183-500	2CKA006132A0349		0.15	1

6131/40-24-500

Busch-Watchdog Sky KNX
24 meter
Detection range (for mounting height 6 m and 12 m): circular.
Walking persons Ø: 18 m, 24 m.
Visible height 23 mm. With 2 channels. Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Use of the device as a movement detector. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightnessdependent switching of two light bands in the area. With integrated KNX bus coupler. The programming button can be activated with the IR transmitter 6010-25 (-500).
Connections: KNX-line: Bus connection terminal. Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 4 m – 12 m. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C. Dimensions: (L x W x D): 91 mm x 91 mm x 45 mm. Mounting depth: 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/40-24-500	2CKA006132A0350		0.15	1

6131/50-24-500

Busch-Presence detector Corridor KNX
30 meter
Detection range: rectangular.
For mounting height 2.5 m: frontal approach max. 18 m x 2.5 m (per side max. 9 m x 2.5 m). Lateral movement max. 24 m x 2.5 m (per side max. 12 m x 2.5 m). For mounting height 3 m as well as 4 m: frontal approach max. 20 m x 3 m (per side max. 10 m x 3 m). Lateral movement max. 30 m x 3 m (per side max. 15 m x 3 m). Visible height 27 mm. With 2 channels.
Targeted for connection and disconnection of lights bands depending on the room brightness. Regulation in response to the movement possible. Using the device as presence and/or movement detectors. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light switch with up to two independent channels. Constant light switch with max. 2 outputs for brightnessdependent switching of two light bands in the area. With integrated KNX bus coupler.
Connections: KNX-line: Bus connection terminal. Brightness limit value: 1 Lux – 1000 Lux.
Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 91 mm x 91 mm x 49 mm. Mounting depth: 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/50-24-500	2CKA006132A0399		0.16	1
aluminium silver	–	6131/50-183-500	2CKA006132A0400		0.16	1

Intelligent Building Solutions

ABB i-bus® KNX – Movement and Presence Detection

6131/51-24-500

Busch-Presence detector Corridor premium KNX 30 meter

Detection range: rectangular.
For mounting height 2.5 m: frontal approach max. 18 m x 2.5 m (per side max. 9 m x 2.5 m). Lateral movement max. 24 m x 2.5 m (per side max. 12 m x 2.5 m).
For mounting height 3 m as well as 4 m: frontal approach max. 20 m x 3 m (per side max. 10 m x 3 m). Lateral movement max. 30 m x 3 m (per side max. 15 m x 3 m).
Visible height 27 mm. With 4 channels. For dimming/brightness of the rules to a defined value in a designated collection area. HVAC function for controlling heating and/or cooling systems and ventilation systems in the designated collection area. Detectors application with 2 power off stages. Detectors application with integrated monitoring function. Constant light controller with up to two independent channels. Constant light controller with max. 2 outputs for dimming daylight control/rules of two rooflights in the room. Integrated object room temperature controller. 10 freely programmable IR channels (white). Incl. 5 logic channels (logic gates, gates, delay and staircase lighting). Weighting of up to 2 external brightness values and the internal brightness sensor possible. With integrated KNX bus coupler. Connections: KNX-line: Bus connection terminal.
Brightness limit value: 1 Lux – 1000 Lux. Mounting height: 2 m – 4 m.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 91 mm x 91 mm x 49 mm. Mounting depth: 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/51-24-500	2CKA006132A0413		0.16	1
aluminium silver	–	6131/51-183-500	2CKA006132A0414		0.16	1

6131/29-24-500

Surface-mounting box for Busch-Presence detector mini

For installing a Busch-Presence detector mini KNX 6131/20-xxx(-500) or a Busch-Presence detector mini premium KNX 6131/21-xxx(-500).
Protection class (Device): IP 20. Dimensions: (L x W x D): 80 mm x 80 mm x 35 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/29-24-500	2CKA006132A0351		0.08	1
aluminium silver	–	6131/29-183-500	2CKA006132A0352		0.08	1

6131/39-24-500

Surface-mounting box for Busch-Presence detector Basic, Premium, Sky and Corridor

For mounting a Busch-Presence detector KNX 6131/30-xxx(-500), a Busch-Presence detector premium KNX 6131/31-xxx(-500), a Busch-Presence detector Corridor KNX 6131/50-xxx(-500), a Busch-Presence detector Corridor premium KNX 6131/51-xxx(-500) or a Busch-Watchdog Sky KNX 6131/40-24(-500).
Protection class (Device): IP 20. Dimensions: (L x W x D): 91 mm x 91 mm x 33 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/39-24-500	2CKA006132A0353		0.10	1
aluminium silver	–	6131/39-183-500	2CKA006132A0354		0.10	1

6131/38-24

Intermediate ring for Busch-Presence detector Basic, Premium, Sky and Corridor
For mounting a Busch-Presence detector KNX 6131/30-xxx(-500), a Busch-Presence detector premium KNX 6131/31-xxx(-500), a Busch-Presence detector Corridor KNX 6131/50-xxx(-500), a Busch-Presence detector Corridor premium KNX 6131/51-xxx(-500) or a Busch-Watchdog Sky KNX 6131/40-24(-500).
Protection class (Device): IP 20. Dimensions: (L x W x D): 91 mm x 91 mm x 22 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6131/38-24-500	2CKA006132A0403		0.08	1
aluminium silver	–	6131/38-183-500	2CKA006132A0404		0.08	1

6179/01-204-500

Busch-Watchdog 220° KNX
Sensor angle: 220° Range: approx. 16 m. With 2 movement channels. With 1 twilight channel with 3 switching thresholds. No remote control possible via IR remote control KNX. With integrated KNX bus coupler. No additional power supply necessary.
Surveillance density: 92 sectors with 368 switching segments.
Twilight sensor: approx. 1 – 1000 lux. Switch-off delay: approx. 10 sec to 1092 min.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpine white	–	6179/01-204-500	2CKA006132A0313		0.56	1
silver metallic	–	6179/01-208-500	2CKA006132A0314		0.56	1

6179/02-204-500

Busch-Watchdog 220° KNX premium
Sensor angle: 220° Range: approx. 16 m. With 4 movement channels. With 1 twilight /brightness channel with 3 switching thresholds. With 1 temperature channel with three switching thresholds. With 7-channel IR remote control. Remote control possible via IR remote control KNX 6179 (included in scope of delivery). With integrated KNX bus coupler.
No additional power supply necessary. Surveillance density: 92 sectors with 368 switching segments. Twilight sensor: approx. 1 –1000 lux; Brightness sensor: approx. 1 – 80 klux; Temperature sensor: approx. – 25 to + 55 °C; Switch-off delay: approx. 10 sec to 1092 min.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpine white	–	6179/02-204-500	2CKA006132A0317		0.56	1
silver metallic	–	6179/02-208-500	2CKA006132A0318		0.56	1

Intelligent Building Solutions

ABB i-bus® KNX – Movement and Presence Detection

6179-500

BW IR remote control KNX

For Busch-Watchdog 220 MasterLINE KNX premium. The functions can be freely assigned. With coded transmission signal. Power supply: lithium button cell battery. Type CR202 (included in delivery). Battery life: typically 2 years. Rated voltage: 3 V, Protection class (Device): IP 40, Temperature range (Device): 0 °C – 45 °C, Dimensions: (L x W x D): 86 mm x 40 mm x 7 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
grey / anthracite	–	6179-500	2CKA006132A0320		0.58	1

Intelligent Building Solutions

ABB i-bus® KNX – Heating, Ventilation and Air Conditioning – Influencing Variables on Room Climate

Influencing Variables on Room Temperature

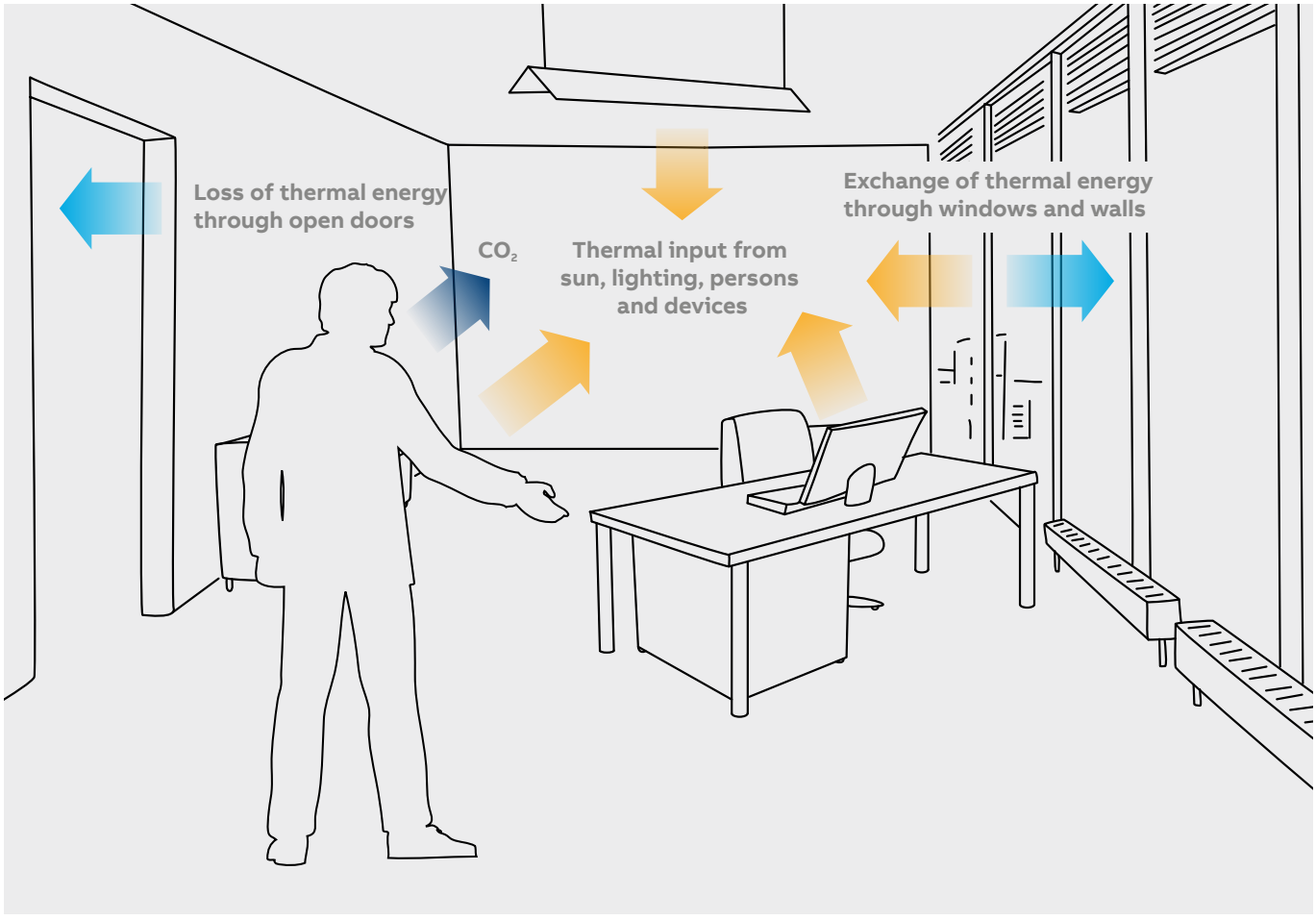
Internal and external factors have an effect on the thermal conditions in a room or a building. As an external factor the solar radiation is important for the indoor temperature – particularly with regard to modern architecture with glass fronts. Besides this, the room temperature is strongly affected by the exchange of thermal energy through windows and walls as well as the loss of thermal energy through open doors and windows.

Depending on the intensity, all this interactions influence also the energy efficiency of a building and have therefore to be optimised.
Internal thermal inputs from lighting, devices or persons have also an influence on the room climate. By planning a heating, ventilation or air conditioning system all this internal and external factors have to be considered.

Influencing Variables on Air Quality

The indoor climate in living and working areas has a scientifically proven impact on health, job performance and well-being of people. A suitable indicator for determination of the room air quality is the CO_2 concentration. In addition the values for room temperature and air humidity must be controlled to meet the requirements for a comfortable room climate.

Studies have shown, that high CO_2 concentration in the air influences the well-being as well as the performance and learning ability of people. Besides the normal CO_2 concentration in the air, human respiration is an important factor increasing the CO_2 concentration in a room. Therefore it is important to measure the CO_2 concentration in rooms where many persons are present (schools, conference rooms, open-plan offices). Monitoring of thresholds enables fans to be switched via ABB i-bus® KNX allowing automatic control of the CO_2 concentration and sufficient supply of fresh air.



Intelligent Building Solutions

ABB i-bus® KNX – Heating, Ventilation and Air Conditioning – Room Thermostat FanCoil

Intelligent Building Solutions

ABB i-bus® KNX – Heating, Ventilation and Air Conditioning

Living and working with a feeling of well-being.
And here the air in the room is one of the most important factors. Because the body takes an ideal temperature for granted and therefore easily reacts to changes. Heated or air-conditioned rooms can be optimally adjusted – to a consistently pleasant ambience.

The KNX Fan Coil room temperature controller for stand-alone applications.
The Fan Coil room temperature controller with display is a room temperature controller for ventilator convectors or conventional systems for heating and cooling. This option offers complete air-conditioning for rooms. The temperature can be adjusted precisely for personal comfort. The fan speeds can be selected by push buttons. Even very large rooms can be heated or cooled to a comfortable temperature quickly – with additional air-conditioning units. The KNX Fan Coil room temperature controller can be operated individually. The bus coupler is integrated into the control element.

Function
- Temperature sensor
- RTC setting
- Illuminated display
- Fan Coil operation for heating and cooling

Features
- Very easy to operate with large, clear display
- Complete air conditioning
- Fan speeds can be manually selected
- Integrated bus coupler
- Surface-mounted, independent switching program
- Colours: studio white, aluminium silver

Intelligent Building Solutions

ABB i-bus® KNX – Heating, Ventilation and Air Conditioning

	Electronic Switch Actuator ES/S x.1.2.1 (x = 4/8)	Electronic Relay ER/U 1.1 (in combination with US/U x.2 (x = 2/4)	Valve Drive Actuator VAA/S x.230.2.1 (x = 6/12)	Valve Drive Actuator VAA/A 6.24.2.1
General				
Supply voltage	KNX	24...250 V AC/DC	KNX	230 V AC (+10/-15 %)
Type of installation	MDRC	Flush-mounted	MDRC	Wall (surface) or on mounting rail
Module width (18 mm)	4/8	–	4/8	–
Rated current (per channel)	1 A (resistive load)	0.5 A (resistive load)	160 mA (resistive load)	1 A
Inrush current (per channel)	8 A (1 s, Tu = 20 °C)	1.2 A (1 min.)	300 mA (2 min., Tu = 60 °C)	– (1 A)
Number of thermoelectric valve drives (per channel)	10 (230 V) 3 (24 V)	2 (230 V) 2 (24 V)	3 (230 V) 1 (24 V)	4
Outputs				
Number	4/8	1	6/12	6
Type	thermoelectric or motor valve drives	thermoelectric valve drives	thermoelectric valve drives	thermoelectric valve drives
Output voltage	24...230 V AC/DC (±10 %)	24...250 V AC/DC	24...230 V AC	24 V AC (±20 %)
Manual operation				
Manual operation	■	–	■	–
Fault acknowledgement	■	–	■	–
Function:				
Operation mode Valve drive, thermoelectric/motor valve drives				
Forced operation	■	■ (via US/U x.2)	■	■
Status	■	–	■	–
Adjustable control value after controller fault	■	■ (via US/U x.2)	■	–
Valve purge	■	■ (via US/U x.2)	■	■
Characteristic curve adaption	■	–	■	–
Blocking	■	–	■	–
Operation mode Switch actuator				
Time: Staircase lighting, delay, flashing	■	–	–	–
8-bit scene	■	–	–	–
Logical functions	■	–	–	–
Safety settings	■	–	–	–
Threshold values	■	–	–	–

■ = Function is supported

– = Function is not supported

ES/S 4.1.2.1

Electronic Switch Actuator, 4-fold, 1 A, MDRC

Controls thermoelectric valve drives (e.g. TSA/K) in heating and cooling systems. Each output (24...230 V AC/DC) is protected against short-circuit and overload. With manual operation and status display for each output.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold	4	ES/S 4.1.2.1	2CDG110058R0011		0.25	1
8-fold	8	ES/S 8.1.2.1	2CDG110059R0011		0.38	1

ER/U 1.1

Electronic Relay, 1-fold, FM

The device combination with the Universal Interface US/U and a room thermostat noiselessly controls the heating system and chilled ceiling temperature via thermo-electric valve drives e.g. TSA/K, 24 V...230 V AC/DC).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ER/U 1.1	GHQ6310044R0111		0.08	1
2-fold	–	US/U 2.2	GHQ6310074R0111		0.06	1
4-fold	–	US/U 4.2	GHQ6310070R0111		0.06	1

6164/11 U-500

BW IR remote control KNX

For Busch-Watchdog 220 MasterLINE KNX premium. The functions can be freely assigned. With coded transmission signal. Power supply: lithium button cell battery. Type CR202 (included in delivery). Battery life: typically 2 years. Rated voltage: 3 V, Protection class (Device): IP 40, Temperature range (Device): 0 °C – 45 °C, Dimensions: (L x W x D): 86 mm x 40 mm x 7 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6164/11 U-500	2CKA006151A0247		0.09	1

Intelligent Building Solutions

ABB i-bus® KNX – Heating, Ventilation and Air Conditioning

VC/S 4.1.1

Valve Drive Controller, 4-fold, MDRC **NEW**

For the control of heating and cooling applications in the room, such as radiator, floor heating or cooling ceiling. The device has 4 channels each for the independent control of a heating or cooling application. Each channel has an electronic valve output for the control of a thermoelectric valve drive, as well as 3 inputs to detect and monitor the room status (use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A) to the inputs of each channel. Each channel has its own integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device. The VC/S 4.2.1 features an easy to use manual operation.
Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.
Available August 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	8	VC/S 4.1.1	2CDG110216R0011		0.27	1
Manual operation	8	VC/S 4.2.1	2CDG110217R0011		0.275	1

VAA/S 6.230.2.1

Valve Drive Actuator, 230 V, MDRC

Controls thermoelectric valve drives (e.g. TSA/K) in heating or cooling systems. Each three outputs are protected against short-circuit and overload. With manual operation and status display.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
6-fold	4	VAA/S 6.230.2.1	2CDG110116R0011		0.17	1
12-fold	8	VAA/S 12.230.2.1	2CDG110117R0011		0.3	1

VAA/A 6.24.1

Valve Drive Actuator, 6-fold, 24 V, SM

In conjunction with the thermostat it controls up to 13 thermoelectric valve drives (24 V), max. 4 per channel. The device is suitable for the installation in heating circuit distribution systems where the application of a triac ensures noiseless switching of the drives. Mains plug on the transformer (230 V) for ease of installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	VAA/A 6.24.1	2CDG120032R0011		0.18	1

SUG/U 1.1

Split Unit Gateway, FM **NEW**

The Split Unit Gateway forms the interface between the KNX system and many manufacturers' air conditioners, so-called split units. The device converts the KNX telegrams into infrared commands and transmits them to the split unit. The transmitter of the supplied cable is bonded directly onto the split unit's receiver. The split unit then no longer receives the commands from a remote control. Instead, it can be operated via any KNX sensors or via a visual display system. The device is put into operation with the ETS, and a free ETS app is available to select the split unit model. Auxiliary voltage is not required.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SUG/U 1.1	2CDG110207R0011		0.02	1

Intelligent Building Solutions

ABB i-bus® KNX – Heating, Ventilation and Air Conditioning

	Blower Actuators		FanCoil Actuators			
	FCL/S 1.6.1.1	FCL/S 2.6.1.1	FCA/S 1.1.1.2	FCA/S 1.1.2.2	FCA/S 1.2.1.2	FCA/S 1.2.2.2
General						
Supply voltage	KNX	KNX	KNX	KNX	KNX	KNX
Type of installation	MDRC	MDRC	MDRC	MDRC	MDRC	MDRC
Module width (18 mm)	4	6	6	6	6	6
Current consumption, bus	< 12 mA	< 12 mA	< 12 mA	< 12 mA	< 12 mA	< 12 mA
Manual operation	–	–	–	■	–	■
Fan outputs						
Number of fans	1	2*	1	1	1	1
Supported fan types:						
– 1/2/3 step or	■	■	■	■	■	■
– 3 individual contacts	–	–	■	■	■	■
Rated current I_n	6 A	6 A	6 A	6 A	6 A	6 A
Rated voltage U_n	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)
Valve outputs						
Electronic 0.5 A	–	–	4	4	–	–
Analog 0...10 V	–	–	–	–	2	2
Control individual	–	–	■	■	■	■
Supported valve types:						
– Thermoelectric valve drive (PWM)	–	–	4	4	–	–
– Motor-driven valve drive (3-point)	–	–	2	2	–	–
– Analog valve drive	–	–	–	–	2	2
Valve type can be mixed	–	–	■	■	–	–
Switching contact						
Number of contacts	1	2 (5)*	1	1	1	1
Rated current I_n	6 A	6 A	16 A	20 A	16 A	20 A
Rated voltage U_n	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)	250/440 V AC (50/60 Hz)
Inputs						
Number of inputs	–	–	3	3	3	3
Supported sensors:						
– Switch sensor	–	–	■	■	■	■
– Value/forced operation	–	–	■	■	■	■
– Temperature sensor	–	–	■	■	■	■
Fan Coil Unit type						
2 pipe						
Heating	–	–	■	■	■	■
Cooling	–	–	■	■	■	■
Heating/Cooling	–	–	■	■	■	■
4 pipe						
Heating/Cooling	–	–	■	■	■	■
Various						
Parallel operation	–	–	■	■	■	■
Commissioning and diagnostic function						
Control and diagnosis via ABB i-bus® Tool	–	–	■	■	■	■

■ = Function is supported

– = Function is not supported

* = Second fan output can be used as 3 switch outputs

	Fan Coil Controller				
	FCC/S 1.1.1.1	**FCC/S 1.1.2.1**	**FCC/S 1.2.1.1**	**FCC/S 1.2.2.1**	**FCC/S 1.3.1.1**
General					
Supply voltage	KNX	KNX	KNX	KNX	KNX
Type of installation	MDRC	MDRC	MDRC	MDRC	MDRC
Module width (18 mm)	MDRC	MDRC	MDRC	MDRC	MDRC
Current consumption, bus	< 12 mA	< 12 mA	< 12 mA	< 12 mA	< 12 mA
Manual operation	–	■	–	■	–
Software functionality					
Integrarted room temperature controller (RTC)	■	■	■	■	■
Use in Master/Slave System with room operation units	■	■	■	■	■
Fan outputs					
Number of fans	1	1	1	1	1
Fan type:					
1/2/3 step	■	■	■	■	–
Rated current I_n	5 A	5 A	5 A	5 A	–
Rated voltage U_n (50/60 Hz)	250 V AC	250 V AC	250 V AC	250 V AC	–
Continues Fan (0 … 10 V)	–	–	–	–	■
Valve outputs					
Electronic 0,5 A	2	2	–	–	–
Analog 0...10 V	–	–	2	2	2
Control individual	■	■	■	■	■
Supported valve types:					
– Thermoelectric valve drive (PWM)	2	2	–	–	–
– Motor-driven valve drive (3-point)	1	1	–	–	–
– Analog valve drive or	–	–	2	2	2
– 6-way valve drive	–	–	1	1	1
Switching contact					
Number of contacts	1	1	1	1	1
Rated current I_n	16 A	16 A	16 A	16 A	16 A
Rated voltage U_n (50/60 Hz)	250 V AC	250 V AC	250 V AC	250 V AC	250 V AC
Inputs					
Number of inputs	4	4	4	4	4
Supported sensors:					
– Temperature sensor	■	■	■	■	■
– Dew Point sensor	■	■	■	■	■
– Level sensor	■	■	■	■	■
– Binary signal input	■	■	■	■	■
– Analog room control unit (SAR/A or SAF/A)	1	1	1	1	1
Fan Coil Unit type					
2 pipe					
Heating	■	■	■	■	■
Cooling	■	■	■	■	■
Heating/Cooling	■	■	■	■	■
4 pipe					
Heating/Cooling	■	■	■	■	■
Commissioning and diagnostic function					
Control and diagnosis via ABB i-bus® Tool	■	■	■	■	■

—

■ = Function is supported

– = Function is not supported

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ABB i-bus® KNX – Heating, Ventilation and Air Conditioning

	Fan Coil Controller			
	FCC/S 1.3.2.1	**FCC/S 1.4.1.1**	**FCC/S 1.5.1.1**	**FCC/S 1.5.2.1**
General				
Supply voltage	KNX	KNX	KNX	KNX
Type of installation	MDRC	MDRC	MDRC	MDRC
Module width (18 mm)	MDRC	MDRC	MDRC	MDRC
Current consumption, bus	< 12 mA	< 12 mA	< 12 mA	< 12 mA
Manual operation	■	–	–	■
Software functionality				
Integrarted room temperature controller (RTC)	■	■	■	■
Use in Master/Slave System with room operation units	■	■	■	■
Fan outputs				
Number of fans	1	1	1	1
Fan type:				
1/2/3 step	–	■	–	–
Rated current I_n	–	5 A	–	–
Rated voltage U_n (50/60 Hz)	–	250 V AC	–	–
Continues Fan (0 … 10 V)	■	–	■	■
Valve outputs				
Electronic 0,5 A	–	1	2	2
Analog 0...10 V	2	–	–	–
Control individual	■	■	■	■
Supported valve types:				
– Thermoelectric valve drive (PWM)	–	1	2	2
– Motor-driven valve drive (3-point)	–	–	1	1
– Analog valve drive or	2	–	–	–
– 6-way valve drive	1	–	–	–
Switching contact				
Number of contacts	1	–	1	1
Rated current I_n	16 A	–	16 A	16 A
Rated voltage U_n (50/60 Hz)	250 V AC	–	250 V AC	250 V AC
Inputs				
Number of inputs	4	4	4	4
Supported sensors:				
– Temperature sensor	■	■	■	■
– Dew Point sensor	■	■	■	■
– Level sensor	■	■	■	■
– Binary signal input	■	■	■	■
– Analog room control unit (SAR/A or SAF/A)	1	1	1	1
Fan Coil Unit type				
2 pipe				
Heating	■	■	■	■
Cooling	■	■	■	■
Heating/Cooling	■	■	■	■
4 pipe				
Heating/Cooling	■	–	■	■
Commissioning and diagnostic function				
Control and diagnosis via ABB i-bus® Tool	■	■	■	■

■ = Function is supported

– = Function is not supported

FCL/S 2.6.1.1

Blower Actuator, 6 A, MDRC

to control blowers or fans with up to three fan speeds via step or changeover control. The FCL/S 1.6.1.1 have one fan output and one additional floating switch output. The FCL/S 2.6.1.1 feature two fan outputs plus two floating switch outputs. Alternatively the second fan output can be used as three switch outputs.
The fan speed can be directly choosen, increased and decreased as well as controlled by the control value of a closed-loop controller.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold	4	FCL/S 1.6.1.1	2CDG110163R0011		0.18	1
2-fold	6	FCL/S 2.6.1.1	2CDG110164R0011		0.26	1

FCC/S 1.1.1.1

Fan Coil Controller PWM, 3-stage, MDRC **NEW**

For the control of fan coil units. Via two electronic outputs, two thermoelectric or one motor-driven valve drive can be controlled for heating and cooling. For the fan control the devices features three relay outputs. A relay output switches an additional load of up to 16 A, such as auxiliary heating. Over 4 inputs the room status can be detected and monitored (Use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A or SAF/A) to the inputs of the device.
The device has an integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device. The FCC/S 1.1.2.1 features an easy to use manual operation.
Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.
Available July 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCC/S 1.1.1.1	2CDG110210R0011		0.28	1
Manual operation	6	FCC/S 1.1.2.1	2CDG110211R0011		0.285	1

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FCC/S 1.2.2.1

Fan Coil Controller, 0 – 10 V, 3-stage, MDRC **NEW**

For the control of fan coil units. Via two analog outputs, two analog valves or one 6-way valve drive can be controlled for heating and cooling. For the fan control the devices features three relay outputs. A relay output switches an additional load of up to 16 A, such as auxiliary heating. Over 4 inputs the room status can be detected and monitored (Use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A or SAF/A) to the inputs of the device. The device has an integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device. The FCC/S 1.2.2.1 features an easy to use manual operation.
Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.
Available July 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCC/S 1.2.1.1	2CDG110212R0011		0.23	1
Manual operation	6	FCC/S 1.2.2.1	2CDG110213R0011		0.235	1

FCC/S 1.3.1.1

Fan Coil Controller, 0 – 10 V, 0 – 10 V, MDRC **NEW**

For the control of fan coil units. Via two analog outputs, two analog valves or one 6-way valve drive can be controlled for heating and cooling. For the fan control the devices features an analog output for the control of a continues fan. A relay output switches an additional load of up to 16 A, such as auxiliary heating. Over 4 inputs the room status can be detected and monitored (Use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A or SAF/A) to the inputs of the device. The device has an integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device. The FCC/S 1.3.2.1 features an easy to use manual operation.
Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.
Available July 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCC/S 1.3.1.1	2CDG110214R0011		0.21	1
Manual operation	6	FCC/S 1.3.2.1	2CDG110215R0011		0.215	1

FCC/S 1.4.1.1

Fan Coil Controller, PWM, 3-stage, MDRC **NEW**

For the control of fan coil units. Via one electronic output, a thermoelectric valve drive can be controlled for heating and cooling. For the fan control the devices features three relay outputs. Over 4 inputs the room status can be detected and monitored (Use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A or SAF/A) to the inputs of the device. The device has an integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device.
The device supports the ABB i-bus® Tool for advanced diagnosis and improved commissioning.
Available July 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCC/S 1.4.1.1	2CDG110009R0011		0.215	1

FCC/S 1.5.1.1

Fan Coil Controller, PWM, 0 – 10 V, MDRC **NEW**

For the control of fan coil units. Via two electronic outputs, two thermoelectric or one motor-driven valve drive can be controlled for heating and cooling. For the fan control the devices features an analog output for the control of a continues fan. A relay output switches an additional load of up to 16 A, such as auxiliary heating. Over 4 inputs the room status can be detected and monitored (Use for window contact, dew point sensor, level sensor or temperature sensor). Also it is possible to connect one analog room control unit (SAR/A or SAF/A) to the inputs of the device. The device has an integrated room temperature controller for the control of the room temperature, which can be used directly to control the outputs of the device. The FCC/S 1.5.2.1 features an easy to use manual operation.
Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.
Available July 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCC/S 1.5.1.1	2CDG110234R0011		0.21	1
Manual operation	6	FCC/S 1.5.2.1	2CDG110235R0011		0.215	1

SAR/A 1.0.1-24

Room Temperature Control Element, SM **NEW**

The control element is used in conjunction with the FCC/S FanCoil controller or the VC/S valve controller for temperature control.
Available July 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SAR/A 1.0.1-24	2CKA006134A0346			1

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SAF/A 1.0.1-24

Room Temperature and FanCoil Control Element, SM **NEW**

The control element is used in conjunction with the FCC/S FanCoil controller or the VC/S valve controller for temperature control.
Available July 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SAF/A 1.0.1-24	2CKA006134A0348			1

FCA/S 1.1.2.2

Fan Coil Actuator, PWM, MDRC

For the control of typical blower convectors via four electronic outputs for thermoelectric or motor-driven valve drives. Furthermore, three outputs for individual fan speeds are provided. An additional load output switches an additional load (up to 16 A), such as auxiliary heating. Window contacts, condensed water signals and temperature signals can be read via three universal inputs and transferred via KNX bus. The FCA/S 1.1.2.2 features an easy to use manual operation and enables quick commissioning. The Fan Coil Actuator supports the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	FCA/S 1.1.1.2	2CDG110195R0011		0.34	1
Manual operation	6	FCA/S 1.1.2.2	2CDG110194R0011		0.34	1

FCA/S 1.2.2.2

Fan Coil Actuator, 0 - 10 V, MDRC

For the control of typical blower convectors via two analogue outputs for 0...10 V valve drives. Furthermore, three outputs for individual fan speeds are provided. An additional load output switches an additional load (up to 16 A), such as auxiliary heating. Window contacts, condensed water signals and temperature signals can be read via three universal inputs and transferred via KNX bus. The FCA/S 1.2.2.2 features an easy to use manual operation and enables quick commissioning. The Fan Coil Actuator supports the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	FCA/S 1.2.1.2	2CDG110196R0011		0.34	1
Manual operation	6	FCA/S 1.2.2.2	2CDG110193R0011		0.34	1

HCC/S 2.1.2.1

Heating/Cooling Circuit Controller, 0 – 10V, 2-fold, MDRC **NEW**

For the control of a heating or cooling circuit. The device has 2 channels, each with an analog output to control the mixing valve (0…10V) of a heating or cooling circuit as well as a relay output (5A) to switch the pump of the circuit. Via 3 binary inputs it is possible to monitor the status of the pump (via potential free contacts) and integrate these feedback into the control of the pump. The flow and return flow temperature are measured and used for the calculation of the control value for the valve output in the integrated controller. The set point temperature is received via the KNX bus. By bundling both channels of the device it is also possible to use it for double pump systems

The HCC/S 2.1.2.1 features an easy to use manual operation.

Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Available August 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	HCC/S 2.1.1.1	2CDG110218R0011		0.28	1
Manual operation	6	HCC/S 2.1.2.1	2CDG110219R0011		0.285	1

HCC/S 2.2.1.1

Heating/Cooling Circuit Controller, 3-Point, 2-fold, MDRC **NEW**

For the control of a heating or cooling circuit. The device has 2 channels, each with two electronic outputs to control a motor-driven mixing valve (3-Point) of a heating or cooling circuit as well as a relay output (5 A) to switch the pump of the circuit. Via 3 binary inputs it is possible to monitor the status of the pump (via potential free contacts) and integrate these feedback into the control of the pump. The flow and return flow temperature are measured and used for the calculation of the control value for the valve output in the integrated controller. The set point temperature is received via the KNX bus. By bundling both channels of the device it is also possible to use it for double pump systems

The HCC/S 2.2.2.1 features an easy to use manual operation.

Both devices support the ABB i-bus® Tool for advanced diagnosis and improved commissioning.

Available August 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	HCC/S 2.2.1.1	2CDG110220R0011		0.285	1
Manual operation	6	HCC/S 2.2.2.1	2CDG110221R0011		0.29	1

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ABB i-bus® KNX – Heating, Ventilation and Air Conditioning

BCI/S 1.1.1

Boiler/Chiller Interface, 1-fold, MDRC **NEW**

As interface between the KNX system and a heat generator or chiller. Via an analog output (0…10 V) the set point or set point adjustment temperature can be transmitted to the heat generator/chiller. The set point itself is received via KNX. Via two binary inputs the device can monitor the status of the heat generator/chiller (via potential free contacts) and send it on the KNX bus. A relay output (5 A) is included to switch or enable/disable the heat generator/chiller. With an additional relay output (5 A) the pump of the heat generator/chiller can be switched on and off. Via 3 binary inputs it is possible to monitor the status of the pump (via potential free contacts) and integrate these feedback into the control of the pump.
The device supports the ABB i-bus® Tool for advanced diagnosis and improved commissioning.
Available September 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	6	BCI/S 1.1.1	2CDG110222R0011		0.21	1

AC/S 1.1.1

Application Controller, MDRC **NEW**

The AC/S Application Controller has predefined Automation Modules for a holistic HVAC Automation Solution from Central HVAC to Room Automation. For example Schedule, Set Point Calculation, Heat Curve Calculation, Data Logging and Device Monitoring. Furthermore own Automation Modules can be created by a graphical Logic Editor. By a web based User Interface the whole system can be monitored and managed. The AC/S 1.2.1 has additional a built in bidirectional KNX-BACnet/IP Gateway (Server) for data exchange with superordinate Building Management Systems.
The Engineering is done completely by the ETS Version 5.6.3 or higher. An additional external Software is not required. The device has a KNX TP port and requires for operation an auxiliary power supply, either via 24 V AC/DC or via PoE.
Available September 2018

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Basic	4	AC/S 1.1.1	2CDG110205R0011		0.19	1
BACnet	4	AC/S 1.2.1	2CDG110206R0011		0.19	1

6138/11-84-500

Room Thermostat Fan Coil with Display, SM

Sends control values for the room to the Fan Coil Actuators or devices with the respective outputs (e.g. Room Master). The intuitive control operation allows each user to individually set the room temperature and the fan speed. The large LC display can display the actual and target temperatures, the current operating mode as well as the fan speeds. With integrated Bus Coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
aluminium silver	–	6138/11-83-500	2CKA006138A0005		0.092	1
davos/studio white	–	6138/11-84-500	2CKA006138A0003		0.092	1

LGS/A 1.1

Air Quality Sensor, SM

to be discontinued

Accurately measures the CO_2 concentration, humidity and temperature in a room.
Three independent thresholds can be set for the CO_2 concentration and the relative humidity in addition to a threshold for the temperature. Exceeding or underrunning the thresholds can trigger a response. Disable object for every threshold. Measured variables can be transmitted directly on the bus. Communication object “Ventilation” is used for RPM control or as a position indicatior for the ventilation flaps. Maintenance free sensor. The sensor is powered via the bus. With integrated Bus Coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	LGS/A 1.1	2CDG120038R0011		0.136	1

LGS/A 1.2

Air Quality Sensor with RTC, SM

NEW

For the control and measuring of the room air quality and temperature. Accurately measures the $C0_2$ concentration (390…10.000 ppm), humidity (0...100 %) and temperature (0…50 °C) in a room and sends the values on the bus. By using the integrated thresholds the measured values can be monitored. The integrated controller controls the room temperature as well as the HVAC actuator. This is possible because of the integrated bus coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	LGS/A 1.2	2CDG120059R0011		0.06	1

Intelligent Building Solutions

ABB i-bus® KNX – Heating, Ventilation and Air Conditioning

ST/K 1.1

Electromotor Valve Drive

The drive is a proportional valve drive for controlling heating valves and is mounted on thermostat valve bases. Valve Adapters VA10, VA78 for conventional valves are supplied.
The control is carried out via a continuous KNX room thermostat. The actual valve position is indicated by 5 LEDs. The valve drive has two binary inputs for a presence contact and/or window contact and for further signal indication. With integrated Bus Coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ST/K 1.1	2CDG120004R0011		0.32	1

TSA/K 230.2

Thermoelectric Valve Drives

For opening and closing valves in heating, ventilation and air-conditioning systems. Both variants (230 V and 24 V) feature a plug-in connection cable (1 m) and a splash-proof housing. The mounting on the valve is easily implemented using the Valve Adapter VA/Z xx.1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
230 V	–	TSA/K 230.2	2CDG120049R0011		0.16	1
24 V	–	TSA/K 24.2	2CDG120050R0011		0.16	1
Valve Adapter for valves from Dumser, Chronatherm, Vescal, KaMo	–	VA/Z 10.1	2CDG120009R0011		0.06	1
Valve Adapter for valves from Honeywell, Reich, Cazzaniga, Landis & Gyr. MNG	–	VA/Z 50.1	2CDG120010R0011		0.05	1
Valve Adapter for valves from Danfoss RA	–	VA/Z 78.1	2CDG120011R0011		0.03	1
Valve Adapter for valves from Heimeier, Herb, Onda, Schlösser (ab 93), Oventrop	–	VA/Z 80.1	2CDG120012R0011		0.06	1

SE/K 1.868.1

EnOcean Valve Drive

The Valve Drive EnOcean is used for efficient room temperature control. It communicates via the wireless, bidirectional EnOcean protocol. The Valve Drive has a large display for showing the current room temperature setpoint and a setting dial for manual setpoint adjustment. Via the ABB i-bus® KNX/EnOcean Gateway (EG/A 32.2.1) the Valve Drive EnOcean can easily be included in every KNX system.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SE/K 1.868.1	2CDG120051R0011		0.28	1

Intelligent Building Solutions

ABB i-bus® KNX – Automation, Logic and Time Control

	Logic Module LM/S 1.1	Application Unit, Logic ABL/S 2.1	Application Unit,Time ABZ/S 2.1	Logic Controller ABA/S 1.2.1
General				
Supply voltage	KNX	KNX	KNX	24 V / PoE
Ethernet connection	–	–	–	■
Type of installation	MDRC	MDRC	MDRC	MDRC
Module width (18 mm)	2	2	2	4
Software function				
Logic gates	■	■	–	■
Gate/filter	■	■	–	■
Multiplexer	–	–	–	■
Flip Flop	–	–	–	■
PID Controller	–	–	–	■
Composite function blocks	–	–	–	■
Time delay	■	■	–	■
Staircase lighting/Pulse duration	■	■	–	■
Calculation	□	–	–	■
Min./Max.	■	■	–	■
Comparator/Threshold	■	■	–	■
Format converter	■	–	–	■
Counter	■	–	–	■
Calendar switch program	–	–	■	■
Day routines	–	–	■	■
Week routines	–	–	■	■
Year routines	–	–	■	■
Special days	–	–	■	–
Daylight saving times	–	–	■	–
Telegram multiplier	■	–	■	■
Simulation (offline)		–	–	■
Webserver	–	–	–	■
Programming via KNX	■	■	■	■
Programming via Ethernet	–	–	–	■
Max. number of function elements	3	140	30	5000
Monitoring (online)	–	–	–	■

■ = Function is supported

– = Function is not supported

□ = Limited functions

Intelligent Building Solutions

ABB i-bus® KNX – Automation, Logic and Time Control

LM/S 1.1

Logic Module, MDRC

Used to solve a varied range of project-specific control tasks and can implement 3 functions simultaneously. The following functions are available for selection: logic gate, filter, time delay, multiplier, min/max value detector, temperature comparator, toggle values, threshold detection, format converter, scenes, increment/decrement values, staircase lighting.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	LM/S 1.1	GHQ6310080R0111		0.1	1

ABL/S 2.1

Application Unit, Logic, MDRC

Allows the compilation of complex logical functions by simply combining different logic elements and gates using a graphical user interface as an ETS plug-in and does not require additional software. 50 logical elements, 50 gates, 30 timer modules and 10 comparators are available.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	ABL/S 2.1	2CDG110073R0011		0.12	1

ABZ/S 2.1

Application Unit, Time, MDRC

It provides a yearly time clock program with 15 daily routines (800 switching events), a weekly schedule and allowance for 100 special days. Additionally, the unit can control up to 300 participants in 30 macro groups, that can be triggered using a single command. In this way, each time controlled switching event can cause a series of actions. The switching times can be modified with the free PZM software without using ETS. PZM Software and additional information on www.abb.com/knx.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	ABZ/S 2.1	2CDG110072R0011		0.12	1

ABA/S 1.2.1

Logic Controller, MDRC

The device provides extensive logic functions. The logic is defined via a graphic editor integrated in the ETS. Up to 3000 logic gates are possible.
The generated logic can be tested by a simulation function. User-defined function blocks can be created and saved for taking them over into other projects.
The device requires an auxiliary voltage, either 24 V DC or Power over Ethernet (PoE). If timer functions are used the date and time has to be provided via KNX/TP.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	ABA/S 1.2.1	2CDG110192R0011			1

FW/S 8.2.1

Radio Time Switch , 8-channel, MDRC

The Radio Time Switch sends current time and date on the bus. The time can be optionally received via a DCF or GPS antenna. Furthermore the device can be used to easily adjust the time programs.

The device provides 8 channels. Every channel supplies an independent daily, time and/or yearly program. Additionally, special programs (e.g. for vacation or public holiday days) are possible.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	3	FW/S 8.2.1	2CDG120039R0011		0.33	1

FAD/A 1.1

DCF-Antenna for Radio Time Switch, SM

For the connection to the Radio Tme Switch FW/S 8.2.1. The time signal from the DCF 77 transmitter can be received within a radius of approx. 1000 km around Frankfurt.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FAD/A 1.1	2CDG120040R0011		0.17	1

FAG/A 1.1

GPS-Antenna for Radio Time Switch, SM

For the connection to the Radio Time Switch FW/S 8.2.1. The device receives time and date via GPS signal which is available worldwide.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FAG/A 1.1	2CDG120041R0011		0.21	1

PS/E 2.1

Programming Set OBELISK top2 for Radio Time Switch

The programming set contains a CD ROM with the Obelisk top2 for the creation of switching programs for the Radio Time Switch FW/S 8.2.1, a memory card PK/E 2.1 for transferring switching programs to the Radio Time Switch and a USB programming adapter for the memory card.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	PS/E 2.1	2CDG120042R0011		0.20	1

Intelligent Building Solutions

ABB i-bus® KNX – Automation, Logic and Time Control

PK/E 2.1

Memory Card for OBELISK top2

The memory card can be used for transferring switching programs to Radio Time Switch.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	PK/E 2.1	2CDG120043R0011		0.02	1

TR/A 1.1

Time Receiver GPS, SM **NEW**

For the reception and processing of the GPS signal, as well as for brightness and temperature measurement. The sensor measures the brightness and outside temperature and sends them on the KNX bus. Likewise the time, date and geographical coordinates are send to the KNX bus. Additionally the sunrise and sunset times are also send to the bus. With integrated Bus Coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/A 1.1	2CDG120060R0011		0.09	1

Intelligent Building Solutions

ABB i-bus® KNX – Visualisation, Display and Signalling

UK/S 32.2

Universal I/O Concentrator, 32-fold, MDRC

Used to connect push buttons or signal lamps, e.g. to an operating/display tableau. It has 32 channels which can be freely parameterised as inputs/outputs using the ETS software. The device requires an external 12 or 24 V DC auxiliary power supply, (e. g. NT/S 24.800).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	UK/S 32.2	2CDG110071R0011		0.18	1

MT 701.2, WS
with T-RAHM, WS

Control and Display Tableau, LCD

For indication of switching status, fault reports and measurement values. Using the robust push buttons, electrical consumers can be manually switched, values can be set in addition to timer programs and light scenes. The alarms can also issue an acoustic warning. The FM wall box simplifies mounting.

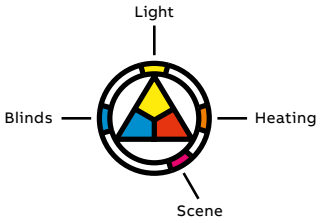
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
silver	–	MT 701.2, SR	GHQ6050059R0006		1.24	1
white	–	MT 701.2, WS	GHQ6050059R0005		1.16	1
Coverframe, silver	–	T-RAHM, SR	GHQ6050059R0012		0.17	1
Coverframe, white	–	T-RAHM, WS	GHQ6050059R0011		0.16	1
Wall box	–	UP-KAST 2	GHQ6050059R0014		0.44	1

Intelligent Building Solutions

ABB i-bus® KNX – Visualisation, Display and Signalling – Busch-ComfortTouch®

The Busch-ComfortTouch® offers not only an extremely versatile range of switching and control functions for KNX systems, but also satisfies the highest design requirements. Its unique colour coding concept makes for particularly easy operation.

Busch-ComfortTouch® unites the functions of a home control system, an information and entertainment centre with the highest design requirements. You can use Busch-ComfortTouch® to switch lamps on and off, dim them, control blinds, room temperature or select scenes comprising a combination of the above-named functions – even via remote control. There is also an integrated audio and video player. These functions are not only of interest for private households – the system is often used in doctor's surgeries, offices, restaurants or stores to provide attractive lighting, soft background music or comfortable room climates. A presence simulation function and alarm message display provide added security. It is also possible to display images from surveillance cameras. The system can be connected to the Internet, enabling you to call up e-mails, the latest stock market news, the weather forecast or traffic information. Operation is simple and easy via touch screen. A menu created individually for the user with clearly assigned buttons and a unique colour coding concept allow simple and intuitive operation.



Simplicity and user-friendliness are always the top priorities for operation. Busch-Jaeger has developed a unique colour coding concept for the user interface of its intelligent home control system. Each comfort area is assigned a specific colour. Yellow stands for lighting, blue for the blind control unit, magenta for light scenes and orange for the heating control unit. These colours are also used in the menus on the display.

01

reddot design award
winner 2013

01 Busch-ComfortTouch® 12.1
Glass black

02 Busch-ComfortTouch® 9
Glass black

03 Busch-ComfortTouch® 9
White glass

04 Busch-ComfortTouch® 12.1
Glass black

05 Busch-ComfortTouch® 12.1
White glass

02

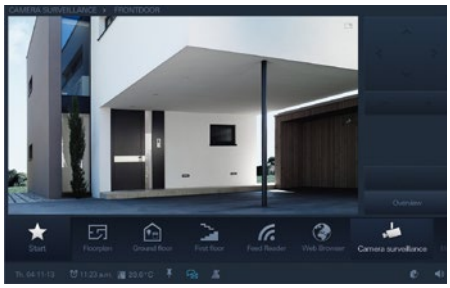
03

04

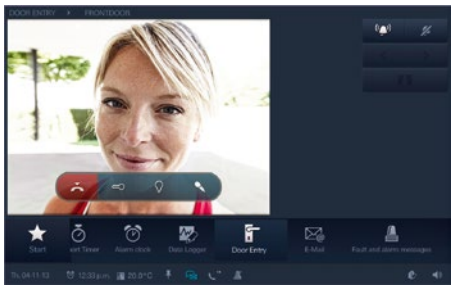
05

The system is controlled via the Busch-ComfortTouch® – it couldn't be easier. Buttons with text and symbols allow intuitive operation. Just a touch of the finger, and you can call up the MP3-player and play individual titles or playlists. And the volume is regulated via the panel, too. The ideal solution, not only for homes – the system is, for example, popular in restaurants. No more CDs lying around, no more finding space for a conventional hifi centre. The system can also be used to call up light scenes for various situations, from a cosy dinner at home to night-time lighting for store windows, at the press of a button or via a time-controlled function. Another useful feature is the handy memo field allowing you to write text by hand - use it, for example to write a shopping list or for leaving messages for others. Colour pictures from surveillance cameras on stairways or outside the building can be called up on the display, offering added security. This allows you to keep an eye on the building at all times – handy, for example, for checking the surrounding area before opening the door for customers in the morning or when the doorbell rings.

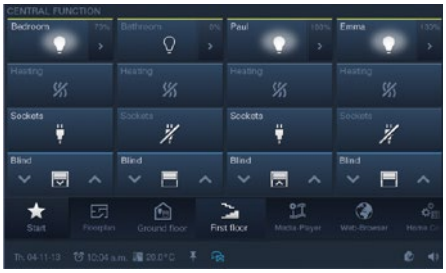
Media player



Video surveillance



Door communication



Dashboard

Remote control by tablets (APP)

reddot design award
winner 2013

iOS

Busch-ComfortTouch®
controllable via app

Intelligent Building Solutions

ABB i-bus® KNX – Visualisation, Display and Signalling

6136/07-811-500

Busch-SmartTouch® 7"

Free programmable KNX touch display as a control, notification and operation center for the entire house. Works as a video indoor station with the ABB-Welcome Door Entry System. During the conversation a picture of the visitor can be taken and stored in the picture memory. For the display and operation of the following KNX standard functions: switching, dimming, slider, blind, RGBW LED control, step switch, RTC, scene switch, display element, audio control. With scene and logic functions, presence simulation and time programs.
Displays alerts and malfunctions. Available with induction loop for connecting to hearing aid devices. Programmable with up to 16 functions per page.
External power supply: 20 – 32 V DC (SELV) or through the ABB-Welcome bus. The freely programmable touch display (7") comes with a resolution of 1024 x 600.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white glass	–	6136/07-811-500	2CKA006136A0205			1
black	–	6136/07-825-500	2CKA006136A0206			1

6136/27-811-500

Surface Mounting Frame for SmartTouch 7"

Surface mounting frame for mounting the Busch-SmartTouch 7" 6136/07-8xx-500 on:

- standard flush mounted wall box VDE & BS
- flush mounted installation box (6136/UP) or
- to be mounted directly on the wall
- to be mounted on the ABB-Welcome table stand

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	6136/27-811-500	2CKA006136A0209			1
black	–	6136/27-825-500	2CKA006136A0210			1

6136/07 UP-500

Flush Mounted Wall Box for SmartTouch 7"

For flush mounting and hollow panel mounting of the Busch-SmartTouch 7" 6136/07-8xx-500. Windproof.
Dimensions flush mounting (H x W x D): 152 mm x 235 mm x 60 mm.
Dimensions hollow wall (H x W x D): 146 mm x 227 mm x 50 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6136/07 UP-500	2CKA006136A0212			1

CP-D 24/2.5

Power Supply Unit, 24 V DC, 2.5 A

For Busch-SmartTouch® 7" 6136/07-8xx-500, Busch-priOn® Power Bus Coupler 6120/13-500 and Busch-ControlTouch® 6136/APP-500.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	CP-D 24/2.5	2CDG120037R0011			1

8136/09-811-500

ComfortPanel 9"

Free programmable IP/KNX touch display can be used as a control, infotainment and entertainment centre for the whole house With a closed capacitative glass surface and a design strip made of stainless steel (brushed). With integrated camera and proximity sensor.
Easy control using intuitive navigation concept. House control: switching, dimming, blinds, RTR, scene/sequences, timed controls Entertainment: Multimedia, remote control RC5 and B&O. Infotainment: IP telephony, RSS reader, intercom with picture, e-mail, voice and graphic memo, consumption data monitoring. Door communication: Indoor station for the ABB-Welcome system in combination with IP gateway 83341. Safety: video surveillance with IP cameras, alarm function, message function, presence simulation. Representation from individual floor plans, room images and operation pages. 23 cm (9") Touch-display with 800 x 480 pixel Compatible with ABB i-bus® KNX Maintenance via remote control over IP. Control with smartphones and tablets via the ComfortTouch App (Apple iOS /Google Android from Version 4).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white glass	–	8136/09-811-500	2CKA008136A0024			1
glas black	–	8136/09-825-500	2CKA008136A0026			1

8136/12-811-500

ComfortPanel 12"

Free programmable IP/KNX touch display can be used as a control, infotainment and entertainment centre for the whole house With a closed capacitative glass surface and a design strip made of stainless steel (brushed). With integrated camera and proximity sensor.
Easy control using intuitive navigation concept. House control: switching, dimming, blinds, RTR, scene/sequences, timed controls Entertainment: Multimedia, remote control RC5 and B&O. Infotainment: IP telephony, RSS reader, intercom with picture, e-mail, voice and graphic memo, consumption data monitoring. Door communication: Indoor station for the ABB-Welcome system in combination with IP gateway 83341. Safety: video surveillance with IP cameras, alarm function, message function, presence simulation. Representation from individual floor plans, room images and operation pages. 23 cm (9") Touch-display with 800 x 480 pixel Compatible with ABB i-bus® KNX Maintenance via remote control over IP. Control with smartphones and tablets via the ComfortTouch App (Apple iOS /Google Android from Version 4).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white glass	–	8136/12-811-500	2CKA008136A0028			1
glas black	–	8136/12-825-500	2CKA008136A0030			1

Intelligent Building Solutions

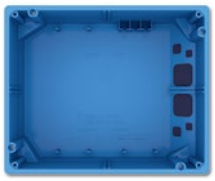
ABB i-bus® KNX – Heating, Ventilation and Air Conditioning

6186/01 UP-500

Power Supply Module TP

Power adapter for the power supply of Comfort-Touch 8136/09-... and 8136/12-.... With integrated KNX bus coupler for the establishment of the local bus connection to the ABB i-bus® KNX. With integrated audio outputs (LineOut). Rated voltage: 110 V~ – 230 V~, +10% / –10%. Rated frequency: 50 Hz – 60 Hz.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6186/01 UP-500	2CKA006186A0023			1



8136/01 UP-500

Mounting Box, FM

For flush-mounted and hollow-wall installation of the Busch-ComfortTouch® 8136/09-..., 8136/12-... . Windproof.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	8136/01 UP-500	2CKA008136A0032			1

6136/UP

Flush Mounted Wall Box for Controlpanel

For flush-mounted and hollow-wall installation of the Busch-ComfortTouch 8136/09..., 8136/12-... . Dimensions (H x W x D): 163.5 mm x 199 mm x 60 mm. Mounting depth: 60 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6136/UP	2CKA006136A0124			1

6136/APP-500

Busch-ControlTouch®, MDRC **NEW**

Freely programmable IP-/KNX gateway as multi-room app control for the KNX system.
MDRC devices with associated IOS and Android apps. Easy control using intuitive navigation concept. Representation of individual operating pages with list view.
Complete web-based commissioning. Home automation, switching, dimming, blind, RTC control, scene/sequences, timing, Philips Hue.
Entertainment: multimedia integration via UPnP.
Infotainment: monitoring of usage data for up to 3 years.
Safety: video surveillance with IP cameras, message function via push messages or e-mail.
Time programs and scenes can be created by the end customer.
Access via KNXnet/IP tunnelling.
Script editor for logic functions.
Compatible with ABB i-bus® KNX.
Control with smartphones and tablets via the ControlTouch app (Apple iOS /Google Android).
External power supply: 5-36 V DC (SELV).
Control element: freely programmable touch surfaces,
Rated voltage: 5 V- - 36 V-, Bus voltage: 24 V-,
Protection class (Device): IP 20, Temperature range (Device): 0 °C to 70 °C,
Dimensions: (L x W x D): 90 mm x 72 mm x 60 mm, Module width: 4 MW, Position for installation: Horizontal

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	6136/APP-500	2CKA006136A0202			1

VCO/S 99.1

Busch-VoiceControl, MDRC **NEW**

A certified voice control gateway for the combination of a KNX system with a voice control system. Acts as a gateway and guarantees that you can operate the KNX components in a house and query their status using Apple, Amazon or Google devices. This component makes it possible to operate the lighting, blind or room temperature controller using simple voice control. Up to 99 functions can be used. Busch-VoiceControl® is an official certified HomeKit accessory. Complete web-based commissioning. Compatible with ABB i-bus® KNX. External power supply: 5-36 VDC (SELV).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	VCO/S 99.1	2CKA006136A0217			

CP-D 24/2.5

Power Supply Unit, 24 V DC, 2.5 A

For Busch-SmartTouch® 7" 6136/07-8xx-500, Busch-priOn® Power Bus Coupler 6120/13-500 and Busch-ControlTouch® 6136/APP-500.

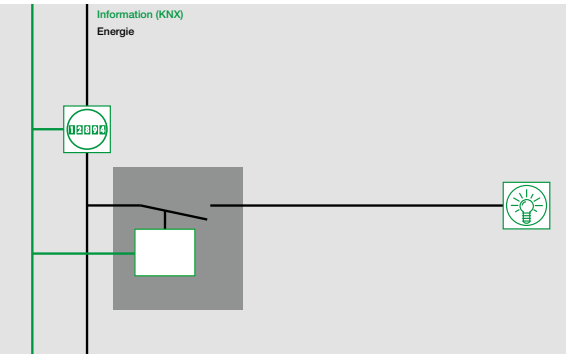
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	CP-D 24/2.5	2CDG120037R0011			1

Intelligent Building Solutions

ABB i-bus® KNX – Energy Management

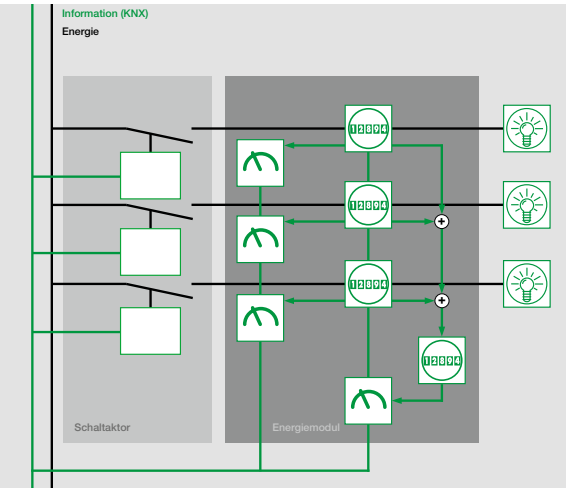
ABB offers various solutions for decentral energy measurement on the basis of the KNX standard.

Version 1



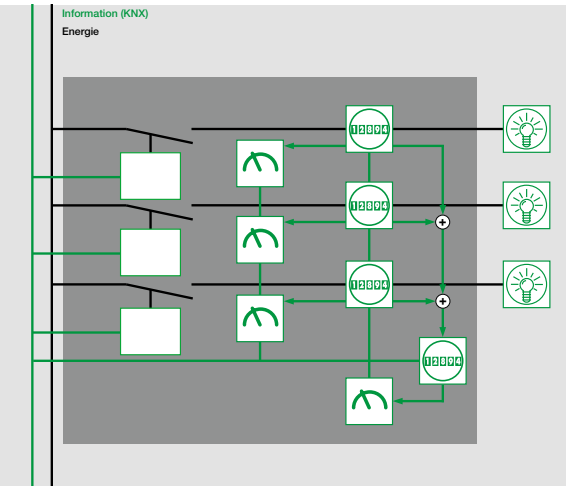
Electronic energy meters make the current energy values available on the KNX bus system in conjunction with a KNX interface. The measured data can be intermediately stored, evaluated and visualized from here.

Version 2



The Energy Module can record the energy consumption for the individual devices. It is used particularly when upgrading existing KNX systems and wherever energy measurement is required without switch functions. It facilitates a detailed and transparent insight into the energy consumption of a building. The current meter values can be sent and evaluated.

Version 3



The Energy Actuator facilitates control of the connected consumer loads via the ABB i-bus® KNX. For each of the three switch channels, the individual consumption can be measured in the same way as for the Energy Module. For every channel, the proven functionality of the ABB i-bus® KNX Switch Actuators are available.

Intermediate meter for electrical energy

Electrical consumer (load)

Energy meter

	Energy Module EM/S 3.16.1	Energy Actuator SE/S 3.16.1	Meter Interface Module ZS/S 1.1 [1)]
General			
Supply voltage	KNX	KNX	KNX
Type of installation	MDRC	MDRC	MDRC
Module width (18 mm)	4	4	2
Number of channels	3	3	–
Rated current I_n	16/20 A	16/20 A AX (C-Load)	–
Measuring range Current	0.025...20 A	0.025...20 A	Depending on meter connected [2)]
Measuring range Voltage	95...265 V	95...265 V	Depending on meter connected [2)]
Measuring range Frequency	45...65 Hz	45...65 Hz	50/60 Hz ± 5 %
Measurement values			
E – Active energy [kWh]	■	■	■
U – Voltage [V]	■	■	■
I – Current [A]	■	■	■
F – Frequency [Hz]	■	■	■
P – Active power [W]	■	■	■
Q – Reactive power [var]	–	–	■
S – Apparent power [VA]	■	■	■
PF – Power factor	■	■	■
CF – Crest factor	■	■	–
General functions			
Function Switch	–	■	–
Function Time	–	■	–
Function Scene	–	■	–
Function Logic	–	■	–
Function Priority	–	■	–
Load control with Energy Actuators as Master (up to ten SE/S 3.16.1 as slaves)	■	■	–
Load control as Slave	–	■	–
Sending delay (for value request)	–	–	■
Commissioning and diagnostic function			
Control and diagnosis via ABB i-bus® Tool	■	■	–

—

■ = Function is supported

– = Function is not supported

1) = In combination with ABB Energy Meter A and B series

2) = See also Electricity Meters Overview

Intelligent Building Solutions

ABB i-bus® KNX – Energy Management

SE/S 3.16.1

Energy Actuator, 3-fold, 16/20 AX, MDRC

Records the energy consumption of the connected electrical loads in the load circuit. Various electrical variables can be monitored and load peaks can be limited by simple load control. The 3 output channels can be manually operated and display the current switching state. The Energy Actuator can switch resistive, inductive and capacitive loads The switching capacity corresponds to the SA/S X.16.6.1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	SE/S 3.16.1	2CDG110136R0011		0.3	1

EM/S 3.16.1

Energy Module, 3-fold, 16/20 AX, MDRC

Measures energy consumption and various electrical parameters in the terminal current. Active power, Current, Voltage and Frequency can be monitored via threshold values and peak loads can be limited through a simple load control. The measured values are provided via ABB i-bus® KNX.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	4	EM/S 3.16.1	2CDG110148R0011		0.2	1

ZS/S 1.1

Meter Interface Module, MDRC

It records consumption and measured values of the electrical energy consumption meters. Using an infra-red interface, the ABB energy meter types of the A- and B-series are incorporated. The information and data which is read can be used, for example, for cost centre accounting, energy optimisation, monitoring of installations and visualisation.

The following values are available (depending on the meter type):

Meter reading

Active energy	Tariff 1-4, total
Reactive energy	Tariff 1-4, total

Power values

Active power	L1, L2, L3, total
Reactive power	L1, L2, L3, total
Apparent power	L1, L2, L3, total
Phase angle power	L1, L2, L3, total
Power factor	L1, L2, L3, total

Instrument values

Voltages	L1-N, L2-N, L3-N, L1-L2, L2-L3, L1-L3
Currents	L1, L2, L3, N
Phase angle voltage	L1, L2, L3, total
Phase angle current	L1, L2, L3, total
Quadrant	L1, L2, L3, total
Mains frequency	

Other

Transformer ratio	Read CT and VT
Power failures	Send and delete
Tariffs	Read and changeover
Status information	Send and read
Communication monitoring	
Intermediate meter	Read and reset

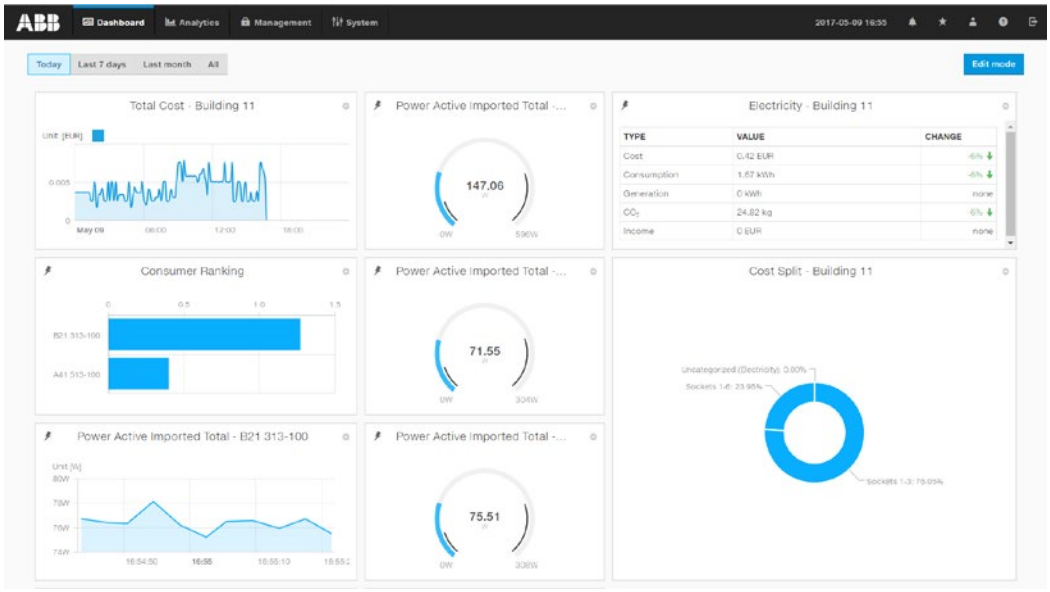
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ZS/S 1.1	2CDG110083R0011		0.13	1

Intelligent Building Solutions

Energy Management

EQmatic

With the new EQmatic series, ABB offers a solution for storing, displaying and analyzing the consumption data of electricity, gas, water and heat meters. Thus, energy flows and costs in the building can be monitored and made transparent. This serves to increase energy efficiency and as a basis for further operational optimizations, based on the energy management standard ISO 50001.
The commissioning, evaluation and analysis of the data are carried out via the web-based graphical user interface.
For a detailed monitoring the devices offer several analysis functions such as historical data analysis, benchmark functions, cost analysis, instantaneous values etc. For a quick overview, metering data and analytic charts can be individually configured and arranged on a dashboard page.
Various export functions are available for further processing of the meter data.



Intelligent Building Solutions

Energy Management

QA/S 3.16.1

QA/S 3.64.1

Energy Analyzer, M-Bus, MDRC*

Compact and web-based stand-alone devices for energy management applications.
For monitoring, logging, displaying and analyzing consumption data of up to 16 or 64 electricity, gas, water or heat meters via M-Bus. Automatic detection for ABB EQ meters (A/B-Series). Access to the device via web browser. The user interface provides graphical analysis functions, e.g. dashboard, historical data, instantaneous values, benchmark functions, cost allocation according to consumer groups and more.
* Pure M-Bus Master, no data routing from M-Bus to KNX

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
M-bus, 16 Devices	4	QA/S 3.16.1	2CDG110226R0011		0.15	1
M-bus, 64 Devices	4	QA/S 3.64.1	2CDG110227R0011		0.15	1

QA/S 4.16.1

QA/S 4.64.1

Energy Analyzer, Modbus, MDRC* NEW

Compact and web-based stand-alone devices for energy management applications. For monitoring, logging, displaying and analyzing consumption data of up to 16 or 64 electricity, gas, water or heat meters via Modbus RTU. Automatic detection for ABB EQ meters (A/B-Series). Access to the device via web browser. The user interface provides graphical analysis functions, e.g. dashboard, historical data, instantaneous values, benchmark functions, cost allocation according to consumer groups and more.
* Pure Modbus RTU Master, no data routing from Modbus RTU to KNX

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Modbus RTU, 16 Devices	4	QA/S 4.16.1	2CDG110228R0011		0.15	1
Modbus RTU, 64 Devices	4	QA/S 4.64.1	2CDG110229R0011		0.15	1

Intelligent Building Solutions

ABB i-bus® KNX – Safety and Monitoring

SMB/S 1.1

Fault Monitoring Unit, MDRC

It is used to detect and manage up to 100 fault messages which are processed within the unit and can be forwarded to a display unit. Furthermore, an optical and an acoustic collective status signal is provided. Messages can be acknowledged and data losses can be reported.
The devices support message formats to DIN 19 235: messages with continuous lighting, new value messages with simple flashing light, initial value messages with simple acknowledgement, motor messages. Current values can be centrally scanned.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	SMB/S 1.1	GHQ6310085R0111		0.12	1

EUB/S 1.1

Monitoring Unit, MDRC

Monitors up to 100 bus devices in KNX systems, which can be divided into 5 groups. The devices are monitored to ensure their presence and minimum functionality (send and receive). Monitoring can be undertaken based on the physical address or the group address. A total of four different monitoring modes are available.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	EUB/S 1.1	2CDG110066R0011		0.12	1

BDB/S 1.1

Data Logging Unit, MDRC

It detects local operation cycles and operating hours to plan the maintenance or durability evaluation of the devices. For each of the 35 channels to be monitored, limit values can be set and a message sent if this limit is exceeded. The logging of operating hours can be predetermined for the total or remaining time. These values can be modified via communication objects.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	BDB/S 1.1	2CDG110067R0011		0.12	1

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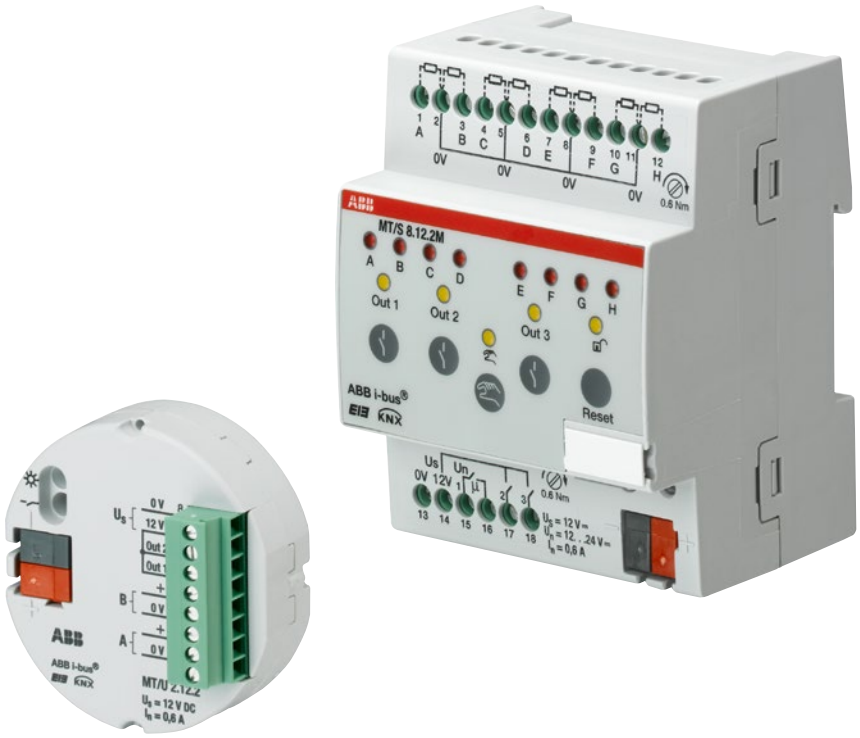
ABB i-bus® KNX – Security – Alarm System KNX



The compact solution for security applications – the Security Terminals
The Security Terminal provides a compact security solution for KNX applications for detection and signalling of intrusion, personal attack and technical hazards. They are used as the interface between the security technology sensors and KNX.

Depending on the configuration, the devices feature 2, 4 or 8 inputs – so-called detector circuits or zones. They are used for monitoring connected passive detectors (e.g. magnetic contacts, glass break sensors, etc.) to the ABB i-bus® KNX as well as for connection of floating contacts in applications with enhanced security requirements.

Through the connection of security technology and KNX, the detectors employed can, in addition to the security functions, also be used for heating control (e.g. window contact signal for control of the heating valve) or lighting control (e.g. central switch off of the lighting when the alarm logic is set).

The Security Terminals can be used as autonomous systems with the integrated alarm logic, in conjunction with the Security Module SCM/S or with an Intrusion Alarm Panel GM/A 8.1 or L240.

The application program offers several functions for security applications, such as

- Direct and delayed setting
- Internal setting with occupancy and external setting when absent
- Setting of the connected detector types
- Reset input and setting input
- Detector monitoring
- Zones (detector circuits) can be switched off
- Different types of alarms
- Setting for freely programmable relay outputs, e.g. for direct control of signalling devices.

	Standard Security				Professional Security
	MT/U 2.12.2	**MT/S 4.12.2M**	**MT/S 8.12.2M**	**SCM/S 1.1**	**GM/A 8.1**
General					
Supply voltage	KNX	KNX	KNX	KNX	85...265 V AC
Auxiliary power supply	12 V DC	12 V DC	12 V DC	–	–
Type of installation	FM	MDRC	MDRC	MDRC	SM
Module width (18 mm)	–	4	4	2	–
Inputs (extendable via bus)	2	4	8	0 (64)	8 (344)
Outputs	2 x Relais	3 x Relais	3 x Relais	1 x Relais	4 x Relais 4 x Signaling devices
Functions					
Connection of conventional security sensors/devices	■	■	■	–	■
Connection of 4-wired security bus sensors/devices	–	–	–	–	■
Event log	–	–	–	■ (250)	■ (10,000)
Remote alarming	Optional via KNX	Optional via KNX	Optional via KNX	Optional via KNX	Integrated E-Mail Voice messages
Back-up power supply					
Optional via NTU/S 12.2000.1 and SU/S 30.640.1	■	■	■	–	–
Optional via SU/S 30.640.1	–	–	–	■	–
Integrated back-up power	–	–	–	–	■
Certifications					
VdS	–	–	–	–	Class C
EN 50 131/IEC 62 642	–	–	–	–	Grade 3
Commissioning and diagnostic functions					
Commissioning and diagnostic via webserver	–	–	–	–	■

—

■ = Function is supported

– = Function is not supported

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ABB i-bus® KNX – Security – Alarm System KNX

SCM/S 1.1

Security Module, MDRC

The module provides the necessary logic functions to link the various KNX devices (e.g. zone terminals) to a security system. Up to 64 different zones can be evaluated via communication objects. Arming, operation and display are also implemented using communication objects. The device has a freely programmable relay output for connection of a signal encoder. An uninterruptable KNX power supply with battery back-up is recommended for security function buffering on mains failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	SCM/S 1.1	2CDG110024R0011		0.13	1

MT/S 8.12.2M

Security Terminal

They are used as the interface between the security technology sensors and the KNX.
The device features inputs, so-called zones. They are used for monitoring connected passive detectors, e.g. magnetic contacts and/or glass break sensors on the ABB i-bus® KNX and/or for connection of floating contacts in applications with enhanced security requirements.
The device can be used as a system with autonomous alarm logic or in combination with the Security Module SCM/S or an Intrusion Alarm Panel. The device requires an external 12 V DC SELV auxiliary power supply, (e.g. NTU/S 12.2000.1).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, MDRC	4	MT/S 4.12.2M	2CDG110109R0011		0.19	1
8-fold, MDRC	4	MT/S 8.12.2M	2CDG110110R0011		0.19	1
2-fold, FM	–	MT/U 2.12.2	2CDG110111R0011		0.08	1

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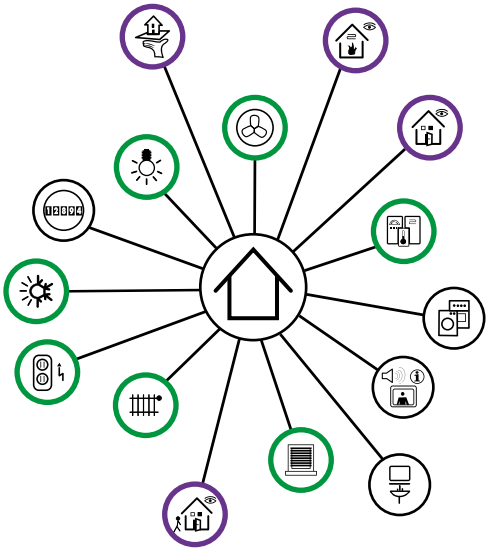
ABB i-bus® KNX – Security – Alarm System GMA



Professional alarm system for KNX experts

With the KNX Security Panel GM/A 8.1 ABB presents the first security system that is compatible with both, the international KNX standard (14543-3-x ISO / IEC) and the international standard for alarm systems (ISO / IEC 62642). Therefore the KNX Security Panel GM/A 8.1 is ready for a worldwide usage and expands business opportunities of nearly 40,000 KNX partners in 124 countries. The system is the perfect solution for projects ranging from simple to high security requirements.

This innovation is the result of more than 30 years of system and application knowledge in alarm technology and building automation at ABB.

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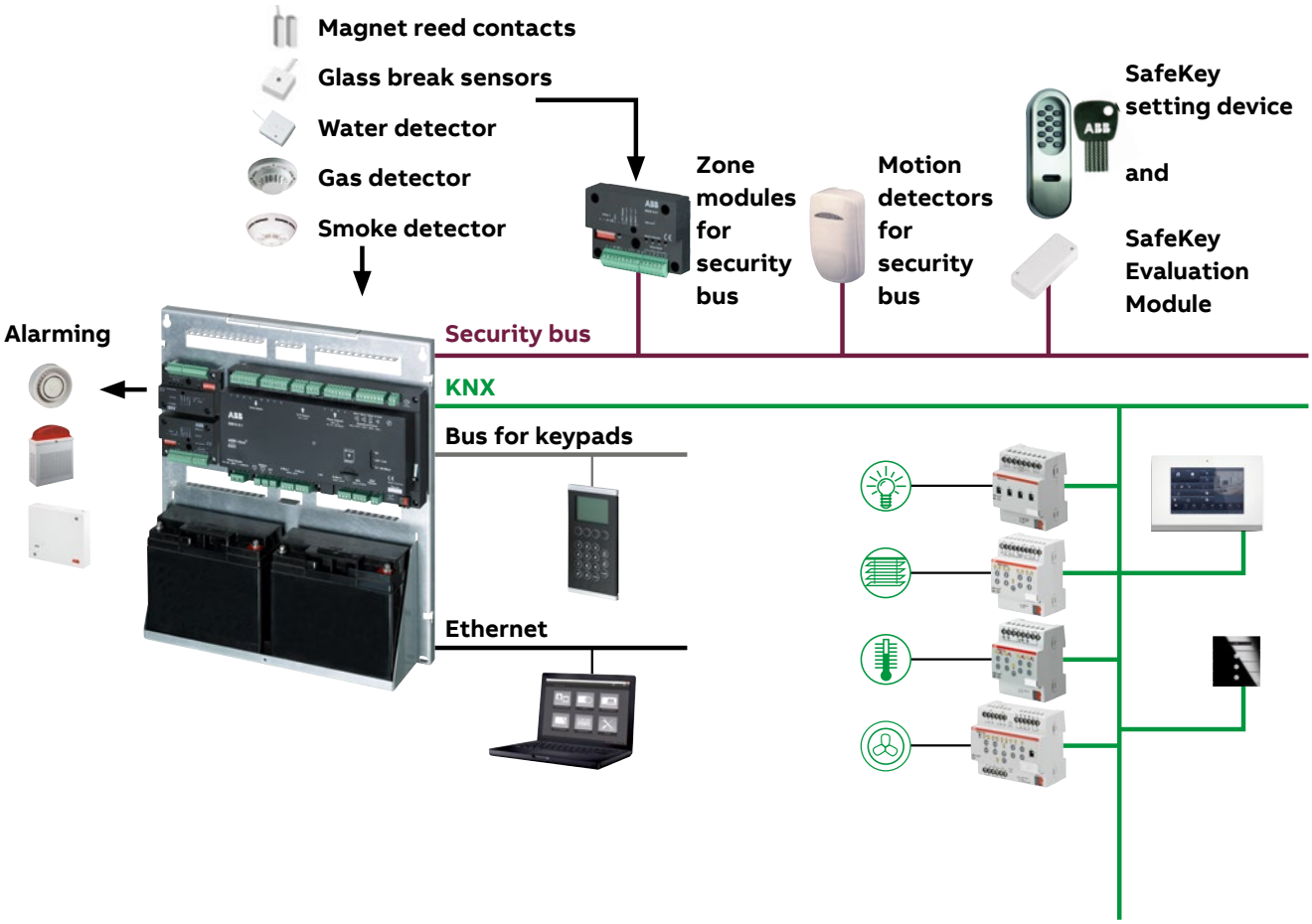
ABB i-bus® KNX – Security – Alarm System GMA



A complete product product portfolio: One system – all interfaces

To fulfill the project requirements ABB provides the user besides the panel and keypad a complete product portfolio for professional alarm technology as well as known solutions for all trades of KNX building automation.

The KNX Security Panel is for universal usage for all kinds of hazardous situations in buildings like intrusion, personal attack, smoke, gas- and water leakage.

KNX Security Panel without cover, integrated zone modules and batteries

Ethernet connection for programming, diagnostics and operation via a standard webbrowser

Direct inputs for security sensors

Keypads

Internal, external or remote alarming

Security bus for security sensors, zone modules and setting devices

KNX interface to display alarm states via displays of building automation and to control automatic building functions with support of security sensors.

The KNX Security Panel provides all needed system interfaces: An ethernet connection is used for programming, diagnostics and operation via a standard webbrowser as well as integration into the building network. The security sensors will be connected directly to the panel inputs or via the security bus, where the setting device for the system is also connected. Furthermore the panel provides interfaces for the also newly developed keypads and for internal, external or remote alarming. Finally the integrated KNX interface allows on the one hand to display alarm states via displays of building automation and on the other to control automatic building functions with support of security sensors.

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ABB i-bus® KNX – Security – Alarm System GMA

GM/A 8.1

KNX Security Panel, SM

for the protection of small to medium residential or commercial properties against intrusion and technical faults. The Security Panel is suitable for up to five logical areas. It has 8 integrated zones for detectors, a Security Bus for Bus-detectors, Bus-Zone Modules and Setting devices, Ethernet connection (RJ45) for programming, operating and displaying system status via Web-Browser and an integrated KNX interface. The Security Panel GM/A 8.1 complies with the requirements to VdS classes A, B and C, to the European Standard EN 50131, Grade 1 to 3 and to ISO/IEC 62642 Grade 1 to 3.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	GM/A 8.1	2CDG110150R0011		10.5	1
Off the wall tamper contact	–	WA/Z 1.1	2CDG110174R0011		0.2	1

SAK17

Sealed Lead Acid Battery, 12 V DC, 7 Ah

Sealed lead acid battery for power backup up of alarm systems. Maintenance free.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SAK17	GHV9240001V0013			1

BT/A 1.1

BT/A 2.1

Keypad for GM/A 8.1

to connect to Security Panel GM/A 8.1 via the Keypad-Bus. The Keypad allows easy operation of the Security Panel. System messages are displayed on a four-line LCD display. Fife Keypads can be connected to each Security Panel. There is no need for an external voltage supply, the keypads are supplied via the Keypad-Bus.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
black	–	BT/A 1.1	2CDG280001R0011		0.5	1
white	–	BT/A 2.1	2CDG280002R0011		0.5	1

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ABB i-bus® KNX – Security – Components

MG/A 4.4.1

Zone Module, 4-fold

to connect to Security Panel GM/A 8.1 via the Security-Bus. For expansion of the Security-Panel by 4 detector zones. Used for connection to the exterior perimeter detectors such as magnetic reed contacts and passive glass break sensors. The module has 4 zones to which several detectors can be connected. The status of each zone is displayed with a status LED. The Zone Module delivers the control signals and the supply voltage for the external detectors. There is no need for an external voltage supply, the Zone Modules are supplied via the Security-Bus.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
to mount in the Security Panel housing	–	MG/E 4.4.1	2CDG110178R0011		0.1	1
in a surface mounting housing for installation in the building	–	MG/A 4.4.1	2CDG110186R0011		0.1	1

IR/XB
IR/XC

Passive IR Bus Motion Detector, 15 m

For direct connection to the security-bus of the Intrusion Alarm Panel GM/A 8.1. The motion detectors with passive infra-red technology are registered for VdS classes B/EN Grade 2 and C/EN Grade 3 (anti-masking monitored). They facilitate monitoring of an area with an IR range of up to 15 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS B/EN Grade 2	–	IR/XB	2CDG230023R0011		0.15	1
VdS C/EN Grade 3	–	IR/XC	2CDG230024R0011		0.15	1

EIM/XB
EIM/XC

Dualtech Bus Motion Detector, 15 m

For direct connection to the security-bus of the Intrusion Alarm Panel GM/A 8.1. The Dual-Motion Detector combines proven passive infra-red technology with temperature independent microwave technology. The combination of both functional principles results in a detector featuring high immunity to false alarms, even with unfavourable ambient conditions, and which still has high detection security. The detectors are registered for VdS classes B/EN Grade 2 and C/EN Grade 3 (anti-masking monitored). They facilitate monitoring of an area with an IR range of up to 15 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS B/EN Grade 2	–	EIM/XB	2CDG230025R0011		0.15	1
VdS C/EN Grade 3	–	EIM/XC	2CDG230026R0011		0.15	1

Intelligent Building Solutions

ABB i-bus® KNX – Security – Components

MW

Mounting Bracket for IR/x and EIM/x

For motion detectors.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	MW	GHV9230039V0020		0.03	1

L240/BS

SafeKey Evaluation Module

For connection of the SafeKey components as well as all components required for a setting door (magnetic contacts, lock bolt switching contact, bolt lock, internal siren). For direct connection to the security-bus of the Intrusion Alarm Panel GM/A 8.1. The management of the electronic keys from the SafeKey range is undertaken completely via the WebUI of the Security Panel GM/A 8.1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	L240/BS	GHQ3050031R0001		0.13	1

SAD/GAP

Distribution Enclosure, SM

For installation of the Bus Module L240/BS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SAD/GAP	2CDG220021R0011		0.131	1

SCS

SafeKey Chipkey

It is an electronic carrier medium for setting / unsetting via a SafeKey Wall Reader. A SafeKey Chipkey can be authorized for any number of different SafeKey systems with different levels of authorization.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SCS	GHQ3050027R0001		0.02	1

WEL/A, ES

SafeKey Wall Reader, SM

For setting/unsetting with the Evaluation Module L240/BS. The unit is actuated by inserting the electronic SafeKey chipkey. The SafeKey Wall Reader WEL is equipped with the key reader and an acknowledgement buzzer. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	WEL/A, ES	GHQ3050023R0001		0.38	1

WELT/A, ES

SafeKey Wall Reader with Keypad, SM

For setting/unsetting with the Evaluation Module L240/BS. The unit is actuated by inserting the electronic SafeKey chipkey and/or code. The SafeKey Wall Reader WELT is equipped with the key reader, keypad and an acknowledgement buzzer. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	WELT/A, ES	GHQ3050024R0001		0.45	1

ESPE/M

Electrical Mini Bolt Lock

The ESPE/M Mini Bolt Lock is used together with an intrusion alarm system to implement the inevitability condition. The motorized bolt lock additionally locks the door to the set area, preventing unintentional opening of the door when the intrusion alarm system is set. The ESPE/M Mini Bolt Lock is connected to the L240/BS Evaluation module for GM/A 8.1 KNX Security Panel.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ESPE/M	2CDG270010R0011		0.13	1

ESPE

Electromechanical Bolt Lock

Prevents access to the set area of an Intrusion Alarm Panel. The unit is mounted in the door frame. Only a single bore or the counterpart for the locking bolt in the door panel is required. Suitable for use with WEL and WELT. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ESPE	GHV9250010V0001		0.55	1
Replacement Locking Bolt	–	EVSB	GHV9250010V0002		0.02	1
Mounting Kit for flat door panel and frame	–	AMSE	GHV9250010V0003		1.02	1
Mounting Kit for raised door panel and frame	–	AMSP	GHV9250010V0004		0.94	1

Intelligent Building Solutions

ABB i-bus® KNX – Security – Components

IR/KB

Passive IR Motion Detector, 15 m

For conventional wiring to zone inputs of an Intrusion Alarm Panel or a KNX Sercurity Terminal. With a volumetric lens for interior monitoring. Can be optionally set for hall monitoring function up to 15 m. Color: RAL 9010 pure white; for use up to VdS class B/EN Grade 2.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS B/EN Grade 2	–	IR/KB	2CDG230027R0011		0.15	1

EIM/KB

Dualtech Motion Detector, 15 m

The dual detector is based on proven infrared technology and microwave detection. The detector enables a detection range of 15 m with 17 zones on 6 levels. The range of the infra-red component and the microwave can be adjusted separately using a jumper. Up to VdS class C/EN Grade 3; Color RAL 9010 pure white.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS B/EN Grade 2	–	EIM/KB	2CDG230028R0011		0.15	1
VdS C/EN Grade 3	–	EIM/KC	2CDG230029R0011		0.15	1

EIM/D

Dual Ceiling Detector

Operates according to the proven detection principle of infra-red technology and microwave over 360°. The range of the infrared component can be adapted via the mounting height while the range of the microwave can be adjusted separately using a jumper. The detector is fitted with a walk test LED. Colour: RAL 9010 pure white.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	EIM/D	2CDG230039R0011		0.14	1

MW

Mounting Bracket for IR/x and EIM/x

For motion detectors.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	MW	GHV9230039V0020			1

MRS/W

Magnet Reed Contact Set

For opening surveillance of windows and doors, complete for bolting or drilling. Contents: 1 magnet, 1 reed contact with 4.0 m connection cable LIYY 4 x 0.14 mm², 2 housings, 2 spacer plates, 2 flanges and 4 anti-magnetic fixing screws. VdS class B.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	MRS/W	GHQ3201972R0001		0.1	1
brown	–	MRS/B	GHQ3201972R0002		0.1	1
Saver Set (20 pcs.), white	–	VMRS/W	GHQ3201972R0011		1.99	1
Saver Set (20 pcs.), brown	–	VMRS/B	GHQ3201972R0012		1.99	1

RTK

Rolling Door Magnet Reed Contact Set

For monitoring opening or rolling doors or other large doors in the industrial field. Contents: 1 magnet, 1 reed contact with 2 m connection cable 4 x 0.14 mm², 1 m protective tubing and 1 set of mounting accessories. Degree of protection: IP 68; Environmental class to VdS 4; VdS class B.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	RTK	GHQ3201973R0021		0.43	1

SPGS/W

Glass Break Sensor

For opening surveillance of windows and doors, complete for bolting or drilling. VdS class B.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SPGS/W	GHV9220004V0009		0.11	1
brown	–	SPGS/B	GHV9220004V0010		0.11	1
Loctite adhesive	–	LKS	GHQ4001906R0001		0.06	1
Mechanical Glass Break Test Device	–	GP2	GHV9220004V0004		0.1	1

Intelligent Building Solutions

ABB i-bus® KNX – Security – Components

WRK/W

Lock Bolt Switching Contact

For installation in the strike plate, for lock monitoring on doors. Water-tight IP 67, with 2.5 m connection cable LIYY 3 x 0.14 mm². VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	WRK/W	2CDG250003R0011		0.03	1

VSUE

Window Lock Monitoring Contact

Lock monitoring is carried out with a special magnet and a reed contact. The magnet is mounted on the push rod of the window sash while the reed contact is mounted on the frame. The connection cable LIYY 4 x 0.14 mm² is 4 m in length. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	VSUE	GHV9210018V0022		0.09	1

ND/W

Emergency Call Button, white

For manual alarm tripping. Complies with the police regulations since it features permanent trip recognition, momentary-contact function, with cover contact. Surface mount version. Colour: white. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Surface mounting	–	ND/W	GHQ7132443R0011		0.15	1
Flush mounting	–	NDU/W	GHQ7132443R0021		0.15	1

NDA/W

Cover Plate for Emergency Call Button

Used primarily in the banking sector or other institutions, where unintentional alarm triggering is possible due to public access.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	NDA/W	GHQ7132443R0004		0.03	1

SGL

Gas Detector

For measurement and evaluation of the concentration of natural gas or liquefied gas in the air. The detector requires a 10 – 30 V DC voltage supply and has a normally open relay output contact for connection to the intrusion alarm panels features an LED display and a Piezo buzzer. For ceiling and wall mounting.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SGL	GHQ3050008R0001		0.16	1

SWM 4

Water Detector for Zone Inputs

A resin-encapsulated water detector with gold-plated Termipoint pins, detects water ingress, e.g., pipe fractures, ingress of groundwater and sewage, water damage caused by washing machines and dishwashers etc. before the damage becomes too expensive.
For operation directly on detector circuits of intrusion alarm panels or security terminals.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SWM 4	GHQ4030001R0004		0.16	1

SWM 4/RN

Water Detector with Relay Output

Features a potential free changeover contact output, an LED parallel output and a LED display. The detector resets itself automatically when the affected area dries out. The device draws its power from an external 10 ... 23 V DC voltage source.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SWM4/RN	GHQ4030001R0012		0.23	1

Intelligent Building Solutions

ABB i-bus® KNX – Security – Components

FC650/O

Optical Smoke Detector

Optical smoke detector in threshold alarm technology that detects smoke according to the scattered-light principle The detectors feature an alarm indicator on the detector head that is visible from all angles, and which can be be triggered with a permanent magnet for test purposes. A detector base is provided for mounting and cable connection purposes into which the detector is simply screwed in via the bayonet connection. Each detector is equipped with an alarm LED, which displays the stored alarm in the event of an a alarm Detector/base diameter: 110 mm. VdS approved.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FC650/O	2CDG430079R0011		0.09	1

FC650/TMAX

Maximum Heat Detector

Static Heat Detector in threshold alarm technology, – trigger temperature 78 °C. The detectors feature an alarm indicator on the detector head that is visible from all angles, and which can be be triggered with a permanent magnet for test purposes. A detector base is provided for mounting and cable connection purposes into which the detector is simply screwed-in via the bayonet connection. Each detector is equipped with an alarm LED, which displays the stored alarm in the event of an a alarm. Detector/base diameter: 110 mm. VdS approved.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FC650/TMAX	2CDG430081R0011		0.09	1

FC600/BREL

Detector Base, 12 V

Enables system-independent connection of the FC650 series fire detector to systems or devices that are not specifically designed for this detector technology. Examples include Intrusion Alarm Panels, KNX Security Terminals, elevator controls or other signal processing equipment. The detector base must be supplied by either a 12 V or a 24 V DV voltage supply. A floating 30 V DC/1 A changeover contacting is provided for transferring an alarm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FC600/BREL	2CDG430051R0011		0.08	1

FPA03

Testing Aerosol for Smoke Detectors, 250 ml

For optical smoke detector testing, 250 ml.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FPA03	GHV9020012V0021			1

6833/01-84-500

Busch-Smoke Alarm® ProfessionalLine

For early detection of smouldering fires and open fires with smoke development indoors according to the photooptical measurement principle (Tyndall). With installed Lithium battery. Battery life min. 10 years. With test button and muting. Can be networked with up to 12 detectors using the radio module. Can be networked via 2-wire twisted pair cable with up to 12 detectors. Acoustic alarm: installed horn (85 dBA). Cyclic functional test. Including attachment material – VdS certified. Conform to EN 14604 studio white.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
not networkable	–	6833-84-500	2CKA006800A2720			1
networkable	–	6833/01-84-500	2CKA006800A2721			1

6835/01-84-500

Busch-Heat Alarm ProfessionalLine

Signal triggered at over 57 °C. With installed Lithium battery. Battery life min. 10 years. With test button and muting. Can be networked via 2-wire twisted pair cable with up to 12 detectors. Can be networked with up to 12 detectors using the radio module. Acoustic alarm: installed horn (85 dBA). Cyclic functional test. Including attachment material – VdS certified. Conform to EN 14604.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white	–	6835/01-84-500	2CKA006800A2723			1

6827-84

Busch-Smoke Alarm® Radio Module

For wireless networking of multiple Busch smoke alarms® / heat alarms.
With installed Lithium battery. Battery life min. 10 years. Radio frequency: 868 MHz.
Range: max. 100 m outdoors, max. 30 m indoors.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6828	2CKA006800A2514			1

Intelligent Building Solutions

ABB i-bus® KNX – Security – Components

6829-84

Busch-Smoke Alarm® Relay

For connecting external systems, e.g. KNX. Relay contact, floating changeover contact 230 V~ max. 5 A. Cable connection: up to 2 x 2 x 1.5 mm². With installed radio module. Rated voltage: 230 V~.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white	–	6829-84	2CKA006800A2515			1

6824-84

Busch-Smoke Alarm® Remote Control

For service purposes. With muting, test and search function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white	–	6824-84	2CKA006800A2516			1

SSS

Electronic Solid-State Siren

Electronic solid-state siren with intermittent tone for alarm purposes in indoor installations. External dimensions: ø x H = 90 x 37 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSS	GHV9270001V0001		0.17	1

SSF/G

Outdoor Sirene

An aluminium protective housing with additional protective enamel coating. Protected against sabotage by a case tamper contact. The alarm inputs are wired onto a terminal strip. With fixing screw (M4) for potential equalization on the base.
Dimensions: H x W x D = 200 x 205 x 88 mm; Color: RAL 9002 Environmental class III to VdS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSF/G	GHQ3050017R0001		1.64	1

SSF/GB

Combination Signalling Device

An aluminium protective housing with additional protective enamel coating. Protected against sabotage by a case tamper contact. The alarm inputs are wired onto a terminal strip. With fixing screw (M4) for potential equalization on the base.
Dimensions: H x W x D = 258 x 205 x 88 mm; Color: RAL 9002 Environmental class III to VdS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSF/GB	GHQ3050018R0001		1.81	1

Reed Relay, 12 V

For connection, e.g. to transistor outputs of Intrusion Alarm Panels. Coil voltage 8.5...14 V DC. Current consumption 5 mA at 12 V DC. Contact loading 24 V/100 mA.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	RL	GHV9270013V0101		0.015	1

Bright prospects for all

We bring energy to buildings and the people within them – whether these are modern single residential units, all kinds of hotels or ground-breaking industrial buildings. For us, power is more than just what comes from the wire. Why? Because it forms the basis of a comfortable life. As a result, we are constantly improving every little detail, looking for the most userfriendly solution and bringing people and technology together. That's what our large company is all about – we do everything to give you the freedom of choice.

A vision for the perfect building
What's key is the synergy created in the building as a whole. It starts with the power that's created using renewable sources of energy, which then feeds into the things that this power can do for the people within – from the infrastructure in the buildings right through to the emotional experience of the occupants, from the lowest parking level right through to the most exquisite penthouse suite. Only when everything intertwines are values created, which you can experience with all your senses.

Building automation from ABB governed by our core values
All ABB solutions are checked against the six core values and constantly improved until they meet the very highest requirements in terms of technology, management and the guests.

Economic efficiency
A hotel building is for the people within. This is the only way to measure the value of what's inside. Every day, development gives rise to performance.

Safety
The building automation technology can't take a break. With a complete system, the management can count on it as a whole – and on the fact that everything is functioning safely.

Energy efficiency
You need energy for absolutely anything you wish to accomplish. That's why, for ABB, it is crucial to never waste energy and to make the most of it at the same time.

Durability
The future always comes quicker than you think. It must be easy to upgrade the technology. The new fits perfectly with what is already there.

Design
Hotels are more than just buildings. They shape the city and are sometimes a key part of the skyline. The aesthetics count – from the largest detail right down to the smallest.

Sustainability
A safe future starts today with technologies which combine all energy-saving capabilities with quality of life.

Intelligent Building Solutions

ABB i-bus® KNX – Guest Room Management

TR/U 1.1

Transponder Reader MIFARE

The “transponder reader” is a flush-mounting device for British Standard wall boxes, designed to realize access control systems with a communication support based on KNX bus.
It is equipped with one relay (4 A @24 V AC/DC) and one input to be used for connecting external conventional card-holder (e.g. Millenium wiring accessories card-holder).
The output can be programmed in three different ways: “Linked to access control”, receiving in this case switching commands from the device itself (according to transponder card validation); being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices; “linked to card-holder”, that means that the relay is switched according to closing/opening internal input contact available on transponder reader.
The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX telegram (for example for DND/MUR purposes).
The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.
The transponder reader is available for ABB Millenium wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/U 1.1	2CSY235683R2001			1

TH/U 1.1

Transponder Holder MIFARE

The “transponder holder” is a flush-mounting device for British Standard wall boxes, designed to realize access control systems with a communication support based on KNX bus.
It is equipped with one relay (4 A @24 V AC/DC) and one binary input to be used for connecting external conventional push-button for switch, dimmer and shutter functionalities, or for example for connecting window contact or similar.
The output can be programmed as “Linked to access control”, receiving in this case switching commands from the device itself (according to card insertion/removal); or being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices. The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX.
The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.
The transponder reader is available for ABB Millenium wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TH/U 1.1	2CSY265232R2021			1

TS/T 1

Set of 10 Transponder Cards, MIFARE

The transponder card uses passive transponder technology operating in radio frequency (MIFARE technology), without the need for contact between the reader and the card itself. The transponder card is read by swiping it in front of the reader at a maximum distance of 20 mm (can be reduced according to installation environment).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TS/T 1	2CSY259412R2041			1

LT/U 1.1.MC
LT/U 1.1.MS

Transponder Reader, Mylos

The transponder reader is used for access control in the hotel, residential and commercial sectors (office buildings, business centers, laboratories, etc.). The device is equipped with two bistable relays (8 A, 250 V AC), one of which can be assigned to control electronic lock, and three voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder reader requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	LT/U 1.1.MC	2CSYK5000C		0.05	1
black	–	LT/U 1.1.MS	2CSYK5000S		0.05	1

PTI/U 1.1.MC

Transponder Holder, Mylos

The transponder holder is equipped with a slot into which the transponder card is inserted. In a hotel application, this allows occupancy recognition and notification at the supervisory level (e.g. on the front desk computer).
Moreover, room status information can be managed by using special cards (minibar status, maintenance status, usability).
The device is equipped with 2 bistable relays (8 A, 250 V AC) and 3 voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder pocket requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PTI/U 1.1.MC	2CSYK5200C		0.05	1
black	–	PTI/U 1.1.MS	2CSYK5200S		0.05	1

Intelligent Building Solutions

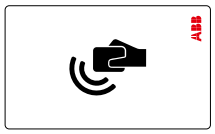
ABB i-bus® KNX – Guest Room Management

PRT/U 1.1.MC

Transponder Programming Device, Mylos

The devices allows the programming of transponder cards.
The device is equipped with 2 bistable relays (8 A, 250 V AC) and 3 voltage-free non-optically insulated inputs; 5 V DC scanning voltage is available on the COM terminal.
The transponder programmer requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PRT/U 1.1.MC	2CSYK5300C		0.05	1
black	–	PRT/U 1.1.MS	2CSYK5300S		0.05	1



CH/T 2

Set of 5 Transponder Cards for Chiara and Mylos design programs

The transponder card uses passive transponder technology operating in radio frequency, without the need for contact between the reader and the card itself. The transponder card is read by swiping it in front of the reader at a maximum distance of 20 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	CH/T 2	2CSKK5400C		0.005	1

LT/U 1.1.CH

Transponder Reader, Chiara NEW

The transponder reader is used for access control in the hotel, residential and commercial sectors (office buildings, business centers, laboratories, etc.). The device is equipped with two bistable relays (8 A, 250 V AC), one of which can be assigned to control electronic lock, and three voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder reader requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	LT/U 1.1.CH	2CSKK5000C		0.05	1

PTI/U 1.1.CH

Transponder Holder, Chiara **NEW**

The transponder holder is equipped with a slot into which the transponder card is inserted. In a hotel application, this allows occupancy recognition and notification at the supervisory level (e.g. on the front desk computer).
Moreover, room status information can be managed by using special cards (minibar status, maintenance status, usability).
The device is equipped with 2 bistable relays (8 A, 250 V AC) and 3 voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder pocket requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PTI/U 1.1.CH	2CSKK5200C		0.05	1

PRT/U 1.1.CH

Transponder Programming Device, Chiara **NEW**

The devices allows the programming of transponder cards.
The device is equipped with 2 bistable relays (8 A, 250 V AC) and 3 voltage-free non-optically insulated inputs; 5 V DC scanning voltage is available on the COM terminal.
The transponder programmer requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PRT/U 1.1.CH	2CSKK5300C		0.05	1

SW MiniMAC 4.1

MiniMAC software

The management and configuration software ensures bidirectional communication with the access control system devices, allowing the system's configuration during its installation and its overall management and supervision.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SW MiniMAC 4.1	2CSY258202R2051		0.005	1

Intelligent Building Solutions

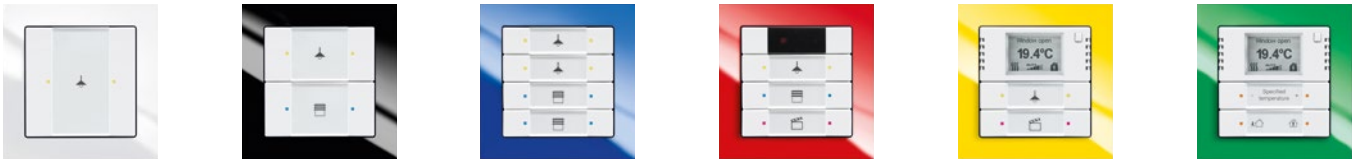
ABB i-bus® KNX – User Operation – Design Ranges –
Unique diversity of the range

01

02

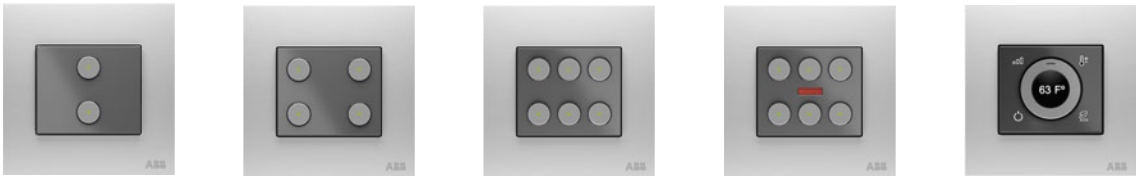
03

04



05

06



07

08

09

10

11

01	carat®
02	pure stainless steel
03	solo®
04	Busch-axcent®
05	future® linear
06	Millenium*
07	Zenit for VDE markets
08	Zenit for NEMA markets
09	Busch-triton®
10	Busch-priOn®
11	Bus Coupling Unit – for conventional Busch-Jaeger series**

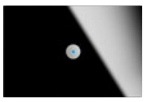
Further information regarding the ABB switch ranges are available on http://new.abb.com/low-voltage/products/residential-products/switch-ranges

* Millenium and Zenit series are only available in selected markets.

** Busch-Jaeger switch ranges only available for selected markets. For further information please contact your local ABB office.

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Functional Overview

Program	Busch-priOn® suitable for KNX bus coupler 6120/12-101 or 6120/13 (depending on the specific combination)		
			
	6340-xx-101 1/2gang	6341-xx-101 rotary control element	6342-xx-101 3/6gang
KNX function			
Switching, rocker switch total	■	–	■
Switching, rocker switch left/right	■	■	■
Dimming, rocker switch total	■	–	■
Dimming, rocker switch left/right	■	–	■
Blind, rocker switch total	■	–	■
Blind, rocker switch total left/right	■	■	■
Short-long operation, rocker switch left/right	■	–	■
Value sender, rocker switch total	■	–	■
Value sender, rocker switch left/right	■	–	■
Value dimming sensor, rocker switch total	■	■	■
Red/green LED status illumination (red/green/off)	–	–	–
RGB LED function illumination + status illumination	1 LED per rocker switch	1 LED per button	1 LED per rocker switch
Setting the RTC operating mode	■	–	■
Value sender, 2 objects, rocker switch left/right	■	–	■
Light scene extension unit with light scene memory function	■	–	■
Level switch, rocker switch total	■	–	■
Level switch, rocker switch total left/right	■	–	■
Multiple operation, rocker switch left/right	■	–	■
IR remote control channels (up to 13 channels)	–	–	–
Light scene unit (8 scenes for up to 8 actuators)	–	–	–
Light scene unit (10 scenes for up to 10 actuators)	–	–	–
Programmable shift key	–	–	–
Proximity function	–	–	–
Room temperature controller only			
Temperature reading	–	–	–
RTC settings	–	–	–
Illuminated display	–	–	–
Fan coil operation for heating and cooling	–	–	–
Media box/CD/DVD/radio	–	–	–
Short-time timer	–	–	–
Weekly timer	–	–	–
Alarm clock	–	–	–
Messages	–	–	–
Screen saver	–	–	–
Display text/value	–	–	–
Device lock	–	–	–
Logic function (including light scenes)	■	■	■
Busch-Watchdog 4 channels	–	–	–

■ = Function is supported

– = Function is not supported

Program	**Busch-priOn® suitable for KNX bus coupler 6120/12-101 or 6120/13 (depending on the specific combination)**		
	6344-xx-101 8.89 cm (3.5") TFT colour display with rotary control element	6344-xx-101	6351-825-101 end strip top with information display, room temperature controller, IR receiver and proximity sensor + 6342-xx-101 3/6gang
KNX function			
Switching, rocker switch total	–	–	■
Switching, rocker switch left/right	■	–	■
Dimming, rocker switch total	–	–	■
Dimming, rocker switch left/right	■	–	■
Blind, rocker switch total	–	–	■
Blind, rocker switch total left/right	■	–	■
Short-long operation, rocker switch left/right	–	–	■
Value sender, rocker switch total	–	–	■
Value sender, rocker switch left/right	■	–	■
Value dimming sensor, rocker switch total	■	–	■
Red/green LED status illumination (red/green/off)	–	–	–
RGB LED function illumination + status illumination	–	–	1 LED per rocker switch
Setting the RTC operating mode	■	–	■
Value sender, 2 objects, rocker switch left/right	–	–	■
Light scene extension unit with light scene memory function	■	–	■
Level switch, rocker switch total	■	–	■
Level switch, rocker switch total left/right	–	–	■
Multiple operation, rocker switch left/right	–	–	■
IR remote control channels (up to 13 channels)	–	–	■
Light scene unit (8 scenes for up to 8 actuators)	–	–	–
Light scene unit (10 scenes for up to 10 actuators)	■	–	–
Programmable shift key	–	–	–
Proximity function	–	–	■
Room temperature controller only			
Temperature reading	–	–	–
RTC settings	■	–	■
Illuminated display	■	–	■
Fan coil operation for heating and cooling	■	–	■
Media box/CD/DVD/radio	■	–	–
Short-time timer	■	–	–
Weekly timer	■	–	–
Alarm clock	■	–	–
Messages	■	–	–
Screen saver	■	–	–
Display text/value	■	–	■
Device lock	■	–	–
Logic function (including light scenes)	■	■	■
Busch-Watchdog 4 channels	–	■	–

■ = Function is supported

– = Function is not supported

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Functional Overview

Program	Busch-priOn® suitable for KNX bus coupler 6120/12-101 or 6120/13 (depending on the specific combination)	
	[redacted]	[redacted]
	6350-825-101 end strip top with IR receiver and proximity sensor	6352-xx-101 end strip bottom with temperature sensor
KNX function		
Switching, rocker switch total	–	–
Switching, rocker switch left/right	–	–
Dimming, rocker switch total	–	–
Dimming, rocker switch left/right	–	–
Blind, rocker switch total	–	–
Blind, rocker switch total left/right	–	–
Short-long operation, rocker switch left/right	–	–
Value sender, rocker switch total	–	–
Value sender, rocker switch left/right	–	–
Value dimming sensor, rocker switch total	–	–
Red/green LED status illumination (red/green/off)	–	–
RGB LED function illumination + status illumination	–	–
Setting the RTC operating mode	–	–
Value sender, 2 objects, rocker switch left/right	–	–
Light scene extension unit with light scene memory function	–	–
Level switch, rocker switch total	–	–
Level switch, rocker switch total left/right	–	–
Multiple operation, rocker switch left/right	–	–
IR remote control channels (up to 13 channels)	■	–
Light scene unit (8 scenes for up to 8 actuators)	–	–
Light scene unit (10 scenes for up to 10 actuators)	–	–
Programmable shift key	–	–
Proximity function	■	–
Room temperature controller only		
Temperature reading	–	■
RTC settings	–	–
Illuminated display	–	–
Fan coil operation for heating and cooling	–	–
Media box/CD/DVD/radio	–	–
Short-time timer	–	–
Weekly timer	–	–
Alarm clock	–	–
Messages	–	–
Screen saver	–	–
Display text/value	–	–
Device lock	–	–
Logic function (including light scenes)	–	–
Busch-Watchdog 4 channels	–	–

■ = Function is supported

– = Function is not supported

Program	**Busch-triton® (next generation) Monoblock**	
	6320/10 1/2gang 6320/30 3/6gang 6320/50 5/10gang	6321/38 3/6gang with RTC 6321/58 5/10gang with RTC
KNX function		
Switching, rocker switch total	■	■
Switching, rocker switch left/right	■	■
Dimming, rocker switch total	■	■
Dimming, rocker switch left/right	■	■
Blind, rocker switch total	■	■
Blind, rocker switch total left/right	■	■
Short-long operation, rocker switch left/right	■	■
Value sender, rocker switch total	■	■
Value sender, rocker switch left/right	■	■
Value dimming sensor, rocker switch total	■	■
Red/green LED status illumination (red/green/off)	1 LED per rocker switch	1 LED per rocker switch
RGB LED function illumination + status illumination	–	–
Setting the RTC operating mode	■	■
Value sender, 2 objects, rocker switch left/right	■	■
Light scene extension unit with light scene memory function	■	■
Level switch, rocker switch total	■	■
Level switch, rocker switch total left/right	■	■
Multiple operation, rocker switch left/right	–	–
IR remote control channels (up to 13 channels)	■	■
Light scene unit (8 scenes for up to 8 actuators)	■	■
Light scene unit (10 scenes for up to 10 actuators)	–	–
Programmable shift key	■	■
Proximity function	–	–
Room temperature controller only		
Temperature reading	–	■
RTC settings	–	■
Illuminated display	–	■
Fan coil operation for heating and cooling	–	■
Media box/CD/DVD/radio	–	–
Short-time timer	–	–
Weekly timer	–	–
Alarm clock	–	–
Messages	–	–
Screen saver	–	–
Display text/value	–	–
Device lock	–	–
Logic function (including light scenes)	–	–
Busch-Watchdog 4 channels	–	–

—

■ = Function is supported

– = Function is not supported

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Functional Overview

Program	Millenium		
	6125/20-500 1/2gang	6126/20-500 2/4gang	6129/20-500 3/6gang
KNX function			
Switching, button pair	■	■	■
Switching, button upper/lower	■	■	■
Dimming, button pair	■	■	■
Dimming, button upper/lower	■	■	■
Blind, button pair	■	■	■
Blind, button upper/lower	■	■	■
Short-long operation, button upper/lower	■	■	■
Value transmitter, button pair	■	■	■
Value transmitter, button upper/lower	■	■	■
Value dimming sensor, button pair	■	■	■
Value dimming sensor, upper/lower	■	■	■
RGB LED function illumination + status illumination	■	■	■
Setting the RTC operating mode	■	■	■
Value transmitter, 2 objects, button upper/lower	■	■	■
Light scene extension unit with light scene memory function	■	■	■
Step switch, button pair	■	■	■
Step switch, button upper/lower	■	■	■
Multiple operation, button upper/lower	■	■	■
IR remote control channels (up to 5 channels)	–	–	–
Room temperature controller only			
Temperature reading	–	–	–
RTC settings	–	–	–
Illuminated display	–	–	–
Fan coil operation for heating and cooling	–	–	–
10 logic channels (incl. light scene, actuator, sequence actuator, logic gates, etc.)	■	■	■
Busch-Watchdog 4 channels	–	–	–

■ = Function is supported

– = Function is not supported

Program	**Millenium**		
	6129/21-500 3/6gang with IR	6122/20-500	6124/20-500
KNX function			
Switching, button pair	■	–	–
Switching, button upper/lower	■	–	–
Dimming, button pair	■	–	–
Dimming, button upper/lower	■	–	–
Blind, button pair	■	–	–
Blind, button upper/lower	■	–	–
Short-long operation, button upper/lower	■	–	–
Value transmitter, button pair	■	–	–
Value transmitter, button upper/lower	■	–	–
Value dimming sensor, button pair	■	–	–
Value dimming sensor, upper/lower	■	–	–
RGB LED function illumination + status illumination	■	–	–
Setting the RTC operating mode	■	–	–
Value transmitter, 2 objects, button upper/lower	■	–	–
Light scene extension unit with light scene memory function	■	–	–
Step switch, button pair	■	–	–
Step switch, button upper/lower	■	–	–
Multiple operation, button upper/lower	■	–	–
IR remote control channels (up to 5 channels)	■	–	–
Room temperature controller only			
Temperature reading	–	–	■
RTC settings	–	–	■
Illuminated display	–	–	■
Fan coil operation for heating and cooling	–	–	■
10 logic channels (incl. light scene, actuator, sequence actuator, logic gates, etc.)	■	–	■
Busch-Watchdog 4 channels	–	■	–

—

■ = Function is supported

– = Function is not supported

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Functional Overview

Program	Zenit		
	6125/98-509 1/2gang	6126/98-509 2/4gang	6129/98-509 3/6gang
KNX function			
Switching, button pair	■	■	■
Switching, button upper/lower	■	■	■
Dimming, button pair	■	■	■
Dimming, button upper/lower	■	■	■
Blind, button pair	■	■	■
Blind, button upper/lower	■	■	■
Short-long operation, button upper/lower	■	■	■
Value transmitter, button pair	■	■	■
Value transmitter, button upper/lower	■	■	■
Value dimming sensor, button pair	■	■	■
Value dimming sensor, upper/lower	■	■	■
RGB LED function illumination + status illumination	■	■	■
Setting the RTC operating mode	■	■	■
Value transmitter, 2 objects, button upper/lower	■	■	■
Light scene extension unit with light scene memory function	■	■	■
Step switch, button pair	■	■	■
Step switch, button upper/lower	■	■	■
Multiple operation, button upper/lower	■	■	■
IR remote control channels (up to 5 channels)	–	–	–
Room temperature controller only			
Temperature reading	–	–	–
RTC settings	–	–	–
Illuminated display	–	–	–
Fan coil operation for heating and cooling	–	–	–
10 logic channels (incl. light scene, actuator, sequence actuator, logic gates, etc.)	■	■	■
Busch-Watchdog 4 channels	–	–	–

■ = Function is supported

– = Function is not supported

Program	**Zenit**		
	6129/98-509 3/6gang with IR	6122/98-509	6124/98-509
KNX function			
Switching, button pair	■	–	–
Switching, button upper/lower	■	–	–
Dimming, button pair	■	–	–
Dimming, button upper/lower	■	–	–
Blind, button pair	■	–	–
Blind, button upper/lower	■	–	–
Short-long operation, button upper/lower	■	–	–
Value transmitter, button pair	■	–	–
Value transmitter, button upper/lower	■	–	–
Value dimming sensor, button pair	■	–	–
Value dimming sensor, upper/lower	■	–	–
RGB LED function illumination + status illumination	■	–	–
Setting the RTC operating mode	■	–	–
Value transmitter, 2 objects, button upper/lower	■	–	–
Light scene extension unit with light scene memory function	■	–	–
Step switch, button pair	■	–	–
Step switch, button upper/lower	■	–	–
Multiple operation, button upper/lower	■	–	–
IR remote control channels (up to 5 channels)	■	–	–
Room temperature controller only			
Temperature reading	–	–	■
RTC settings	–	–	■
Illuminated display	–	–	■
Fan coil operation for heating and cooling	–	–	■
10 logic channels (incl. light scene, actuator, sequence actuator, logic gates, etc.)	■	–	■
Busch-Watchdog 4 channels	–	■	–

—

■ = Function is supported

– = Function is not supported

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Functional Overview

Program	Multifunction control elements, suitable for KNX bus coupler 6120/12-101 and 6120/13			
	6125/02 1/2gang 6126/02 2/4gang 6127/02 4/8gang	6129/01 3/6gang with IR	6128/28 2/4gang with RTC	6122/01 standard
KNX function				
Switching, rocker switch total	■	■	■	–
Switching, rocker switch left/right	■	■	■	–
Dimming, rocker switch total	■	■	■	–
Dimming, rocker switch left/right	■	■	■	–
Blind, rocker switch total	■	■	■	–
Venetian blind, rocker switch total left/right	■	■	■	–
Short-long operation, rocker switch left/right	■	■	■	–
Value sender, rocker switch total	■	■	■	–
Value sender, rocker switch left/right	■	■	■	–
Value dimming sensor, rocker switch total	■	■	■	–
Red/green LED status illumination (red/green/off)	–	–	–	–
RGB LED function illumination + status illumination	Two LEDs per rocker switch	Two LEDs per rocker switch	Two LEDs per rocker switch	–
Setting the RTC operating mode	■	■	■	–
Value sender, 2 objects, rocker switch left/right	■	■	■	–
Light scene extension unit with light scene memory function	■	■	■	–
Level switch, rocker switch total	■	■	■	–
Level switch, rocker switch total left/right	■	■	■	–
Multiple operation, rocker switch left/right	■	■	■	–
IR remote control channels (up to 5 channels)	–	■	–	–
Room temperature controller only				
Temperature reading	–	–	■	–
RTC settings	–	–	■	–
Illuminated display	–	–	■	–
Fan coil operation for heating and cooling	–	–	■	–
Logic function (including light scenes)	■	■	■	■
Busch-Watchdog 4 channels	–	–	–	■
ABB				
basic55®	–	–	–	–
future® linear	■	■	■	■
alpha exclusive/nea	–	–	–	–
Busch-axcent®	■	■	■	■
solo®	■	■	■	■
pure stainless steel	■	■	■	■
carat®	■	■	■	■
ocean®	–	–	–	–
All Weather 44	–	–	–	–

■ = Function is supported

– = Function is not supported

Program	FM Watchdog with integrated bus coupler	Standard control elements, bus coupler included with package	FM push-button coupling unit with integrated bus coupler	
	6122/10 6122/10-BS-500	6125/01 1gang 6126/01 2gang 6127/01 4gang	6108/06 6108/06-BS 1/2gang	6108/07 6108/07-BS 2/4gang
KNX function				
Switching, rocker switch total	–	■	■	■
Switching, rocker switch left/right	–	–	■	■
Dimming, rocker switch total	–	■	■	■
Dimming, rocker switch left/right	–	–	■	■
Blind, rocker switch total	–	■	■	■
Venetian blind, rocker switch total left/right	–	–	■	■
Short-long operation, rocker switch left/right	–	–	■	■
Value sender, rocker switch total	–	■	■	■
Value sender, rocker switch left/right	–	–	■	■
Value dimming sensor, rocker switch total	–	–	■	■
Red/green LED status illumination (red/green/off)	–	Two LEDs per rocker switch	–	–
RGB LED function illumination + status illumination	–	–	One LED per rocker switch	One LED per rocker switch
Setting the RTC operating mode	–	–	■	■
Value sender, 2 objects, rocker switch left/right	–	■	■	■
Light scene extension unit with light scene memory function	–	■	■	■
Level switch, rocker switch total	–	–	■	■
Level switch, rocker switch total left/right	–	–	■	■
Multiple operation, rocker switch left/right	–	–	–	–
IR remote control channels (up to 5 channels)	–	–	–	–
Room temperature controller only				
Temperature reading	–	–	■	■
RTC settings	–	–	–	–
Illuminated display	–	–	–	–
Fan coil operation for heating and cooling	–	–	–	–
Logic function (including light scenes)	■	–	–	–
Busch-Watchdog 4 channels	■	–	–	–
ABB				
basic55®	–	–	■	■
future® linear	■	■	■	■
alpha exclusive/nea	–	–	–	–
Busch-axcent®	■	■	■	■
solo®	■	■	■	■
pure stainless steel	■	■	■	■
carat®	■	■	■	■
ocean®	–	–	–	–
All Weather 44	–	–	–	–

■ = Function is supported

– = Function is not supported

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Functional Overview

Program	FM push-button coupling unit with integrated bus coupler		
	6108/60 6-fold KNX sensor	6108/06-AP 1/2gang	6108/07-AP 2/4gang
KNX function			
Switching, rocker switch total	■	■	■
Switching, rocker switch left/right	–	■	■
Dimming, rocker switch total	■	■	■
Dimming, rocker switch left/right	–	■	■
Blind, rocker switch total	■	■	■
Venetian blind, rocker switch total left/right	–	■	■
Short-long operation, rocker switch left/right	–	■	■
Value sender, rocker switch total	■	■	■
Value sender, rocker switch left/right	–	■	■
Value dimming sensor, rocker switch total	■	■	■
Red/green LED status illumination (red/green/off)		1 LED	–
RGB LED function illumination + status illumination	–	–	–
Setting the RTC operating mode	–	■	■
Value sender, 2 objects, rocker switch left/right	–	■	■
Light scene extension unit with light scene memory function	■	■	■
Level switch, rocker switch total	■	■	■
Level switch, rocker switch total left/right	–	■	■
Multiple operation, rocker switch left/right	–	–	–
IR remote control channels (up to 5 channels)	–	–	–
Room temperature controller only			
Temperature reading	■	–	–
RTC settings	■ (only as slave)	–	–
Illuminated display	–	–	–
Fan coil operation for heating and cooling	■ (only as slave)	–	–
Logic function (including light scenes)	–	–	–
Busch-Watchdog 4 channels	–	–	–
ABB			
basic55®	■	■	■
future® linear	■	■	■
alpha exclusive/nea	■	■	■
Busch-axcent®	■	■	■
solo®	■	■	■
pure stainless steel	■	■	■
carat®	■	■	■
ocean®	–	■	■
All Weather 44	–	■	■

■ = Function is supported

– = Function is not supported

Program	**FM room temperature controller**				
	6108/18 6108/18-BS	6109/18	6109/28	6109/08	6109/05
Control element					
Standard function	–	–	–	–	–
Additional function	–	–	–	–	–
Indication					
Display	■	■	■	–	–
Actual temperature display	■	■	■	–	–
Status display via text and/or ICON	–	■	■	–	–
RTC					
Manual operation	■	■	■	–	–
Heating and/or cooling with/without additional stage	■	■	■	■	■
Fan coil	■	■	■	■	■
Master/slave	■	■	■	master only	master only
Basic load	■	■	■	■	■
Internal and/or external actual temperature sensor	■	■	■	■	external only
Internal actual temperature sensor	■	■	■	■	■
Air quality					
CO_2	–	–	■	–	–
Humidity	–	–	■	–	–
Air pressure	–	–	■	–	–
Universal input/binary input					
Switching/alarm	–	■	■	■	■
Dimming	–	■	■	■	■
Blind	–	■	■	■	■
Value	–	■	■	■	■
Scene	–	■	■	■	■
Switching sequences	–	■	■	■	■
Multi	–	■	■	■	■
Pulse counter	–	■	■	■	■
Universal analogue input e.g. external sensors					
0–10 V (external)	–	■	■	■	■
1–10 V (external)	–	■	■	■	■
Upper/lower threshold value	–	■	■	■	■
Universal input of external temperature sensor (PT1000 or 6226/T)					
Actual temperature sensor	–	■	■	■	■
Temperature limiter	–	■	■	■	■

ABB					
basic55®	■	■	■	■	–
future® linear	■	■	■	■	–
alpha exclusive/nea	–	■	■	■	–
Busch-axcent®	■	■	■	■	–
solo®	■	■	■	■	–
pure stainless steel	■	■	■	■	–
carat®	■	■	■	■	–
ocean®	–	–	–	–	–
All Weather 44	–	–	–	–	–

■ = Function is supported

– = Function is not supported

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – ABB-tacteo

TB/U1.1.1-CG

Touch Control Element with Bus Coupler, FM **NEW**

Freely configurable multifunction control element. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. With integrated temperature sensor. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold	–	TB/U1.1.1-CG	2CKA006300A1538			1
2-fold	–	TB/U2.4.1-CG	2CKA006300A1539			1
2-fold	–	TB/U2.5.1-CG	2CKA006300A1540			1
4-fold	–	TB/U4.4.1-CG	2CKA006300A1541			1
4-fold	–	TB/U4.5.1-CG	2CKA006300A1612			1
6-fold	–	TB/U6.4.1-CG	2CKA006300A1542			1
6-fold	–	TB/U6.5.1-CG	2CKA006300A1602			1
12-fold	–	TB/U12.7.1-CG	2CKA006300A1543			1
12-fold	–	TB/U12.8.1-CG	2CKA006300A1544			1

TBR/U4.7.1-CG

Touch Control Element with Room Temperature Controller and Bus Coupler, 4-fold, FM **NEW**

Freely configurable multifunction control element. The icons and/or texts are configured by means of a web configuration tool. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1. Contribution to space heating energy efficiency 1,0 %. With integrated KNX bus coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TBR/U4.7.1-CG	2CKA006300A1545			1
	–	TBR/U4.8.1-CG	2CKA006300A1546			1

TR/U.1.1-CG

Touch Room Temperature Controller with Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1. Contribution to space heating energy efficiency 1,0 %. With integrated KNX bus coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/U.1.1-CG	2CKA006300A1547			1

TBW/U.1.1-CG

Busch-Watchdog® 180 Sensor Standard with Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated temperature sensor. With integrated KNX bus coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TBW/U.1.1-CG	2CKA006300A1548			1

TA/U3.1.1-CG

Room Outdoor Sensor with Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. With integrated temperature sensor. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TA/U3.1.1-CG	2CKA006300A1549			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – ABB-tacteo

TLM/U.1.1-CG

Room Outdoor Sensor with Card Reader and Bus Couper, FM **NEW**

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. For reading mifare RF cards. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TLM/U.1.1-CG	2CKA006300A1550			1

TKK/U.1.1-CG

Card Holder with Bus Coupler, conventional **NEW**

Ordering possible only in connection with the design ID. For inserting mifare RF cards. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TKK/U.1.1-CG	2CKA006300A1552			1

TKM/U.1.1-CG

Card Holder with Bus Coupler, universal **NEW**

Ordering possible only in connection with the design ID. For inserting and evaluating of mifare RF cards. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TKM/U.1.1-CG	2CKA006300A1553			1

TSM/U.2.1-CG

Room Outdoor Sensor with Card Reader, Room Number and Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. For reading mifare RF cards. With backlit room number. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TSM/U.2.1-CG	2CKA006300A1555			1

TB/U1.2.1-CG

Touch Control Element with Bus Coupler, FM **NEW**

Freely configurable multifunction control element. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. With integrated temperature sensor. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold	–	TB/U1.2.1-CG	2CKA006300A1578			1
2-fold	–	TB/U2.8.1-CG	2CKA006300A1579			1
2-fold	–	TB/U2.7.1-CG	2CKA006300A1580			1
4-fold	–	TB/U4.7.1-CG	2CKA006300A1581			1
6-fold	–	TB/U6.7.1-CG	2CKA006300A1582			1

TR/U.2.1-CG

Touch Room Temperature Controller with Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Control element with room thermostat function for controlling TSA/K 230.1, TSA/K 24.1 in connection with KNX-Heating actuator, commercially available valve drives or analogue valve drives (continuous controllers). The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1. Contribution to space heating energy efficiency 1,0 %. With integrated KNX bus coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/U.2.1-CG	2CKA006300A1583			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – ABB-tacteo

TBW/U.2.1-CG

Busch-Watchdog® 180 Sensor Standard with Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated temperature sensor. With integrated KNX bus coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TBW/U.2.1-CG	2CKA006300A1584			1

TA/U3.2.1-CG

Room Outdoor Sensor with Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. For reading mifare RF cards. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TA/U3.2.1-CG	2CKA006300A1585			1

TLM/U.2.1-CG

Room Outdoor Sensor with Card Reader and Bus Copupler, FM **NEW**

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. With integrated temperature sensor. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TLM/U.2.1-CG	2CKA006300A1587			1

TKK/U.2.1-CG

Card Holder with Bus Coupler, conventional NEW

Ordering possible only in connection with the design ID. For inserting mifare RF cards. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TKK/U.2.1-CG	2CKA006300A1588			1

TKM/U.2.1-CG

Card Holder with Bus Coupler, universal NEW

Ordering possible only in connection with the design ID. For inserting and evaluating of mifare RF cards. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TKM/U.2.1-CG	2CKA006300A1589			1

TB/U1.3.1-CG

Touch Control Element with Bus Coupler, FM NEW

Freely configurable multifunction control element. The icons and/or texts are configured by means of a web configuration tool. With integrated KNX bus coupler. With integrated temperature sensor. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold	–	TB/U1.3.1-CG	2CKA006300A1590			1
4-fold	–	TB/U4.8.1-CG	2CKA006300A1593			1
6-fold	–	TB/U6.8.1-CG	2CKA006300A1594			1

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ABB i-bus® KNX – User Operation – Design Ranges – ABB-tacteo

TR/U.3.1-CG

Touch Room Temperature Controller with Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/ no function assigned) or standard illumination red/green. Control element with room thermostat function for controlling TSA/K 230.1, TSA/K 24.1 in connection with KNX-Heating actuator, commercially available valve drives or analogue valve drives (continuous controllers). The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1. Contribution to space heating energy efficiency 1,0 %. With integrated KNX bus coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/U.3.1-CG	2CKA006300A1595			1

TBW/U.3.1-CG

Busch-Watchdog® 180 Sensor Standard with Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated temperature sensor. With integrated KNX bus coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TBW/U.3.1-CG	2CKA006300A1596			1

TA/U3.3.1-CG

Room Outdoor Sensor with Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. For reading mifare RF cards. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TA/U3.3.1-CG	2CKA006300A1597			1

TLM/U.3.1-CG

Room Outdoor Sensor with Card Reader and Bus Coupler, FM **NEW**

Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. With integrated temperature sensor. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TLM/U.3.1-CG	2CKA006300A1599			1

TSN/U.2.1-CG

Room Outdoor Sensor with Room Number and Bus Coupler, FM **NEW**

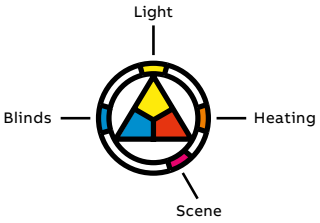
Ordering possible only in connection with the design ID. The icons and/or texts are configured by means of a web configuration tool. Freely programmable function ”Do not disturb“, ”Bell“ and ”Make up room“. With backlit room number. Push switch function: switching / dimming / blind / sending values / scenes etc. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. With integrated KNX bus coupler. The bus connection is provided via the enclosed bus terminal.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TSN/U.2.1-CG	2CKA006300A1603			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Busch-priOn®

Busch-priOn® allows you to control and monitor functions for the entire room. Light, scenes, timer, blind control unit, heating control unit – all functions are controlled simply and intuitively via a rotary dial, and freely programmable functions can be called up via the rocker switches. Busch-priOn® is a non-fixed, modular concept.



Colours that make life easier.
A consistent colour coding concept and durable LED technology make Busch-priOn® extremely easy to operate. The dial lights up in the colours of the coding system, thus providing feedback on the function currently selected. Yellow stands for lighting, blue for the blind control unit, magenta for light scenes and orange for the heating control unit. These colours are also found on the rocker switches of the control element panels.

01

The rotary control element is equipped with a freely programmable button which can be pressed and turned. It can be used to switch and dim individual lamps, but also to switch on whole groups of lamps with one press of a button and vary their brightness continuously via the dial.

Function
Dimming | Blinds | Value | Light scenes | Logic functions | Time functions

Features
Illuminated dial | Colour coding concept | Anti-theft protection | Day/night operation

02

The single control element is equipped with a freely programmable “large” operating button. It can be assigned to one topic and can carry out a maximum of two commands.

Function
Switching | Dimming | Blinds | Value | Buttons | Light scenes | Logic functions | Time functions

Features
Illuminated rocker switch | Colour coding concept | Freely programmable control button | Anti-theft protection | Replaceable labelling symbol (Fig. shows Lighting labelling symbol)

03

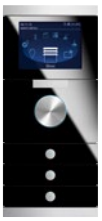
The triple control element is equipped with 3 freely programmable control buttons. Each can be assigned to one topic and can carry out a maximum of two commands.

Function
Switching | Dimming | Blinds | Value | Buttons | Light scenes | Logic functions | Time functions

Features
Illuminated rocker switches | Colour coding concept | Freely programmable control buttons | Anti-theft protection | Replaceable labelling symbol (Fig. shows labelling symbols Lighting, Blinds and Scene)

01	Rotary control element
02	1gang control element
03	3gang control element
04	Glass black
05	Studiowhite, glossy
06	Stainless steel
07	White glass

04



05

06

07

reddot design award
best of the best 2008

Busch-priOn® received special commendment in the category “best of the best,” winning the “red dot award: communication design 2008” for its interface design.

01

A single-line display with integrated room temperature controller has been designed for the Busch-priOn® 3gang control element, technically reduced to the basics and optically elegant. It is particularly easy to read due to the monochromatic design for white on black information. The room temperature controller, information function like time and date, up to 17 freely programmable text displays, IR sensor and proximity sensor have been integrated into the display. The design of the display is available in the colour and material “glass black” only.

02

The 8.9 cm (3.5") TFT display gives a clear overview of all information. Operation is simple intuitive, supported the colour coding concept. It is possible freely combine several Busch-priOn® elements with each other. display and a special allow simple and convenient control.

03

Busch-priOn® is a nonfixed, modular-design system. The rocker switches of the triple control element allow you to call up freely programmable functions such as light scenes, blind functions or specific lamps.

04

Busch-priOn® is ideal in combination with the carat® switch series, which has surfaces in the same design.

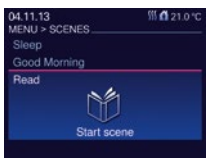
05

The Busch-priOn® flush-mounted movement sensor can be used individually or with other Busch-priOn® modules. Practical because users thus do not have to look for the light switch and are greeted with light when first entering a dark room.

The 8.9 cm (3.5") TFT display gives a clear overview of all information. The user can choose from 3 surface designs: black, blue and silver.

Blinds

Climate control



Scene

Note: We can only give you a rough idea here of the wide range of combinations offered by this modular concept. For more detailed information, see our separate product brochure / planning aid or the catalogue.

01	3gang control element with single-line display and temperature controller
02	2gang combination
03	3gang combination
04	carat® glass black
05	Flush-mounted movement sensor

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Planning aid for Busch-priOn®

End strips without function

studio white,
Article-No. 6348-24G-101-500

glass black,
Article-No. 6348-825-101-500

white glass,
Article-No. 6348-811-101-500

stainless steel,
Article-No. 6348-860-101-500

Support frame, bus coupler

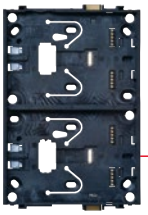
Bus coupler Busch-priOn®,
Article-No. 6120/12-101

1gang,
Article-No.
6346/10-101-500

Note:
This power adaptor can supply up to 15 power bus couplers with current.

Power adaptor
REG,
Article-No.
CP-D 24/2.5

Bus coupler Busch-priOn®,
Article-No. 6120/13-500

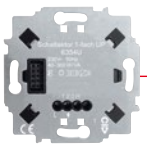


2gang,
Article-No.
6346/11-101-500

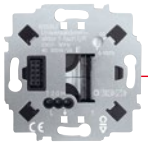
3gang,
Article-No.
6346/12-101-500

FM actuators

Without end strip incl. temperature reading



Switch actuator,
1gang, FM
2.300 w/VA,
Article-No.
6354 U-500



Universal dimming actuator, 1gang,
FM 10–450 w/VA,
Article-No.
6355 U-500

Serial/blind actuator,
2/1gang, FM
2.300 w/VA,
Article-No.
6356 U-500

End strip

Commissioning adaptor,
Article-No. 6149/21-500

End strips without function

studio white,
Article-No. 6349-24G-101-500

white glass,
Article-No. 6349-811-101-500

glass black,
Article-No. 6349-825-101-500

stainless steel,
Article-No. 6349-860-101-500

End strip with IR proximity function

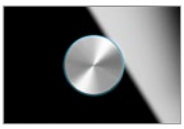
glass black,
Article-No.
6350-825-101-500

Note:
only combinable with 3gang control element

Single-line display and room thermostat,
Article-No.
6351-825-101-500

Control element, 1gang,
Article-No.
6340-825-101-500

Control element, 3gang, Article-No.
6342-825-101-500



Rotary control element, 1gang,
Article-No.
6341-825-101-500

Busch-Watchdog, 180 FM,
Article-No.
6345-825-101-500

Colour display with rotary control element, Article-No. 6344-825-101-500

End strips with temperature sensor.

Not combinable with FM actuators.

studio white,
Article-No. 6352-24G-101-500

white glass,
Article-No. 6352-811-101-500

glass black,
Article-No. 6352-825-101-500

stainless steel,
Article-No. 6352-860-101-500

Colour range

Busch-priOn®
glass black

Busch-priOn®
white glass

Busch-priOn®
stainless steel

Busch-priOn®
studio white, gloss

Labelling symbols

Labelling inserts for blinds, lighting, RTC and scene. The colours are repeated in the Busch-Jaeger colour concept.

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Busch-priOn®

6120/12-101-500

Bus Coupler, FM

for Busch-priOn® support frame 1-fold 6346/10-10x and control elements 6122/0x-xxx, 6124/0x-xxx, 6125/0x-xxx, 6126/0x-xxx, 6127/0x-xxx, 6128/0x-xxx and 6129/0x-xxx.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6120/12-101-500	2CKA006120A0075			1
swiss version	–	6120/12-101-508	2CKA006120A0076			1

6120/13-500

Power Bus Coupler, FM, Busch-priOn®

For Busch-priOn® base frame 1-fold, 2-fold and 3-fold. Separate power supply required. The KNX connection is used exclusively for bus communication.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6120/13-500	2CKA006120A0072			1
swiss version	–	6120/13-508	2CKA006120A0073			1

6354 U-500

Switch Actuator/Sensor, 1-fold, FM, Busch-priOn®

For switching incandescent lamps, 230 V halogen lamps, fluorescent lamps and low-voltage halogen lamps operated using transformers 3-wire technology (Neutral conductor required). Only in conjunction with a 2-fold and 3-fold base frame Cannot be combined with the lower finishing strip with temperature sensor.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6354 U-500	2CKA006310A0097			1

6356 U-500

Shutter/2-fold Actuator, FM, Busch-priOn®

Only in conjunction with a 2-fold and 3-fold base frame. Not suitable for switching fluorescent lamps, HQI lamps and HQL lamps. Cannot be combined with the lower finishing strip with temperature sensor.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6356 U-500	2CKA006310A0099			1

6355 U-500

Universal Dim Actuator, 1-fold, FM, Busch-priOn®

For dimming and switching of incadescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional or electronic transformers. 2-wire connection (neutral conductor not required). Do not operate conventional transformers and electronic transformers together on the universal dimmer switch insert. Can be used only in connection with support frame 2gang (6346/11-101-500) and 3gang (6346/12-101-500). Not combinable with the bottom end strip with temperature sensor (6352-xxx-101-500).

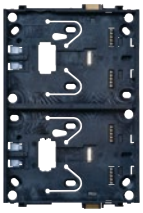
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6355 U-500	2CKA006310A0098			1

6346/10-101-500

Base Frame, 1-fold, Busch-priOn®

For Busch-priOn® for seating and contact connection of rotary control elements, operating element 1-fold and 3-fold as well as the top/bottom finishing strip. For contacting with the Bus Coupler priOn or Power Bus Coupler priOn.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6346/10-101-500	2CKA006310A0135			1



6346/11-101-500

Base Frame, 2-fold, Busch-priOn®

For Busch-priOn® for seating and contact connection of 8.89 cm (3.5") TFT colour display with rotary control element, rotary control element 1-fold and 3-fold as well as the top/bottom finishing strip. For contacting with the Power Bus Coupler priOn.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6346/11-101-500	2CKA006310A0137			1

6346/12-101-500

Base Frame, 3-fold, Busch-priOn®

For Busch-priOn® for seating and contact connection of 8.89 cm (3.5") TFT colour display with rotary control element, rotary control element 1-fold and 3-fold as well as the top/bottom finishing strip. For contacting with the Power Bus Coupler priOn.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6346/12-101-500	2CKA006310A0139			1

Intelligent Building Solutions

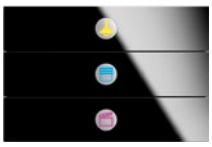
ABB i-bus® KNX – User Operation – Design Ranges – Busch-priOn®

6340-825-101-500

Control Element, 1-fold, Busch-priOn®

Freely programmable multi-function operation element for installation in the Base Frame 1-fold, 2-fold or 3-fold. Supports the KNX functions with innovative colour concept on the labelling symbols or standard lighting in red/green. The accompanying symbol can be substituted by other alternative labelling symbols.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6340-24G-101-500	2CKA006310A0109			1
white glass	–	6340-811-101-500	2CKA006310A0168			1
glas black	–	6340-825-101-500	2CKA006310A0108			1
stainless steel	–	6340-866-101-500	2CKA006310A0106			1

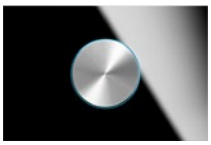


6342-825-101-500

Control Element, 3-fold, Busch-priOn®

Freely programmable multi-function operation element for installation in the Base Frame 1-fold, 2-fold or 3-fold. Supports the KNX functions with innovative colour concept on the labelling symbols or standard lighting in red/green. The accompanying symbol can be substituted by other alternative labelling symbols.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6342-24G-101-500	2CKA006310A0125			1
white glass	–	6342-811-101-500	2CKA006310A0172			1
glas black	–	6342-825-101-500	2CKA006310A0124			1
stainless steel	–	6342-866-101-500	2CKA006310A0122			1



6341-825-101-500

Rotary Control Element, 1-fold, Busch-priOn®

Freely programmable multi-function rotary control element for installation in the Base Frame 1-fold, 2-fold or 3-fold. Supports the KNX functions with innovative colour concept on the rotary knob or standard lighting in red/green. Rotary knob stainless steel.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6341-24G-101-500	2CKA006310A0117			1
white glass	–	6341-811-101-500	2CKA006310A0170			1
glas black	–	6341-825-101-500	2CKA006310A0116			1
stainless steel	–	6341-866-101-500	2CKA006310A0114			1

6344-825-101-500

8.89 cm (3,5") TFT-Display with Rotary Control Element, Busch-priOn®

Freely programmable 8.89 cm (3.5") TFT colour display with rotary control element for installation in the Base Frame, 2-fold or 3-fold. For representation of up to 120 functions.
With integrated weekly time switch, alarm, timer, with light scene function, screensaver and control of multimedia devices (in conjunction with additional device). Free function inscription with user-defined texts and symbols. Supports the KNX functions with innovative colour concept on the rotary knob. Rotary knob stainless steel.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6344-24G-101-500	2CKA006310A0133			1
white glass	–	6344-811-101-500	2CKA006310A0174			1
glas black	–	6344-825-101-500	2CKA006310A0132			1
stainless steel	–	6344-866-101-500	2CKA006310A0130			1

6345-825-101-500

Busch Watchdog® 180 FM Sensor, Busch-priOn®

Sends switching commands with motion detection in combination with the bus coupler Busch-priOn®. Programmable via ETS for automatic and semi-automatic operation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6345-24G-101-500	2CKA006310A0081			1
white glass	–	6345-811-101-500	2CKA006310A0176			1
glas black	–	6345-825-101-500	2CKA006310A0080			1
stainless steel	–	6345-866-101-500	2CKA006310A0078			1

6348-825-101-500

Top End Strip, Busch-priOn®

For mounting on Base Frame 1-fold to 3-fold.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6348-24G-101-500	2CKA006310A0147			1
white glass	–	6348-811-101-500	2CKA006310A0178			1
glas black	–	6348-825-101-500	2CKA006310A0146			1
stainless steel	–	6348-866-101-500	2CKA006310A0144			1

6350-825-101-500

Top End Strip with IR Receiver and Proximity Sensor, Busch-priOn®

For mounting on Base Frame 1-fold to 3-fold. With integrated IR receiver for control by IR handheld control as well as integrated proximity function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
glas black	–	6350-825-101-500	2CKA006310A0157			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Busch-priOn®

6349-825-101-500

Bottom End Strip, without logo, Busch-priOn®

For mounting on Base Frame 1-fold to 3-fold.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6349-24G-101-500	2CKA006310A0155			1
white glass	–	6349-811-101-500	2CKA006310A0180			1
glas black	–	6349-825-101-500	2CKA006310A0154			1
stainless steel	–	6349-860-101-500	2CKA006310A0152			1

6352-825-101-500

Bottom End Strip with Temperature Sensor, Busch-priOn®

For mounting on Base Frame 1-fold to 3-fold. Provides the value measured by the temperature sensor to the 8.89 cm (3.5") TFT colour display or the room thermostat.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white, high gloss	–	6352-24G-101-500	2CKA006310A0165			1
white glass	–	6352-811-101-500	2CKA006310A0182			1
glas black	–	6352-825-101-500	2CKA006310A0164			1
stainless steel	–	6352-860-101-500	2CKA006310A0162			1

6351/08-825-500

Top End Strip with Display, Room Thermostat, IR Receiver and Proximity Sensor, Busch-priOn®

Top end strip for installation on 1gang to 3gang support frame (6346/10-101, 6346/11-101 and 6346/12-101). With integrated IR receiver for control using the Busch remote control 6010-25 or 6020-.../6121... and integrated proximity function. For heating and cooling (PI, PWM or 2-point). For control of up to 5-level ventilation actuators. With manual adjustment of fan levels. Master/slave configuration. With base-load operation. Display of up to 17 functions as text and/or icon. Only in connection with 1-gang rotary control element (6341-xxx-101) and 3-gang control element (6342-xxx-101) possible. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Detection range: frontal: 0.5 m, lateral: 0.5 m. Detection angle: 100 °. Mounting height: 1.1 m. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 33.4 mm x 106.6 mm x 15.5 mm

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
glas black	–	6351/08-825-500	2CKA006310A0183			1

6353/20-860-500

Inscription Symbols, Busch-priOn®

For Busch-priOn® operating element 1-fold to 3-fold with different symbols.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
lighting	–	6353/20-860-500	2CKA006310A0093			1
blind	–	6353/30-860-500	2CKA006310A0094			1
Room Temperature	–	6353/40-860-500	2CKA006310A0095			1
scene	–	6353/50-860-500	2CKA006310A0096			1

6149/21-500

Commissioning Interface / Adapter

6120/12-101-500 and 6120/13-500 via USB port or via SD card slot.
With integrated battery for independent operation for up to 8 h.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6149/21-500	2CKA006133A0201			1

CP-D 24/2.5

Commissioning Interface / Adapter

6120/12-101-500 and 6120/13-500 via USB port or via SD card slot.
With integrated battery for independent operation for up to 8 h.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	CP-D 24/2.5	2CDG120037R0011			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – ClimaECO Sensors

SBS/U6.0.1-84

Control Element with RTC Slave Unit, 6-fold **NEW**

Freely configurable multifunction control element. Room Thermostat extension with max. 6gang control. With labelling field. Transparent labelling sheet with standard symbols included in delivery. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). With integrated temperature sensor. With actual value temperature display. With display of set-value temperature. The bus can be connected via enclosed terminal block.

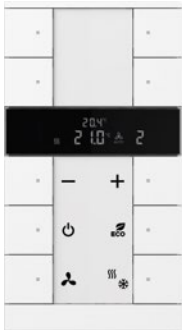
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SBS/U6.0.1-84	2CKA006330A0002			1

SBR/U6.0.1-84

Room Temperature Controller with Control Element, 6-fold **NEW**

Freely configurable multifunction control element. With integrated KNX bus coupler. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Push switch function: switching / dimming / blind / sending values / scenes etc. For activating heating, ventilation and fan coil actuators. Master/slave configuration. With base-load operation. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SBR/U6.0.1-84	2CKA006330A0004			1



SBS/U10.0.1-84

Control Element with RTC Slave Unit, 10-fold **NEW**

Freely configurable multifunction control element. With labelling field. Transparent labelling sheet with standard symbols included in delivery. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=-neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). With integrated temperature sensor. With actual value temperature display. With display of set-value temperature. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SBS/U10.0.1-84	2CKA006330A0006			1

SBR/U10.0.1-84

Room Temperature Controller with Control Element, 10-fold **NEW**

Freely configurable multifunction control element. With integrated KNX bus coupler. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Push switch function: switching / dimming / blind / sending values / scenes etc. Master/slave configuration. With base-load operation. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1.

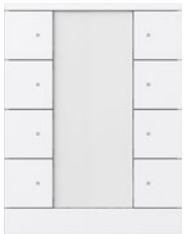
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SBR/U10.0.1-84	2CKA006330A0008			1

SBC/U6.0.1-84

RTC with CO_2/Humidity Sensor and Control Element **NEW**

Control element with room temperature controller function and CO_2/moisture/air pressure sensor. With integrated KNX bus coupler. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green. Push switch function: switching / dimming / blind / sending values / scenes etc. For activating heating, ventilation and fan coil actuators. Master/slave configuration. With base-load operation. The fan stage can be switched manually or in automatic mode. Class of temperature controller 1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white, 6-fold	–	SBC/U6.0.1-84	2CKA006330A0010			1
davos/studio white, 10-fold	–	SBC/U10.0.1-84	2CKA006330A0012			1



SB/U8.0.1-84

Control Element **NEW**

With integrated KNX bus coupler. With labelling field. Support of KNX functions through innovative colour concept (yellow=lighting, blue=blind, orange=RTC, magenta=scene and white=neutral/no function assigned) or standard illumination red/green.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white, 8-fold	–	SB/U8.0.1-84	2CKA006330A0014			1
davos/studio white, 12-fold	–	SB/U12.0.1-84	2CKA006330A0016			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – ClimaECO Sensors

SAS/A.0.1-84

Support Frame, small, SM

NEW

Surface-mounted housing for mounting 8gang control element, RT with 6gang control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SAS/A.0.1-84	2CKA006330A0018			1

SAB/A.0.1-84

Support Frame, large, SM

NEW

Surface-mounted housing for mounting 12gang control element, RT with 10gang control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SAB/A.0.1-84	2CKA006330A0020			1

SLS/A.0.1-84

Cover for Label Area, small, RTC

NEW

Marking coverplate for RTR with 6gang control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SLS/A.0.1-84	2CKA006330A0022			1

SLM/A.0.1-84

Cover for Label Area, Control Element, small

NEW

Marking coverplate for 8gang control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SLM/A.0.1-84	2CKA006330A0024			1

SLB/A.0.1-84

Cover for Label Area, large, RTC

NEW

Upper marking coverplate for RT with 10-fold control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SLB/A.0.1-84	2CKA006330A0026			1

SLX/A.0.1-84

Cover for Label Area, Control Element, large

NEW

Marking coverplate for 12gang control element.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
davos/studio white	–	SLX/A.0.1-84	2CKA006330A0028			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Standard Control Elements

The standard control elements are available as 1/2gang, 2/4gang or 4/8gang models. Every switch rocker has two LEDs, which display the status of the connected loads. The separate switch rockers are freely programmable and are suitable for switching and dimming, and also for operating blinds and as a light scene extension unit.

They can also be used in commercial applications. Anti-theft protection has also been integrated – an important factor for installations in public areas.

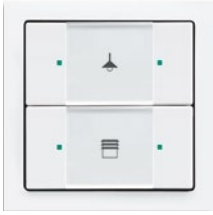
Customised text. Pictograms can be applied to push buttons for easier orientation. A clear text template with standard symbols is included for every sensor. The self-explanatory pictograms are available for the complete range of building control technology and if necessary can be easily replaced. If the appropriate symbol is not included, the push buttons can be labelled as desired. The related bus-coupler unit is included in delivery.

01

Function
Switching | Dimming | Blinds | Push-button | Value transmitter | Light scene extension unit

Features
Labellable switch rockers | Anti-theft protection | Freely programmable switches | Status/orientation light (red/green/OFF)

02



Function
Switching | Dimming | Blinds | Push-button | Value transmitter | Light scene extension unit

Features
Labellable switch rockers | Anti-theft protection | Freely programmable switches | Status/orientation light (red/green/OFF)

03

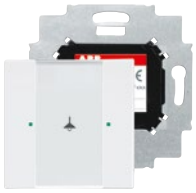
Function
Switching | Dimming | Blinds | Push-button | Value transmitter | Light scene extension unit

Features
Labellable switch rockers | Anti-theft protection | Freely programmable switches | Status/orientation light (red/green/OFF)

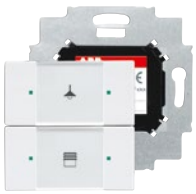
01 Standard control element 1/2gang
02 Standard control element 2/4gang
03 Standard control element 4/8gang

Standard control element with bus coupler enclosed

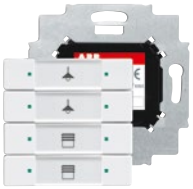
With labelling field. Transparent labelling sheet with standard symbols included in delivery. Display elements: Two LED per rocker via separate communication object for status (Red/Green/OFF) or orientation light. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to + 45 °C. Dimensions: (L x W x D): 63 mm x 63 mm.



6125/01



6126/01



6127/01

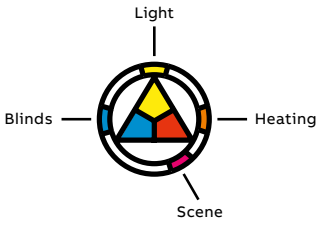
Pack unit pc.	Weight 1 pc. kg	Description	Control Element with Bus Coupler, standard, FM, 1-fold with bus coupler enclosed With 1 Control element: rocker switch left/right Order details		Price 1 pc.	Control Element with Bus Coupler, standard, FM, 2-fold with bus coupler enclosed With 2 Control elements: rocker switch left/right Order details		Price 1 pc.	Control Element with Bus Coupler, standard, FM, 4-fold with bus coupler enclosed With 4 Control elements: rocker switch left/right Order details		Price 1 pc.
			Type	Order code		Type	Order code		Type	Order code	
		future® linear									
1		anthracite	6125/01-81-500	2CKA006115A0205		6126/01-81-500	2CKA006116A0195		6127/01-81-500	2CKA006117A0221	
1		savanne/ivory	6125/01-82-500	2CKA006115A0206		6126/01-82-500	2CKA006116A0196		6127/01-82-500	2CKA006117A0222	
1		aluminium silver [1]	6125/01-83-500	2CKA006115A0207		6126/01-83-500	2CKA006116A0197		6127/01-83-500	2CKA006117A0223	
1		davos/studio white	6125/01-84-500	2CKA006115A0183		6126/01-84-500	2CKA006116A0174		6127/01-84-500	2CKA006117A0200	
1		studio white, matt [1]	6125/01-884-500	2CKA006115A0214		6126/01-884-500	2CKA006116A0204		6127/01-884-500	2CKA006117A0230	
1		black, matt [1]	6125/01-885-500	2CKA006115A0215		6126/01-885-500	2CKA006116A0205		6127/01-885-500	2CKA006117A0231	
		solo®									
1		savanne/ivory	6125/01-82-500	2CKA006115A0206		6126/01-82-500	2CKA006116A0196		6127/01-82-500	2CKA006117A0222	
1		davos/studio white	6125/01-84-500	2CKA006115A0183		6126/01-84-500	2CKA006116A0174		6127/01-84-500	2CKA006117A0200	
1		meteor/grey metallic [1]	6125/01-803-500	2CKA006115A0212		6126/01-803-500	2CKA006116A0202		6127/01-803-500	2CKA006117A0228	
		carat®									
1		anthracite	6125/01-81-500	2CKA006115A0205		6126/01-81-500	2CKA006116A0195		6127/01-81-500	2CKA006117A0221	
1		savanne/ivory	6125/01-82-500	2CKA006115A0206		6126/01-82-500	2CKA006116A0196		6127/01-82-500	2CKA006117A0222	
1		davos/studio white	6125/01-84-500	2CKA006115A0183		6126/01-84-500	2CKA006116A0174		6127/01-84-500	2CKA006117A0200	
		pure stainless steel [1]									
1		stainless steel	6125/01-866-500	2CKA006115A0211		6126/01-866-500	2CKA006116A0201		6127/01-866-500	2CKA006117A0227	
		Busch-axcent®									
1		davos/studio white	6125/01-84-500	2CKA006115A0183		6126/01-84-500	2CKA006116A0174		6127/01-84-500	2CKA006117A0200	

[1] Surface painted

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Multifunction Control Elements

The multifunction control elements with LED colour code concept meet the highest demands for comfort and technology. They each come with two RGB LEDs per rocker switch, which conform to a consistent colour concept. This makes the function obvious at a glance, and the surfaces can be additionally fitted with pictograms. Each side of a rocker switch can be occupied with its own function – each for calling up one light scene, for instance. This turns a 4gang control element into an 8gang control element.



01	Multifunction control element 1/2gang
02	Multifunction control element 2/4gang
03	Multifunction control element 4/8gang
04	Room temperature controller
05	Multifunction control element 2/4gang, integrated room thermostat
06	Multifunction control element 3/6gang with IR reception
07	FM movement detector standard
08	FM movement detector comfort

01

Function
Switching | Dimming | Blinds | Push-button | Value transmitter | Light scene extension unit | Step-type | Multiple operation | Logic function (including light scenes)

Features
Labellable switch rockers | Anti-theft protection | Freely programmable switches | LED colour code concept

02

Function
Switching | Dimming | Blinds | Push-button | Value transmitter | Light scene extension unit | Step-type | Multiple operation | Logic function (including light scenes)

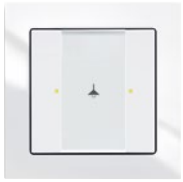
Features
Labellable switch rockers | Anti-theft protection | Freely programmable switches | LED colour code concept

03

Function
Switching | Dimming | Blinds | Push-button | Value transmitter | Light scene extension unit | Step-type | Multiple operation | Logic function (including light scenes)

Features
Labellable switch rockers | Anti-theft protection | Freely programmable switches | LED colour code concept

Wide range. Different shapes, colours and materials fulfil every requirement. KNX control elements are available in the carat®, pure stainless steel, solo®, Busch-axcent® and future® linear programmes. The complete range of conventional switches from these series is available, so there are no limits to the options for combining KNX components.



04

Function
Comfort | Stand-by | Night mode | Frost protection | Specified temperature | Time | Date | Heating | Cooling | Fan Coil operation for heating and cooling | Light scenes | Light scene extension unit | Value | Logic function (including light scenes)

Features
Labellable switch rockers | Anti-theft protection | Display illumination | LED colour code concept

05

Function
Comfort | Stand-by | Night mode | Frost protection | Specified temperature | Time | Date | Heating | Cooling | Fan Coil operation for heating and cooling | Light scenes | Light scene extension unit | Value | Logic function (including light scenes)

Features
Labellable switch rockers | Anti-theft protection | Display illumination | Colour concept

06

Function
10 freely programmable IR channels | Switching | Dimming | Blinds | Button | Light scenes | Light scene extension unit | Value | Logic function (including light scenes)

Features
Labellable switch rockers | Anti-theft protection | Display illumination | Colour concept

07

08

Function
4 channels | Logic function (including light scenes)

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Multifunction Control Elements

Control element, Multi-function/colour concept
For BCU 6120/12-101-500 or 6120/13-500. With labelling field. Support of KNX functions through innovative colour concept or standard illumination red/green. Push switch function: switching/dimming/blind/sending values/scenes etc. Transparent labelling sheet with standard symbols included in delivery. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Display elements: Two LED per rocker via separate communication object for status (Red/Green/OFF) or orientation light.

6125/02

6126/02

6127/02

			Control element, 1/2-fold Multi-function/colour concept			Control element, 2/4-fold Multi-function/colour concept			Control element, 4/8-fold Multi-function/colour concept		
			With 1 Control element: rocker switch left/right			With 2 Control elements: rocker switch left/right			With 4 Control elements: rocker switch left/right		
Pack unit pc.	Weight 1 pc. kg	Description	Order details		Price 1 pc.	Order details		Price 1 pc.	Order details		Price 1 pc.
			Type	Order code		Type	Order code		Type	Order code	
		future® linear									
1		anthracite	6125/02-81-500	2CKA006115A0216		6126/02-81-500	2CKA006116A0206		6127/02-81-500	2CKA006117A0232	
1		savanne/ivory	6125/02-82-500	2CKA006115A0217		6126/02-82-500	2CKA006116A0207		6127/02-82-500	2CKA006117A0233	
1		aluminium silver [1]	6125/02-83-500	2CKA006115A0218		6126/02-83-500	2CKA006116A0208		6127/02-83-500	2CKA006117A0234	
1		davos/studio white	6125/02-84-500	2CKA006115A0219		6126/02-84-500	2CKA006116A0209		6127/02-84-500	2CKA006117A0235	
1		studio white, matt [1]	6125/02-884-500	2CKA006115A0226		6126/02-884-500	2CKA006116A0216		6127/02-884-500	2CKA006117A0242	
1		black, matt [1]	6125/02-885-500	2CKA006115A0227		6126/02-885-500	2CKA006116A0217		6127/02-885-500	2CKA006117A0243	
		solo®									
1		savanne/ivory	6125/02-82-500	2CKA006115A0217		6126/02-82-500	2CKA006116A0207		6127/02-82-500	2CKA006117A0233	
1		davos/studio white	6125/02-84-500	2CKA006115A0219		6126/02-84-500	2CKA006116A0209		6127/02-84-500	2CKA006117A0235	
1		meteor/grey metallic [1]	6125/02-803-500	2CKA006115A0224		6126/02-803-500	2CKA006116A0214		6127/02-803-500	2CKA006117A0240	
		carat®									
1		anthracite	6125/02-81-500	2CKA006115A0216		6126/02-81-500	2CKA006116A0206		6127/02-81-500	2CKA006117A0232	
1		savanne/ivory	6125/02-82-500	2CKA006115A0217		6126/02-82-500	2CKA006116A0207		6127/02-82-500	2CKA006117A0233	
1		davos/studio white	6125/02-84-500	2CKA006115A0219		6126/02-84-500	2CKA006116A0209		6127/02-84-500	2CKA006116A0209	
		pure stainless steel [1]									
1		stainless steel	6125/02-866-500	2CKA006115A0223		6126/02-866-500	2CKA006116A0213		6127/02-866-500	2CKA006117A0239	
		Busch-axcent®									
1		davos/studio white	6125/02-84-500	2CKA006115A0219		6126/02-84-500	2CKA006116A0209		6127/02-84-500	2CKA006117A0235	
		Dynasty®									
1		anthracite	6125/02-81-500	2CKA006115A0216		6126/02-81-500	2CKA006116A0206		6127/02-81-500	2CKA006117A0232	
1		savanne/ivory	6125/02-82-500	2CKA006115A0217		6126/02-82-500	2CKA006116A0207		6127/02-82-500	2CKA006117A0233	
1		antique brass	6125/02-840-500	2CKA006115A0452		6126/02-840-500	2CKA006116A0227		6127/02-840-500	2CKA006117A0252	

[1] Surface painted

6129/01

Control Element, 3/6-fold, multifunction, with IR-Interface, FM
suitable for KNX bus coupler 6120/12-101-500 and 6120/13-500. With IR interface for Busch-remote controllers 6010-25 or 6020-.../6021-... . Push button function: switching/dimming/blind/value sending/light scenes/step-type switch functions. Switch contacts left/right. Two freely programmable RGB LEDs per rocker. With RGB colour code concept or red/green/OFF-operation. With labeling field. Transparent labeling sheet with standard symbols included in delivery.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
future® linear						
anthracite	–	6129/01-81-500	2CKA006135A0156			1
savanne/ivory	–	6129/01-82-500	2CKA006135A0157			1
aluminium silver [1]	–	6129/01-83-500	2CKA006135A0158			1
davos/studio white	–	6129/01-84-500	2CKA006135A0146			1
studio white, matt [1]	–	6129/01-884-500	2CKA006135A0165			1
black, matt [1]	–	6129/01-885-500	2CKA006135A0166			1
solo®						
savanne/ivory	–	6129/01-82-500	2CKA006135A0157			1
davos/studio white	–	6129/01-84-500	2CKA006135A0146			1
meteor/grey metallic [1]	–	6129/01-803-500	2CKA006135A0163			1
carat®						
anthracite	–	6129/01-81-500	2CKA006135A0156			1
savanne/ivory	–	6129/01-82-500	2CKA006135A0157			1
davos/studio white	–	6129/01-84-500	2CKA006135A0146			1
pure stainless steel [1]						
stainless steel	–	6129/01-866-500	2CKA006135A0162			1
Busch-axcent®						
davos/studio white	–	6129/01-84-500	2CKA006135A0146			1

[1] Surface painted

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Movement Detectors

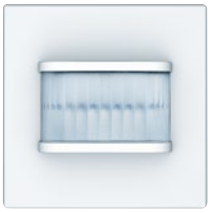
6122/02-84-500

Busch-Watchdog® 180 Comfort, FM

Movement detector with up to 4 channels. For ABB i-bus® KNX 6120/12-101-500, 6120/13-500. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.)

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
future® linear						
anthracite	–	6122/02-81-500	2CKA006132A0283			1
savanne/ivory	–	6122/02-82-500	2CKA006132A0284			1
aluminium silver [1]	–	6122/02-83-500	2CKA006132A0285			1
davos/studio white	–	6122/02-84-500	2CKA006132A0263			1
studio white, matt [1]	–	6122/02-884-500	2CKA006132A0292			1
black, matt [1]	–	6122/02-885-500	2CKA006132A0293			1
solo®						
savanne/ivory	–	6122/02-82-500	2CKA006132A0284			1
davos/studio white	–	6122/02-84-500	2CKA006132A0263			1
meteor/grey metallic [1]	–	6122/02-803-500	2CKA006132A0290			1
carat®						
anthracite	–	6122/02-81-500	2CKA006132A0283			1
savanne/ivory	–	6122/02-82-500	2CKA006132A0284			1
davos/studio white	–	6122/02-84-500	2CKA006132A0263			1
pure stainless steel [1]						
stainless steel	–	6122/02-866-500	2CKA006132A0289			1
Busch-axcent®						
davos/studio white	–	6122/02-84-500	2CKA006132A0263			1

[1] Surface painted



6122/10-84-500

Busch-Watchdog® 180 Sensor Standard, Select with integrated bus coupler, FM
Movement detector with up to 4 channels. The bus can be connected via enclosed terminal block. With integrated KNX bus coupler.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	6122/10-212-500	2CKA006132A0373			1
alpine white	–	6122/10-214-500	2CKA006132A0374			1
future® linear						
anthracite	–	6122/10-81-500	2CKA006132A0376			1
ivory	–	6122/10-82-500	2CKA006132A0377			1
aluminium silver	–	6122/10-83-500	2CKA006132A0378			1
studio white	–	6122/10-84-500	2CKA006132A0379			1
studio white matt	–	6122/10-884-500	2CKA006132A0380			1
black, matt	–	6122/10-885-500	2CKA006132A0381			1
solo®						
ivory	–	6122/10-82-500	2CKA006132A0377			1
studio white	–	6122/10-84-500	2CKA006132A0379			1
grey metallic	–	6122/10-803-500	2CKA006132A0382			1
Busch-axcent®						
studio white	–	6122/10-84-500	2CKA006132A0379			1
pure stainless steel						
stainless steel	–	6122/10-866-500	2CKA006132A0385			1
carat®						
anthracite	–	6122/10-81-500	2CKA006132A0376			1
ivory	–	6122/10-82-500	2CKA006132A0377			1
studio white	–	6122/10-84-500	2CKA006132A0379			1
Dynasty®						
anthracite	–	6122/10-81-500	2CKA006132A0376			1
ivory	–	6122/10-82-500	2CKA006132A0377			1
antique brass	–	6122/10-840-500	2CKA006132A0407			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Room Thermostats

6128/28-884-500

Room Thermostat with Display and 2/4-fold Switch Sensor, FM
For ABB i-bus® KNX bus coupler 6120/12-101-500, 6120/13-500. Support of KNX functions through innovative colour concept (yellow = lighting, blue = blind, orange = RTC, magenta = scene and white = neutral/no function assigned) or standard illumination red/green. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). Master/slave configuration. With base-load operation. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Transparent labelling sheet with standard symbols included in delivery. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts left/right, also for selecting setpoint and mode of operation Display elements: LCD showing operation mode and temperature. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C. Dimensions: (L x W x D): 63 mm x 63 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
future® linear						
anthracite	–	6128/28-81-500	2CKA006134A0331			1
savanne/ivory	–	6128/28-82-500	2CKA006134A0332			1
aluminium silver	–	6128/28-83-500	2CKA006134A0333			1
davos/studio white	–	6128/28-84-500	2CKA006134A0334			1
studio white, matt	–	6128/28-884-500	2CKA006134A0338			1
black, matt	–	6128/28-885-500	2CKA006134A0339			1
solo®						
savanne/ivory	–	6128/28-82-500	2CKA006134A0332			1
davos/studio white	–	6128/28-84-500	2CKA006134A0334			1
meteor/grey metallic	–	6128/28-803-500	2CKA006134A0336			1
carat®						
anthracite	–	6128/28-81-500	2CKA006134A0331			1
savanne/ivory	–	6128/28-82-500	2CKA006134A0332			1
davos/studio white	–	6128/28-84-500	2CKA006134A0334			1
pure stainless steel						
stainless steel	–	6128/28-866-500	2CKA006134A0335			1
Busch-axcent®						
davos/studio white	–	6128/28-84-500	2CKA006134A0334			1
Dynasty®						
anthracite	–	6128/28-81-500	2CKA006134A0331			1
savanne/ivory	–	6128/28-82-500	2CKA006134A0332			1
antique brass	–	6128/28-840-500	2CKA006134A0342			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Frames

1721-184K

Frames, future® linear

For vertical and horizontal installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, anthracite	–	1721-181K	2CKA001754A4240			10
1-fold, savanna/ivory	–	1721-182K-500	2CKA001754A4506			10
1-fold, aluminium silver [1]	–	1721-183K-500	2CKA001754A4529			10
1-fold, davos/studio white	–	1721-184K-500	2CKA001754A4498			10
1-fold, studio white, matt [1]	–	1721-884K-500	2CKA001754A4531			10
1-fold, black matt [1]	–	1721-885K-500	2CKA001754A4532			10
2-fold, anthracite	–	1722-181K	2CKA001754A4241			10
2-fold, savanna/ivory	–	1722-182K	2CKA001754A4231			10
2-fold, aluminium silver [1]	–	1722-183K-500	2CKA001754A4530			10
2-fold, davos/studio white	–	1722-184K-500	2CKA001754A4499			10
2-fold, studio white, matt [1]	–	1722-884K	2CKA001754A4415			10
2-fold, black matt [1]	–	1722-885K-500	2CKA001754A4534			10
3-fold, anthracite	–	1723-181K	2CKA001754A4242			10
3-fold, savanna/ivory	–	1723-182K	2CKA001754A4232			10
3-fold, aluminium silver [1]	–	1723-183K-500	2CKA001754A4533			10
3-fold, davos/studio white	–	1723-184K-500	2CKA001754A4502			10
3-fold, studio white, matt [1]	–	1723-884K	2CKA001754A4416			10
3-fold, black matt [1]	–	1723-885K	2CKA001754A4421			10
4-fold, anthracite	–	1724-181K	2CKA001754A4243			10
4-fold, savanna/ivory	–	1724-182K	2CKA001754A4233			10
4-fold, aluminium silver [1]	–	1724-183K	2CKA001754A4309			10
4-fold, davos/studio white	–	1724-184K	2CKA001754A4238			10
4-fold, studio white, matt [1]	–	1724-884K	2CKA001754A4417			10
4-fold, black matt [1]	–	1724-885K	2CKA001754A4422			10
5-fold, anthracite	–	1725-181K	2CKA001754A4244			1
5-fold, savanna/ivory	–	1725-182K	2CKA001754A4234			1
5-fold, aluminium silver [1]	–	1725-183K	2CKA001754A4310			1
5-fold, davos/studio white	–	1725-184K-500	2CKA001754A4517			1
5-fold, studio white, matt [1]	–	1725-884K	2CKA001754A4418			1
5-fold, black matt [1]	–	1725-885K	2CKA001754A4423			1

[1] Surface painted

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Frames

1721-80

Frames, solo®

For vertical and horizontal installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, chrome, matt	–	1721-80-500	2CKA001754A4535			10
1-fold, chrome, glossy	–	1721-80G-500	2CKA001754A4538			10
1-fold, davos/studio white	–	1721-84-500	2CKA001754A4536			10
2-fold, chrome, matt	–	1722-80-500	2CKA001754A4537			10
2-fold, chrome, glossy	–	1722-80G	2CKA001754A4327			10
2-fold, davos/studio white	–	1722-84-500	2CKA001754A4539			10
3-fold, chrome, matt	–	1723-80-500	2CKA001754A4540			10
3-fold, chrome, glossy	–	1723-80G	2CKA001754A4328			10
3-fold, davos/studio white	–	1723-84-500	2CKA001754A4541			10
4-fold, chrome, matt	–	1724-80	2CKA001754A4107			1
4-fold, chrome, glossy	–	1724-80G	2CKA001754A4329			1
4-fold, davos/studio white	–	1724-84	2CKA001754A4112			1
5-fold, chrome, matt	–	1725-80	2CKA001754A4108			1
5-fold, chrome, glossy	–	1725-80G	2CKA001754A4330			1
5-fold, davos/studio white	–	1725-84	2CKA001754A4113			1

1721-860

Frames, carat®

For vertical and horizontal installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, white glass	–	1721-811	2CKA001754A4442			1
1-fold, bronze	–	1721-821	2CKA001754A4258			1
1-fold, gold [1]	–	1721-823-101	2CKA001754A4356			1
1-fold, glass black	–	1721-825	2CKA001754A4322			1
1-fold, chrome	–	1721-826-101	2CKA001754A4360			1
1-fold, stainless steel	–	1721-860	2CKA001754A4254			1
2-fold, white glass	–	1722-811	2CKA001754A4443			1
2-fold, bronze	–	1722-821	2CKA001754A4259			1
2-fold, gold [1]	–	1722-823-101	2CKA001754A4357			1
2-fold, glass black	–	1722-825	2CKA001754A4323			1
2-fold, chrome	–	1722-826-101	2CKA001754A4361			1
2-fold, stainless steel	–	1722-860	2CKA001754A4255			1
3-fold, white glass	–	1723-811	2CKA001754A4444			1
3-fold, bronze	–	1723-821	2CKA001754A4260			1
3-fold, gold [1]	–	1723-823-101	2CKA001754A4358			1
3-fold, glass black	–	1722-825	2CKA001754A4323			1
3-fold, chrome	–	1723-826-101	2CKA001754A4362			1
3-fold, stainless steel	–	1723-860	2CKA001754A4256			1
4-fold, white glass	–	1724-811	2CKA001754A4445			1
4-fold, bronze	–	1724-821	2CKA001754A4261			1
4-fold, gold [1]	–	1724-823-101	2CKA001754A4359			1
4-fold, glass black	–	1724-825	2CKA001754A4325			1
4-fold, chrome	–	1724-826-101	2CKA001754A4363			1
4-fold, stainless steel	–	1724-860	2CKA001754A4257			1

[1] Gold plated 24 carat

1721-866K

Frames, pure stainless steel

For vertical and horizontal installation. Stainless steel material.
Anti-fingerprint (does not leave any visible fingerprints on the material).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, stainless steel	–	1721-866K-500	2CKA001754A4500			10
2-fold, stainless steel	–	1722-866K-500	2CKA001754A4501			10
3-fold, stainless steel	–	1723-866K	2CKA001754A4319			10
4-fold, stainless steel	–	1724-866K	2CKA001754A4320			1
5-fold, stainless steel	–	1725-866K	2CKA001754A4321			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Frames

1722-283

Frames, axcent®

For vertical and horizontal installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, black	–	1721-281	2CKA001754A4409			10
1-fold, brown glass	–	1721-283	2CKA001754A4543			1
1-fold, davos/studio white	–	1721-284	2CKA001754A4331			10
1-fold, yellow	–	1721-285	2CKA001754A4334			10
1-fold, green	–	1721-286	2CKA001754A4337			10
1-fold, red	–	1721-287	2CKA001754A4340			10
1-fold, blue	–	1721-288	2CKA001754A4343			10
1-fold, white glass	–	1721-280	2CKA001754A4437			1
1-fold, entrée-grey	–	1721-291-500	2CKA001754A4471			10
1-fold, château-black	–	1721-295-500	2CKA001754A4491			10
1-fold, chalet-white	–	1721-296-500	2CKA001754A4486			10
1-fold, foyer-red	–	1721-297-500	2CKA001754A4476			10
1-fold, maison-beige	–	1721-299-500	2CKA001754A4481			10
2-fold, black	–	1722-281	2CKA001754A4410			10
2-fold, brown glass	–	1722-283	2CKA001754A4544			1
2-fold, davos/studio white	–	1722-284	2CKA001754A4332			10
2-fold, yellow	–	1722-285	2CKA001754A4335			10
2-fold, green	–	1722-286	2CKA001754A4338			10
2-fold, red	–	1722-287	2CKA001754A4341			10
2-fold, blue	–	1722-288	2CKA001754A4344			10
2-fold, white glass	–	1722-280	2CKA001754A4438			1
2-fold, entrée-grey	–	1722-291-500	2CKA001754A4472			10
2-fold, château-black	–	1722-295-500	2CKA001754A4492			10
2-fold, chalet-white	–	1722-296-500	2CKA001754A4487			10
2-fold, foyer-red	–	1722-297-500	2CKA001754A4477			10
2-fold, maison-beige	–	1722-299-500	2CKA001754A4482			10
3-fold, black	–	1723-281	2CKA001754A4411			10
3-fold, brown glass	–	1723-283	2CKA001754A4545			1
3-fold, davos/studio white	–	1723-284	2CKA001754A4333			10
3-fold, yellow	–	1723-285	2CKA001754A4336			10
3-fold, green	–	1723-286	2CKA001754A4339			10
3-fold, red	–	1723-287	2CKA001754A4342			10
3-fold, blue	–	1723-288	2CKA001754A4345			10
3-fold, white glass	–	1723-280	2CKA001754A4439			1
3-fold, entrée-grey	–	1723-291-500	2CKA001754A4473			10
3-fold, château-black	–	1723-295-500	2CKA001754A4493			10
3-fold, chalet-white	–	1723-296-500	2CKA001754A4488			10
3-fold, foyer-red	–	1723-297-500	2CKA001754A4478			10
3-fold, maison-beige	–	1723-299-500	2CKA001754A4483			10

Continuation of table “Frames, axcent” on next page

Continuation of table “Frames, axcent”

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, black	–	1724-281	2CKA001754A4412			1
4-fold, brown glass	–	1724-283	2CKA001754A4546			1
4-fold, davos/studio white	–	1724-284	2CKA001754A4346			1
4-fold, yellow	–	1724-285	2CKA001754A4348			1
4-fold, green	–	1724-286	2CKA001754A4350			1
4-fold, red	–	1724-287	2CKA001754A4352			1
4-fold, blue	–	1724-288	2CKA001754A4354			1
4-fold, white glass	–	1724-280	2CKA001754A4440			1
4-fold, entrée-grey	–	1724-291-500	2CKA001754A4474			1
4-fold, château-black	–	1724-295-500	2CKA001754A4494			1
4-fold, chalet-white	–	1724-296-500	2CKA001754A4489			1
4-fold, foyer-red	–	1724-297-500	2CKA001754A4479			1
4-fold, maison-beige	–	1724-299-500	2CKA001754A4484			1
5-fold, black	–	1725-281	2CKA001754A4413			1
5-fold, brown glass	–	1725-283	2CKA001754A4547			1
5-fold, davos/studio white	–	1725-284	2CKA001754A4347			1
5-fold, yellow	–	1725-285	2CKA001754A4349			1
5-fold, green	–	1725-286	2CKA001754A4351			1
5-fold, red	–	1725-287	2CKA001754A4353			1
5-fold, blue	–	1725-288	2CKA001754A4355			1
5-fold, white glass	–	1725-280	2CKA001754A4441			1
5-fold, entrée-grey	–	1725-291-500	2CKA001754A4475			1
5-fold, château-black	–	1725-295-500	2CKA001754A4495			1
5-fold, chalet-white	–	1725-296-500	2CKA001754A4490			1
5-fold, foyer-red	–	1725-297-500	2CKA001754A4480			1
5-fold, maison-beige	–	1725-299-500	2CKA001754A4485			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Frames

1721-838-500

Frames, Dynasty®

For vertical and horizontal installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1-fold, polished brass ivory	–	1721-838-500	2CKA001754A4560			1
1-fold, polished brass anthracite	–	1721-835-500	2CKA001754A4565			1
1-fold, polished brass decor ivory	–	1721-836-500	2CKA001754A4570			1
1-fold, polished brass decor anthracite	–	1721-833-500	2CKA001754A4575			1
1-fold, antique brass ivory	–	1721-848-500	2CKA001754A4580			1
1-fold, antique brass anthracite	–	1721-845-500	2CKA001754A4585			1
1-fold, antique brass decor ivory	–	1721-846-500	2CKA001754A4590			1
1-fold, antique brass decor anthracite	–	1721-843-500	2CKA001754A4595			1
1-fold, ivory	–	1721-832-500	2CKA001754A4600			1
1-fold, anthracite	–	1721-831-500	2CKA001754A4605			1
2-fold, polished brass ivory	–	1722-838-500	2CKA001754A4561			1
2-fold, polished brass anthracite	–	1722-835-500	2CKA001754A4566			1
2-fold, polished brass decor ivory	–	1722-836-500	2CKA001754A4571			1
2-fold, polished brass decor anthracite	–	1722-833-500	2CKA001754A4576			1
2-fold, antique brass ivory	–	1722-848-500	2CKA001754A4581			1
2-fold, antique brass anthracite	–	1722-845-500	2CKA001754A4586			1
2-fold, antique brass decor ivory	–	1722-846-500	2CKA001754A4591			1
2-fold, antique brass decor anthracite	–	1722-843-500	2CKA001754A4596			1
2-fold, ivory	–	1722-832-500	2CKA001754A4601			1
2-fold, anthracite	–	1722-831-500	2CKA001754A4606			1
3-fold, polished brass ivory	–	1723-838-500	2CKA001754A4562			1
3-fold, polished brass anthracite	–	1723-835-500	2CKA001754A4567			1
3-fold, polished brass decor ivory	–	1723-836-500	2CKA001754A4572			1
3-fold, polished brass decor anthracite	–	1723-833-500	2CKA001754A4577			1
3-fold, antique brass ivory	–	1723-848-500	2CKA001754A4582			1
3-fold, antique brass anthracite	–	1723-845-500	2CKA001754A4587			1
3-fold, antique brass decor ivory	–	1723-846-500	2CKA001754A4592			1
3-fold, antique brass decor anthracite	–	1723-843-500	2CKA001754A4597			1
3-fold, ivory	–	1723-832-500	2CKA001754A4602			1
3-fold, anthracite	–	1723-831-500	2CKA001754A4607			1

Continuation of table “Frames, Dynasty®” on next page

Continuation of table “Frames, Dynasty®”

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
4-fold, polished brass ivory	–	1724-838-500	2CKA001754A4563			1
4-fold, polished brass anthracite	–	1724-835-500	2CKA001754A4568			1
4-fold, polished brass decor ivory	–	1724-836-500	2CKA001754A4573			1
4-fold, polished brass decor anthracite	–	1724-833-500	2CKA001754A4578			1
4-fold, antique brass ivory	–	1724-848-500	2CKA001754A4583			1
4-fold, antique brass anthracite	–	1724-845-500	2CKA001754A4588			1
4-fold, antique brass decor ivory	–	1724-846-500	2CKA001754A4593			1
4-fold, antique brass decor anthracite	–	1724-843-500	2CKA001754A4598			1
4-fold, ivory	–	1724-832-500	2CKA001754A4603			1
4-fold, anthracite	–	1724-831-500	2CKA001754A4608			1
5-fold, polished brass ivory	–	1725-838-500	2CKA001754A4564			1
5-fold, polished brass anthracite	–	1725-835-500	2CKA001754A4569			1
5-fold, polished brass decor ivory	–	1725-836-500	2CKA001754A4574			1
5-fold, polished brass decor anthracite	–	1725-833-500	2CKA001754A4579			1
5-fold, antique brass ivory	–	1725-848-500	2CKA001754A4584			1
5-fold, antique brass anthracite	–	1725-845-500	2CKA001754A4589			1
5-fold, antique brass decor ivory	–	1725-846-500	2CKA001754A4594			1
5-fold, antique brass decor anthracite	–	1725-843-500	2CKA001754A4599			1
5-fold, ivory	–	1725-832-500	2CKA001754A4604			1
5-fold, anthracite	–	1725-831-500	2CKA001754A4609			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Busch-triton®

With freely programmable switch rockers, backlit label fields and IR sensor Busch-triton® is ideal for any application and with its elegant design it is commonly installed in hotels and public areas. Busch-triton® is equipped with an integrated bus coupler and IR receiver. The unit composed of control element and integrated bus coupler now really has everything required to control building systems elegantly and comfortably.

01	1/2gang control element with rear-illuminated labelling area and IR reception
02	3/6gang control element with rear-illuminated labelling area and IR reception
03	5/10gang control element with rear-illuminated labelling area and IR reception

01

Function
Switching | Dimming | Blinds | Value transmitter | Value dimming sensor | Light scene extension unit | Step-type switch | Short/long operation | 13 freely programmable IR channels | 8 light scenes

Features
Labellable switch rockers | Rear-illuminated labelling field | Anti-theft protection | Freely programmable switches | IR remote-controllable | Freely programmable additional key

02

Function
Switching | Dimming | Blinds | Value transmitter | Value dimming sensor | Light scene extension unit | Step-type switch | Short/long operation | 13 freely programmable IR channels | 8 light scenes

Features
Labellable switch rockers | Rear-illuminated labelling field | Anti-theft protection | Freely programmable switches | IR remote-controllable

03

Function
Switching | Dimming | Blinds | Value transmitter | Value dimming sensor | Light scene extension unit | Step-type switch | Short/long operation | 13 freely programmable IR channels | 8 light scenes

Features
Labellable switch rockers | Rear-illuminated labelling field | Anti-theft protection | Freely programmable switches | IR remote-controllable | Freely programmable additional key

Colour-coordinated.
The Busch-triton® is available in five stunning colours, offering exactly the right ambience for any environment. The colours offer exactly the right accent to the carat®, impuls, alpha and future® linear ranges – such as the use of the colour-coordinated socket outlets or motion detectors.

01

Function
LCD display room temperature controller | Comfort | Stand-by | Night operation | Frost protection | Heating | Cooling | Fan control | Switching | Dimming | Blinds | Value | 13 freely programmable IR channels | 8 light scenes

Features
Labellable switch rockers | Rear-illuminated labelling field | Anti-theft protection | Freely programmable switches | IR remote-controllable | Freely programmable additional key

02

Function
LCD display room temperature controller | Comfort | Stand-by | Night operation | Frost protection | Heating | Cooling | Fan control | Switching | Dimming | Blinds | Value | 13 freely programmable IR channels | 8 light scenes

Features
Labellable switch rockers | Rear-illuminated labelling field | Anti-theft protection | Freely programmable switches | IR remote-controllable | Freely programmable additional key

01	3/6gang control element with rear-illuminated labelling field, integrated room thermostat, LCD display and IR reception
02	5/10gang control element with rear-illuminated labelling field, integrated room thermostat, LCD display and IR reception

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Busch-triton®

6320/10-24G-500

Busch-triton® Control Element, 1/2-fold, FM

With intergrated bus coupling unit. With IR interface for Busch-remote controllers. Push button function: switching/dimming/blind/value sending/light scenes/step-type switch functions. Switch contacts left/right. One freely programmable LED per rocker (red/green/OFF). With labeling field.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha						
platinum	–	6320/10-20-500	2CKA006320A0002			1
studio white, high gloss	–	6320/10-24G-500	2CKA006320A0004			1
palladium	–	6320/10-260-500	2CKA006320A0010			1
impuls						
champagne metallic	–	6320/10-79-500	2CKA006320A0006			1
future® linear						
aluminium silver	–	6320/10-83-500	2CKA006320A0008			1

6320/30-24G-500

Busch-triton® Control Element, 3/6-fold, FM

With intergrated bus coupling unit. With IR interface for Busch-remote controllers. Push button function: switching/dimming/blind/value sending/light scenes/step-type switch functions. Switch contacts left/right. One freely programmable LED per rocker (red/green/OFF). With labeling field.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha						
platinum	–	6320/30-20-500	2CKA006320A0012			1
studio white, high gloss	–	6320/30-24G-500	2CKA006320A0014			1
palladium	–	6320/30-260-500	2CKA006320A0020			1
impuls						
champagne metallic	–	6320/30-79-500	2CKA006320A0016			1
future® linear						
aluminium silver	–	6320/30-83-500	2CKA006320A0018			1

6320/50-24G-500

Busch-triton® Control Element, 5/10-fold, FM

With intergrated bus coupling unit. With IR interface for Busch-remote controllers. Push button function: switching/dimming/blind/value sending/light scenes/step-type switch functions. Switch contacts left/right. One freely programmable LED per rocker (red/green/OFF). With labeling field.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha						
platinum	–	6320/50-20-500	2CKA006320A0032			1
studio white, high gloss	–	6320/50-24G-500	2CKA006320A0034			1
palladium	–	6320/50-260-500	2CKA006320A0040			1
impuls						
champagne metallic	–	6320/50-79-500	2CKA006320A0036			1
future® linear						
aluminium silver	–	6320/50-83-500	2CKA006320A0038			1

6321/38-24G-500

Busch-triton® Control Element with Room Thermostat and 3/6-fold Switch Sensor, FM

With integrated KNX bus coupler. With labelling field. Rocker switch left/right (switching/dimming/blind/value sender/light scenes/fan function). Master/slave configuration. With base-load operation. Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. To control up to 13 IR channels (RC5) using Busch-Remote control. IR mobile remote control 6010-25 or 6020-.../6021... . Control element: rocker switch left/right. Display elements: One LED per rocker via separate communication object for status (Red/Green/OFF) or orientation light. Connections: KNX-line: Bus connection terminal. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha						
platinum	–	6321/38-20-500	2CKA006320A0052			1
studio white, high gloss	–	6321/38-24G-500	2CKA006320A0054			1
palladium	–	6321/38-260-500	2CKA006320A0060			1
impuls						
champagne metallic	–	6321/38-79-500	2CKA006320A0056			1
future® linear						
aluminium silver	–	6321/38-83-500	2CKA006320A0058			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Busch-triton®

6321/58-24G-500

Busch-triton® Control Element with Room Thermostat and 5/10-fold Switch Sensor, FM

With integrated KNX bus coupler. With labelling field. Rocker switch left/right (switching/ dimming/blind/value sender/light scenes/fan function). Master/slave configuration. With base-load operation. Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a constant room temperature controller for ventilator convectors (fan coils) in 2-pipe and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. To control up to 13 IR channels (RC5) using Busch-Remote control IR mobile remote control 6010-25 or 6020-.../6021... . Control element: rocker switch left/right. Display elements: One LED per rocker via separate communication object for status (Red/ Green/ OFF) or orientation light. Connections: KNX-line: Bus connection terminal. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C. Dimensions: (L x W x D): 159 mm x 90 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha						
platinum	–	6321/58-20-500	2CKA006320A0062			1
studio white, high gloss	–	6321/58-24G-500	2CKA006320A0064			1
palladium	–	6321/58-260-500	2CKA006320A0070			1
impuls						
champagne metallic	–	6321/58-79-500	2CKA006320A0066			1
future® linear						
aluminium silver	–	6321/58-83-500	2CKA006320A0068			1

6010-25-500

Infra-Red Hand Held Transmitter

For infra-red receiver and KNX flush-mounted infra-red interface. Switching and dimming of up to 10 consumers in 2 groups (1-5/6-10). Programming and selection of 2 MEMO memories per group is possible. Power supply: 4 alkaline manganese batteries, IEC LR03 (microcell) not included in scope of supply Detection range: frontal 15 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6010-25-500	2CKA006020A1133			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Push Button Coupling Unit

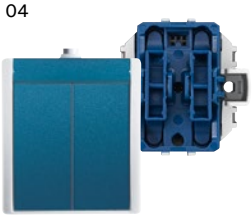
The push-button coupling unit with a centre position offers maximum flexibility. Installed in a flush-mounted wall box, it accepts switch rockers from conventional switch ranges* like a completely standard flush-mounted insert. Covers from all conventional ranges can now be used for KNX. This offers maximum freedom in the selection of the switch range and makes retrofitting easier.

01

02

03

04



Features

Easy mounting and uncomplicated commissioning
All flush-mounted switch ranges* can be used for the ABB i-bus® KNX
Affordable solution for renovations
Status/orientation light (red/green/OFF)
(only with 1gang push-button/switches)
Integration in surface-mounted water protected units

01	Push-button coupler 2gang with integrated bus coupler
02	Push-button coupler 4gang with integrated bus coupler
03	Push-button coupler 2gang for ocean with integrated bus coupler
04	Push-button coupler 4gang for ocean with integrated bus coupler

Design without limits. The push-button coupling unit includes the complete range* of switches for KNX. Switch rockers from all switch ranges can now be converted to KNX push buttons, which not only switch on and off but also dim or show the status with an LED (6108/01 and 6108/04 only). 1gang and 2gang models for single and 2gang switch rockers are available.

KNX – water protected
The push-button coupling unit also allows special products to be used for KNX. Special models for water-protected installation allow covers from, for example, the ocean® surface-mounted range to be used. This means that KNX sensors can also be safely installed in a cellar, outside on a patio or in commercial applications. Temperature range: -25 °C to 45 °C

*except impuls, basic55® and All Weather 44 Busch-Jaeger switch ranges only available for selected markets. For further information please contact your local ABB office.

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Push Button Coupling Unit

6108/06-AP-500

KNX Switch Connection Unit for design ocean® (IP44), FM

For contacting conventional 1gang rocker switches. With middle position. For inserting in the ocean surface-mounted housing. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1/2-fold	–	6108/06-AP-500	2CKA006133A0225			1
2/4-fold	–	6108/07-AP-500	2CKA006133A0227			1

6108/06-500

Push-button coupling 2gang with integrated bus coupler

Support of KNX functions through innovative colour concept yellow = lighting, blue = blind, orange = RTC, magenta = scene and white = neutral/no function assigned) or standard illumination red/green. With middle position. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6108/06-500	2CKA006133A0221			1

SR-1-84

Rocker 1gang, without printing

As cover for KNX 2gang push-button coupling unit (6108/06-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	SR-1-212	2CKA006220A0182			1
alpine white	–	SR-1-214	2CKA006220A0183			1
future® linear						
anthracite	–	SR-1-81	2CKA006220A0137			1
ivory	–	SR-1-82	2CKA006220A0516			1
aluminium silver	–	SR-1-83	2CKA006220A0138			1
studio white	–	SR-1-84	2CKA006220A0139			1
studio white matt	–	SR-1-884	2CKA006220A0601			1
black, matt	–	SR-1-885	2CKA006220A0618			1
solo®						
ivory	–	SR-1-82	2CKA006220A0516			1
studio white	–	SR-1-84	2CKA006220A0139			1
grey metallic	–	SR-1-803	2CKA006220A0550			1
Busch-axcent®						
studio white	–	SR-1-84	2CKA006220A0139			1
pure stainless steel						
stainless steel	–	SR-1-866	2CKA006220A0533			1
carat®						
anthracite	–	SR-1-81	2CKA006220A0137			1
ivory	–	SR-1-82	2CKA006220A0516			1
studio white	–	SR-1-84	2CKA006220A0139			1
Dynasty®						
anthracite	–	SR-1-81	2CKA006220A0137			1
ivory	–	SR-1-82	2CKA006220A0516			1
antique brass	–	SR-1-840	2CKA006220A0371			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Push Button Coupling Unit

SRL-1-84

Rocker 1gang, with “Light” icon

As cover for KNX 2gang push-button coupling unit (6108/06-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	SRL-1-212	2CKA006220A0184			1
alpine white	–	SRL-1-214	2CKA006220A0185			1
future® linear						
anthracite	–	SRL-1-81	2CKA006220A0140			1
ivory	–	SRL-1-82	2CKA006220A0517			1
aluminium silver	–	SRL-1-83	2CKA006220A0141			1
studio white	–	SRL-1-84	2CKA006220A0142			1
studio white matt	–	SRL-1-884	2CKA006220A0602			1
black, matt	–	SRL-1-885	2CKA006220A0619			1
solo®						
ivory	–	SRL-1-82	2CKA006220A0517			1
studio white	–	SRL-1-84	2CKA006220A0142			1
grey metallic	–	SRL-1-803	2CKA006220A0551			1
Busch-axcent®						
studio white	–	SRL-1-84	2CKA006220A0142			1
pure stainless steel						
stainless steel	–	SRL-1-866	2CKA006220A0534			1
carat®						
anthracite	–	SRL-1-81	2CKA006220A0140			1
ivory	–	SRL-1-82	2CKA006220A0517			1
studio white	–	SRL-1-84	2CKA006220A0142			1
Dynasty®						
anthracite	–	SRL-1-81	2CKA006220A0140			1
ivory	–	SRL-1-82	2CKA006220A0517			1
antique brass	–	SRL-1-840	2CKA006220A0372			1

SRB-1-84

Rocker 1gang, with “Blind” icon

As cover for KNX 2gang push-button coupling unit (6108/06-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	SRB-1-212	2CKA006220A0186			1
alpine white	–	SRB-1-214	2CKA006220A0187			1
future® linear						
anthracite	–	SRB-1-81	2CKA006220A0143			1
ivory	–	SRB-1-82	2CKA006220A0518			1
aluminium silver	–	SRB-1-83	2CKA006220A0144			1
studio white	–	SRB-1-84	2CKA006220A0145			1
studio white matt	–	SRB-1-884	2CKA006220A0603			1
black, matt	–	SRB-1-885	2CKA006220A0620			1
solo®						
ivory	–	SRB-1-82	2CKA006220A0518			1
studio white	–	SRB-1-84	2CKA006220A0145			1
grey metallic	–	SRB-1-803	2CKA006220A0552			1
Busch-axcent®						
studio white	–	SRB-1-84	2CKA006220A0145			1
pure stainless steel						
stainless steel	–	SRB-1-866	2CKA006220A0535			1
carat®						
anthracite	–	SRB-1-81	2CKA006220A0143			1
ivory	–	SRB-1-82	2CKA006220A0518			1
studio white	–	SRB-1-84	2CKA006220A0145			1
Dynasty®						
anthracite	–	SRB-1-81	2CKA006220A0143			1
ivory	–	SRB-1-82	2CKA006220A0518			1
antique brass	–	SRB-1-840	2CKA006220A0373			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Push Button Coupling Unit

SRS-1-84

Rocker 1gang, with “Scene” icon

As cover for KNX 2gang push-button coupling unit (6108/06-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	SRS-1-212	2CKA006220A0188			1
alpine white	–	SRS-1-214	2CKA006220A0189			1
future® linear						
anthracite	–	SRS-1-81	2CKA006220A0146			1
ivory	–	SRS-1-82	2CKA006220A0519			1
aluminium silver	–	SRS-1-83	2CKA006220A0147			1
studio white	–	SRS-1-84	2CKA006220A0148			1
studio white matt	–	SRS-1-884	2CKA006220A0604			1
black, matt	–	SRS-1-885	2CKA006220A0621			1
solo®						
ivory	–	SRS-1-82	2CKA006220A0519			1
studio white	–	SRS-1-84	2CKA006220A0148			1
grey metallic	–	SRS-1-803	2CKA006220A0553			1
Busch-axcent®						
studio white	–	SRS-1-84	2CKA006220A0148			1
pure stainless steel						
stainless steel	–	SRS-1-866	2CKA006220A0536			1
carat®						
anthracite	–	SRS-1-81	2CKA006220A0146			1
ivory	–	SRS-1-82	2CKA006220A0519			1
studio white	–	SRS-1-84	2CKA006220A0148			1
Dynasty®						
anthracite	–	SRS-1-81	2CKA006220A0146			1
ivory	–	SRS-1-82	2CKA006220A0519			1
antique brass	–	SRS-1-840	2CKA006220A0374			1

SRD-1-84

Rocker 1gang, with “Dimmer” icon

As cover for KNX 2gang push-button coupling unit (6108/06-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	SRD-1-212	2CKA006220A0190			1
alpine white	–	SRD-1-214	2CKA006220A0191			1
future® linear						
anthracite	–	SRD-1-81	2CKA006220A0149			1
ivory	–	SRD-1-82	2CKA006220A0520			1
aluminium silver	–	SRD-1-83	2CKA006220A0150			1
studio white	–	SRD-1-84	2CKA006220A0151			1
studio white matt	–	SRD-1-884	2CKA006220A0605			1
black, matt	–	SRD-1-885	2CKA006220A0622			1
solo®						
ivory	–	SRD-1-82	2CKA006220A0520			1
studio white	–	SRD-1-84	2CKA006220A0151			1
grey metallic	–	SRD-1-803	2CKA006220A0554			1
Busch-axcent®						
studio white	–	SRD-1-84	2CKA006220A0151			1
pure stainless steel						
stainless steel	–	SRD-1-866	2CKA006220A0537			1
carat®						
anthracite	–	SRD-1-81	2CKA006220A0149			1
ivory	–	SRD-1-82	2CKA006220A0520			1
studio white	–	SRD-1-84	2CKA006220A0151			1
Dynasty®						
anthracite	–	SRD-1-81	2CKA006220A0149			1
ivory	–	SRD-1-82	2CKA006220A0520			1
antique brass	–	SRD-1-840	2CKA006220A0375			1

6108/07-500

Push-button coupling 4gang with integrated bus coupler

Support of KNX functions through innovative colour concept yellow = lighting, blue = blind, orange = RTC, magenta = scene and white = neutral/no function assigned) or standard illumination red/green. With middle position. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6108/07-500	2CKA006133A0223			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Push Button Coupling Unit

SR-2-84

SRB-2-84

Pack unit pc.	Weight 1 pc. kg	Description	Rocker 2gang left/right, without printing As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.	Rocker 2gang left/right, with “Blind” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.
		Reflex SI						
		white	SR-2-212	2CKA006220A0192		SRB-2-212	2CKA006220A0196	
		alpine white	SR-2-214	2CKA006220A0193		SRB-2-214	2CKA006220A0197	
		future® linear						
		anthracite	SR-2-81	2CKA006220A0152		SRB-2-81	2CKA006220A0158	
		ivory	SR-2-82	2CKA006220A0521		SRB-2-82	2CKA006220A0523	
		aluminium silver	SR-2-83	2CKA006220A0153		SRB-2-83	2CKA006220A0159	
		studio white	SR-2-84	2CKA006220A0154		SRB-2-84	2CKA006220A0160	
		studio white matt	SR-2-884	2CKA006220A0606		SRB-2-884	2CKA006220A0608	
		black, matt	SR-2-885	2CKA006220A0623		SRB-2-885	2CKA006220A0625	
		solo®						
		ivory	SR-2-82	2CKA006220A0521		SRB-2-82	2CKA006220A0523	
		studio white	SR-2-84	2CKA006220A0154		SRB-2-84	2CKA006220A0160	
		grey metallic	SR-2-803	2CKA006220A0555		SRB-2-803	2CKA006220A0557	
		Busch-axcent®						
		studio white	SR-2-84	2CKA006220A0154		SRB-2-84	2CKA006220A0160	
		pure stainless steel						
		stainless steel	SR-2-866	2CKA006220A0538		SRB-2-866	2CKA006220A0540	
		carat®						
		anthracite	SR-2-81	2CKA006220A0152		SRB-2-81	2CKA006220A0158	
		ivory	SR-2-82	2CKA006220A0521		SRB-2-82	2CKA006220A0523	
		studio white	SR-2-84	2CKA006220A0154		SRB-2-84	2CKA006220A0160	
		Dynasty®						
		anthracite	SR-2-81	2CKA006220A0152		SRB-2-81	2CKA006220A0158	
		ivory	SR-2-82	2CKA006220A0521		SRB-2-82	2CKA006220A0523	
		antique brass	SR-2-840	2CKA006220A0376		SRB-2-840	2CKA006220A0378	

SRL-2-L-84

SRL-2-R-84

Pack unit pc.	Weight 1 pc. kg	Description	Rocker 2gang left, with “Light” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details		Price 1 pc.	Rocker 2gang right, with “Light” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details		Price 1 pc.
			Type	Order code		Type	Order code	
		Reflex SI						
		white	SRL-2-L-212	2CKA006220A0194		SRL-2-R-212	2CKA006220A0202	
		alpine white	SRL-2-L-214	2CKA006220A0195		SRL-2-R-214	2CKA006220A0203	
		future® linear						
		anthracite	SRL-2-L-81	2CKA006220A0155		SRL-2-R-81	2CKA006220A0167	
		ivory	SRL-2-L-82	2CKA006220A0522		SRL-2-R-82	2CKA006220A0527	
		aluminium silver	SRL-2-L-83	2CKA006220A0156		SRL-2-R-83	2CKA006220A0168	
		studio white	SRL-2-L-84	2CKA006220A0157		SRL-2-R-84	2CKA006220A0169	
		studio white matt	SRL-2-L-884	2CKA006220A0607		SRL-2-R-884	2CKA006220A0612	
		black, matt	SRL-2-L-885	2CKA006220A0624		SRL-2-R-885	2CKA006220A0629	
		solo®						
		ivory	SRL-2-L-82	2CKA006220A0522		SRL-2-R-82	2CKA006220A0527	
		studio white	SRL-2-L-84	2CKA006220A0157		SRL-2-R-84	2CKA006220A0169	
		grey metallic	SRL-2-L-803	2CKA006220A0556		SRL-2-R-803	2CKA006220A0561	
		Busch-axcent®						
		studio white	SRL-2-L-84	2CKA006220A0157		SRL-2-R-84	2CKA006220A0169	
		pure stainless steel						
		stainless steel	SRL-2-L-866	2CKA006220A0539		SRL-2-R-866	2CKA006220A0544	
		carat®						
		anthracite	SRL-2-L-81	2CKA006220A0155		SRL-2-R-81	2CKA006220A0167	
		ivory	SRL-2-L-82	2CKA006220A0522		SRL-2-R-82	2CKA006220A0527	
		studio white	SRL-2-L-84	2CKA006220A0157		SRL-2-R-84	2CKA006220A0169	
		Dynasty®						
		anthracite	SRL-2-L-81	2CKA006220A0155		SRL-2-R-81	2CKA006220A0167	
		ivory	SRL-2-L-82	2CKA006220A0522		SRL-2-R-82	2CKA006220A0527	
		antique brass	SRL-2-L-840	2CKA006220A0377		SRL-2-R-840	2CKA006220A0381	

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Push Button Coupling Unit

SRS-2-L-84

SRS-2-R-84

Pack unit pc.	Weight 1 pc. kg	Description	Rocker 2gang left, with “Scene” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.	Rocker 2gang right, with “Scene” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.
		Reflex SI						
		white	SRS-2-L-212	2CKA006220A0198		SRS-2-R-212	2CKA006220A0206	
		alpine white	SRS-2-L-214	2CKA006220A0199		SRS-2-R-214	2CKA006220A0207	
		future® linear						
		anthracite	SRS-2-L-81	2CKA006220A0161		SRS-2-R-81	2CKA006220A0173	
		ivory	SRS-2-L-82	2CKA006220A0524		SRS-2-R-82	2CKA006220A0528	
		aluminium silver	SRS-2-L-83	2CKA006220A0162		SRS-2-R-83	2CKA006220A0174	
		studio white	SRS-2-L-84	2CKA006220A0163		SRS-2-R-84	2CKA006220A0175	
		studio white matt	SRS-2-L-884	2CKA006220A0609		SRS-2-R-884	2CKA006220A0613	
		black, matt	SRS-2-L-885	2CKA006220A0626		SRS-2-R-885	2CKA006220A0630	
		solo®						
		ivory	SRS-2-L-82	2CKA006220A0524		SRS-2-R-82	2CKA006220A0528	
		studio white	SRS-2-L-84	2CKA006220A0163		SRS-2-R-84	2CKA006220A0175	
		grey metallic	SRS-2-L-803	2CKA006220A0558		SRS-2-R-803	2CKA006220A0562	
		Busch-axcent®						
		studio white	SRS-2-L-84	2CKA006220A0163		SRS-2-R-84	2CKA006220A0175	
		pure stainless steel						
		stainless steel	SRS-2-L-866	2CKA006220A0541		SRS-2-R-866	2CKA006220A0545	
		carat®						
		anthracite	SRS-2-L-81	2CKA006220A0161		SRS-2-R-81	2CKA006220A0173	
		ivory	SRS-2-L-82	2CKA006220A0524		SRS-2-R-82	2CKA006220A0528	
		studio white	SRS-2-L-84	2CKA006220A0163		SRS-2-R-84	2CKA006220A0175	
		Dynasty®						
		anthracite	SRS-2-L-81	2CKA006220A0161		SRS-2-R-81	2CKA006220A0173	
		ivory	SRS-2-L-82	2CKA006220A0524		SRS-2-R-82	2CKA006220A0528	
		antique brass	SRS-2-L-840	2CKA006220A0379		SRS-2-R-840	2CKA006220A0382	

SRD-2-L-84

SRD-2-R-84

Pack unit pc.	Weight 1 pc. kg	Description	Rocker 2gang left, with “Dimmer” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.	Rocker 2gang right, with “Dimmer” icon As cover for KNX 4gang push-button coupling unit (6108/07-500). Order details Type	Order code	Price 1 pc.
		Reflex SI						
		white	SRD-2-L-212	2CKA006220A0200		SRD-2-R-212	2CKA006220A0261	
		alpine white	SRD-2-L-214	2CKA006220A0201		SRD-2-R-214	2CKA006220A0262	
		future® linear						
		anthracite	SRD-2-L-81	2CKA006220A0164		SRD-2-R-81	2CKA006220A0258	
		ivory	SRD-2-L-82	2CKA006220A0525		SRD-2-R-82	2CKA006220A0526	
		aluminium silver	SRD-2-L-83	2CKA006220A0165		SRD-2-R-83	2CKA006220A0259	
		studio white	SRD-2-L-84	2CKA006220A0166		SRD-2-R-84	2CKA006220A0260	
		studio white matt	SRD-2-L-884	2CKA006220A0610		SRD-2-R-884	2CKA006220A0611	
		black, matt	SRD-2-L-885	2CKA006220A0627		SRD-2-R-885	2CKA006220A0628	
		solo®						
		ivory	SRD-2-L-82	SRD-2-L-82		SRD-2-R-82	2CKA006220A0526	
		studio white	SRD-2-L-84	SRD-2-L-84		SRD-2-R-84	2CKA006220A0260	
		grey metallic	SRD-2-L-803	SRD-2-L-803		SRD-2-R-803	2CKA006220A0560	
		Busch-axcent®						
		studio white	SRD-2-L-84	2CKA006220A0166		SRD-2-R-84	2CKA006220A0260	
		pure stainless steel						
		stainless steel	SRD-2-L-866	2CKA006220A0542		SRD-2-R-866	2CKA006220A0543	
		carat®						
		anthracite	SRD-2-L-81	2CKA006220A0164		SRD-2-R-81	2CKA006220A0258	
		ivory	SRD-2-L-82	2CKA006220A0525		SRD-2-R-82	2CKA006220A0526	
		studio white	SRD-2-L-84	2CKA006220A0166		SRD-2-R-84	2CKA006220A0260	
		Dynasty®						
		anthracite	SRD-2-L-81	2CKA006220A0164		SRD-2-R-81	2CKA006220A0258	
		ivory	SRD-2-L-82	2CKA006220A0525		SRD-2-R-82	2CKA006220A0526	
		antique brass	SRD-2-L-840	2CKA006220A0380		SRD-2-R-840	2CKA006220A0383	

Intelligent Building Solutions

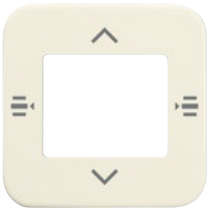
ABB i-bus® KNX – User Operation – Design Ranges

6108/60-500

Control Element, 6gang with Universal Input, 5gang

Control element with a maximum of 6 control functions and an RTC extension unit (slave). Primary function for calling up the main function. Status bar for indication/display of operating or RTC functions. Operation is carried out via cover plate 6108/61-xxx. With actual value temperature display. With display of set-value temperature. With universal input with: - max. of 5 binary inputs - 4 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V - 2 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V and an external temperature sensor PT1000 / T6226. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6108/60-500	2CKA006115A0454			1

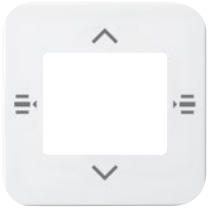


6108/61-212-500

Cover Plate for KNX Control Element, 7gang

As cover for control element, 7gang (6108/60).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	6108/61-212-500	2CKA006115A0474			1
alpine white	–	6108/61-214-500	2CKA006115A0475			1
platinum	–	6108/61-20-500	2CKA006115A0476			1
bronze	–	6108/61-21-500	2CKA006115A0477			1
ivory/white	–	6108/61-22G-500	2CKA006115A0478			1
studio white matt	–	6108/61-24-500	2CKA006115A0479			1
studio white	–	6108/61-24G-500	2CKA006115A0480			1
palladium	–	6108/61-260-500	2CKA006115A0481			1
titanium	–	6108/61-266-500	2CKA006115A0482			1
anthracite	–	6108/61-81-500	2CKA006115A0483			1
ivory white	–	6108/61-82-500	2CKA006115A0484			1
aluminium silver	–	6108/61-83-500	2CKA006115A0485			1
studio white	–	6108/61-84-500	2CKA006115A0486			1
studio white matt	–	6108/61-884-500	2CKA006115A0487			1
black matt	–	6108/61-885-500	2CKA006115A0488			1
grey metallic	–	6108/61-803-500	2CKA006115A0489			1
stainless steel	–	6108/61-866-500	2CKA006115A0492			1



6108/61-914

Cover Plate, Control Element, 7gang

As cover for control element, 7gang (6108/60).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	6108/61-914	2CKA006155A0115			1
stainless steel	–	6108/61-840-500	2CKA006155A0121			1

6109/05-500

Room Temperature Controller with 5gang Universal Input, FM

Room temperature controller without “local control” and without internal temperature sensor. With universal input with: - max. of 5 binary inputs - 4 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V - 2 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V and an external temperature sensor PT1000 / T6226. Master/slave configuration. With base-load operation. The bus can be connected via enclosed terminal block. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%.

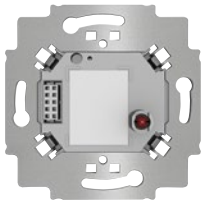
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6109/05-500	2CKA006181A0013			1

6109/08-500

Room Temperature Controller, Commercial, with 5gang Universal Input, FM

Room thermostat without “local control” incl. insert for centre plate for cooling element. With universal input with: - max. of 5 binary inputs - 4 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V - 2 binary inputs and 1 analogue input for activating sensors with external power supply 1-10 V/0-10 V and an external temperature sensor PT1000 / T6226. Can only be used with a cover plate 2114-xxx or 6541-xxx, with the exception of 6541-20. -21.-260 and -266. Master/slave configuration. With base-load operation. The bus can be connected via enclosed terminal block. Class of temperature controller 1 Contribution to space heating energy efficiency 1,0%.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6109/08-500	2CKA006134A0313			1



6108/08-500

Room Temperature Controller, Commercial, FM

Room thermostat without “local operation” incl. insert for centre plate for cooling element. For controlling commercially available valve drives. Can only be used with a cover plate 2114-xxx or 6541-xxx, with the exception of 6541-20. -21.-260 and -266. For control of up to 5-level ventilation actuators Master/slave configuration. With base-load operation. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6108/08-500	2CKA006134A0308			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges

6541-84

Cover Plate for Room Temperature Controller, Commercial

For room temperature controller, commercial.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
future® linear						
anthracite	–	6541-81	2CKA006599A2882			10
savanna/ivory	–	6541-82	2CKA006599A2832			10
aluminium silver [1]	–	6541-83	2CKA006599A2885			10
davos/studio white	–	6541-84	2CKA006599A2835			10
studio white, matt [1]	–	6541-884	2CKA006599A2962			10
black matt [1]	–	6541-885	2CKA006599A2967			10
solo®						
savanna/ivory	–	6541-82	2CKA006599A2832			10
davos/studio white	–	6541-84	2CKA006599A2835			10
meteor/grey metallic [1]	–	6541-803	2CKA006599A2940			10
carat®						
anthracite	–	6541-81	2CKA006599A2882			10
savanna/ivory	–	6541-82	2CKA006599A2832			10
davos/studio white	–	6541-84	2CKA006599A2835			10
pure stainless steel [1]						
stainless steel	–	6541-866	2CKA006599A2924			10
Busch-axcent®						
davos/studio white	–	6541-84	2CKA006599A2835			10
alpha						
ivory	–	6541-22G	2CKA006599A2795			10
studio white, matt	–	6541-24	2CKA006599A1557			10
studio white, high gloss	–	6541-24G	2CKA006599A2332			10
Platinum	–	6541-20	2CKA006599A1466			10
Bronze	–	6541-21	2CKA006599A1524			10
palladium	–	6541-260	2CKA006599A2853			10
titanium	–	6541-266	2CKA006599A2856			10
impuls						
alpine white	–	6541-74	2CKA006599A2076			
champagne metallic	–	6541-79	2CKA006599A2142			
ivory	–	6541-72	2CKA006599A2918			
studio white matt	–	6541-774	2CKA006599A2971			
black matt	–	6541-775	2CKA006599A2975			
blackberry	–	6541-777	2CKA006599A2933			
aluminium silver	–	6541-783	2CKA006599A2919			
Busch-Duro 2000® SI						
white (SI-Series)	–	2114-212	2CKA006599A1193			10

[1] Surface painted

2114-214

Cover Plate for Temperature Controller, Commercial

For room temperature controller, commercial.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI	–					
alpine white (SI-Series)	–	2114-214-500	2CKA006599A3008			10

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Room Temperature Controller

6108/18-500

Room thermostat, heating/cooling operation

Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. For controlling commercially available valve drives. With display of set-value temperature. Master/slave configuration. With base-load operation. The bus can be connected via enclosed terminal block.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6108/18-500	2CKA006134A0319			1

CP-FCC-212

Cover plate for room thermostat

As cover for KNX room temperature controller (6108/18-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	CP-FCC-212	2CKA006220A0245			1
alpine white	–	CP-FCC-214	2CKA006220A0246			1
future® linear						
anthracite	–	CP-FCC-81	2CKA006220A0242			1
ivory	–	CP-FCC-82	2CKA006220A0532			1
aluminium silver	–	CP-FCC-83	2CKA006220A0243			1
studio white	–	CP-FCC-84	2CKA006220A0244			1
studio white matt	–	CP-FCC-884	2CKA006220A0617			1
black, matt	–	CP-FCC-885	2CKA006220A0634			1
solo®						
ivory	–	CP-FCC-82	2CKA006220A0532			1
studio white	–	CP-FCC-84	2CKA006220A0244			1
grey metallic	–	CP-FCC-803	2CKA006220A0566			1
Busch-axcent®						
studio white	–	CP-FCC-84	2CKA006220A0244			1
pure stainless steel						
stainless steel	–	CP-FCC-866	2CKA006220A0549			1
carat®						
anthracite	–	CP-FCC-81	2CKA006220A0242			1
ivory	–	CP-FCC-82	2CKA006220A0532			1
studio white	–	CP-FCC-84	2CKA006220A0244			1
Dynasty®						
anthracite	–	CP-FCC-81	2CKA006220A0242			1
ivory	–	CP-FCC-82	2CKA006220A0532			1

6109/18-500

Room temperature controller with 5gang universal input, FM

Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. With display of set-value temperature, master/slave configuration and base load operation. With universal inputs: a) max. of 5 binary inputs b) 4 binary inputs and 1 analogue input for activating sensors with external power supply 1 – 10 V/0 – 10 V or c) 2 binary inputs and 1 analogue input for activating sensors with external power supply 1 – 10 V/0 – 10 V and an external temperature sensor PT1000/T6226.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6109/18-500	2CKA006134A0315			1

6109/28-500

Room temperature controller with CO_2/moisture sensor, FM

Control element with room thermostat function and CO_2 moisture/air pressure sensor or triggering the heating, ventilation and fan-coil actuators. With display of set-value temperature, master/slave configuration and base load operation. With universal inputs:
a) max. of 5 binary inputs b) 4 binary inputs and 1 analogue input for activating sensors with external power supply 1 – 10 V/0 – 10 V or c) 2 binary inputs and 1 analogue input for activating sensors with external power supply 1 – 10 V/0 – 10 V and an external temperature sensor PT1000/T6226.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6109/28-500	2CKA006134A0317			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Room Temperature Controller

6109/03-214-500

Cover plate for room thermostat

As cover for KNX room temperature controller (6108/18-500).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Reflex SI						
white	–	6109/03-212-500	2CKA006155A0051			1
alpine white	–	6109/03-214-500	2CKA006155A0052			1
future® linear						
anthracite	–	6109/03-81-500	2CKA006155A0060			1
ivory/white	–	6109/03-82-500	2CKA006155A0061			1
aluminium silver	–	6109/03-83-500	2CKA006155A0062			1
studio white	–	6109/03-84-500	2CKA006155A0063			1
studio white matt	–	6109/03-884-500	2CKA006155A0064			1
black, matt	–	6109/03-885-500	2CKA006155A0065			1
solo®						
ivory/white	–	6109/03-82-500	2CKA006155A0061			1
studio white	–	6109/03-84-500	2CKA006155A0063			1
grey metallic	–	6109/03-803-500	2CKA006155A0066			1
Busch-axcent®						
studio white	–	6109/03-84-500	2CKA006155A0063			1
pure stainless steel						
stainless steel	–	6109/03-866-500	2CKA006155A0069			1
carat®						
anthracite	–	6109/03-81-500	2CKA006155A0060			1
ivory/white	–	6109/03-82-500	2CKA006155A0061			1
studio white	–	6109/03-84-500	2CKA006155A0063			1
Dynasty®						
anthracite	–	6109/03-81-500	2CKA006155A0060			1
ivory/white	–	6109/03-82-500	2CKA006155A0061			1
antique brass	–	6109/03-840-500	2CKA006155A0114			1

ABB-tacteo KNX

The individual touch

Unique in design and function, the intuitive and individually configurable ABB-tacteo KNX sensor is as extraordinary as you are. The impressive, high-quality black or white glass sensor with its capacitive user interface offers virtually unlimited possibilities for intelligent building networking. Heating, ventilation, blinds and lighting can all be controlled to create comfortable everyday situations and put intelligent building management firmly in your hands. Discover more details at **abb.com/tacteo**

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Millenium

The Millenium collection is the first metal range to incorage the KNX system, the most intelligent way of managing spaces and optimizing performance in terms of energy savings. Millenium is based on a combinable concept which creates a very comprehensive range, suitable for any types of needs. This makes it the ideal collection for all types of homes, hotels, offices and shops.

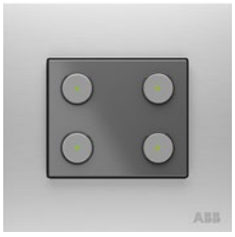
01	Switch Sensor 2gang KNX
02	Switch Sensor 4gang KNX
03	Switch Sensor 6gang KNX
04	Switch Sensor 6gang KNX with IR
05	Busch watchdog 180° KNX
06	Room Thermostat KNX

01

Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

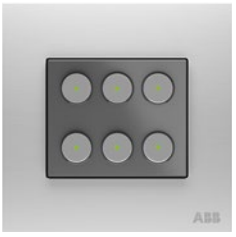
02



Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

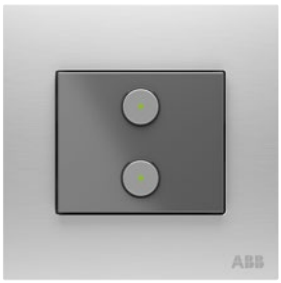
03

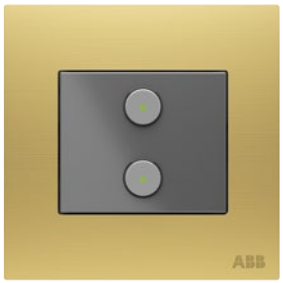


Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

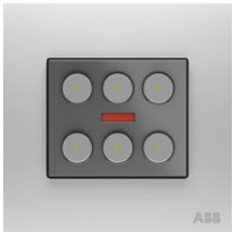
Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

Wide range. Millenium range offers special mounting plates for KNX sensors to reduce the height and improve the aesthetics for ultra slim design. The KNX sensors allow to replace the buttons with desired symbols in order to adjust the sensors to specific design and needs like light, blind, scene, RTC or fan coil. Millenium offers a wide and elegant choice of finishes in stainless steel material: from the Brush Stainless Steel, to the soft touch given by the Silk Black, and the luxury of the sophisticated gold finishes, Matt Gold and Antique Gold.





04



Function
Switching | Dimming | Blinds | Sending values | Scenes etc. | 6gang sensor with IR.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

05

Function
Movement sensor with up to four channels.
Detection range: frontal: 6 m, lateral: 6 m
Detection angle: 180 °
Brightness limit value:
5 Lux - 150 Lux
Mounting height: 1.1 m

06

Function
Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a thermostat for Fan Coil units in 2- and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode.

The Millenium range is only available in the following countries: China, Dubai, India, Kuweit, Oman, Qatar, Saudi Arabia, Singapore, UAE and UK.
Frames and special mounting plates for KNX sensores have to ordered by:
ABB, S.A.
Low Voltage Products-Niessen, Oiartzun / Spain
www.abb.es/niessen

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)

Switch contacts for operating mode selection and dial for setpoint or fan speed adjustment.
Display elements: LCD showing operation modes.
Protection class (Device): IP 20
Temperature range (Device):
– 5 °C to 45 °C

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Millenium

6125/20-981-500

Switch Sensor 2 gang KNX

Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.).
Control element: Switch contacts. Display elements: LED to indicate the function.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 53 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6125/20-981-500	2CKA006115A0443			1

6126/20-981-500

Switch Sensor 4 gang KNX

Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.).
Control element: Switch contacts. Display elements: LED to indicate the function.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 53 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6126/20-981-500	2CKA006116A0218			1

6129/20-981-500

Switch Sensor 6 gang KNX

Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.).
Control element: Switch contacts. Display elements: LED to indicate the function.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 53 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6129/20-981-500	2CKA006118A0104			1

6129/21-981-500

Switch Sensor 6 gang KNX with IR

Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.).
Control element: Switch contacts. Display elements: LED to indicate the function.
Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 53 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6129/21-981-500	2CKA006118A0107			1

6122/20-981-500

Busch-Watchdog 180 flush mounted standard sensor
Movement sensor with up to four channels. Detection range: frontal: 6 m, lateral: 6 m. Detection angle: 180 °. Brightness limit value: 5 Lux – 150 Lux. Mounting height: 1.1 m Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C. Dimensions: (L x W x D): 53 mm x 44 mm. Position for installation: vertical.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6122/20-981-500	2CKA006132A0306			1

6124/08-981-500

Room Thermostat
Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a thermostat for Fan Coil units in 2- and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.).
Switch contacts for operating mode selection and dial for setpoint or fan speed adjustment. Display elements: LCD showing operation modes. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C. Dimensions: (L x W x D): 53 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6124/08-981-500	2CKA006134A0309			1

Buttons with symbols
Buttons with symbols for Millenium control covers 1 / 2-gang, 2 / 4-gang, 3 / 6-gang and 3 / 6-gang with infrared.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Symbol for marking “Light”	–	6123/20-500	2CKA006123A0001			1
Symbol for marking “blinds”	–	6123/21-500	2CKA006123A0002			1
Symbol for marking “scene”	–	6123/22-500	2CKA006123A0003			1
Symbol for marking “temperature”	–	6123/23-500	2CKA006123A0004			1
Symbol for marking “ceiling light”	–	6123/24-500	2CKA006123A0005			1
Symbol for marking “Fan Coil”	–	6123/26-500	2CKA006123A0006			1

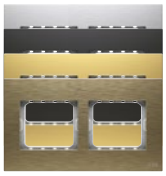
Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Millenium

Triple rocker / KNX frame 1 gang

Frame includes metal mounting plate. Dimensions 86 x 86 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Stainless Steel	–	AMD5153-ST	2CLA637100N1101			1
Silk Black	–	AMD5153-SB	2CLA637100N1501			1
Matt Gold	–	AMD5153-MG	2CLA637100N1701			1
Antique Gold	–	AMD5153-AG	2CLA637100N1601			1



Triple rocker / KNX frame 2 gang

Frame includes metal mounting plate. Dimensions 86 x 147 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Stainless Steel	–	AMD5253-ST	2CLA667200N1101			1
Silk Black	–	AMD5253-SB	2CLA667200N1501			1
Matt Gold	–	AMD5253-MG	2CLA667200N1701			1
Antique Gold	–	AMD5253-AG	2CLA667200N1601			1

AMD5053

Special metal mounting plate for KNX sensors

Allows reduction height of KNX sensors to 1 mm. Only for following items: AMD72053-AN, AMD74053-AN, AMD76053-AN, AMD76153-AN.

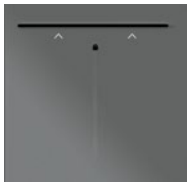
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Special metal mounting plate for KNX sensors 1 gang	–	AMD5053	2CLA627190N1001			1

TR/U 1.1

Transponder Reader MIFARE

The “transponder reader” is a flush-mounting device for British Standard wall boxes, designed to realize access control systems with a communication support based on KNX bus. It is equipped with one relay (4A @24 V AC/DC) and one input to be used for connecting external conventional card-holder (e.g. Millenium wiring accessories card-holder). The output can be programmed in three different ways: “Linked to access control”, receiving in this case switching commands from the device itself (according to transponder card validation); being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices; “linked to card-holder”, that means that the relay is switched according to closing/opening internal input contact available on transponder reader. The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX telegram (for example for DND/MUR purposes).
The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.
The transponder reader is available for ABB Millenium wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TR/U 1.1	2CSY235683R2001			1



TH/U 1.1

Transponder Holder MIFARE

The “transponder holder” is a flush-mounting device for British Standard wall boxes, designed to realize access control systems with a communication support based on KNX bus. It is equipped with one relay (4A @24V AC/DC) and one binary input to be used for connecting external conventional push-button for switch, dimmer and shutter functionalities, or for example for connecting window contact or similar. The output can be programmed as “Linked to access control”, receiving in this case switching commands from the device itself (according to card insertion/removal); or being a standard KNX Switch actuator output, able to be controlled by every KNX-standard devices. The bicolor (red-green) LED placed on the front of the device allow you to monitor device operation and can be also switched ON/OFF in the proper color according to KNX.
The transponder reader requires a 12...24 V AC/DC external power supply to ensure its operation even with bus voltage failure.
The transponder reader is available for ABB Millenium wiring accessories range.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	TH/U 1.1	2CSY265232R2021			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Zenit

01	Switch Sensor 2gang KNX
02	Switch Sensor 4gang KNX
03	Switch Sensor 6gang KNX
04	Switch Sensor 6gang KNX with IR
05	Busch watchdog 180° KNX
06	Room Thermostat KNX

01

Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

02

Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

03

Function
Switching | Dimming | Blinds | Sending values | Scenes etc.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

Zenit is based on a combinable concept which creates a very comprehensive range, suitable for any type of needs. Optimizing comfort, safety and efficiency of homes and buildings: Providing with complete comfort solutions to satisfy all type of needs and projects. Ensuring safety and protection of persons and goods. Saving energy by using only the amount of energy required.

Zenit offers two different mounting plates for KNX sensors corresponding to different market standards: VDE and NEMA.

04

Function
Switching | Dimming | Blinds | Sending values | Scenes etc. | 6gang sensor with IR.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Control element: Switch contacts
Display elements: LED to indicate the function

05

Function
Movement sensor with up to four channels.
Detection range: frontal: 6 m, lateral: 6 m
Detection angle: 180 °
Brightness limit value: 5 Lux - 150 Lux
Mounting height: 1.1 m

06

Function
Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a thermostat for Fan Coil units in 2- and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode.

Features
Incl. 10 logic channels (light scene actuator | sequence actuator | logic gates, etc.)
Switch contacts for operating mode selection and dial for setpoint or fan speed adjustment.
Display elements: LCD showing operation modes.
Protection class (Device): IP 20
Temperature range (Device): – 5 °C to + 45 °C

The Zenit VDE range is only available in the following countries:
Spain, Portugal, Russia, France
The Zenit NEMA range is only available in the following countries:
Latin America, Australia, Thailand, Vietnam.
Sensors, frames and special mounting plates for KNX sensores have to ordered by:
ABB, S.A.
Low Voltage Products-Niessen, Oiartzun / Spain
www.abb.es/niessen

Intelligent Building Solutions

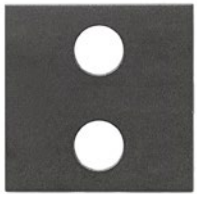
ABB i-bus® KNX – User Operation – Design Ranges – Zenit

6125/98-509

1/2-fold sensor

Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6125/98-509	2CKA006115A0444			1



N2221.2

Cover Zenit 1/2-fold

Cover Zenit 1/2-fold. Available in white (BL), anthracite (AN) and silver (PL).

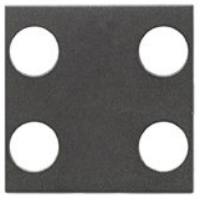
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2221.2 BL	2CLA222120N1101			1
anthracite	–	N2221.2 AN	2CLA222120N1801			1
silver	–	N2221.2 PL	2CLA222120N1301			1

6126/98-509

2/4-fold sensor

Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Control element: Switch contacts. Display elements: LED to indicate the function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6126/98-509	2CKA006116A0219			1



N2221.4

Cover Zenit 2/4-fold

Cover Zenit 2/4-fold. Available in white (BL), anthracite (AN) and silver (PL).

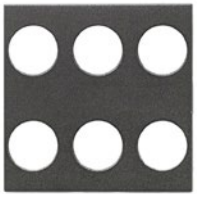
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2221.4 BL	2CLA222140N1101			1
anthracite	–	N2221.4 AN	2CLA222140N1801			1
silver	–	N2221.4 PL	2CLA222140N1301			1

6129/96-509

3/6-fold sensor

Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.)
Control element: Switch contacts. Display elements: LED to indicate the function. Protection class (Device): IP 20. Temperature range (Device): – 5 °C to 45 °C.
Dimensions: (L x W x D): 44 mm x 44 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6129/96-509	2CKA006118A0105			1



N2221.6

Cover Zenit 3/6-fold

Cover Zenit 3/6-fold. Available in white (BL), anthracite (AN) and silver (PL).

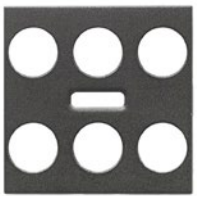
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2221.6 BL	2CLA222160N1101			1
anthracite	–	N2221.6 AN	2CLA222160N1801			1
silver	–	N2221.6 PL	2CLA222160N1301			1

6129/98-509

3/6-fold sensor with IR

Push switch function: switching / dimming / blind / sending values / scenes etc. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). With infrared.
Control element: Switch contacts. Display elements: LED to indicate the function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6129/98-509	2CKA006118A0108			1



N2221.7

Cover Zenit 3/6-fold with IR

Cover Zenit 3/6-fold with IR. Available in white (BL), anthracite (AN) and silver (PL).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2221.7 BL	2CLA222170N1101			1
anthracite	–	N2221.7 AN	2CLA222170N1801			1
silver	–	N2221.7 PL	2CLA222170N1301			1

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ABB i-bus® KNX – User Operation – Design Ranges – Zenit

6124/88-509

Room thermostat heating / cooling Fan Coil

Control element with room thermostat function for triggering the heating, ventilation and fan-coil actuators. The controller is a thermostat for Fan Coil units in 2 - and 4-pipe systems and conventional heating or cooling systems. The fan stage can be switched manually or in automatic mode. Incl. 10 logic channels (light scene actuator, sequence actuator, logic gates, etc.). Switch contacts for operating mode selection and dial for setpoint or fan speed adjustment. Display elements: LCD showing operation modes.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6124/88-509	2CKA006134A0310			1

N2240.4

Cover Zenit room thermostat

Cover Zenit room thermostat. Available in white (BL), anthracite (AN) and silver (PL).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2240.4 BL	2CLA224040N1101			1
anthracite	–	N2240.4 AN	2CLA224040N1801			1
silver	–	N2240.4 PL	2CLA224040N1301			1

6122/98-509

Watchdog 180 flush mounted

Movement sensor with up to four channels. Detection range: frontal: 6 m, lateral: 6 m. Detection angle: 180 °. Brightness limit value: 5 Lux – 150 Lux. Mounting height: 1.1 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6122/98-509	2CKA006132A0307			1

N2241.4

Cover Zenit watchdog

Cover Zenit watchdog. Available in white (BL), anthracite (AN) and silver (PL).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2241.4 BL	2CLA224140N1101			1
anthracite	–	N2241.4 AN	2CLA224140N1801			1
silver	–	N2241.4 PL	2CLA224140N1301			1

Buttons with symbols

Buttons with symbols for Zenit control covers 1 / 2-gang, 2 / 4-gang, 3 / 6-gang and 3 / 6-gang with infrared.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Symbol for marking “Light”	–	6123/20-500	2CKA006123A0001			10
Symbol for marking “blinds”	–	6123/21-500	2CKA006123A0002			10
Symbol for marking “scene”		6123/22-500	2CKA006123A0003			10
Symbol for marking “temperature”	–	6123/23-500	2CKA006123A0004			10
Symbol for marking “ceiling light”	–	6123/24-500	2CKA006123A0005			10
Symbol for marking “Fan Coil”	–	6123/26-500	2CKA006123A0006			10

N2271 XX

Frames, 1 window, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2271 BL	2CLA227100N1102			1
silver	–	N2271 PL	2CLA227100N1302			1
anthracite	–	N2271 AN	2CLA227100N1802			1
champagne	–	N2271 CV	2CLA227100N1902			1
wengué	–	N2271 WG	2CLA227100N2102			1
slate	–	N2271 PZ	2CLA227100N2202			1
white glass	–	N2271 CB	2CLA227100N3002			1
black glass	–	N2271 CN	2CLA227100N3102			1
pearl glass	–	N2271 CP	2CLA227100N3502			1
coffee glass	–	N2271 CC	2CLA227100N3702			1
graphite glass	–	N2271 CF	2CLA227100N3802			1
champagne glass	–	N2271 CH	2CLA227100N3902			1
stainless steel	–	N2271 OX	2CLA227100N4002			1

Basic frame, 1 window, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2271.1 BL	2CLA227110N1102			1
silver	–	N2271.1 PL	2CLA227110N1302			1
anthracite	–	N2271.1 AN	2CLA227110N1802			1
champagne	–	N2271.1 CV	2CLA227110N1902			1

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N2272 BL

2gang frames, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2272 BL	2CLA227200N1102			1
silver	–	N2272 PL	2CLA227200N1302			1
anthracite	–	N2272 AN	2CLA227200N1802			1
champagne	–	N2272 CV	2CLA227200N1902			1
wengué	–	N2272 WG	2CLA227200N2102			1
slate	–	N2272 PZ	2CLA227200N2202			1
white glass	–	N2272 CB	2CLA227200N3002			1
black glass	–	N2272 CN	2CLA227200N3102			1
pearl glass	–	N2272 CP	2CLA227200N3502			1
coffee glass	–	N2272 CC	2CLA227200N3702			1
graphite glass	–	N2272 CF	2CLA227200N3802			1
champagne glass	–	N2272 CH	2CLA227200N3902			1
stainless steel	–	N2272 OX	2CLA227200N4002			1

N2272.1 BL

2gang frames – Basic, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2272.1 BL	2CLA227210N1102			1
silver	–	N2272.1 PL	2CLA227210N1302			1
anthracite	–	N2272.1 AN	2CLA227210N1802			1
champagne	–	N2272.1 CV	2CLA227210N1902			1

N2273 BL

3gang frames, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2273 BL	2CLA227300N1102			1
silver	–	N2273 PL	2CLA227300N1302			1
anthracite	–	N2273 AN	2CLA227300N1802			1
champagne	–	N2273 CV	2CLA227300N1902			1
wengué	–	N2273 WG	2CLA227300N2102			1
slate	–	N2273 PZ	2CLA227300N2202			1
white glass	–	N2273 CB	2CLA227300N3002			1
black glass	–	N2273 CN	2CLA227300N3102			1
pearl glass	–	N2273 CP	2CLA227300N3502			1
coffee glass	–	N2273 CC	2CLA227300N3702			1
graphite glass	–	N2273 CF	2CLA227300N3802			1
champagne glass	–	N2273 CH	2CLA227300N3902			1
stainless steel	–	N2273 OX	2CLA227300N4002			1

N2273.1 BL

3gang frames – Basic, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2273.1 BL	2CLA227310N1102			1
silver	–	N2273.1 PL	2CLA227310N1302			1
anthracite	–	N2273.1 AN	2CLA227310N1802			1
champagne	–	N2273.1 CV	2CLA227310N1902			1

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N2274 BL

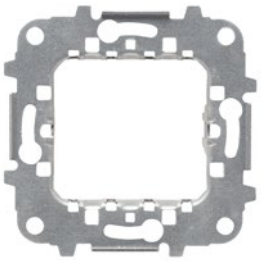
4gang frames, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2274 BL	2CLA227400N1102			1
silver	–	N2274 PL	2CLA227400N1302			1
anthracite	–	N2274 AN	2CLA227400N1802			1
champagne	–	N2274 CV	2CLA227400N1902			1
wengué	–	N2274 WG	2CLA227400N2102			1
slate	–	N2274 PZ	2CLA227400N2202			1
white glass	–	N2274 CB	2CLA227400N3002			1
black glass	–	N2274 CN	2CLA227400N3102			1
pearl glass	–	N2274 CP	2CLA227400N3502			1
coffee glass	–	N2274 CC	2CLA227400N3702			1
graphite glass	–	N2274 CF	2CLA227400N3802			1
champagne glass	–	N2274 CH	2CLA227400N3902			1
stainless steel	–	N2274 OX	2CLA227400N4002			1

N2274.1 BL

4gang frames – Basic, Zenit VDE

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2274.1 BL	2CLA227410N1102			1
silver	–	N2274.1 PL	2CLA227410N1302			1
anthracite	–	N2274.1 AN	2CLA227410N1802			1
champagne	–	N2274.1 CV	2CLA227410N1902			1



N2271.9

Metal mounting plate

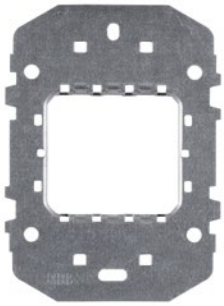
Metal mounting plate for Zenit VDE KNX sensors.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
1 window	–	N2271.9	2CLA227190N1002			20
2 windows	–	N2272.9	2CLA227290N1002			20

N2372.1 XX

Frame, 2 modules, Zenit, NEMA

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	N2372.1 BL	2CLA237210N1102			1
silver	–	N2372.1 PL	2CLA237210N1302			1
anthracite	–	N2372.1 AN	2CLA237210N1802			1
champagne	–	N2372.1 CV	2CLA237210N1902			1
slate	–	N2372.1 PZ	2CLA237200N2202			1
white glass	–	N2372.1 CB	2CLA237200N3002			1
black glass	–	N2372.1 CN	2CLA237200N3102			1
stainless steel	–	N2372.1 OX	2CLA237200N4002			1



N2371.9V

Metal mounting plate

Mounting plate for 3 module box, facilitates the assembly of 1 and 2 module devices in vertical or horizontal installations.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
for vertical installation	–	N2371.9V	2CLA237190N1002			20
for horizontal installation	–	N2373.9	2CLA237390N1002			20

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2CSYK1001C

Binary Input, 2-fold

Device equipped with 2 binary input channels that can be used to interface to KNX system conventional push-buttons/rocker switches, or auxiliary/technical contacts. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1001C	2CSYK1001C			1
black	–	2CSYK1001S	2CSYK1001S			1

2CSYK1002C

Binary Input, 2-fold, with Rocker Switch

Device equipped with: 1 rocker switch; 2 binary input channels that can be used to interface to KNX system conventional push-buttons/rocker switches, or auxiliary/technical contacts. LEDs for the functional signaling of the load to which the rocker switch is connected. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1002C	2CSYK1002C			1
black	–	2CSYK1002S	2CSYK1002S			1

2CSYK1003C

Binary Input, 2-fold, with Rocker Switches, 2 gang

Device equipped with: 2 rocker switches; 2 binary input channels that can be used to interface to KNX system conventional push-buttons/rocker switches, or auxiliary/technical contacts. LEDs for the functional signaling of the load to which the rocker switch is connected. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1003C	2CSYK1003C			1
black	–	2CSYK1003S	2CSYK1003S			1

2CSYK1023C

Binary Input, 2-fold, with Rocker Switches, 2 gang, multifunction **NEW**

Device equipped with:2 rocker switches; 2 binary input channels that can be used to interface to KNX system conventional push-buttons/rocker switches, or auxiliary/technical contacts. LEDs for the functional signaling of the load to which the rocker switch is connected. Upper and lower rocker switches can be separeted for switching, dimming, shutter functionality. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1023C	2CSYK1023C			1
black	–	2CSYK1023S	2CSYK1023S			1

2CSYK1012C

One rocker switch

1 rocker switch device used as a sensor in KNX system. LEDs for the functional signaling of the load to which the rocker switch is connected. Flush-mounted installation. Customization labels are available as separate articles: 2CSYE1502C and 2CSYE1502S.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1012C	2CSYK1012C			1
black	–	2CSYK1012S	2CSYK1012S			1

2CSYK1022C

One rocker switch, multifunction **NEW**

1 rocker switch device used as a sensor in KNX system. LEDs for the functional signaling of the load to which the rocker switch is connected. Upper and lower rocker switches can be separeted for switching, dimming, shutter functionality. Flush-mounted installation. Customization labels are available as separate articles: 2CSYE1502C and 2CSYE1502S.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1022C	2CSYK1022C			1
black	–	2CSYK1022S	2CSYK1022S			1

2CSYK1101C

Switch Actuator, 1-fold, 16 A

Device equipped with 1 output channel to switch 1 independent electrical load (16 A) via KNX bus. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1101C	2CSYK1101C			1
black	–	2CSYK1101S	2CSYK1101S			1

2CSYK1102C

Switch Actuator, 1-fold, 16 A, with Rocker Switch

Device equipped with: 1 rocker switch, 1 output channel to switch 1 independent electrical load (16 A) via KNX bus. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1102C	2CSYK1102C			1
black	–	2CSYK1102S	2CSYK1102S			1

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2CSYK1103C

Switch Actuator, 1-fold, 16A, with Rocker Switches, 2 gang

Device equipped with: 2 rocker switches, 1 output channel to switch 1 independent electrical load (16 A) via KNX bus. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1103C	2CSYK1103C			1
black	–	2CSYK1103S	2CSYK1103S			1

2CSYK1104C

Shutter Actuator, 1-fold, 230 V

Device equipped with 1-fold shutter actuator. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1104C	2CSYK1104C			1
black	–	2CSYK1104S	2CSYK1104S			1

2CSYK1105C

Shutter Actuator, 1-fold, 230 V, with Rocker Switch

Device equipped with 1-fold shutter actuator and 1 rocker switch. Equipped with LED for functional signaling.Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1105C	2CSYK1105C			1
black	–	2CSYK1105S	2CSYK1105S			1

2CSYK1106C

Switch Actuator, 2-fold, 8A, with Rocker Switches, 2 gang

Device equipped with: 2 rocker switches, 2 output channel to switch 2 independent electrical load (8 A) via KNX bus. Equipped with LED for functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1106C	2CSYK1106C			1
black	–	2CSYK1106S	2CSYK1106S			1

2CSYK1202C

Thermostat

Standard KNX thermostat equipped with backlight LCD display 4 push buttons on the front- for the following functionalities (Operating mode switching, Fan-coil speed manual switching, set-point manual increment/decrement). Possibility to choose different type of control: 2-point ON/OFF, PWM, Continue, Fan- coil.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1202C	2CSYK1202C			1
black	–	2CSYK1202S	2CSYK1202S			1

2CSYK1205C

Universal Dimmer Actuator, 1-fold, 350W, with Rocker Switch

Device with 350 W dimmer and rocker switch. Suitable for inductive and capacitive load with automatic recognition. Equipped with LED for load functional signaling.Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1205C	2CSYK1205C			1
black	–	2CSYK1205S	2CSYK1205S			1

2CSYK1206C

Dimmer 1..10 V, 1-fold, with Rocker Switch

Device equipped with 1/10 V dimmer with rocker switch. Suitable for loads with ballast adjustment. Equipped with LED for load functional signaling. Flush-mounted installation.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	2CSYK1206C	2CSYK1206C			1
black	–	2CSYK1206S	2CSYK1206S			1

LT/U 1.1.MC
LT/U 1.1.MS

Transponder Reader, Mylos

The transponder reader is used for access control in the hotel, residential and commercial sectors (office buildings, business centers, laboratories, etc.). The device is equipped with two bistable relays (8 A, 250 V AC), one of which can be assigned to control electronic lock, and three voltage-free, non-optically insulated inputs; the 5-V DC scanning voltage is available on the COM terminal.
The transponder reader requires a 10...32 V DC/12...24 V AC external power supply to ensure its operation even with bus voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	LT/U 1.1.MC	2CSYK5000C			1
black	–	LT/U 1.1.MS	2CSYK5000S			1

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PTI/U 1.1.MC

Transponder Holder, Mylos

The transponder holder is equipped with a slot into which the transponder card is inserted. In a hotel application, this allows occupancy recognition and notification at the supervisory level (e.g. on the front desk computer). Moreover, room status information can be managed by using special cards (minibar status, maintenance status, usability).
The device is equipped with two bistable relays (8 A, 250 Vac), and three voltage-free, non-optically insulated inputs; the 5-Vdc scanning voltage is generated by the device itself. The transponder holder has on the front four LEDs for signaling indications. It requires a 10...32 Vdc/12...24 Vac auxiliary power supply to ensure its operation even in case of KNX voltage failure.

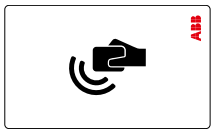
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PTI/U 1.1.MC	2CSYK5200C			1
black	–	PTI/U 1.1.MS	2CSYK5200S			1

PRT/U 1.1.MC

Transponder Programming Device, Mylos

The devices allows the programming of transponder cards. The device is equipped with two bistable relays (8 A, 250 Vac), and three voltage-free, non-optically insulated inputs; the 5-Vdc scanning voltage is generated by the device itself. The transponder programming device has on the front four LEDs for signaling indications. It requires a 10...32Vdc/12...24Vac auxiliary power supply to ensure its operation even in case of KNX voltage failure.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	PRT/U 1.1.MC	2CSYK5300C			1
black	–	PRT/U 1.1.MS	2CSYK5300S			1



CH/T 2

Set of 5 Transponder Cards for Chiara and Mylos design programs

The transponder card uses passive transponder technology operating in radio frequency, without the need for contact between the reader and the card itself. The transponder card is read by swiping it in front of the reader at a maximum distance of 20 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	CH/T 2	2CSKK5400C			1

Round cover plates

Mylos Lucent

A great adventure in luminosity.
If the need is to surround youself with sparkling elements, the Lucent series is the most appropriate choice.
Made of special resins, each plate enhances with its glossy shades in every setting, like spots of light on Caravaggio canvases.
Mylos Lucent evokes elements such as alabaster and ice, also makes black shine, giving a technological aspect and thereby completing particularly high-tech spaces.

Alabaster white

Lucent, White Alabaster.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0201RGP	2CSY0201RGP			1
	3	2CSY0301RGP	2CSY0301RGP			1
	4	2CSY0401RGP	2CSY0401RGP			1
	7	2CSY0701RGP	2CSY0701RGP			1
	4+4	2CSY0801RGP	2CSY0801RGP			1

Cold grey

Lucent, Cold Grey.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0202RLP	2CSY0202RLP			1
	3	2CSY0302RLP	2CSY0302RLP			1
	4	2CSY0402RLP	2CSY0402RLP			1
	7	2CSY0702RLP	2CSY0702RLP			1
	4+4	2CSY0802RLP	2CSY0802RLP			1

Brilliant black

Lucent, Brilliant black.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0200RLP	2CSY0200RLP			1
	3	2CSY0300RLP	2CSY0300RLP			1
	4	2CSY0400RLP	2CSY0400RLP			1
	7	2CSY0700RLP	2CSY0700RLP			1
	4+4	2CSY0800RLP	2CSY0800RLP			1

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Ice

Lucent, Ice.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0203QGP	2CSY0203QGP			1
	3	2CSY0303QGP	2CSY0303QGP			1
	4	2CSY0403QGP	2CSY0403QGP			1
	7	2CSY0703QGP	2CSY0703QGP			1
	4+4	2CSY0803QGP	2CSY0803QGP			1

Mylos Velvet

A touch of velvet in every gesture.

The Mylos Velvet finish draws inspiration from the creation of interiors in the automotive sector, a feather in the cap of Italian industrial tradition.

The technology applied to polymers makes it possible to obtain a matt scratchresistant finish and with an extraordinary soft tactile effect, just like velvet, to provide one's home with an original multisensorial elegance.

Ice

Velvet, Ice.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0221RSP	2CSY0221RSP			1
	3	2CSY0321RSP	2CSY0321RSP			1
	4	2CSY0421RSP	2CSY0421RSP			1
	7	2CSY0721RSP	2CSY0721RSP			1
	4+4	2CSY0821RSP	2CSY0821RSP			1

Graphite

Velvet, Graphite.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0225RSP	2CSY0225RSP			1
	3	2CSY0325RSP	2CSY0325RSP			1
	4	2CSY0425RSP	2CSY0425RSP			1
	7	2CSY0725RSP	2CSY0725RSP			1
	4+4	2CSY0825RSP	2CSY0825RSP			1

White

Velvet, White.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0224RMP	2CSY0224RMP			1
	3	2CSY0324RMP	2CSY0324RMP			1
	4	2CSY0424RMP	2CSY0424RMP			1
	7	2CSY0724RMP	2CSY0724RMP			1
	4+4	2CSY0824RMP	2CSY0824RMP			1

Cold grey

Velvet, Cold Grey.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0222RSP	2CSY0222RSP			1
	3	2CSY0322RSP	2CSY0322RSP			1
	4	2CSY0422RSP	2CSY0422RSP			1
	7	2CSY0722RSP	2CSY0722RSP			1
	4+4	2CSY0822RSP	2CSY0822RSP			1

Black

Velvet, Black.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0223RSP	2CSY0223RSP			1
	3	2CSY0323RSP	2CSY0323RSP			1
	4	2CSY0423RSP	2CSY0423RSP			1
	7	2CSY0723RSP	2CSY0723RSP			1
	4+4	2CSY0823RSP	2CSY0823RSP			1

Anthracite

Velvet, Anthracite.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0226RSP	2CSY0226RSP			1
	3	2CSY0326RSP	2CSY0326RSP			1
	4	2CSY0426RSP	2CSY0426RSP			1
	7	2CSY0726RSP	2CSY0726RSP			1
	4+4	2CSY0826RSP	2CSY0826RSP			1

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ABB i-bus® KNX – User Operation – Design Ranges – Mylos

White white

Velvet, White white.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0201RWP	2CSY0201RWP			1
	3	2CSY0301RWP	2CSY0301RWP			1
	4	2CSY0401RWP	2CSY0401RWP			1
	7	2CSY0701RWP	2CSY0701RWP			1
	4+4	2CSY0801RWP	2CSY0801RWP			1

Mylos Metal

The prestige, the strength, the charm.
The skill in working metals is another typically Italian talent. The Mylos Metal civil series is the result of the process of die-casting of “zama”, a zinc alloy, finished with the shades of natural metals by means of precious painting and careful brushing for each and every piece. The finishes obtained range from silver to gold, through aluminium, steel and chromium, brushed and glossy, that evoke sensations of sophistication and preciousness.

Satin silver

Metal, Satin finish, Silver.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0211RLZ	2CSY0211RLZ			1
	3	2CSY0311RLZ	2CSY0311RLZ			1
	4	2CSY0411RLZ	2CSY0411RLZ			1
	7	2CSY0711RLZ	2CSY0711RLZ			1
	4+4	2CSY0811RLZ	2CSY0811RLZ			1

Satin aluminium

Metal, Satin finish, Aluminium.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0204RLZ	2CSY0204RLZ			1
	3	2CSY0304RLZ	2CSY0304RLZ			1
	4	2CSY0404RLZ	2CSY0404RLZ			1
	7	2CSY0704RLZ	2CSY0704RLZ			1
	4+4	2CSY0804RLZ	2CSY0804RLZ			1

Satin gold

Metal, Satin finish, gold.

Description	No. mod-ules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0205RLZ	2CSY0205RLZ			1
	3	2CSY0305RLZ	2CSY0305RLZ			1
	4	2CSY0405RLZ	2CSY0405RLZ			1
	7	2CSY0705RLZ	2CSY0705RLZ			1
	4+4	2CSY0805RLZ	2CSY0805RLZ			1

Glossy chrome

Metal, Glossy finish, Chrome.

Description	No. mod-ules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0206RLZ	2CSY0206RLZ			1
	3	2CSY0306RLZ	2CSY0306RLZ			1
	4	2CSY0406RLZ	2CSY0406RLZ			1
	7	2CSY0706RLZ	2CSY0706RLZ			1
	4+4	2CSY0806RLZ	2CSY0806RLZ			1

Brushed steel

Metal, Brushed steel.

Description	No. mod-ules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0202RSZ	2CSY0202RSZ			1
	3	2CSY0302RSZ	2CSY0302RSZ			1
	4	2CSY0402RSZ	2CSY0402RSZ			1
	7	2CSY0702RSZ	2CSY0702RSZ			1
	4+4	2CSY0802RSZ	2CSY0802RSZ			1

Dark nickel

Metal, Dark nickel.

Description	No. mod-ules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0210RSZ	2CSY0210RSZ			1
	3	2CSY0310RSZ	2CSY0310RSZ			1
	4	2CSY0410RSZ	2CSY0410RSZ			1
	7	2CSY0710RSZ	2CSY0710RSZ			1
	4+4	2CSY0810RSZ	2CSY0810RSZ			1

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ABB i-bus® KNX – User Operation – Design Ranges – Mylos

Glossy gold

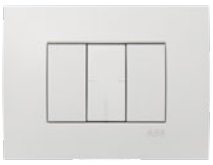
Metal, Glossy finish, Gold.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0207RLZ	2CSY0207RLZ			1
	3	2CSY0307RLZ	2CSY0307RLZ			1
	4	2CSY0407RLZ	2CSY0407RLZ			1
	7	2CSY0707RLZ	2CSY0707RLZ			1
	4+4	2CSY0807RLZ	2CSY0807RLZ			1

Square Cover Plate

Mylos Etik

The design in perfect harmony with sustainability. Today, the development of a new product cannot ignore the impact on the environment in which we live. Every effort must be made with a view to obtaining an original but mainly sustainable result. ABB strongly believes in this commitment. And confirms this with Mylos Etik, the new finish that is good for all, including the environment.



White

Black

Mylos Ethik white and black

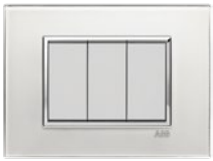
Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	2	2CSY0201QEP	2CSY0201QEP			1
white	3	2CSY0301QEP	2CSY0301QEP			1
white	4	2CSY0401QEP	2CSY0401QEP			1
white	7	2CSY0701QEP	2CSY0701QEP			1
black	2	2CSY0200QEP	2CSY0200QEP			1
black	3	2CSY0300QEP	2CSY0300QEP			1
black	4	2CSY0400QEP	2CSY0400QEP			1
black	7	2CSY0700QEP	2CSY0700QEP			1

Mylos Crystal

The elegance of glass, the naturalness of reflections.

The glass of the Mylos Crystal series is not just glass. It draws inspiration from the great master glass-makers of Murano, in the Venice Lagoon, already active in this art since the VIII century. The elegant satin effect which differs from the typical shiny glass effect is obtained by the sanding effect which consists in subjecting the glass slab to the abrasive action of sand. After treatment the transparent slab becomes opalescent. The result is an elegant yet sober finish suitable for the most sought-after settings, with a refined yet never excessive style.

Crystal black



Crystal white

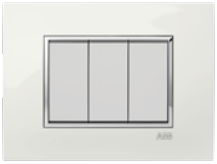
Crystal black and white

Description	No. mod-ules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
black	2	2CSY0200QSV	2CSY0200QSV			1
black	3	2CSY0300QSV	2CSY0300QSV			1
black	4	2CSY0400QSV	2CSY0400QSV			1
white	2	2CSY0201QMV	2CSY0201QMV			1
white	3	2CSY0301QMV	2CSY0301QMV			1
white	4	2CSY0401QMV	2CSY0401QMV			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Mylos

Mylos Lucent
A great adventure in luminosity.
If the need is to surround youself with sparkling elements, the Lucent series is the most appropriate choice.
Made of special resins, each plate enhances with its glossy shades in every setting, like spots of light on Caravaggio canvases.
Mylos Lucent evokes elements such as alabaster and ice, also makes black shine, giving a technological aspect and thereby completing particularly high-tech spaces.



White alabaster

Lucent, White Alabaster.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0201RGP	2CSY0201RGP			1
	3	2CSY0301RGP	2CSY0301RGP			1
	4	2CSY0401RGP	2CSY0401RGP			1
	7	2CSY0701RGP	2CSY0701RGP			1
	4+4	2CSY0801RGP	2CSY0801RGP			1

Cold grey

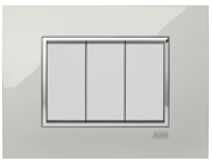
Lucent, Cold Grey.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0202QLP	2CSY0202QLP			1
	3	2CSY0302QLP	2CSY0302QLP			1
	4	2CSY0402QLP	2CSY0402QLP			1
	7	2CSY0702QLP	2CSY0702QLP			1
	4+4	2CSY0802QLP	2CSY0802QLP			1

Brilliant black

Lucent, Brilliant black.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0200QLP	2CSY0200QLP			1
	3	2CSY0300QLP	2CSY0300QLP			1
	4	2CSY0400QLP	2CSY0400QLP			1
	7	2CSY0700QLP	2CSY0700QLP			1
	4+4	2CSY0800QLP	2CSY0800QLP			1



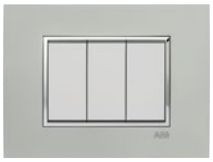
Ice

Lucent, Ice.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0203QLP	2CSY0203QLP			1
	3	2CSY0303QLP	2CSY0303QLP			1
	4	2CSY0403QLP	2CSY0403QLP			1
	7	2CSY0703QLP	2CSY0703QLP			1
	4+4	2CSY0803QLP	2CSY0803QLP			1

Mylos Velvet

A touch of velvet in every gesture.
The Mylos Velvet finish draws inspiration from the creation of interiors in the automotive sector, a feather in the cap of Italian industrial tradition.
The technology applied to polymers makes it possible to obtain a matt scratchresistant finish and with an extraordinary soft tactile effect, just like velvet, to provide one's home with an original multisensorial elegance.



Ice

Velvet, Ice.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0221QSP	2CSY0221QSP			1
	3	2CSY0321QSP	2CSY0321QSP			1
	4	2CSY0421QSP	2CSY0421QSP			1
	7	2CSY0721QSP	2CSY0721QSP			1
	4+4	2CSY0821QSP	2CSY0821QSP			1

Graphite

Velvet, Graphite.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0225QSP	2CSY0225QSP			1
	3	2CSY0325QSP	2CSY0325QSP			1
	4	2CSY0425QSP	2CSY0425QSP			1
	7	2CSY0725QSP	2CSY0725QSP			1
	4+4	2CSY0825QSP	2CSY0825QSP			1

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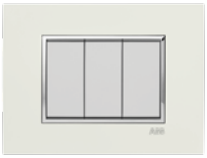
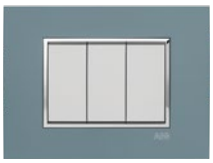
ABB i-bus® KNX – User Operation – Design Ranges – Mylos



White

Velvet, White.

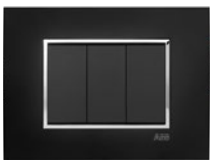
Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0224QMP	2CSY0224QMP			1
	3	2CSY0324QMP	2CSY0324QMP			1
	4	2CSY0424QMP	2CSY0424QMP			1
	7	2CSY0724QMP	2CSY0724QMP			1
	4+4	2CSY0824QMP	2CSY0824QMP			1



Cold grey

Velvet, Cold Grey.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0222QSP	2CSY0222QSP			1
	3	2CSY0322QSP	2CSY0322QSP			1
	4	2CSY0422QSP	2CSY0422QSP			1
	7	2CSY0722QSP	2CSY0722QSP			1
	4+4	2CSY0822QSP	2CSY0822QSP			1



Black

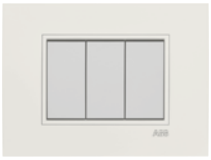
Velvet, Black.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0223QSP	2CSY0223QSP			1
	3	2CSY0323QSP	2CSY0323QSP			1
	4	2CSY0423QSP	2CSY0423QSP			1
	7	2CSY0723QSP	2CSY0723QSP			1
	4+4	2CSY0823QSP	2CSY0823QSP			1

Anthracite

Velvet, Anthracite.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0226QSP	2CSY0226QSP			1
	3	2CSY0326QSP	2CSY0326QSP			1
	4	2CSY0426QSP	2CSY0426QSP			1
	7	2CSY0726QSP	2CSY0726QSP			1
	4+4	2CSY0826QSP	2CSY0826QSP			1



White white

Velvet, White white.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0201QWP	2CSY0201QWP			1
	3	2CSY0301QWP	2CSY0301QWP			1
	4	2CSY0401QWP	2CSY0401QWP			1
	7	2CSY0701QWP	2CSY0701QWP			1
	4+4	2CSY0801QWP	2CSY0801QWP			1

Intelligent Building Solutions

ABB i-bus® KNX – User Operation – Design Ranges – Mylos

Mylos Metal

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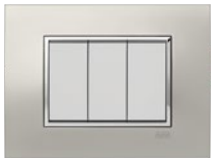
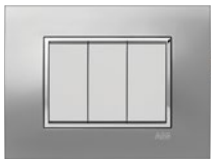


Satin silver

Metal, Satin finish, Silver.

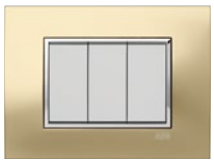
Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0211QLZ	2CSY0211QLZ			1
	3	2CSY0311QLZ	2CSY0311QLZ			1
	4	2CSY0411QLZ	2CSY0411QLZ			1
	7	2CSY0711QLZ	2CSY0711QLZ			1
	4+4	2CSY0811QLZ	2CSY0811QLZ			1



Satin aluminium

Metal, Satin finish, Aluminium.

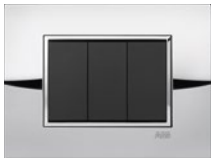
Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0204QLZ	2CSY0204QLZ			1
	3	2CSY0304QLZ	2CSY0304QLZ			1
	4	2CSY0404QLZ	2CSY0404QLZ			1
	7	2CSY0704QLZ	2CSY0704QLZ			1
	4+4	2CSY0804QLZ	2CSY0804QLZ			1



Satin gold

Metal, Satin finish, Gold.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0205QLZ	2CSY0205QLZ			1
	3	2CSY0305QLZ	2CSY0305QLZ			1
	4	2CSY0405QLZ	2CSY0405QLZ			1
	7	2CSY0705QLZ	2CSY0705QLZ			1
	4+4	2CSY0805QLZ	2CSY0805QLZ			1



Glossy chrome

Metal, Glossy finish, chrome.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0206QLZ	2CSY0206QLZ			1
	3	2CSY0306QLZ	2CSY0306QLZ			1
	4	2CSY0406QLZ	2CSY0406QLZ			1
	7	2CSY0706QLZ	2CSY0706QLZ			1
	4+4	2CSY0806QLZ	2CSY0806QLZ			1

Brushed steel

Metal, Scratchbrushed steel.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0202QSZ	2CSY0202QSZ			1
	3	2CSY0302QSZ	2CSY0302QSZ			1
	4	2CSY0402QSZ	2CSY0402QSZ			1
	7	2CSY0702QSZ	2CSY0702QSZ			1
	4+4	2CSY0802QSZ	2CSY0802QSZ			1

Dark nickel

Metal, Dark nickel.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0210QSZ	2CSY0210QSZ			1
	3	2CSY0310QSZ	2CSY0310QSZ			1
	4	2CSY0410QSZ	2CSY0410QSZ			1
	7	2CSY0710QSZ	2CSY0710QSZ			1
	4+4	2CSY0810QSZ	2CSY0810QSZ			1

Glossy gold

Metal, Glossy finish, Gold.

Description	No. modules	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	2	2CSY0207QLZ	2CSY0207QLZ			1
	3	2CSY0307QLZ	2CSY0307QLZ			1
	4	2CSY0407QLZ	2CSY0407QLZ			1
	7	2CSY0707QLZ	2CSY0707QLZ			1
	4+4	2CSY0807QLZ	2CSY0807QLZ			1

Intelligent Building Solutions

WaveLINE Wireless Control – RF Sensors

01

02

03

04

05

01 SM WaveLINE movement detector, Article-No. 6747 AGM-204-500

The WaveLINE Busch-Watchdog 220 is a battery-operated movement detector. Since it is installed without cables it can be mounted in the most ideal position. The battery has a service life of 5 years.

02 WaveLINE media converter TP-RF, Article-No. 6770-500

The KNX and Busch radio control are coupled via the WaveLINE media converter TP-RF. Telegrams can be exchanged in both directions. One application serves to transmit the window sensor to the KNX system.

03 Window sensor, Article-No. 6720-64

The WaveLINE window sensor is retrofitted between the window and window handle, which means the original window handle is retained. The window handle is used for the following window positions: opened, tilted and closed.

04 Universal detector, Article-No. 6721-64

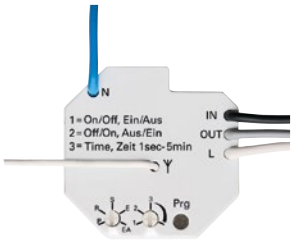
The WaveLINE universal detector is suited for skylights or sliding doors and is activated via a reed contact. The universal detector has a second channel which can be permanently wired to a floating contact (NO or NC contacts).

05 Remote control RF, Article-No. 6780-500

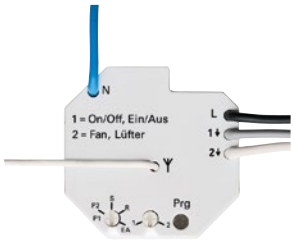
The remote control is used as mobile control for the WaveLINE. Loads can be controlled individually and scenes can be started.

Control elements					
Switch ranges	1gang	2gang	4gang	1gang	2gang
pure stainless steel	6731-866-500	6732-866-500	6733-866-500		
solo®	6731-xx-500	6732-xx-500	6733-xx-500		
Busch-axcent®	6731-xx-500	6732-xx-500	6733-xx-500		
future® linear	6731-xx-500	6732-xx-500	6733-xx-500		
Reflex SI				6731-214-500	6732-214-500
Busch-Duro 2000® SI				6731-212-500	6732-212-500

01

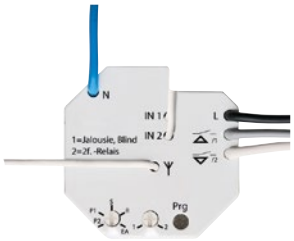


02

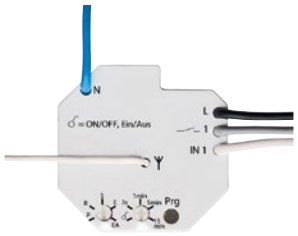


03

04



05



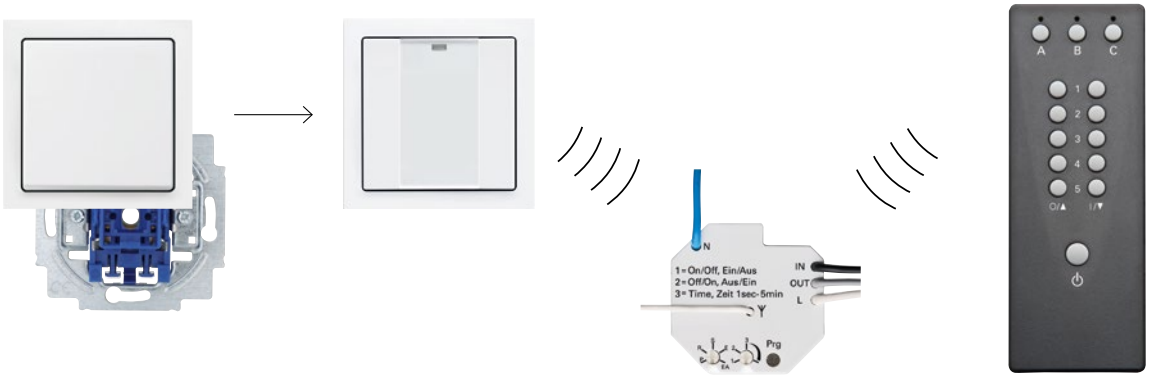
06

07

01	1gang WaveLINE actuator, Article-No. 6702-500
02	2gang WaveLINE actuator, Article-No. 6703-500
03	WaveLINE dimming actuator, Article-No. 6704-500
04	WaveLINE blind actuator, Article-No. 6705-101-500
05	1gang WaveLINE actuator, Article-No. 6701-101-500
06	WaveLINE binary input, 2gang Article-No. 6725-500
07	WaveLINE LED display, 4gang with switching function, Article-No. 6730-84

Before

After



Usage of frequency might be restricted in certain countries.

Intelligent Building Solutions

WaveLINE Wireless Control – Transmitter

6731-214-500

6731-84-500

WaveLINE-Switch Sensor 1-fold

1gang wall-mounted transmitter independent of mains power supply. For switching and dimming. For controlling blinds and light scenes. 1 radio channel can be operated or up to 2 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery included in delivery; service life: typically 5 years.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	6731-212-500	2CKA006730A0028			1/10
alpine white	–	6731-214-500	2CKA006730A0030			1/10
ivory white	–	6731-82-500	2CKA006730A0032			1/10
aluminium silver	–	6731-83-500	2CKA006730A0035			1/10
studio white	–	6731-84-500	2CKA006730A0038			1/10
stainless steel	–	6731-866-500	2CKA006730A0041			1/10
antique brass	–	6731-840-500	2CKA006730A0094			1/10

6732-214-500

6732-84-500

WaveLINE-Switch Sensor 2-fold

2gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 2 radio channels can be operated or up to 4 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery included in delivery; service life: typically 5 years.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	6732-212-500	2CKA006730A0029			1/10
alpine white	–	6732-214-500	2CKA006730A0031			1/10
ivory white	–	6732-82-500	2CKA006730A0033			1/10
aluminium silver	–	6732-83-500	2CKA006730A0036			1/10
studio white	–	6732-84-500	2CKA006730A0039			1/10
stainless steel	–	6732-866-500	2CKA006730A0042			1/10
antique brass	–	6732-840-500	2CKA006730A0095			1/10

6733-84-500

WaveLINE-Switch Sensor 4-fold

4gang wall-mounted transmitter independent of mains power supply. With labelling field and labelling strip. For switching and dimming. For controlling blinds and light scenes. 4 radio channels can be operated or up to 8 light scenes can be called up. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery included in delivery; service life: typically 5 years.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
ivory white	–	6733-82-500	2CKA006730A0034			1/10
aluminium silver	–	6733-83-500	2CKA006730A0037			1/10
studio white	–	6733-84-500	2CKA006730A0040			1/10
stainless steel	–	6733-866-500	2CKA006730A0043			1/10

6780-500

WaveLINE-Remote Controller

Network-independent radio control. For switching and dimming. For controlling blinds and light scenes. With 3 groups (A, B or C) with 5 pairs of channels. There are 15 radio channels operated singly or up to 30 light scenes can be called. With “ALL OFF” function for associated actuators. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. For LED display WaveLINE 6730-xxx. Compatible with WaveLINE KNX gateway TP-RF 6770. Send frequency: 868 MHz. Free-field range: approx. 100 m. Power supply: lithium button cell battery Type CR2032. Battery included in delivery; service life: typically 5 years.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
black	–	6780-500	2CKA006780A0001			1/10

Intelligent Building Solutions

WaveLINE Wireless Control – Transmitter

6725-500

WaveLINE binary input, 2gang, 230 V

Radio control telegrams are sent when the two extension units are activated with mains voltage (AC 230 V~). Operation also possible via conventional push-buttons (2020 US, 2012/6 UK). The 2gang binary input has 5 function modes 2-channel switching; 2-channel dimming; 1-channel blind; Two-channel light scene control; Channel 1: Switching ON. Channel 2: Continuous switching ON/OFF.
In dependence of the selected function, it can be combined with WaveLINE actuators 6701-101, 6702, 6703, 6704, 6705-101. Compatible with WaveLINE KNX gateway TP-RF 6770. Repeater function can be activated for extended range. For universal attachment or installation. Phase and neutral conductor required. For installation in (deep) flush-mounted boxes to German Standard DIN 49073, Part 1. Send/receive frequency: 868 MHz. Free-field range: approx. 100 m. Control element: Adjustable potentiometer. Display elements: LED for status display. Rated voltage: 230 V~, +10 % / –10 %. Rated frequency: 50 Hz. Inputs: 2.
Polling voltage: 230 V~, potential-connected.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	6725-500	2CKA006720A0008			1/10

6747 AGM-204-500

Busch-Watchdog 220° WaveLINE

Wireless movement detector for detecting thermal motion. With display for detection and status indication. With ground and rear-field detection. With high-quality lens for optimum detection. Surveillance density: 84 sectors with 336 switching segments. With integrated dismantling protection. All functions controlled by microprocessor. With automatic range stabilization. With automatic interference suppression. With automatic dazzle-proofing. With automatic battery monitoring. Battery type: Lithium batteries 1250 mAh (L92 AAA 1.5 V). Battery included in delivery. Battery service life: typically 5 years, therefore practically maintenance-free. With brightness-independent test mode for evaluating the detection zone. Individual adjustment of detection range via enclosed protective foil which can be cut to size. Combinable with switch actuator WaveLINE, 1gang, with extension unit 6701-101. Compatible with WaveLINE KNX gateway TP-RF 6770. For standalone and group operation. Switch-off delay: 3 min. (single mode), individually adjustable at actuator (group mode). Send frequency: 868 MHz. Free-field range: approx. 100 m. Rated voltage: 4.5 V–. Detection range: frontal: 16 m, lateral: 16 m. Detection angle: 220 °. Brightness limit value: 0.5 Lux – 300 Lux, Daytime operation. Mounting height: 2.5 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
brown	–	6747 AGM-201-500	2CKA006700A0038			1
white	–	6747 AGM-204-500	2CKA006700A0035			1
silver metallic	–	6747 AGM-208-500	2CKA006700A0036			1
anthracite	–	6747 AGM-35-500	2CKA006700A0037			1

Intelligent Building Solutions

WaveLINE Wireless Control – Actuators, RF/ KNX Media Converters

6701-101-500

Receiver WaveLINE, FM

For wireless switching of electrical loads. Functions via radio control: ON/OFF, timer and light scene control. Functions via the extension unit: ON/OFF, timer and sending a radio control telegram. Operation also possible via conventional push-buttons (2020 US, 2012/6 UK). For Busch-Watchdog WaveLINE. For wall mounted transmitter Waveline 6731-xxx, 6732-xxx and 6733-xxx. For remote control WaveLINE 6780. For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-EnergyControl 6762-xx. Compatible with WaveLINE KNX gateway TP-RF 6770. Controllable up to 32 transmission addresses. Send/receive frequency: 868 MHz. Free-field range: approx. 100 m. Control element: Adjustable potentiometer. Display elements: Status indication of output via LED. Rated voltage: 230 V~, +10 % / -10 %. Rated frequency: 50 Hz. Inputs: 1.
Polling voltage: 230 V~, Sensing pulse, L-wire.
Outputs: 1x Normally open contact, potential-bound.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6701-101-500	2CKA006700A0040			1/10

6702-500

WaveLINE-Actuator 1-fold

For wireless switching of electrical loads. For functions ON/OFF, timer and lightscene control. For wall mounted transmitter Waveline 6731-xxx, 6732-xxx and 6733-xxx. For remote control WaveLINE 6780. For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-EnergyControl 6762-xx. Compatible with WaveLINE KNX gateway TP-RF 6770. Controllable up to 32 transmission addresses. Send/receive frequency: 868 MHz. Free-field range: approx. 100 m. Control element: Adjustable potentiometer. Display elements: Status indication of output via LED. Rated voltage: 230 V~, +10 % / –10 %. Rated frequency: 50 Hz. Outputs: 1x Normally open contact, potential free.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6702-500	2CKA006700A0023			1/10

6703-500

WaveLINE-Actuator 2-fold

For wireless switching of electrical loads. For operation mode 2gang switch, 2 separate outputs. For operation mode timer: output 1 (eg lighting), output 2: ON/Off delay in dependence of output 1 (eg fan control). For functions: ON/OFF and light scene control. For wall mounted transmitter Waveline 6731-xxx, 6732-xxx and 6733-xxx. For remote control WaveLINE 6780. For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-EnergyControl 6762-xx. Compatible with WaveLINE KNX gateway TP-RF 6770. Controllable up to 32 transmission addresses. Send/receive frequency: 868 MHz. Free-field range: approx. 100 m. Control element: Adjustable potentiometer. Display elements: Status indication of output via LED. Rated voltage: 230 V~, +10 % / –10 %.
Rated frequency: 50 Hz. Outputs: 2x Normally open contact, potential-bound.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6703-500	2CKA006700A0024			1/10

Intelligent Building Solutions

WaveLINE Wireless Control – Actuators, RF/ KNX Media Converters

6704-500

WaveLINE-Dimmer Actuator

For wireless switching and dimming of electrical loads. For functions ON/OFF, dimming and lightscene control. With soft ON/OFF function. With selectable light value storage. For wall mounted transmitter Waveline 6731-xxx, 6732-xxx and 6733-xxx. For remote control WaveLINE 6780. Compatible with WaveLINE KNX gateway TP-RF 6770. Repeater function can be activated for extended range. Controllable up to 32 transmission addresses.
Send/receive frequency: 868 MHz. Free-field range: approx. 100 m. Control element: Adjustable potentiometer. Display elements: Status indication of output via LED. Rated voltage: 230 V~, +10 % / –10 %. Rated frequency: 50 Hz. Outputs: 1x dimming channel.
Suitable for: 230 V incandescent lamps. Output voltage: 230 V~. Rated power: 35 – 210 W.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6704-500	2CKA006700A0025			1/10

6705-101-500

WaveLINE series/blind actuator with extension unit

For wireless switching of electrical loads. For driving and adjusting blinds/shutters and awnings over radio. Functions via radio control: 2gang switch, blind switch and light scene control. Functions via extension unit: 2gang switch, blind switch and send radio control telegram. Operation also possible via conventional push-buttons (2020 US, 2012/6 UK). For wall mounted transmitter Waveline 6731-xxx, 6732-xxx and 6733-xxx. For remote control WaveLINE 6780. For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-EnergyControl 6762-xx. Compatible with WaveLINE KNX gateway TP-RF 6770. Controllable up to 32 transmission addresses. Send/receive frequency: 868 MHz. Free-field range: approx. 100 m. Control element: Adjustable potentiometer. Display elements: Status indication of output via LED. Rated voltage: 230 V~, +10 % / –10 %. Rated frequency: 50 Hz. Inputs: 2. Polling voltage: 230 V~, Sensing pulse, L-wire. Outputs: 2x Normally open contact, potential-bound.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6705-101-500	2CKA006700A0042			1/10

6770-500

WaveLINE-Media converter TP-RF

Media converter with internal antenna for conversion of KNX RF WaveLine radio signals to KNX twisted pair networks with 24 channels. For the evaluation and transfer of up to 24 channels each with 4 sub-channels as transmitter or receiver. Simple operation due to “programming button” and display on the device. Is surface-mounted. The KNX/WaveLine Gateway is powered via KNX and does not require an additional power supply.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6770-500	2CKA006770A0002			1

Intelligent Building Solutions

WaveLINE Wireless Control – Window Sensor, Universal Detector

6730-214

LED display WaveLINE

For status display of window handle positions: open = red, closed = green, tilted = yellow. Direct onsite operation possible for switching / dimming an electrical device depending on the flush-mounted insert. 4 individual LED display channels. Up to 8 WaveLine transmitters can be taught-in on each LED display channel. Up to 8 WaveLine transmitters can be taughtin on onsite operation. User-friendly start-up without PC / software. Printed labelling sheet with 8 different inlay sheets (see labelling sheet 1799 xx). For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-Watchdog 220 WaveLINE 6747 AGM. For Busch-Universal relay switch insert 6404 U. For universal dimmer switch insert 6595 U. Free-field range: approx. 100 m. Send/receive frequency: 868 MHz.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Busch-Duro 2000® SI white	–	6730-212	2CKA006730A0001			1
Reflex SI alpine white	–	6730-214	2CKA006730A0002			1

6730-24G

LED display WaveLINE

For status display of window handle positions: open = red, closed = green, tilted = yellow. Direct onsite operation possible for switching / dimming an electrical device depending on the flush-mounted insert. 4 individual LED display channels. Up to 8 WaveLine transmitters can be taught-in on each LED display channel. Up to 8 WaveLine transmitters can be taughtin on onsite operation. User-friendly start-up without PC / software. Printed labelling sheet with 8 different inlay sheets (see labelling sheet 1799 xx). For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-Watchdog 220 WaveLINE 6747 AGM. For Busch-Universal relay switch insert 6404 U. For universal dimmer switch insert 6595 U. For ABB i-bus® KNX devices 6110 U, 6114 U, 6120 U-102.
Free-field range: approx. 100 m. Send/receive frequency: 868 MHz.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
alpha platinum	–	6730-20	2CKA006730A0007			1
bronze	–	6730-21	2CKA006730A0008			1
ivory white	–	6730-22G	2CKA006730A0009			1
studio white matt	–	6730-24	2CKA006730A0010			1
studio white glossy	–	6730-24G	2CKA006730A0011			1
palladium	–	6730-260	2CKA006730A0005			1
titanium	–	6730-266	2CKA006730A0006			1

Intelligent Building Solutions

WaveLINE Wireless Control – Window Sensor, Universal Detector

6730-84

LED display WaveLINE

For status display of window handle positions: open = red, closed = green, tilted = yellow. Direct onsite operation possible for switching / dimming an electrical device depending on the flush-mounted insert. 4 individual LED display channels. Up to 8 WaveLine transmitters can be taught-in on each LED display channel. Up to 8 WaveLine transmitters can be taughtin on onsite operation. User-friendly start-up without PC / software. Printed labelling sheet with 8 different inlay sheets (see labelling sheet 1799 xx). For WaveLINE window position sensor 6720-6x. For WaveLINE 6721-xx universal signalling unit. For Busch-Watchdog 220 WaveLINE 6747 AGM. For Busch-Universal relay switch insert 6404 U. For universal dimmer switch insert 6595 U. Free-field range: approx. 100 m. Send/receive frequency: 868 MHz.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
future® linear anthracite	–	6730-81	2CKA006730A0014			1
ivory white	–	6730-82	2CKA006730A0015			1
aluminium silver	–	6730-83	2CKA006730A0016			1
studio white	–	6730-84	2CKA006730A0017			1
studio white matt	–	6730-884	2CKA006730A0026			1
black, matt	–	6730-885	2CKA006730A0027			1
solo® ivory white		6730-82	2CKA006730A0015			1
studio white	–	6730-84	2CKA006730A0017			1
grey metallic	–	6730-803	2CKA006730A0025			1
yellow	–	6730-815	2CKA006730A0024			1
Busch-axcent® studio white	–	6730-84	2CKA006730A0017			1
chalet white	–	6730-896-500	2CKA006730A0066			1
carat® anthracite	–	6730-81	2CKA006730A0014			1
ivory white	–	6730-82	2CKA006730A0015			1
studio white	–	6730-84	2CKA006730A0017			1
pure stainless steel anthracite	–	6730-866	2CKA006730A0023			1

6404 U

Busch-Universal relay switch insert

For switching incandescent lamps, 230 V tungsten halogen lamps, fluorescent lamps and low-voltage halogen lamps, that are actuated via transformers. 3 wire connection (neutral conductor required). With operating mode switch for operating mode: switch, time switch. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). For LED display WaveLINE 6730-xxx. Rated voltage: 230 V~, +10 % / –10 %. Rated frequency: 50 Hz. Inputs: 1. Polling voltage: 230 V~, Sensing pulse, L-wire. Outputs: 1x Normally open contact, potential-bound. Suitable for: ohmic, capacitive and inductive loads. Rated current: 10 AX. Rated power: 2300 W/VA.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6404 U	2CKA006401A0055			1

6595 U

Universal Dimmer Switch Insert

For dimming and switching of incadescent lamps, 230 V halogen lamps and low-voltage halogen lamps with conventional or electronic transformers. 2-wire connection (neutral conductor not required). With soft ON/OFF function. Operation also possible via conventional push buttons (2020 US, 2021/6 UK). Do not operate conventional transformers and electronic transformers together on the universal dimmer switch insert. For LED display WaveLINE 6730-xxx. Rated voltage: 230 V~, +10 % / –10 %. Rated frequency: 50 Hz. Inputs: 1. Polling voltage: 230 V~, Sensing pulse, L-wire. Outputs: 1x electronic output, potential-bound. Suitable for: ohmic, capacitive and inductive loads. Rated power: 60 – 450 W/VA.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
R,L,C	–	6595 U	2CKA006590A0188			1

Intelligent Building Solutions

WaveLINE Wireless Control – Window Sensor, Universal Detector

6720-64

Window sensor WaveLINE

For monitoring and transmission of the current window handle position (window open, closed, tilted). The WaveLINE window sensor transmits the current window handle position immediately upon operation. Existing window handle is used. The WaveLINE window sensor is installed between the existing window handle and window frame. Suitable for window handle: 7 mm square fastener, 43 mm attachment screw separation, lifter dia. 10 and 12 mm, max. mounting plate size 34 x 77 mm (WxH). No wire laying required. Accessories for assembly (square fastener extension, screws, adapter for lifter) of the WaveLINE window position sensor included in delivery. Battery included in delivery. Battery service life: typically 5 years, therefore practically maintenance-free. Monitoring of battery life and transmission of battery condition. For LED display WaveLINE 6730-xxx. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. Compatible with WaveLINE KNX gateway TP-RF 6770. Free-field range: approx. 100 m. Send frequency: 868 MHz.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6720-64	2CKA006720A0001			1
basalt black	–	6720-65	2CKA006720A0002			1
stainless steel [1]	–	6720-66	2CKA006720A0003			1

[1] Surface painted

6721-64

Universal alarm unit Wave

For monitoring and transmission of the state (open, closed) of dormer windows, skylights, doors and gates. For window surveillance with open fireplace and extractor hood pursuant to Article 4 of the German Fire Prevention Regulations. Additional connection option for an external, potential-free sensor (choice of normally closed or normally open contact). Isolated evaluation and monitoring of channels. The WaveLINE universal sensor immediately transmits the current information when there is a change in state. Addition cyclic transmission for monitoring of the transmission link and the fault-free state of equipment. Attachment of WaveLINE universal sensor and magnets by using adhesive foil or screws. Accessories (adhesive foil, screws, magnet) included in delivery. Battery included in delivery. Battery service life: typically 5 years, therefore practically maintenance-free. Monitoring of battery life and transmission of battery condition. For LED display WaveLINE 6730-xxx. For flush-mounted WaveLINE actuators 6701-101, 6702, 6703, 6704 and 6705-101. Compatible with WaveLINE KNX gateway TP-RF 6770.
External sensor max. wire length: 5 m. External sensor terminal connection diameter : 0.14...0.5 mm² (single wire). Free-field range: approx. 100 m. Send frequency: 868 MHz.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white matt	–	6721-64	2CKA006720A0004			1
basalt black	–	6721-65	2CKA006720A0005			1

Electrical installation solutions for buildings

ABB-free@home®

Index

System devices	14/12
Displays	14/17
VDE	14/20
Zenit	14/60
Millenium	14/62
Zenit/Millenium	14/64
Mylos	14/76
DINRail	14/82

You may also visit our ABB-free@home® website:

Freedom
Home becomes smart

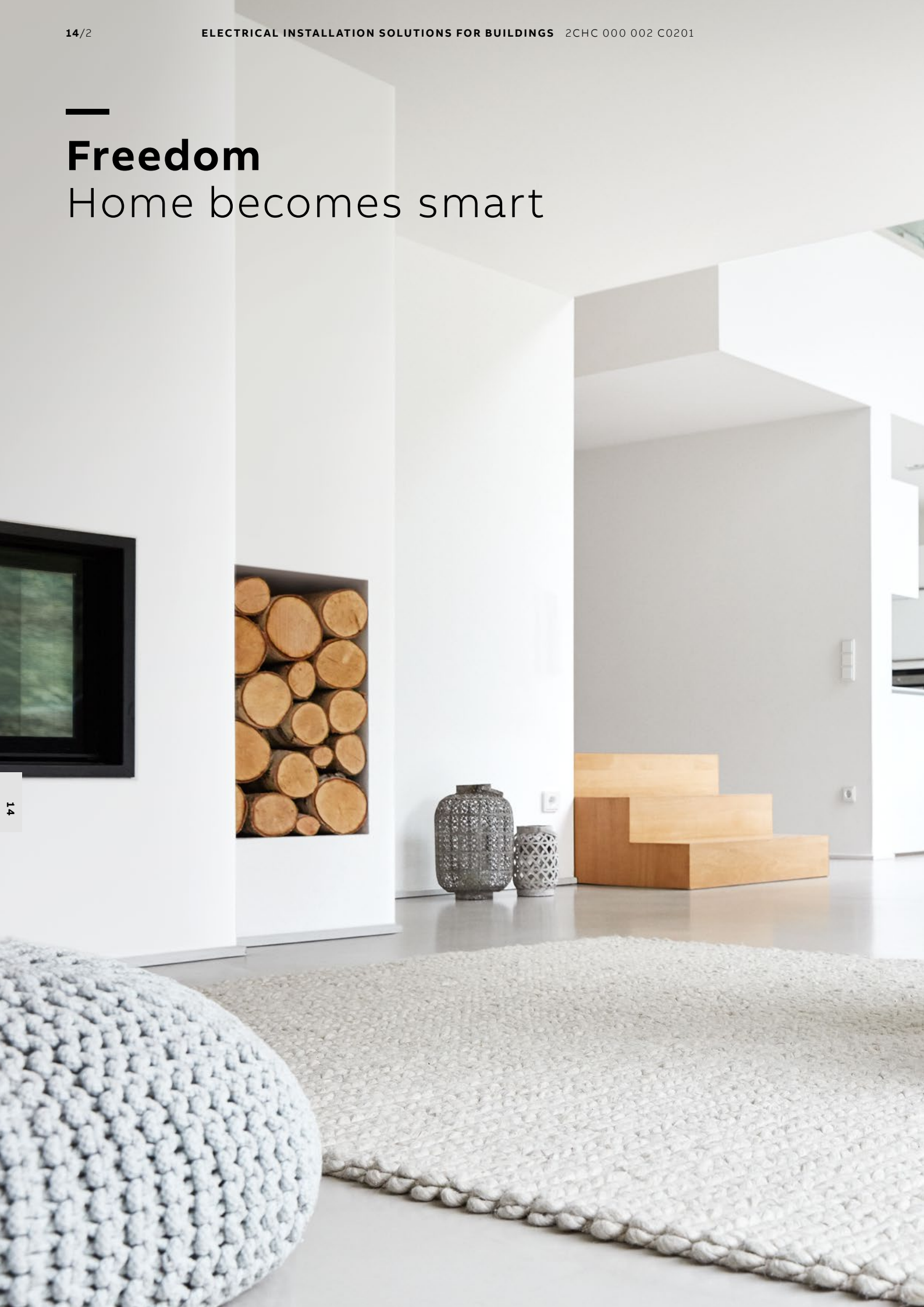
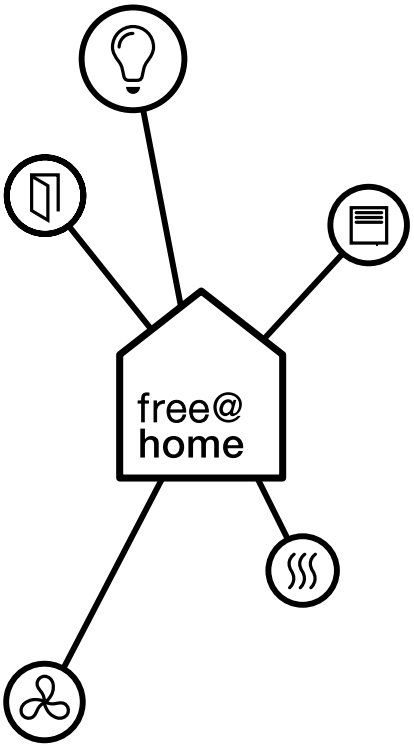


ABB-free@home®
Endless installation possibilities

Perfect daily routine. With ABB-free@home® the entire home can be controlled as usual with switches, and now even more practical: with the smartphone, tablet, or computer. Via touch or voice control.



- Blind
- Light
- Heating
- Air-conditioning
- Door communication

Open for new ideas
With ABB-free@home® everyone can determine for themselves how they want to use the smart living technologies. Both individual functions, such as heating or control of blinds, or a combination of different functions can be implemented. Over the course of time the system can also be flexibly extended, if one so desires. Freedom of choice at all times.

Blinds
Whether blind, roller blind, awning or roller door – with ABB-free@home®, sun protection and energy-saving could not be easier. Opening and closing, as well as adjustment of slats can be automated and controlled. In addition, a weather station for protection during a storm, a timer or astro function can be used. It automatically adjusts the blind according to sunrise and sunset. The relevant data are combined in the System Access Point and are precisely implemented.

Light control
Life begins with light.
With ABB-free@home® it can be optimally used, whether for illuminating individual rooms or the entire house. For example, with striking light scenes – for different moods and to suit the occasion. A pleasant side effect here is the cost-saving and environmentally friendly use of energy.

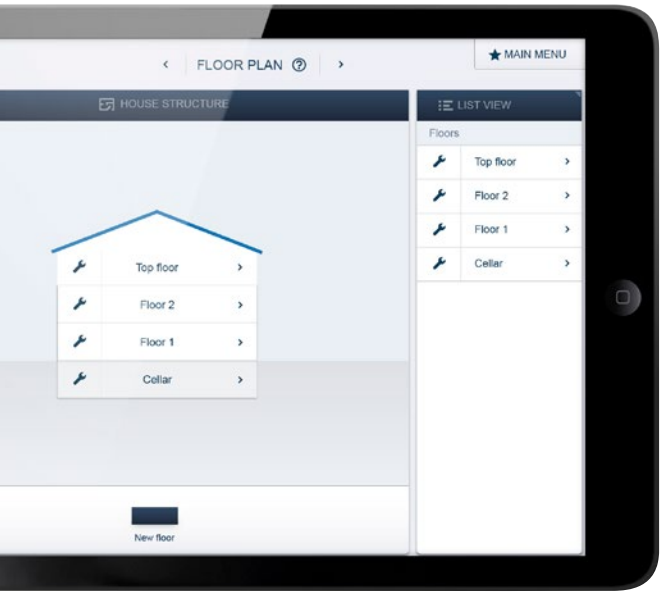
Heating and air-conditioning
Comfortable and energy-saving. The optimum room temperature can be adjusted according to the actual requirement. The heating can be automatically shut off when the windows are open. This reduces energy consumption. The ideal temperature is never the same. Depending on the time of the day, the room temperature controller provides your personal feelgood temperature. The heating valves are controlled wirelessly – with radio controlled thermal actuating drives. The room temperature controllers can be integrated into the switch combination. And the window contacts are networked wirelessly.

Door communication
The ABB-Welcome door communication system can be integrated into ABB-free@home®. The door communication and home automation can be used together with ABB-free@home-Touch 7". For example, the light switches on when the doorbell rings to see visitors more clearly. And for reasons of safety, the video camera records pictures of visitors at the door when no one is home.

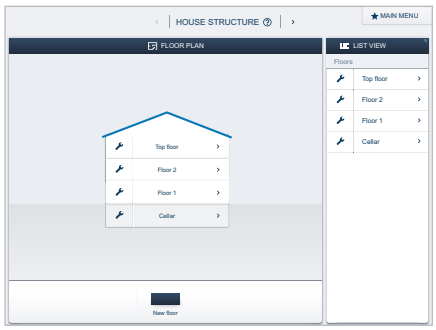
Pictures shown on the display
Practical and convenient. The pictures recorded by the video camera can be displayed on the tablet or smartphone via the ABB-Welcome app. This allows visitors who ring the bell to be recognised even when you are not at home (requires the ABB-Welcome IP gateway and ABB-Welcome outdoor video station).

So easy, anyone can do it
Creating scenes

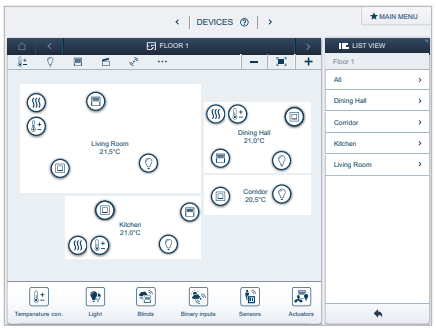
Intuitive operation. The ABB-free@home® app is easy to understand. To start with, all available devices in the rooms are activated in the display, allowing the favourite settings to be made immediately via drag-and-drop.



Easy to install – and even easier to operate
The ABB-free@home® app has been optimised for use in daily life. The wizard guides one through the system. The most important functions are clearly marked with self-explanatory icons. It makes no difference whether the components are connected in the two-wire bus or wirelessly. One has control over a uniform system. For maximum security, a personal password can be activated when logging in. This protects the home automation system against unauthorized access and tampering.

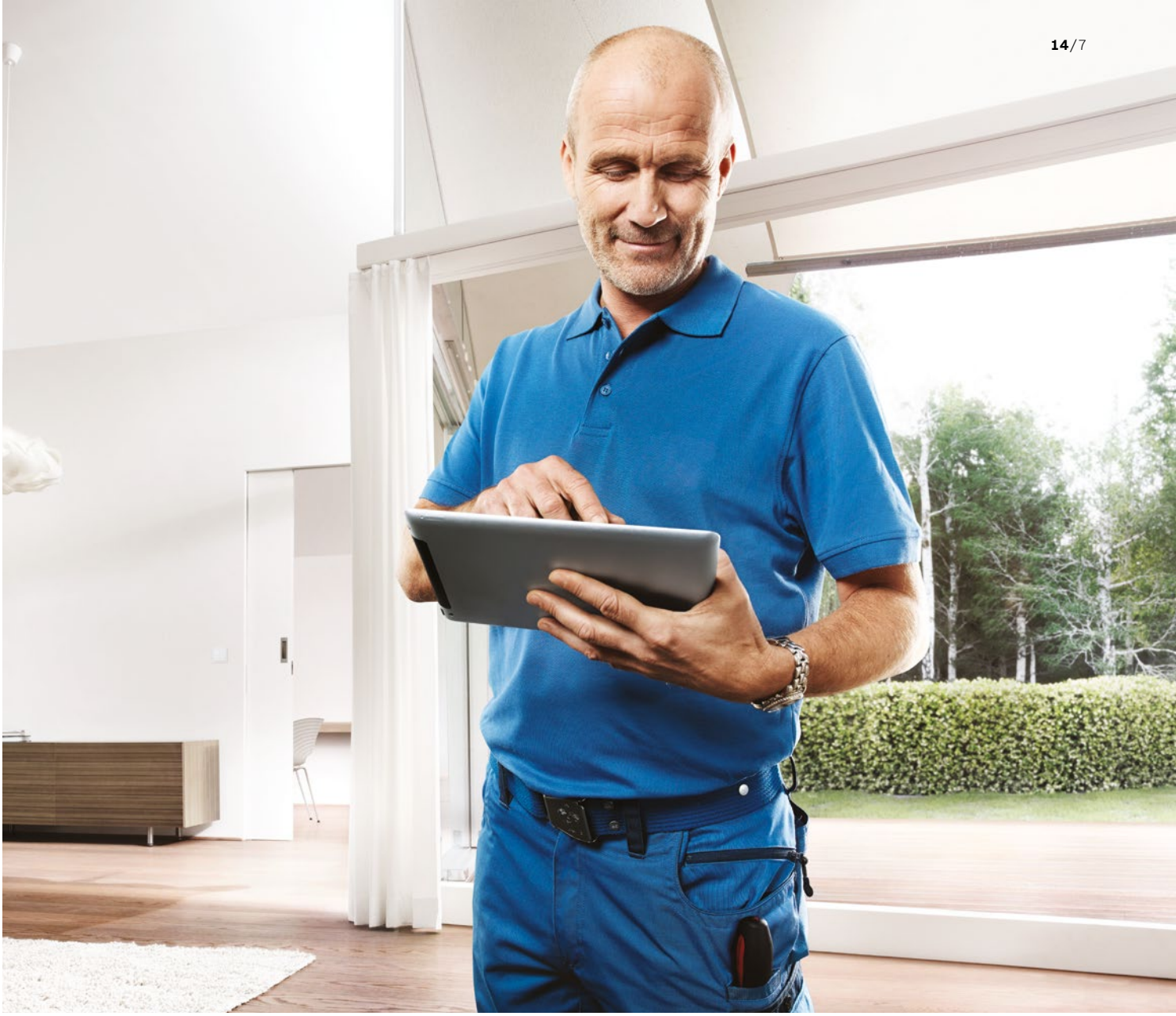


The house
First the electrician sets up the floor plan with its floors and rooms.



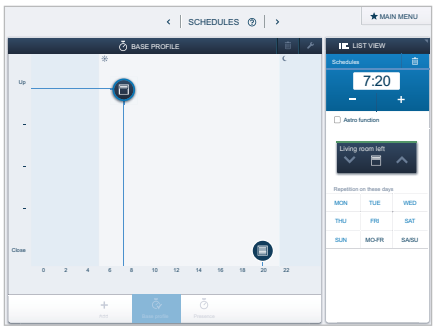
Assigning
Then the sensors in the app are integrated in the floor plan and assigned in the system.

Combining
And finally, the elements can be combined according to individual preferences and requirements.

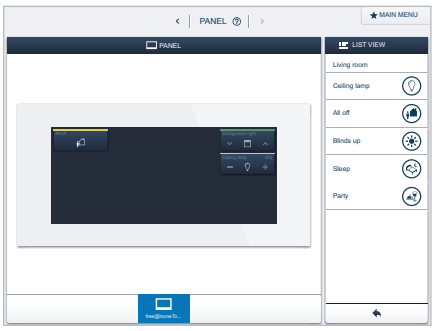


Simple and time-saving
The electrician performs the initial configuration of the system via app. Operation is particularly fast and saves on costly billable hours.

Scene control
The user can easily combine the switches and devices available in each room to create personal scenes. The lighting scene for an evening on the sofa, for example.



Time control
Roller blinds can be automatically moved and lights can be switched at any time or dependent on sunrise or sundown.



Panel setting
The most important functions can be controlled from a central location in the house and easily changed later at any time.

Simply effortless
This saves valuable labour time

Now easier than ever. Only a few components are needed to install ABB-free@home®. For the direct activation of light, the entire system only requires a bus cable, the sensor/actuator unit, a power supply and a System Access Point for programming.

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01

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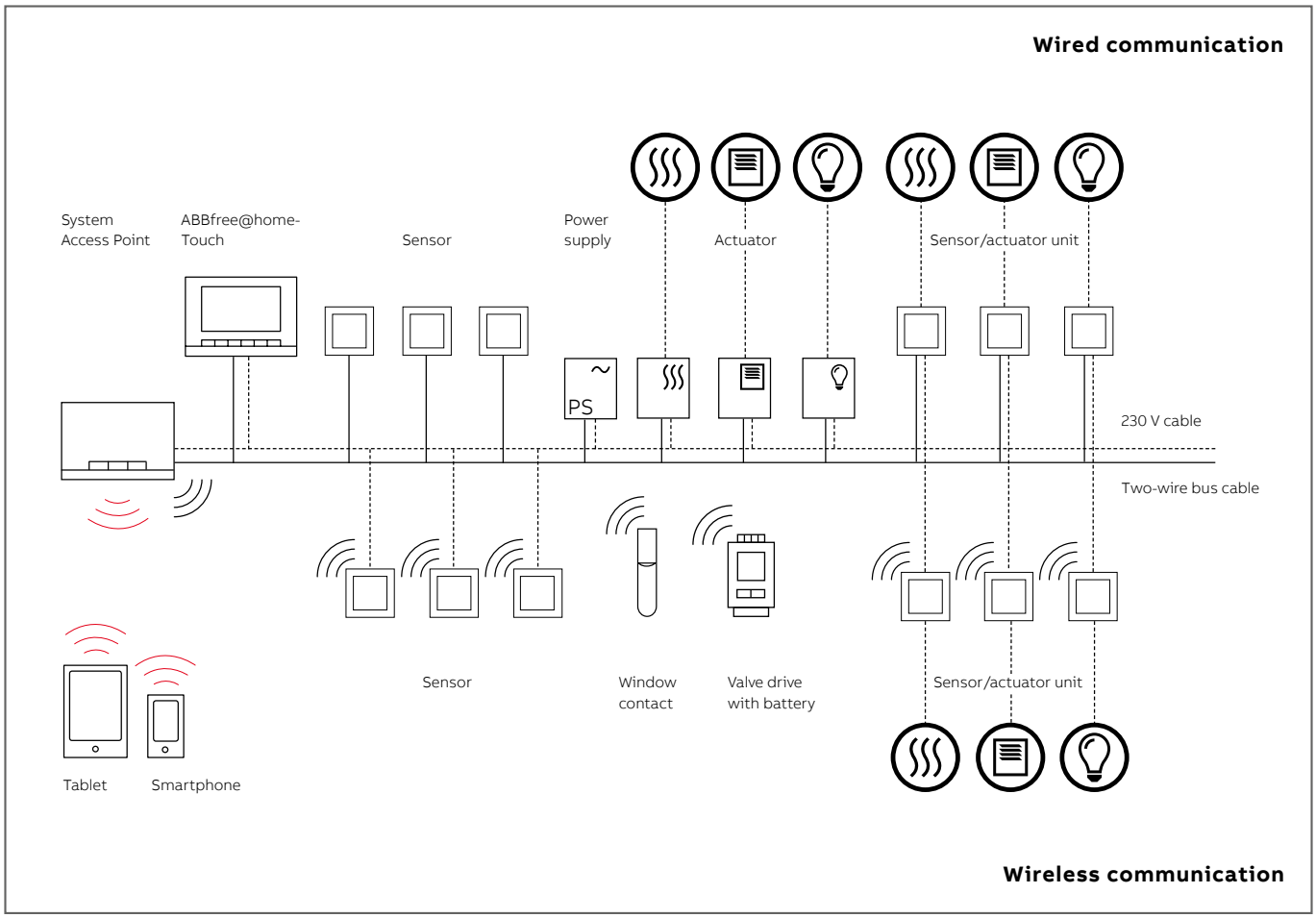
01 System Access Point
—
02 Sensor, 1gang
—
03 Switch actuator, 4gang
—
04 Binary input, 2gang, flush-mounted
—
05 Power supply

The System Access Point
The nerve centre of the ABB-free@home® system is the System Access Point. It provides access for computer, tablet or smartphone via WLAN. This allows the functions of the system to be defined and remotely controlled – even after installation. The System Access Point can also be combined with a network router – via LAN or WLAN. Just connect and you're done. For convenience, the System Access Point creates its own WLAN and the software necessary for project planning and commissioning is already on board. This makes you independent from the structural conditions and no additional software is required. As soon as you are finished with programming you can save the status and restore it again at any time.

The actuators and sensors
Actuators for switching, dimming and control are available for ABB-free@home®. The flush-mounted binary inputs also allow the integration of conventional switches and devices, such as window contacts, for example. Push-buttons, room temperature controllers and movement detectors are available as sensors.



Central distribution board with rail-mounting actuator
The installation of central rail-mounting actuators in the consumer unit makes the installation of the sensors even easier – as only the bus line is located in the flush-mounted box. With this method, the costs for each channel can be reduced.

Sensor/actuator unit for decentralised control
All in one. With the sensor/actuator unit, both the sensor and actuator are located in a single device to save space. The basic function of the unit is pre-configured, which makes programming the basic function unnecessary – but possible if required. The 230-volt line is wired as usual.

Sensor/actuator unit
The sensor/actuator unit combines a control element and, for example, a switch actuator in the single flush-mounted housing. It is installed in the same way as a flush-mounted switch. The device has already been pre-programmed: this means the light can be switched on directly after installation – without any programming. The sensor/actuator unit can, of course, be freely re-configured via the user interface, just like all other sensors and actuators.

Simply effortless

This saves valuable labour time

System Access Point, wireless[1)]
For ABB-free@home®
For commissioning and remote control of the ABB-free@home® system.
Allows the execution of astro and time programs.
Commissioning and remote control is executed via the web interface or app.
No additional commissioning software is required.
Easy commissioning with WLAN ad-hoc mode.
Connection to the home network via WLAN client mode or via CAT cable.
The bus can be connected via enclosed terminal block.
Display elements: LED for status display.
Bus voltage: 24 V
Rated frequency: 50 Hz/60 Hz
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 110 mm x 170 mm x 31 mm

Rated voltage: 230 V~

		Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
		EAN	Type code	Order code		kg	pc.
WIRELESS							
84 studio white	NEW	215944	SAP-S-2	2CKA006200A0105			1

Rated voltage: 127 V~

		Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
		EAN	Type code	Order code		kg	pc.
WIRELESS							
84 studio white	NEW	232408	SAP-S-127.2	6200-0-0130			1

1) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

External antenna
For ABB-free@home®
For use with System Access Point SAP-S-2 and SAP-S-127.2.
Feed the ABB-free@home® wireless signal to the outside when the internal antenna of the System Access Point is shielded due to structural conditions.
With magnetic base.
Cable length: 1.5 m

WIRELESS	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	216224	SAP-1-WL	2CKA006200A0100			1

1) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

System devices

Basic free@home radiator thermostat, wireless [1) 2)]
For ABB-free@home®
For temperature control of hydronic heating radiators.
With integrated temperature sensor, controller and actuating drive.
Local operation for the switchover between comfort mode and Off.
No wire laying required.
Communication with the free@home system is carried out wireless.
Setpoint adjustement via the free@home app or a temperature controller extension (e.g. RTC-F-1).
“Window open” detection when combined with Window sensor Wireless (WBI-S-1-XX-WL).
With lime protection function.
With frost protection function.
Quiet operation.
Installation with sleeve nut M 30 x 1.5.
Fits many popular valve bases (e.g. Braukmann, Heimeier, Honeywell, Junkers, MNG).
The adapters for Danfoss RAV, Danfoss RA and Danfoss RAVL are included in the scope of supply.
Adapters for additional valves are available as accessories.
Battery included in scope supply.
Battery type: 2 x AA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 63 mm x 48 mm x 84 mm

WIRELESS	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
NEW		HA-S-1-WL	2CKA006200A0133			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Comfort free@home radiator thermostat, wireless [1) 2)]
For ABB-free@home®
For temperature control of hydronic heating radiators.
With integrated temperature sensor, controller and actuating drive.
Local operation for the switchover between comfort mode, eco mode and Off.
No wire laying required.
With integrated Display and control knob for Setpoint temperature adjustment.
Setpoint adjustement locally, via the free@home app or a temperature controller extension (e.g. RTC-F-1).
Integrated “Window open” detection or can be linked with WBI-S-X-WL.
With lime protection function.
With frost protection function.
Quiet operation.
Installation with sleeve nut M 30 x 1.5.
Fits many popular valve bases (e.g. Braukmann, Heimeier, Honeywell, Junkers, MNG).
The adapters for Danfoss RAV, Danfoss RA and Danfoss RAVL are included in the scope of supply.
Adapters for additional valves are available as accessories.
Battery included in scope supply.
Battery type: 2 x AA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 63 mm x 48 mm x 84 mm

WIRELESS	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
NEW		HA-S-2-WL	2CKA006200A0134			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

System devices

Valve adapter Herz
For ABB-free@home®
Metal adapter for installation radiator thermostat. (HA-S-X-WL).
For valve bodies Herz M 28 x 1,5.

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
NEW		AC-HA-1	2CKA006200A0138			1

Valve adapter Comap
For ABB-free@home®
Metal adapter for installation radiator thermostat. (HA-S-X-WL).
For valve bodies Comap M 28 x 1,5.

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
NEW		AC-HA-2	2CKA006200A0139			1

Valve adapter Orkli
For ABB-free@home®
Metal adapter for installation radiator thermostat. (HA-S-X-WL).
For valve bodies Orkli M 28 x 1,0.

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
NEW		AC-HA-3	2CKA006200A0140			1

free@home window sensor, wireless [1) 2)]
For ABB-free@home®
For monitoring of the current window handle position.
The status can be visualized on the free@home panel and in the free@home app.
The window sensor is installed between the existing window handle and the window frame.
Existing window handle is used.
Suitable for window handle: 7 mm square fastener, 43 mm
attachment screw separation, lifter dia. 10 and 12 mm, max.
mounting plate size 34 x 77 mm (WxH). No wire laying required.
Mounting accessories (square extension, screws, adapter for cams) are included.
Battery included.
Low Battery notification via the free@home app.
Protection class (Device): IP 43
Temperature range (Device): -5 °C to 50 °C
Dimensions: (L x W x D): 168 mm x 38 mm x 13 mm

WIRELESS	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
64 studio white matt **NEW**		WBI-S-1-64-WL	2CKA006200A0101			1
65 basalt black **NEW**		WBI-S-1-65-WL	2CKA006200A0103			1
66 stainless steel **NEW**		WBI-S-1-66-WL	2CKA006200A0142			1

free@home universal detector, wireless [1) 2)]
For monitoring of the state (open, closed) of windows, skylights, doors and gates with a magnetic contact.
Additional connection option for an external, potential-free sensor
(choice of normally closed or normally open contact).
The status can be visualized on the free@home panel and in the free@home app.
The magnetic contact and the potential-free input can be monitored separately.
The universal detector and the magnets are fixed with adhesive film or screws.
Accessories (adhesive foil, screws, magnet) included in delivery.
Battery type: CR2
Low Battery notification via the free@home app.
External sensor max. wire length: 5 m
External sensor terminal connection diameter : 0.14...0.5 mm² (single wire)
Protection class (Device): IP 43
Temperature range (Device): -5 °C to 50 °C
Dimensions: (L x W x D): 118 mm x 30 mm x 22 mm

WIRELESS	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
64 studio white matt **NEW**		BI-S-1-64-WL	2CKA006200A0102			1
65 basalt black **NEW**		BI-S-1-65-WL	2CKA006200A0104			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

System devices

Weather station
For ABB-free@home®
For recording and transmitting of brightness, temperature, wind speed and rain.
Weather data can be linked with actuators to automatically control functions.
Weather data can be visualized in the ABB-free@home® web interface and the ABB-free@home® app.
Wind speed measuring range 2 - 30 m/s
The bus can be connected via enclosed terminal block.
Rated voltage: 110 V~ - 230 V~
Rated frequency: 50 Hz - 60 Hz
Bus voltage: 24 V-
Inputs: 4
Protection class (Device): IP 44
Temperature range (Device): -20 °C to 55 °C
Temperature range (Sensor):
Brightness limit value: 1 Lux - 100000 Lux
Dimensions: (L x W x D): 108 mm x 121 mm x 227 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	205525	WS-1	2CKA006220A0212			1

ABB-free@home®
Displays

ABB-free@homeTouch 7" [1) 2)]
Indoor video station with 17.8 cm (7") touch display
For ABB-free@home® and ABB-Welcome®.
For the central control of up to 16 configurable ABB-free@home® functions and display of the video image of an outdoor door communication station.
During the conversation a picture of the visitor can be taken and stored in the picture memory. For door calls during absence three pictures of the visitor are automatically stored in the picture memory.
With hands-free function, volume is adjustable.
Easy operation keys for door openers, mute function and light.
Different bell sounds are adjustable for door and floor ringing; five polyphone bell sounds are available.
Volume of bell sounds is adjustable.
SD card slot for extension of the picture memory.
Suitable as room temperature controller extension unit.
For surface mounting.
The bus can be connected via enclosed terminal block.
Display size: 17,8 cm (7")
Display resolution: 800 x 480
Display elements: TFT Touch Display
Protection class (Device): IP 30
Dimensions: (L x W x D): 155 mm x 218 mm x 29 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
611 white	182420	DP7-S-611	2CKA008300A0356			1
625 black	182383	DP7-S-625	2CKA008300A0357			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®
Displays

ABB-free@homeTouch 4.3"
For the central control of up to 16 configurable ABB-free@home® functions.
For the display of configurable system messages.
A configurable primary function can be triggered with a multi-touch gesture.
Capacitive touch screen with closed glass surface. With integrated room temperature controller and temperature sensor. In connection with temperature sensor DP4-T-1 the integrated room temperature controller can be fitted with a remote sensor.
Suitable as room temperature controller extension unit (up to 8).
Requires additional power supply 24 VDC; e.g. 6358-101
Display size: 10.9 cm (4.3")
Display resolution: 480 x 854
Mounting height: 8 mm
Control element: freely programmable touch surfaces, Display elements: 1 LCD display,
Bus voltage: 24 V-,
Protection class (Device): IP 20, Temperature range (Device): -5 °C to 40 °C,
Dimensions: (L x W x D): 104 mm x 143 mm x 53 mm,
No additional commissioning software is required., Programming only with bus voltage applied via the web interface of the System Access Point.

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
625 black	180198	DP4-1-625	2CKA006220A0120			
611 white	180235	DP4-1-611	2CKA006220A0119			

Temperature sensor
For ABB-free@home®
For use as remote sensor.
Line type: H03 VV-F
Cable length: 4 m
Type: NTC 10 kohm

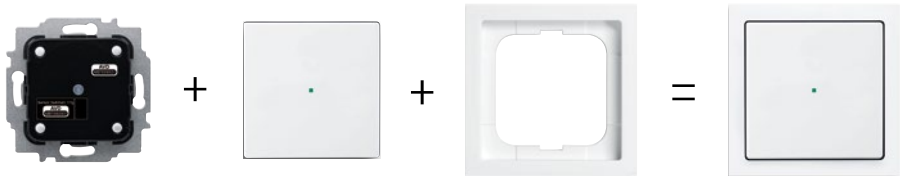
	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	213315	DP4-T-1	2CKA006220A0721			1

Flush-mounted installation box
For ABB-free@home®
For flush-mounted und hollow-wall installation of the ABB-free@homeTouch 4.3" DP4-1-6XX.
Windproof.
Installation dimensions (H x W x D): 82 mm x 123 mm x 50 mm
Installation depth: 50 mm
Mounting depth: 50 mm
Halogen free.

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	202296	DP4-F	2CKA006220A0389			1

ABB-free@home®
Installation Standards

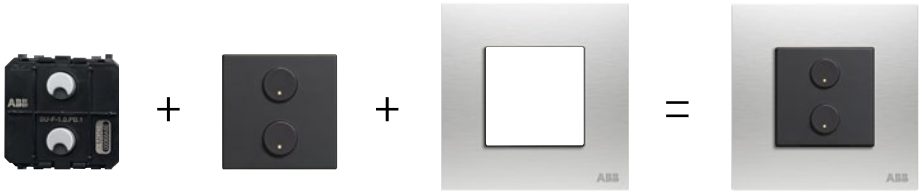
VDE



01 02 03 04

01 Sensor insert
02 Rocker, 1gang
03 Cover frame, 1/1gang
04 Sensor unit

British standard



01 02 03 04

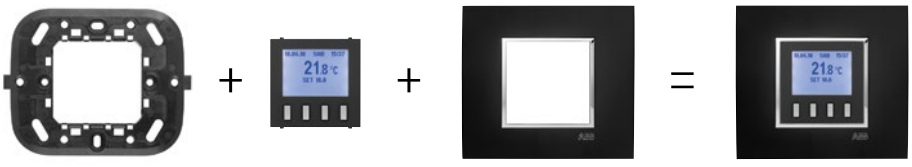
01 Switch actuator
02 Rocker, 2 fold push buttons
03 Frame
04 ABB-free@home® Switch Sensor 1/2gang KNX

NEMA

01 02 03 04 05

01 Metal Mounting Frame
02 Sensor insert, 1/2gang
03 Cover plate, 2 fold
04 Frame
05 Sensor unit

Italian standard



01 02 03 04

01 2 modules mounting grid
02 2 modules ABB-free@home® device
03 2 modules frame
04 ABB-free@home® RTC Unit

01 02 03 04 05

01 3 modules mounting grid
02 2 modules ABB-free@home®
03 1 module ABB-free@home®
04 3 modules frame
05 ABB-free@home® RTC and actuator unit

ABB-free@home®

VDE

Rocker
1gang, without printing
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180747	SR-1-212	2CKA006220A0182			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181133	SR-1-214	2CKA006220A0183			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181492	SR-1-81	2CKA006220A0137			1
82 ivory white	203453	SR-1-82	2CKA006220A0516			1
83 aluminium silver	182178	SR-1-83	2CKA006220A0138			1
84 studio white	181836	SR-1-84	2CKA006220A0139			1
803 grey metallic	203866	SR-1-803	2CKA006220A0550			1
840 antique brass	195598	SR-1-840	2CKA006220A0371			1
866 stainless stell	203699	SR-1-866	2CKA006220A0533			1
884 studiowhite matt	204337	SR-1-884	2CKA006220A0601			1
885 black matt	204511	SR-1-885	2CKA006220A0618			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204689	SR-1-92	2CKA006220A0635			1
93 champagne	204856	SR-1-93	2CKA006220A0652			1
94 alpine white	205006	SR-1-94	2CKA006220A0669			1
95 chateau-black	205150	SR-1-95	2CKA006220A0686			1
96 chalet white	205365	SR-1-96	2CKA006220A0703			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	146270	SR-1-85AI	2CLA852620A1401			1
BL Soft White	135205	SR-1-85BL	2CLA852620A1101			1
NS Soft Black	146287	SR-1-85NS	2CLA852620A1501			1
PL Silver	135212	SR-1-85PL	2CLA852620A1301			1

Rocker
1gang, with “Light” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180754	SRL-1-212	2CKA006220A0184			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181140	SRL-1-214	2CKA006220A0185			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181515	SR-1-81	2CKA006220A0140			1
82 ivory white	203460	SR-1-82	2CKA006220A0517			1
83 aluminium silver	182185	SR-1-83	2CKA006220A0141			1
84 studio white	181843	SR-1-84	2CKA006220A0142			1
803 grey metallic	203873	SR-1-803	2CKA006220A0551			1
840 antique brass	195604	SR-1-840	2CKA006220A0372			1
866 stainless stell	203705	SR-1-866	2CKA006220A0534			1
884 studiowhite matt	204344	SR-1-884	2CKA006220A0602			1
885 black matt	204528	SR-1-885	2CKA006220A0619			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204696	SR-1-92	2CKA006220A0636			1
93 champagne	204863	SR-1-93	2CKA006220A0653			1
94 alpine white	205013	SR-1-94	2CKA006220A0670			1
95 chateau-black	205167	SR-1-95	2CKA006220A0687			1
96 chalet white	205372	SR-1-96	2CKA006220A0704			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	144955	SRL-1-85AI	2CLA852642A1401			1
BL Soft White	144931	SRL-1-85BL	2CLA852642A1101			1
NS Soft Black	144962	SRL-1-85NS	2CLA852642A1501			1
PL Silver	144948	SRL-1-85PL	2CLA852642A1301			1

ABB-free@home®

VDE

Rocker
1gang, with “Blind” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180761	SR-1-212	2CKA006220A0186			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181157	SR-1-214	2CKA006220A0187			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181522	SR-1-81	2CKA006220A0143			1
82 ivory white	203477	SR-1-82	2CKA006220A0518			1
83 aluminium silver	182192	SR-1-83	2CKA006220A0144			1
84 studio white	181850	SR-1-84	2CKA006220A0145			1
803 grey metallic	203880	SR-1-803	2CKA006220A0552			1
840 antique brass	195611	SR-1-840	2CKA006220A0373			1
866 stainless stell	203712	SR-1-866	2CKA006220A0535			1
884 studiowhite matt	204368	SR-1-884	2CKA006220A0603			1
885 black matt	204535	SR-1-885	2CKA006220A0620			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204719	SR-1-92	2CKA006220A0637			1
93 champagne	204870	SR-1-93	2CKA006220A0654			1
94 alpine white	205020	SR-1-94	2CKA006220A0671			1
95 chateau-black	205174	SR-1-95	2CKA006220A0688			1
96 chalet white	205389	SR-1-96	2CKA006220A0705			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	144993	SRB-1-85AI	2CLA852623A1401			1
BL Soft White	144979	SRB-1-85BL	2CLA852623A1101			1
NS Soft Black	145006	SRB-1-85NS	2CLA852623A1501			1
PL Silver	144986	SRB-1-85PL	2CLA852623A1301			1

Rocker
1gang, with “Scene” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180778	SRS-1-212	2CKA006220A0188			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181171	SRS-1-214	2CKA006220A0189			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181539	SRS-1-81	2CKA006220A0146			1
82 ivory white	203484	SRS-1-82	2CKA006220A0519			1
83 aluminium silver	182215	SRS-1-83	2CKA006220A0147			1
84 studio white	181867	SRS-1-84	2CKA006220A0148			1
803 grey metallic	203897	SRS-1-803	2CKA006220A0553			1
840 antique brass	195628	SRS-1-840	2CKA006220A0374			1
866 stainless stell	203729	SRS-1-866	2CKA006220A0536			1
884 studiowhite matt	204351	SRS-1-884	2CKA006220A0604			1
885 black matt	204542	SRS-1-885	2CKA006220A0621			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204726	SRS-1-92	2CKA006220A0638			1
93 champagne	204887	SRS-1-93	2CKA006220A0655			1
94 alpine white	205037	SRS-1-94	2CKA006220A0672			1
95 chateau-black	205181	SRS-1-95	2CKA006220A0689			1
96 chalet white	205396	SRS-1-96	2CKA006220A0706			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	145075	SRS-1-85AI	2CLA852627A1401			1
BL Soft White	145051	SRS-1-85BL	2CLA852627A1101			1
NS Soft Black	145082	SRS-1-85NS	2CLA852627A1501			1
PL Silver	145068	SRS-1-85PL	2CLA852627A1301			1

ABB-free@home®

VDE

Rocker
1gang, with “Dimmer” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180785	SR-1-212	2CKA006220A0190			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181188	SR-1-214	2CKA006220A0191			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181522	SR-1-81	2CKA006220A0149			1
82 ivory white	203477	SR-1-82	2CKA006220A0520			1
83 aluminium silver	182192	SR-1-83	2CKA006220A0150			1
84 studio white	181850	SR-1-84	2CKA006220A0151			1
803 grey metallic	203880	SR-1-803	2CKA006220A0554			1
840 antique brass	195611	SR-1-840	2CKA006220A0375			1
866 stainless stell	203712	SR-1-866	2CKA006220A0537			1
884 studiowhite matt	204368	SR-1-884	2CKA006220A0605			1
885 black matt	204535	SR-1-885	2CKA006220A0622			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204733	SR-1-92	2CKA006220A0639			1
93 champagne	204894	SR-1-93	2CKA006220A0656			1
94 alpine white	205044	SR-1-94	2CKA006220A0673			1
95 chateau-black	205198	SR-1-95	2CKA006220A0690			1
96 chalet white	205402	SR-1-96	2CKA006220A0707			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Al Stainless Steel	145037	SRD-1-85Al	2CLA852625A1401			1
BL Soft White	145013	SRD-1-85BL	2CLA852625A1101			1
NS Soft Black	145044	SRD-1-85NS	2CLA852625A1501			1
PL Silver	145020	SRD-1-85PL	2CLA852625A1301			1

Rocker
2gang left/right, without printing
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180792	SRS-1-212	2CKA006220A0192			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181195	SRS-1-214	2CKA006220A0193			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181553	SRS-1-81	2CKA006220A0152			1
82 ivory white	203507	SRS-1-82	2CKA006220A0521			1
83 aluminium silver	182239	SRS-1-83	2CKA006220A0153			1
84 studio white	181881	SRS-1-84	2CKA006220A0154			1
803 grey metallic	203927	SRS-1-803	2CKA006220A0555			1
840 antique brass	195642	SRS-1-840	2CKA006220A0376			1
866 stainless stell	203750	SRS-1-866	2CKA006220A0538			1
884 studiowhite matt	204399	SRS-1-884	2CKA006220A0606			1
885 black matt	204566	SRS-1-885	2CKA006220A0623			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204740	SRS-1-92	2CKA006220A0640			1
93 champagne	204900	SRS-1-93	2CKA006220A0657			1
94 alpine white	205051	SRS-1-94	2CKA006220A0674			1
95 chateau-black	205204	SRS-1-95	2CKA006220A0691			1
96 chalet white	205419	SRS-1-96	2CKA006220A0708			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	146294	SR-2-85AI	2CLA852640A1401			1
BL Soft White	135229	SR-2-85BL	2CLA852640A1101			1
NS Soft Black	146300	SR-2-85NS	2CLA852640A1501			1
PL Silver	135236	SR-2-85PL	2CLA852640A1301			1

ABB-free@home®

VDE

Rocker
2gang left, with “Light” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180808	SRL-2-L-212	2CKA006220A0194			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181218	SRL-2-L-214	2CKA006220A0195			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181560	SRL-2-L-81	2CKA006220A0155			1
82 ivory white	203606	SRL-2-L-82	2CKA006220A0522			1
83 aluminium silver	182246	SRL-2-L-83	2CKA006220A0156			1
84 studio white	181898	SRL-2-L-84	2CKA006220A0157			1
803 grey metallic	203934	SRL-2-L-803	2CKA006220A0556			1
840 antique brass	195659	SRL-2-L-840	2CKA006220A0377			1
866 stainless stell	203767	SRL-2-L-866	2CKA006220A0539			1
884 studiowhite matt	204412	SRL-2-L-884	2CKA006220A0607			1
885 black matt	204573	SRL-2-L-885	2CKA006220A0624			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204757	SRL-2-L-92	2CKA006220A0641			1
93 champagne	204917	SRL-2-L-93	2CKA006220A0658			1
94 alpine white	205068	SRL-2-L-94	2CKA006220A0675			1
95 chateau-black	205211	SRL-2-L-95	2CKA006220A0692			1
96 chalet white	205426	SRL-2-L-96	2CKA006220A0709			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
Al Stainless Steel	145112	SRL-2-L-85Al	2CLA852642A1401			1
BL Soft White	145099	SRL-2-L-85BL	2CLA852642A1101			1
NS Soft Black	145129	SRL-2-L-85NS	2CLA852642A1501			1
PL Silver	145105	SRL-2-L-85PL	2CLA852642A1301			1

Rocker
2gang left/right, “Blind” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180815	SRB-2-212	2CKA006220A0196			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181225	SRB-2-214	2CKA006220A0197			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181577	SRB-2-81	2CKA006220A0158			1
82 ivory white	203613	SRB-2-82	2CKA006220A0523			1
83 aluminium silver	182253	SRB-2-83	2CKA006220A0159			1
84 studio white	181911	SRB-2-84	2CKA006220A0160			1
803 grey metallic	203941	SRB-2-803	2CKA006220A0557			1
840 antique brass	195666	SRB-2-840	2CKA006220A0378			1
866 stainless stell	203774	SRB-2-866	2CKA006220A0540			1
884 studiowhite matt	204429	SRB-2-884	2CKA006220A0608			1
885 black matt	204580	SRB-2-885	2CKA006220A0625			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204764	SRB-2-92	2CKA006220A0642			1
93 champagne	204924	SRB-2-93	2CKA006220A0659			1
94 alpine white	205075	SRB-2-94	2CKA006220A0676			1
95 chateau-black	205228	SRB-2-95	2CKA006220A0693			1
96 chalet white	205433	SRB-2-96	2CKA006220A0710			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	145518	SRB-2-85AI	2CLA852643A1401			1
BL Soft White	143798	SRB-2-85BL	2CLA852643A1101			1
NS Soft Black	145525	SRB-2-85NS	2CLA852643A1501			1
PL Silver	145501	SRB-2-85PL	2CLA852643A1301			1

ABB-free@home®

VDE

Rocker
2gang left, with “Scene” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180839	SRS-2-L-212	2CKA006220A0198			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181232	SRS-2-L-214	2CKA006220A0199			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181584	SRS-2-L-81	2CKA006220A0161			1
82 ivory white	203620	SRS-2-L-82	2CKA006220A0524			1
83 aluminium silver	182260	SRS-2-L-83	2CKA006220A0162			1
84 studio white	181928	SRS-2-L-84	2CKA006220A0163			1
803 grey metallic	203958	SRS-2-L-803	2CKA006220A0558			1
840 antique brass	195673	SRS-2-L-840	2CKA006220A0379			1
866 stainless stell	203781	SRS-2-L-866	2CKA006220A0541			1
884 studiowhite matt	204436	SRS-2-L-884	2CKA006220A0609			1
885 black matt	204597	SRS-2-L-885	2CKA006220A0626			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204788	SRS-2-L-92	2CKA006220A0643			1
93 champagne	204931	SRS-2-L-93	2CKA006220A0660			1
94 alpine white	205082	SRS-2-L-94	2CKA006220A0677			1
95 chateau-black	205235	SRS-2-L-95	2CKA006220A0694			1
96 chalet white	205440	SRS-2-L-96	2CKA006220A0711			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	145310	SRS-2-L-85AI	2CLA852644A1401			1
BL Soft White	145297	SRS-2-L-85BL	2CLA852644A1101			1
NS Soft Black	145327	SRS-2-L-85NS	2CLA852644A1501			1
PL Silver	145303	SRS-2-L-85PL	2CLA852644A1301			1

Rocker
2gang left, with “Dimmer” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180846	SRD-2-L-212	2CKA006220A0200			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181249	SRD-2-L-214	2CKA006220A0201			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181591	SRD-2-L-81	2CKA006220A0164			1
82 ivory white	203637	SRD-2-L-82	2CKA006220A0525			1
83 aluminium silver	182277	SRD-2-L-83	2CKA006220A0165			1
84 studio white	181935	SRD-2-L-84	2CKA006220A0166			1
803 grey metallic	203965	SRD-2-L-803	2CKA006220A0559			1
840 antique brass	195680	SRD-2-L-840	2CKA006220A0380			1
866 stainless stell	203798	SRD-2-L-866	2CKA006220A0542			1
884 studiowhite matt	204443	SRD-2-L-884	2CKA006220A0610			1
885 black matt	204610	SRD-2-L-885	2CKA006220A0627			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204795	SRD-2-L-92	2CKA006220A0644			1
93 champagne	204948	SRD-2-L-93	2CKA006220A0661			1
94 alpine white	205099	SRD-2-L-94	2CKA006220A0678			1
95 chateau-black	205242	SRD-2-L-95	2CKA006220A0695			1
96 chalet white	205457	SRD-2-L-96	2CKA006220A0712			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	145235	SRD-2-L-85AI	2CLA852641A1401			1
BL Soft White	145211	SRD-2-L-85BL	2CLA852641A1101			1
NS Soft Black	145242	SRD-2-L-85NS	2CLA852641A1501			1
PL Silver	145228	SRD-2-L-85PL	2CLA852641A1301			1

ABB-free@home®

VDE

Rocker
2gang right, with “Light” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180853	SRL-2-R-212	2CKA006220A0202			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181263	SRL-2-R-214	2CKA006220A0203			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181614	SRL-2-R-81	2CKA006220A0167			1
82 ivory white	203651	SRL-2-R-82	2CKA006220A0527			1
83 aluminium silver	182284	SRL-2-R-83	2CKA006220A0168			1
84 studio white	181942	SRL-2-R-84	2CKA006220A0169			1
803 grey metallic	203989	SRL-2-R-803	2CKA006220A0561			1
840 antique brass	195697	SRL-2-R-840	2CKA006220A0381			1
866 stainless stell	203828	SRL-2-R-866	2CKA006220A0544			1
884 studiowhite matt	204467	SRL-2-R-884	2CKA006220A0612			1
885 black matt	204634	SRL-2-R-885	2CKA006220A0629			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204818	SRL-2-R-92	2CKA006220A0646			1
93 champagne	204962	SRL-2-R-93	2CKA006220A0663			1
94 alpine white	205112	SRL-2-R-94	2CKA006220A0680			1
95 chateau-black	205266	SRL-2-R-95	2CKA006220A0697			1
96 chalet white	205471	SRL-2-R-96	2CKA006220A0714			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	145150	SRL-2-R-85AI	2CLA852648A1401			1
BL Soft White	145136	SRL-2-R-85BL	2CLA852648A1101			1
NS Soft Black	145167	SRL-2-R-85NS	2CLA852648A1501			1
PL Silver	145143	SRL-2-R-85PL	2CLA852648A1301			1

Rocker
2gang right, with “Scene” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180884	SRS-2-R-212	2CKA006220A0206			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181287	SRS-2-R-214	2CKA006220A0207			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181638	SRS-2-R-81	2CKA006220A0173			1
82 ivory white	203668	SRS-2-R-82	2CKA006220A0528			1
83 aluminium silver	182314	SRS-2-R-83	2CKA006220A0174			1
84 studio white	181966	SRS-2-R-84	2CKA006220A0175			1
803 grey metallic	203996	SRS-2-R-803	2CKA006220A0562			1
840 antique brass	195710	SRS-2-R-840	2CKA006220A0382			1
866 stainless stell	203835	SRS-2-R-866	2CKA006220A0545			1
884 studiowhite matt	204474	SRS-2-R-884	2CKA006220A0613			1
885 black matt	204641	SRS-2-R-885	2CKA006220A0630			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204825	SRS-2-R-92	2CKA006220A0647			1
93 champagne	204979	SRS-2-R-93	2CKA006220A0664			1
94 alpine white	205129	SRS-2-R-94	2CKA006220A0681			1
95 chateau-black	205273	SRS-2-R-95	2CKA006220A0698			1
96 chalet white	205488	SRS-2-R-96	2CKA006220A0715			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	145358	SRS-2-R-85AI	2CLA852649A1401			1
BL Soft White	145334	SRS-2-R-85BL	2CLA852647A1101			1
NS Soft Black	145365	SRS-2-R-85NS	2CLA852649A1501			1
PL Silver	145341	SRS-2-R-85PL	2CLA852649A1301			1

ABB-free@home®

VDE

Rocker
2gang right, with “Dimmer” icon
As cover for ABB-free@home® sensor units and sensor/actuator units

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	188507	SRD-2-R-212	2CKA006220A0261			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	188514	SRD-2-R-214	2CKA006220A0262			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	188477	SRD-2-R-81	2CKA006220A0258			1
82 ivory white	203644	SRD-2-R-82	2CKA006220A0526			1
83 aluminium silver	188484	SRD-2-R-83	2CKA006220A0259			1
84 studio white	188491	SRD-2-R-84	2CKA006220A0260			1
803 grey metallic	203972	SRD-2-R-803	2CKA006220A0560			1
840 antique brass	195727	SRD-2-R-840	2CKA006220A0383			1
866 stainless stell	203811	SRD-2-R-866	2CKA006220A0543			1
884 studiowhite matt	204450	SRD-2-R-884	2CKA006220A0611			1
885 black matt	204627	SRD-2-R-885	2CKA006220A0628			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204801	SRD-2-R-92	2CKA006220A0645			1
93 champagne	204955	SRD-2-R-93	2CKA006220A0662			1
94 alpine white	205105	SRD-2-R-94	2CKA006220A0679			1
95 chateau-black	205259	SRD-2-R-95	2CKA006220A0696			1
96 chalet white	205464	SRD-2-R-96	2CKA006220A0713			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	145273	SRD-2-R-85AI	2CLA852640A2401			1
BL Soft White	145259	SRD-2-R-85BL	2CLA852640A2101			1
NS Soft Black	145280	SRD-2-R-85NS	2CLA852640A2501			1
PL Silver	145266	SRD-2-R-85PL	2CLA852640A2301			1

Cover plate
For room thermostat
As cover for ABB-free@home® room temperature controller RTC-F-1.

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	180914	CP-RTC-212	2CKA006220A0210			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	181317	CP-RTC-214	2CKA006220A0211			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	181652	CP-RTC-81	2CKA006220A0179			1
82 ivory white	205693	CP-RTC-82	2CKA006220A0529			1
83 aluminium silver	182345	CP-RTC-83	2CKA006220A0180			1
84 studio white	181980	CP-RTC-84	2CKA006220A0181			1
803 grey metallic	205747	CP-RTC-803	2CKA006220A0563			1
840 antique brass	195734	CP-RTC-840	2CKA006220A0384			1
866 stainless stell	205723	CP-RTC-866	2CKA006220A0546			1
884 studiowhite matt	205815	CP-RTC-884	2CKA006220A0614			1
885 black matt	205839	CP-RTC-885	2CKA006220A0631			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	205853	CP-RTC-92	2CKA006220A0648			1
93 champagne	205877	CP-RTC-93	2CKA006220A0665			1
94 alpine white	205891	CP-RTC-94	2CKA006220A0682			1
95 chateau-black	205921	CP-RTC-95	2CKA006220A0699			1
96 chalet white	205952	CP-RTC-96	2CKA006220A0716			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	145433	CP-RTC-85AI	2CLA854060A1401			1
BL Soft White	145419	CP-RTC-85BL	2CLA854060A1101			1
NS Soft Black	145440	CP-RTC-85NS	2CLA854060A1501			1
PL Silver	145426	CP-RTC-85PL	2CLA854060A1301			1

ABB-free@home®

VDE

Cover plate
For room thermostat
As cover for ABB-free@home® room temperature controller RTC-F-1.

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	187487	CP-FCC-212	2CKA006220A0245			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	187494	CP-FCC-214	2CKA006220A0246			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	187456	CP-FCC-81	2CKA006220A0242			1
82 ivory white	205716	CP-FCC-82	2CKA006220A0532			1
83 aluminium silver	187463	CP-FCC-83	2CKA006220A0243			1
84 studio white	187470	CP-FCC-84	2CKA006220A0244			1
803 grey metallic	205754	CP-FCC-803	2CKA006220A0566			1
866 stainless stell	205730	CP-FCC-866	2CKA006220A0549			1
884 studiowhite matt	205822	CP-FCC-884	2CKA006220A0617			1
885 black matt	205846	CP-FCC-885	2CKA006220A0634			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	205860	CP-FCC-92	2CKA006220A0651			1
93 champagne	205884	CP-FCC-93	2CKA006220A0668			1
94 alpine white	205914	CP-FCC-94	2CKA006220A0685			1
95 chateau-black	205938	CP-FCC-95	2CKA006220A0702			1
96 chalet white	205969	CP-FCC-96	2CKA006220A0719			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	144993	CP-RTC-FC-85AI	2CLA855420A1401			1
BL Soft White	144979	CP-RTC-FC-85BL	2CLA855420A1101			1
NS Soft Black	145006	CP-RTC-FC-85NS	2CLA855420A1501			1
PL Silver	144986	CP-RTC-FC-85PL	2CLA855420A1301			1

Cover plate
For 2 fold left push button with play/pause symbol
As cover for ABB-free@home® sensor units and sensor/actuator units

Sonos

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	261095	SRA-2-L-212	2CKA006220A0763			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	257821	SRA-2-L-214	2CKA006220A0765			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	257722	SRA-2-L-81	2CKA006220A0755			1
82 ivory white	257746	SRA-2-L-82	2CKA006220A0757			1
83 aluminium silver	257760	SRA-2-L-83	2CKA006220A0759			1
84 studio white	257784	SRA-2-L-84	2CKA006220A0761			1
803 grey metallic	257845	SRA-2-L-803	2CKA006220A0767			1
840 antique brass	257951	SRA-2-L-840	2CKA006220A0775			1
866 stainless stell	257883	SRA-2-L-866	2CKA006220A0769			1
884 studiowhite matt	261101	SRA-2-L-884	2CKA006220A0771			1
885 black matt	257937	SRA-2-L-885	2CKA006220A0773			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	257975	SRA-2-L-92	2CKA006220A0777			1
93 champagne	257999	SRA-2-L-93	2CKA006220A0779			1
94 alpine white	258019	SRA-2-L-94	2CKA006220A0781			1
95 chateau-black	258033	SRA-2-L-95	2CKA006220A0783			1
96 chalet white	258057	SRA-2-L-96	2CKA006220A0785			1

ABB-free@home®

VDE

Cover plate
For 2 fold right push button with volume symbol
As cover for ABB-free@home® sensor units and sensor/actuator units

Sonos

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	257814	SRA-2-R-212	2CKA006220A0764			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	257838	SRA-2-R-214	2CKA006220A0766			1

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	257739	SRA-2-R-81	2CKA006220A0756			1
82 ivory white	257753	SRA-2-R-82	2CKA006220A0758			1
83 aluminium silver	257777	SRA-2-R-83	2CKA006220A0760			1
84 studio white	257791	SRA-2-R-84	2CKA006220A0762			1
803 grey metallic	257876	SRA-2-R-803	2CKA006220A0768			1
840 antique brass	257968	SRA-2-R-840	2CKA006220A0776			1
866 stainless stell	257890	SRA-2-R-866	2CKA006220A0770			1
884 studiowhite matt	257920	SRA-2-R-884	2CKA006220A0772			1
885 black matt	257944	SRA-2-R-885	2CKA006220A0774			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	257982	SRA-2-R-92	2CKA006220A0778			1
93 champagne	261118	SRA-2-R-93	2CKA006220A0780			1
94 alpine white	258026	SRA-2-R-94	2CKA006220A0782			1
95 chateau-black	258040	SRA-2-R-95	2CKA006220A0784			1
96 chalet white	258064	SRA-2-R-96	2CKA006220A0786			1

Sensor unit, 1gang [1) 2)]
For ABB-free@home®
For transmitting switching, push-button, dimming and blind commands to an ABB-free@home® actuator.
Only to be used in combination with ABB-free@home® 1gang rockers.
The bus can be connected via enclosed terminal block.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 23 mm
Mounting depth: 9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180075	SU-F-1.0.1	2CKA006220A0117			1

Sensor unit, 1gang, wireless [1) 2)]
For ABB-free@home®
For transmitting switching, push-button, dimming and blind commands to an ABB-free@home® actuator.
Communication with the free@home system is carried out wireless.
Only to be used in combination with ABB-free@home® 1gang rockers.
The bus can be connected via enclosed terminal block.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Rated voltage: 230 V~
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215616	SU-F-1.0.1-WL	2CKA006200A0072			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

VDE

Sensor unit, 2gang [1) 2)]
For ABB-free@home®
For transmitting switching, push-button, dimming and blind commands to an ABB-free@home® actuator.
Only to be used in combination with ABB-free@home® 2gang rockers.
The bus can be connected via enclosed terminal block.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 23 mm
Mounting depth: 9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180082	SU-F-2.0.1	2CKA006220A0118			1

Sensor unit, 2gang, wireless [1) 2)]
For ABB-free@home®
For transmitting switching, push-button, dimming and blind commands to an ABB-free@home® actuator.
Communication with the free@home system is carried out wireless.
Only to be used in combination with ABB-free@home® 2gang rockers.
The bus can be connected via enclosed terminal block.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Rated voltage: 230 V~
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215623	SU-F-2.0.1-WL	2CKA006200A0073			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Room thermostat [1) 2)]
For ABB-free@home®
Heating/cooling operation.
Control element with room temperature controller function for controlling commercially available actuating drives in connection with HA-M-0.6.1, HA-M-0.12.1, FCA-M-2.3.1.
With display of set-value temperature.
Only to be used in combination with ABB-free@home® room temperature controller cover plates CP-RTC-xxx.
The bus can be connected via enclosed terminal block.
Control element: Floating rocker for the selection of set values and operating modes
Display elements: LCD showing operation modes
Bus voltage: 24 V
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 30 mm
Mounting depth: 14 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180099	RTC-F-1	2CKA006220A0122			1

Room thermostat, wireless [1) 2)]
For ABB-free@home®
Heating/cooling operation.
Communication with the free@home system is carried out wireless.
Control element with room temperature controller function for controlling commercially available actuating drives in connection with HA-M-0.6.1, HA-M-0.12.1, FCA-M-2.3.1.
With display of set-value temperature.
Only to be used in combination with ABB-free@home® room temperature controller cover plates CP-RTC-xxx.
The bus can be connected via enclosed terminal block.
Control element: Floating rocker for the selection of set values and operating modes
Display elements: LCD showing operation modes
Bus voltage: 230 V~
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 48 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215715	RTC-F-1-WL	2CKA006200A0081			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

VDE

Room temperature controller/heating actuator, wireless [1) 2)]
For ABB-free@home®
Heating/cooling operation. Communication with the free@home system is carried out wireless.
Control element with room temperature controller function.
With display of set-value temperature.
With integrated switch actuator, e.g. for controlling thermoelectric actuating drives in heating/cooling systems or electric floor heating systems. RTC function is available also without prior programming (preconfigured).
In connection with temperature sensor DP4-T-1 the integrated room temperature controller can be fitted with a remote sensor.
3 wire connection (neutral conductor required).
Only to be used in combination with ABB-free@home® room temperature controller cover plates CP-RTC-XXX.
With fixing claws.
Control element: Floating rocker for the selection of set values and operating modes
Display elements: LCD showing operation modes
Rated voltage: 230 V~
Rated frequency: 50 Hz - 60 Hz
Outputs: 1x Normally open contact, potential-bound
Supply voltage: 230 V~
Suitable for: ohmic
Rated current: 16 A
Output voltage: 230 V~
Rated power: 3 680 W
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 48 mm
Mounting depth: 32 mm

WIRELESS	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	215722	RTC-F-2.1-1-WL	2CKA006200A0082			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Switch actuator sensor, 1/1gang [1) 2)]
For ABB-free@home®
For switching 127 V~/230 V~ consumers.
With integrated switch actuator.
Switching function is available also without prior programming (pre-configured).
Configuration can be changed later via the web interface (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 1gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x Normally open contact, potential free
Suitable for: ohmic
Rated current: 10 A
Output voltage: 230 V~
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Rated power: 2300 VA
Suitable for: inductive
Rated current: 10 AX
Rated power: 2300 VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180112	SSA-F-1.1.1	2CKA006220A0123			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

VDE

Switch actuator sensor, 1/1gang, wireless [1) 2)]
For ABB-free@home®
For switching 127 V~/230 V~ consumers.
Communication with the free@home system is carried out wireless.
With integrated switch actuator.
Switching function is available also without prior programming (pre-configured).
Configuration can be changed later via the web interface (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 1gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x Normally open contact, potential free
Suitable for: ohmic
Rated current: 10 A
Output voltage: 230 V~
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Rated power: 2300 VA
Suitable for: inductive
Rated current: 10 AX
Rated power: 2300 VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215630	SSA-F-1.1.1-WL	2CKA006200A0074			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

^Switch actuator sensor, 2/1gang [1) 2)]
For ABB-free@home®
For switching 127 V~/230 V~ consumers.
With integrated switch actuator.
Switching function is available also without prior programming (left sensor channel is pre-configured).
Configuration can be changed later via the web interface (groups, scenes, etc.).
The right sensor channel for programming additional functions (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 2gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x Normally open contact, potential free
Suitable for: ohmic
Rated current: 10 A
Output voltage: 230 V~
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Rated power: 2300 VA
Suitable for: inductive
Rated current: 10 AX
Rated power: 2300 VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180129	SSA-F-2.1.1	2CKA006220A0124			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

VDE

Switch actuator sensor, 2/1gang, wireless [1) 2)]
For ABB-free@home®
For switching 127 V~/230 V~ consumers.
Communication with the free@home system is carried out wireless.
With integrated switch actuator.
Switching function is available also without prior programming (left sensor channel is pre-configured).
Configuration can be changed later via the web interface (groups, scenes, etc.).
The right sensor channel for programming additional functions (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 2gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x Normally open contact, potential free
Suitable for: ohmic
Rated current: 10 A
Output voltage: 230 V~
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Rated power: 2300 VA
Suitable for: inductive
Rated current: 10 AX
Rated power: 2300 VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215647	SSA-F-2.1.1-WL	2CKA006200A0075			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Switch actuator sensor, 2/2gang [1) 2)]
For ABB-free@home®
For switching 127 V~/230 V~ consumers.
With integrated 2gang switch actuator.
Switching function is available also without prior programming (both sensor channels are pre-configured). Configuration can be changed later via the web interface (groups, scenes, etc.). Only to be used in combination with ABB-free@home® 2gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 2x Normally open contact, potential free
Suitable for: ohmic
Rated current: 5 A
Output voltage: 230 V~
Rated power: 1380 W
Suitable for: capacitive
Rated current: 4 AX
Rated power: 920 VA
Suitable for: inductive
Rated current: 4 AX
Rated power: 920 VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180136	SSA-F-2.2.1	2CKA006220A0125			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

VDE

Switch actuator sensor, 2/2gang, wireless [1) 2)]
For ABB-free@home®
For switching 127 V~/230 V~ consumers.
Communication with the free@home system is carried out wireless.
With integrated 2gang switch actuator.
Switching function is available also without prior programming (both sensor channels are pre-configured). Configuration can be changed later via the web interface (groups, scenes, etc.). Only to be used in combination with ABB-free@home® 2gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 2x Normally open contact, potential free
Suitable for: ohmic
Rated current: 5 A
Output voltage: 230 V~
Rated power: 1380 W
Suitable for: capacitive
Rated current: 4 AX
Rated power: 920 VA
Suitable for: inductive
Rated current: 4 AX
Rated power: 920 VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215654	SSA-F-2.2.1-WL	2CKA006200A0076			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Dimming actuator sensor, 1/1gang [1) 2) 3)]
For ABB-free@home®
For dimming 230 V~ loads.
With integrated universal dimming actuator for controlling LEDs, incandescent lamps, 230 V halogen lamps, low-voltage halogen lamps with conventional or electronic transformers, and dimmable energy-saving halogen lamps.
For dimmable Retrofit-LEDs (LEDi).
Dimming function is available also without prior programming (pre-configured).
Configuration can be changed later via the web interface (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 1gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x dimming channel
Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer.
Rated power: 10 - 180 W/VA
Suitable for: LEDi and energy-saving bulbs; typical
Rated power: 2 - 80 W/VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180143	SDA-F-1.1.1	2CKA006220A0126			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.
3) The power is supplied by the ABB-Welcome system controller 83300.

ABB-free@home®

VDE

Dimming actuator sensor, 1/1gang, wireless [1) 2) 3)]
For ABB-free@home®
For dimming 230 V~ loads.
Communication with the free@home system is carried out wireless.
With integrated universal dimming actuator for controlling LEDs, incandescent lamps, 230 V halogen lamps, low-voltage halogen lamps with conventional or electronic transformers, and dimmable energy-saving halogen lamps.
For dimmable Retrofit-LEDs (LEDi).
Dimming function is available also without prior programming (pre-configured).
Configuration can be changed later via the web interface (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 1gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x dimming channel
Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer.
Rated power: 10 - 180 W/VA
Suitable for: LEDi and energy-saving bulbs; typical
Rated power: 2 - 80 W/VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215661	SDA-F-1.1.1-WL	2CKA006200A0077			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.
3) The power is supplied by the ABB-Welcome system controller 83300.

Dimming actuator sensor, 2/1gang [1) 2) 3)]
For ABB-free@home®
For dimming 230 V~ loads.
With integrated universal dimming actuator for controlling LEDs, incandescent lamps, 230 V halogen lamps, low-voltage halogen lamps with conventional or electronic transformers, and dimmable energy-saving halogen lamps.
For dimmable Retrofit-LEDs (LEDi).
Dimming function is available also without prior programming (left sensor channel is pre-configured). Configuration can be changed later via the web interface (groups, scenes, etc.).
The right sensor channel for programming additional functions (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 2gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x dimming channel
Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer.
Rated power: 10 - 180 W/VA
Suitable for: LEDi and energy-saving bulbs; typical
Rated power: 2 - 80 W/VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180150	SDA-F-2.1.1	2CKA006220A0127			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.
3) The power is supplied by the ABB-Welcome system controller 83300.

ABB-free@home®

VDE

Dimming actuator sensor, 2/1gang, wireless [1) 2) 3)]
For ABB-free@home®
For dimming 230 V~ loads.
Communication with the free@home system is carried out wireless.
With integrated universal dimming actuator for controlling LEDs, incandescent lamps, 230 V halogen lamps, low-voltage halogen lamps with conventional or electronic transformers, and dimmable energy-saving halogen lamps.
For dimmable Retrofit-LEDs (LEDi).
Dimming function is available also without prior programming (left sensor channel is pre-configured). Configuration can be changed later via the web interface (groups, scenes, etc.).
The right sensor channel for programming additional functions (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 2gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x dimming channel
Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer.
Rated power: 10 - 180 W/VA
Suitable for: LEDi and energy-saving bulbs; typical
Rated power: 2 - 80 W/VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215678	SDA-F-2.1.1-WL	2CKA006200A0078			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.
3) The power is supplied by the ABB-Welcome system controller 83300.

Blind actuator sensor, 1/1gang [1) 2)]
For ABB-free@home®
For controlling blind or awning motors.
With integrated blind actuator.
Blind function is available also without prior programming (pre-configured).
Configuration can be changed later via the web interface (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 1gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x Change-over contacts/normally open contact, potential-bound
Suitable for: Operation mode Blind
Rated current: 4 A
Output voltage: 230 V~
Rated power: 920 VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180167	SBA-F-1.1.1	2CKA006220A0128			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

VDE

Blind actuator sensor, 1/1gang, wireless [1) 2)]
For ABB-free@home®
For controlling blind or awning motors.
Communication with the free@home system is carried out wireless.
With integrated blind actuator.
Blind function is available also without prior programming (pre-configured).
Configuration can be changed later via the web interface (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 1gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x Change-over contacts/normally open contact, potential-bound
Suitable for: Operation mode Blind
Rated current: 4 A
Output voltage: 230 V~
Rated power: 920 VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215685	SBA-F-1.1.1-WL	2CKA006200A0079			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Blind actuator sensor, 2/1gang [1) 2)]
For ABB-free@home®
For controlling blind or awning motors.
With integrated blind actuator.
Blind function is available also without prior programming (left sensor channel is pre-configured). Configuration can be changed later via the web interface (groups, scenes, etc.).
The right sensor channel for programming additional functions (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 2gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x Change-over contacts/normally open contact, potential-bound
Suitable for: Operation mode Blind
Rated current: 4 A
Output voltage: 230 V~
Rated power: 920 VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180174	SBA-F-2.1.1	2CKA006220A0129			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

VDE

Blind actuator sensor, 2/1gang, wireless [1) 2)]
For ABB-free@home®
For controlling blind or awning motors.
Communication with the free@home system is carried out wireless.
With integrated blind actuator.
Blind function is available also without prior programming (left sensor channel is pre-configured). Configuration can be changed later via the web interface (groups, scenes, etc.).
The right sensor channel for programming additional functions (groups, scenes, etc.).
Only to be used in combination with ABB-free@home® 2gang rockers.
The bus can be connected via enclosed terminal block.
When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Control element: Switch contacts top/bottom
Display elements: LED as light for orientation or display of the switching state
Bus voltage: 24 V
Outputs: 1x Change-over contacts/normally open contact, potential-bound
Suitable for: Operation mode Blind
Rated current: 4 A
Output voltage: 230 V~
Rated power: 920 VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 45 mm
Mounting depth: 32 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215692	SBA-F-2.1.1-WL	2CKA006200A0080			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Movement detector/switch actuator, 1gang [1) 2)]
For ABB-free@home®
With select lens for detection with animal access.
For automatic switching of ABB-free@home® actuators dependent on movement and brightness. Switch-off delay of the actuator can be programmed via the web interface of the System Access Point. For switching 127 V~/230 V~ consumers. With integrated switch actuator. Switching function is available also without prior programming (pre-configured). Configuration can be changed later via the web interface (groups, scenes, etc.).
The bus can be connected via enclosed terminal block. When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Bus voltage: 24 V
Outputs: 1x Normally open contact, potential free
Suitable for: ohmic
Rated current: 10 A
Output voltage: 230 V~
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Rated power: 2300 VA
Suitable for: inductive
Rated current: 10 AX
Rated power: 2300 VA
Detection range: frontal: 6 m, lateral: 3 m
Detection angle: 180 °
Brightness limit value: 1 Lux - 500 Lux
Mounting height: 1.1 m - 1.3 m
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm
Mounting depth: 32 mm
Position for installation: vertical

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
212 white	179765	MSA-F-1.1.1-212	2CKA006220A0220			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
214 alpine white	179802	MSA-F-1.1.1-214	2CKA006220A0221			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®
VDE

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
81 antracite	179840	MSA-F-1.1.1-81	2CKA006220A0215			1
82 ivory white	203682	MSA-F-1.1.1-82	2CKA006220A0531			1
83 aluminium silver	179949	MSA-F-1.1.1-83	2CKA006220A0216			1
84 studio white	179895	MSA-F-1.1.1-84	2CKA006220A0217			1
803 grey metallic	204016	MSA-F-1.1.1-803	2CKA006220A0565			1
815 yellow	204160	MSA-F-1.1.1-815	2CKA006220A0582			1
840 antique brass	195758	MSA-F-1.1.1-840	2CKA006220A0386			1
866 stainless stell	203859	MSA-F-1.1.1-866	2CKA006220A0548			1
884 studiowhite matt	204498	MSA-F-1.1.1-884	2CKA006220A0616			1
885 black matt	204665	MSA-F-1.1.1-885	2CKA006220A0633			1
896 chalet white	204320	MSA-F-1.1.1-896	2CKA006220A0599			1

basic55®

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
92 white	204849	MSA-F-1.1.1-92	2CKA006220A0650			1
93 champagne	204993	MSA-F-1.1.1-93	2CKA006220A0667			1
94 alpine white	205143	MSA-F-1.1.1-94	2CKA006220A0684			1
95 chateau-black	205297	MSA-F-1.1.1-95	2CKA006220A0701			1
96 chalet white	205501	MSA-F-1.1.1-96	2CKA006220A0718			1

Sky

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
AI Stainless Steel	145396	CP-MD-85AI	2CLA854150A1401			1
BL Soft White	145372	CP-MD-85BL	2CLA854150A1101			1
NS Soft Black	145402	CP-MD-85NS	2CLA854150A1501			1
PL Silver	145389	CP-MD-85PL	2CLA854150A1301			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Movement detector/switch actuator, 1gang, wireless [1) 2)]
For ABB-free@home®
With select lens for detection with animal access.
Communication with the free@home system is carried out wireless.
For automatic switching of ABB-free@home® actuators dependent on movement and brightness. Switch-off delay of the actuator can be programmed via the web interface of the System Access Point. For switching 127 V~/230 V~ consumers. With integrated switch actuator. Switching function is available also without prior programming (pre-configured). Configuration can be changed later via the web interface (groups, scenes, etc.).
The bus can be connected via enclosed terminal block. When installing in the flush-mounted box, a spatial division between the bus cable and 127 V/230 V installation cable is to be adhered to! If this minimum distance is not possible, use electronic boxes or insulating tubes.
Bus voltage: 24 V
Outputs: 1x Normally open contact, potential free
Suitable for: ohmic
Rated current: 10 A
Output voltage: 230 V~
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Rated power: 2300 VA
Suitable for: inductive
Rated current: 10 AX
Rated power: 2300 VA
Detection range: frontal: 6 m, lateral: 3 m
Detection angle: 180 °
Brightness limit value: 1 Lux - 500 Lux
Mounting height: 1.1 m - 1.3 m
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 53 mm
Mounting depth: 32 mm
Position for installation: vertical

Busch-Duro 2000® SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215821	MSA-F-1.1.1-212-WL	2CKA006200A0092			1

Reflex SI

Color	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215838	MSA-F-1.1.1-214-WL	2CKA006200A0093			1

ABB-free@home®

VDE

future® linear, Busch-axcent®, solo®, pure stainless steel, carat®, Busch-dynasty®, wireless

Color	Bbn 4011395 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
WIRELESS						
81 antracite	215739	MSA-F-1.1.1-81-WL	2CKA006200A0083			1
82 ivory white	215746	MSA-F-1.1.1-82-WL	2CKA006200A0084			1
83 aluminium silver	215753	MSA-F-1.1.1-83-WL	2CKA006200A0085			1
84 studio white	215760	MSA-F-1.1.1-84-WL	2CKA006200A0086			1
803 grey metallic	215845	MSA-F-1.1.1-803-WL	2CKA006200A0094			1
866 stainless stell	215869	MSA-F-1.1.1-866-WL	2CKA006200A0096			1
884 studiowhite matt	215876	MSA-F-1.1.1-884-WL	2CKA006200A0097			1
885 black matt	215883	MSA-F-1.1.1-885-WL	2CKA006200A0098			1

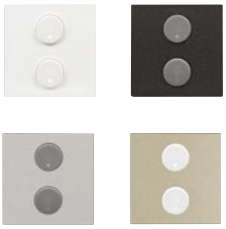
basic55®

Color	Bbn 4011395 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
WIRELESS						
92 white	215777	MSA-F-1.1.1-92-WL	2CKA006200A0087			1
93 champagne	215784	MSA-F-1.1.1-93-WL	2CKA006200A0088			1
94 alpine white	215791	MSA-F-1.1.1-94-WL	2CKA006200A0089			1
95 chateau-black	215807	MSA-F-1.1.1-95-WL	2CKA006200A0090			1
96 chalet white	215814	MSA-F-1.1.1-96-WL	2CKA006200A0091			1

Notes

ABB-free@home®

Zenit

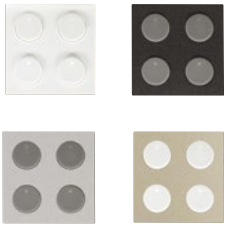


Cover plate for 2 fold push buttons incl neutral symbols
Cover for ABB-free@home® 1/2 gang switches:
SSA-F-1.1.PB.1, SDA-F-1.1.PB.1, SBA-F-1.1.PB.1 and SU-F-1.0.PB.1
Dimensions (H × W): 44 mm x 44 mm

	Bbn 8427238	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
white	113401	SR-2-N2BL	2CLA222620N1102			1
anthracite	113425	SR-2-N2AN	2CLA222620N1802			1
silver	113418	SR-2-N2PL	2CLA222620N1302			1
champagne	113906	SR-2-N2CV	2CLA222620N1902			1

Available with the following interchangeable icons (blind, light, dimmer, scene)

	SBB-N2BL	2CLA202620N1102		SBL-N2BL	2CLA202610N1102
	SBB-N2GR	2CLA202620N1402		SBL-N2GR	2CLA202610N1402
	SBD-N2BL	2CLA202640N1102		SBS-N2BL	2CLA202630N1102
	SBD-N2GR	2CLA202640N1402		SBS-N2GR	2CLA202630N1402



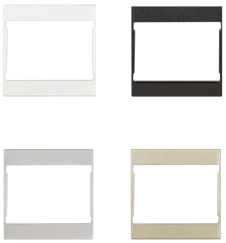
Cover plate for 4 fold push buttons incl neutral symbols
Cover for ABB-free@home® 2/4 gang switches:
SSA-F-2.1.PB.1, SSA-F-2.2.PB.1, SDA-F-2.1.PB.1, SBA-F-2.1.PB.1 and SU-F-2.0.PB.1
Dimensions (H × W): 44 mm x 44 mm

	Bbn 8427238	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
white	113432	SR-4-N2BL	2CLA222640N1102			1
anthracite	113456	SR-4-N2AN	2CLA222640N1802			1
silver	113449	SR-4-N2PL	2CLA222640N1302			1
champagne	113913	SR-4-N2CV	2CLA222640N1902			1

Available with the following interchangeable icons (blind, light, dimmer, scene)

	SBB-N2BL	2CLA202620N1102		SBL-N2BL	2CLA202610N1102
	SBB-N2GR	2CLA202620N1402		SBL-N2GR	2CLA202610N1402
	SBD-N2BL	2CLA202640N1102		SBS-N2BL	2CLA202630N1102
	SBD-N2GR	2CLA202640N1402		SBS-N2GR	2CLA202630N1402

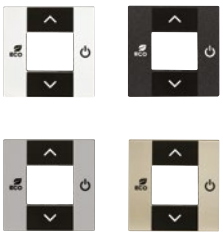
Color legend:
AN = anthracite, BL = white, PL = silver, CV = champagne, GR = grey
WG = Wengue wood, PZ = Stone slate, CB = White glass, CN = Black glass, OX = Aluminium (Inox AISI304)



Cover plate for movement detector

Cover for ABB-free@home® movement detector: MSA-F-1.1.1 and MD-F-1.0.PB.1
Dimensions (H × W): 44 mm x 44 mm

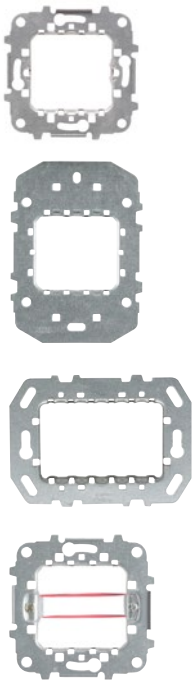
	Bbn 8427238	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
white	113463	CP-MD-N2BL	2CL0N224161ABB			1
anthracite	113487	CP-MD-N2AN	2CL0N224168ABB			1
silver	113470	CP-MD-N2PL	2CL0N224163ABB			1
champagne	113920	CP-MD-N2CV	2CL0N224169ABB			1



Cover plate for room temperature controller

Cover for ABB-free@home® room temperature controller: RTC-F-1.PB
Dimensions (H × W): 44 mm x 44 mm

	Bbn 8427238	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
white	113494	CP-RTC-N2BL	2CL0N224061ABB			1
anthracite	113517	CP-RTC-N2AN	2CL0N224068ABB			1
silver	113500	CP-RTC-N2PL	2CL0N224063ABB			1
champagne	113937	CP-RTC-N2CV	2CL0N224069ABB			1



Metal mounting frame

Metal mounting frame for flush mounted units.
Metal mounting frame with clamps for flush mounted units of Zenit VDE range.
Dimensions (H × W): 102 mm x 74 mm, 74 mm x 102 mm

	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
square		N2271.9	2CLA227190N1001			1
vertical		N2371.9 V	2CLA237190N1002			1
horizontal		N2373.9	2CLA237390N1002			1
square with clamps		N2271.9G	2CLA227190N1101			

ABB-free@home®

Millenium

Cover plate for 2 fold push buttons incl neutral symbols

Cover for ABB-free@home® 1/2 gang switches: SSA-F-1.1.PB.1, SDA-F-1.1.PB.1, SBA-F-1.1.PB.1 and SU-F-1.0.PB.1

Available in the following colors: anthracite

Dimensions (H × W): 44 mm x 44 mm

	Bbn 8427238	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
anthracite	115849	SR-2-AMAN	2CLA622620N1801			1

Available with the following interchangeable icons (blind, light, dimmer, scene)

	SBB-AMAN	2CLA602620N1801		SBL-AMAN	2CLA602610N1801
	SBD-AMAN	2CLA602640N1801		SBS-AMAN	2CLA602630N1801

Cover plate for 4 fold push buttons incl neutral symbols

Cover for ABB-free@home® 2/4 gang switches: SSA-F-2.1.PB.1, SSA-F-2.2.PB.1, SDA-F-2.1.PB.1, SBA-F-2.1.PB.1 and SU-F-2.0.PB.1

Available in the following colors: anthracite

Dimensions (H × W): 44 mm x 44 mm

	Bbn 8427238	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
anthracite	115856	SR-4-AMAN	2CLA622640N1801			1

Available with the following interchangeable icons (blind, light, dimmer, scene)

	SBB-AMAN	2CLA602620N1801		SBL-AMAN	2CLA602610N1801
	SBD-AMAN	2CLA602640N1801		SBS-AMAN	2CLA602630N1801

Color legend:
AN = anthracite, BL = white, PL = silver, CV = champagne, GR = grey
WG = Wengue wood, PZ = Stone slate, CB = White glass, CN = Black glass, OX = Aluminium (Inox AISI304)

Cover plate for movement detector
Cover for ABB-free@home® movement detector: MSA-F-1.1.1 and MD-F-1.0.PB.1
Available in the following colors: anthracite
Dimensions (H × W): 44 mm x 44 mm

	Bbn 8427238	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	115863	CP-MD-AMAN	2CLA624160N1801			1

Cover plate for room temperature controller
Cover for ABB-free@home® room temperature controller: RTC-F-1.PB
Available in the following colors: anthracite
Dimensions (H × W): 44 mm x 44 mm

	Bbn 8427238	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	115887	CP-RTC-AMAN	2CLA624060N1801			1

Color legend:
AN = anthracite, BL = white, PL = silver, CV = champagne, GR = grey
WG = Wengue wood, PZ = Stone slate, CB = White glass, CN = Black glass, OX = Aluminium (Inox AISI304)

ABB-free@home®

Zenit/Millenium

Sensor/Switch actuator 1/1gang

For switching 230 V~ devices. With integrated actuator. Switching function is available pre-configured. To be used with ABB-free@home® Zenit cover plates for 2 fold push buttons.
Outputs: 1× normally open contact, potential free
Suitable for: resistive
Rated current: 10 A
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187357	SSA-F-1.1.PB.1	2CKA006220A0232			1

Sensor/Switch actuator 1/1gang, wireless

For switching 230 V~ devices. With integrated actuator. Switching function is available pre-configured. To be used with ABB-free@home® Zenit cover plates for 2 fold push buttons.
Outputs: 1× normally open contact, potential free
Suitable for: resistive
Rated current: 10 A
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215975	SSA-F-1.1.PB.1-WL	2CKA006200A0108			1

Switch/actuator, 2/4gang + 1 actuator
For switching 230 V~ devices. With integrated actuator. Switching function is available pre-configured. To be used with ABB-free@home® Zenit cover plates for 4 fold push buttons.
Outputs: 1× normally open contact, potential free
Suitable for: resistive
Rated current: 10 A
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187364	SSA-F-2.1.PB.1	2CKA006220A0267			1

Switch/actuator, 2/4gang + 1 actuator, wireless
For switching 230 V~ devices. With integrated actuator. Switching function is available pre-configured. To be used with ABB-free@home® Zenit cover plates for 4 fold push buttons.
Outputs: 1× normally open contact, potential free
Suitable for: resistive
Rated current: 10 A
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215982	SSA-F-2.1.PB.1-WL	2CKA006200A0109			1

ABB-free@home®

Zenit/Millenium

Switch/actuator, 2/4gang + 2 actuator
For switching 230 V~ devices. With integrated actuator. Switching function is available pre-configured. To be used with ABB-free@home® Zenit cover plates for 4 fold push buttons.
Outputs: 2× normally open contact, potential free
Suitable for: resistive
Rated current: 10 A
Rated power: 2 x 1200 W
Suitable for: capacitive
Rated current: 10 AX
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187371	SSA-F-2.2.PB.1	2CKA006220A0234			1

Switch/actuator, 2/4gang + 2 actuator, wireless
For switching 230 V~ devices. With integrated actuator. Switching function is available pre-configured. To be used with ABB-free@home® Zenit cover plates for 4 fold push buttons.
Outputs: 2× normally open contact, potential free
Suitable for: resistive
Rated current: 10 A
Rated power: 2 x 1200 W
Suitable for: capacitive
Rated current: 10 AX
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215999	SSA-F-2.2.PB.1-WL	2CKA006200A0110			1

Switch/dimmer, 1/2gang + 1 dimmer
For dimming 230 V~ loads. With integrated universal dimming actuator
for controlling different lamps. The dimming function is available pre-configured.
To be used with ABB-free@home® Zenit cover plates for 2 fold push buttons.
Outputs: 1× dimming channel
Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers
or electronic transformers
Rated power: 10–180 W/VA
Suitable for: LEDi and energy-saving bulbs
Rated power: 2–80 W/VA
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187388	SDA-F-1.1.PB.1	2CKA006220A0235			1

Switch/dimmer, 1/2gang + 1 dimmer, wireless
For dimming 230 V~ loads. With integrated universal dimming actuator
for controlling different lamps. The dimming function is available pre-configured.
To be used with ABB-free@home® Zenit cover plates for 2 fold push buttons.
Outputs: 1× dimming channel
Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers
or electronic transformers
Rated power: 10–180 W/VA
Suitable for: LEDi and energy-saving bulbs
Rated power: 2–80 W/VA
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	216002	SDA-F-1.1.PB.1-WL	2CKA006200A0111			1

ABB-free@home®

Zenit/Millenium

Switch/dimmer, 2/4gang + 1 dimmer
For dimming 230 V~ loads. With integrated universal dimming actuator for controlling different lamps. The dimming function is available pre-configured. To be used with ABB-free@home® Zenit cover plates for 4 fold push buttons.
Outputs: 1× dimming channel
Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers
or electronic transformers
Rated power: 10–180 W/VA
Suitable for: LEDi and energy-saving bulbs
Rated power: 2–80 W/VA
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187395	SDA-F-2.1.PB.1	2CKA006220A0236			1

Switch/dimmer, 2/4gang + 1 dimmer, wireless
For dimming 230 V~ loads. With integrated universal dimming actuator for controlling different lamps. The dimming function is available pre-configured. To be used with ABB-free@home® Zenit cover plates for 4 fold push buttons.
Outputs: 1× dimming channel
Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers
or electronic transformers
Rated power: 10–180 W/VA
Suitable for: LEDi and energy-saving bulbs
Rated power: 2–80 W/VA
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	216019	SDA-F-2.1.PB.1-WL	2CKA006200A0112			1

Switch/blind actuator, 1/2gang + 1 blind actuator
For controlling blind and awning motors. With integrated blind actuator. Blind function is available pre-configured. To be used in combination with ABB-free@home® Zenit cover plates for 2 fold push buttons.
Outputs: 1× Change-over contacts/normally open contact, potential bound
Rated power: 920 VA
Rated current: 4 A
Suitable for: Operating mode blind
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187401	SBA-F-1.1.PB.1	2CKA006220A0237			1

Switch/blind actuator, 1/2gang + 1 blind actuator, wireless
For controlling blind and awning motors. With integrated blind actuator. Blind function is available pre-configured. To be used in combination with ABB-free@home® Zenit cover plates for 2 fold push buttons.
Outputs: 1× Change-over contacts/normally open contact, potential bound
Rated power: 920 VA
Rated current: 4 A
Suitable for: Operating mode blind
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	216026	SBA-F-1.1.PB.1-WL	2CKA006200A0113			1

ABB-free@home®

Zenit/Millenium

Switch/blind actuator, 2/4gang + 1 blind actuator

For controlling blind and awning motors. With integrated blind actuator. Blind function is available pre-configured. To be used with ABB-free@home® Zenit cover plates for 4 fold push buttons.

Outputs: 1× Change-over contacts/normally open contact, potential-bound
Rated power: 920 VA
Rated current: 4 A
Suitable for: Operating mode blind
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187418	SBA-F-2.1.PB.1	2CKA006220A0238			1

Switch/blind actuator, 2/4gang + 1 blind actuator, wireless

For controlling blind and awning motors. With integrated blind actuator. Blind function is available pre-configured. To be used with ABB-free@home® Zenit cover plates for 4 fold push buttons.

Outputs: 1× Change-over contacts/normally open contact, potential-bound
Rated power: 920 VA
Rated current: 4 A
Suitable for: Operating mode blind
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 40.9 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	216033	SBA-F-2.1.PB.1-WL	2CKA006200A0114			1

Room temperature controller
Room temperature control function for controlling commercially available valve drives or analogue valve drives (continuous controllers) in connection with HA-M-0.6.1, HA-M-0.12.1, FCA-M-2.3.1. With display of set-value temperature. To be used with ABB-free@home® Zenit cover plates for room temperature controller.
Display elements: LCD Display showing operation modes
Protection class of device: IP 20
Mounting depth: 17.9 mm
Dimensions (H × W × D): 44 mm x 44 mm x 29.4 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	188743	RTC-F-1.PB	2CKA006220A0276			1

Room temperature controller, wireless
Room temperature control function for controlling commercially available valve drives or analogue valve drives (continuous controllers) in connection with HA-M-0.6.1, HA-M-0.12.1, FCA-M-2.3.1. With display of set-value temperature. To be used with ABB-free@home® Zenit cover plates for room temperature controller.
Display elements: LCD Display showing operation modes
Protection class of device: IP 20
Mounting depth: 17.9 mm
Dimensions (H × W × D): 44 mm x 44 mm x 29.4 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	216040	RTC-F-1.PB-WL	2CKA006200A0115			1

ABB-free@home®
Zenit/Millenium

Room temperature controller/heating actuator, wireless [1) 2)]
For ABB-free@home®
Heating/cooling operation.
Control element with room temperature controller function.
With display of set-value temperature.
With integrated switch actuator, e.g. for controlling thermoelectric actuating drives in heating/cooling systems or electric floor heating systems.
RTC function is available also without prior programming (preconfigured).
In connection with temperature sensor DP4-T-1 the integrated room temperature controller can be fitted with a remote sensor.
3 wire connection (neutral conductor required).
Only to be used in combination with ABB-free@home® room temperature controller cover plates CP-RTC-XXX. With fixing claws.
Control element: Floating rocker for the selection of set values and operating modes
Display elements: LCD showing operation modes
Rated voltage: 230 V~
Rated frequency: 50 Hz - 60 Hz
Outputs: 1x Normally open contact, potential-bound
Supply voltage: 230 V~
Suitable for: ohmic
Rated current: 16 A
Output voltage: 230 V~
Rated power: 3680 W
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 71 mm x 71 mm x 48 mm
Mounting depth: 32 mm

WIRELESS	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	216057	RTC-F-2.1-1.PB-WL	2CKA006200A0116			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Switch 1/2gang
For sending switching, dimming and blind command to an ABB-free@home® actuator.
To be used with ABB-free@home® Zenit cover plates for 2 fold push buttons.
Control element: Switch contacts top/bottom
Display elements: LED for orientation or switch state display
Protection class of device: IP 20
Mounting depth: 14.1 mm
Dimensions (H × W × D): 44 mm x 44 mm x 23.5 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187258	SU-F-1.0.PB.1	2CKA006220A0222			1

Switch 1/2gang, wireless
For sending switching, dimming and blind command to an ABB-free@home® actuator.
To be used with ABB-free@home® Zenit cover plates for 2 fold push buttons.
Control element: Switch contacts top/bottom
Display elements: LED for orientation or switch state display
Protection class of device: IP 20
Mounting depth: 14.1 mm
Dimensions (H × W × D): 44 mm x 44 mm x 23.5 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215951	SU-F-1.0.PB.1-WL	2CKA006200A0106			1

Switch 2/4gang
For sending switching, dimming and blind command to an ABB-free@home® actuator.
To be used with ABB-free@home® Zenit cover plates for 4 fold push buttons.
Control element: Switch contacts top/bottom
Display elements: LED for orientation or switch state display
Protection class of device: IP 20
Mounting depth: 14.1 mm
Dimensions (H × W × D): 44 mm x 44 mm x 23.5 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187265	SU-F-2.0.PB.1	2CKA006220A0223			1

Switch 2/4gang, wireless
For sending switching, dimming and blind command to an ABB-free@home® actuator.
To be used with ABB-free@home® Zenit cover plates for 4 fold push buttons.
Control element: Switch contacts top/bottom
Display elements: LED for orientation or switch state display
Protection class of device: IP 20
Mounting depth: 14.1 mm
Dimensions (H × W × D): 44 mm x 44 mm x 23.5 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	215968	SU-F-2.0.PB.1-WL	2CKA006200A0107			1

ABB-free@home®
Zenit/Millenium

Movement detector
With select lens for detection with animal access. For automatic switching of ABB-free@home® actuators dependent on movement and brightness.
To be used with ABB-free@home® Zenit cover plates for movement detector.
Detection range: frontal 6 m, lateral 3 m
Detection angle: 180°
Brightness limit value: 1 – 500 lux
Protection class of device: IP 20
Mounting depth: 14.1 mm
Dimensions (H × W × D): 44 mm x 44 mm x 29.6 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187326	MD-F-1.0.PB.1	2CKA006220A0229			1

Movement detector + 1 actuator
With select lens for detection with animal access. Including an integrated actuator for switching 230 V~ devices. To be used with ABB-free@home® Zenit cover plates for movement detector.
Outputs: 1× normally open contact, potential free
Suitable for: resistive
Rated current: 10 A
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Detection range: frontal 6 m, lateral 3 m
Detection angle: 180°
Brightness limit value: 1 – 500 lux
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 47 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187340	MSA-F-1.1.PB.1	2CKA006220A0231			1

Movement detector + 1 actuator, wireless
With select lens for detection with animal access. Including an integrated actuator for switching 230 V~ devices. To be used with ABB-free@home® Zenit cover plates for movement detector.
Outputs: 1× normally open contact, potential free
Suitable for: resistive
Rated current: 10 A
Rated power: 2300 W
Suitable for: capacitive
Rated current: 10 AX
Detection range: frontal 6 m, lateral 3 m
Detection angle: 180°
Brightness limit value: 1 – 500 lux
Protection class of device: IP 20
Mounting depth: 31.5 mm
Dimensions (H × W × D): 44 mm x 44 mm x 47 mm

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
WIRELESS						
	216064	MSA-F-1.1.1-WL	2CKA006200A0117			1

ABB-free@home®

Mylos

Input module, 1 rocker switch, 1 module

1 module, 1 rocker switch device used as an input channel in ABB-free@home® system. Equipped with programming button for the identification. Flush-mounted installation.

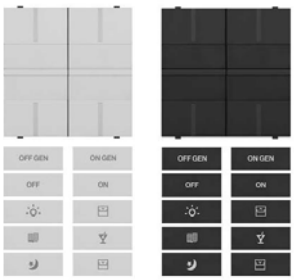
Labels are available as separate articles 2CSYE1502C and 2CSYE1502S

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	262855	2CSYE1012C	2CSY226285R1012			1
Black	262954	2CSYE1012S	2CSY226295R1012			1

2 binary inputs module, 1 rocker switch

2 modules device equipped with:1 rocker switch that can be used as the input channel; 2 input channels that can be used to interface binary inputs to ABB-free@home® system. LEDs for the functional signaling of the load to which the rocker switch is connected. Flush-mounted installation.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	145851	2CSYE1002C	2CSY214585R1002			1
Black	147251	2CSYE1002S	2CSY214725R1002			1



2 binary inputs module, 2 rocker switches

2 modules device equipped with:2 rocker switches that can be used as the input channels; 2 input channels that can be used to interface binary inputs to ABB-free@home® system. LEDs for the functional signaling of the load to which the rocker switches are connected. Flush-mounted installation.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	145950	2CSYE1003C	2CSY214595R1003			1
Black	147350	2CSYE1003S	2CSY214735R1003			1

16A relay actuator

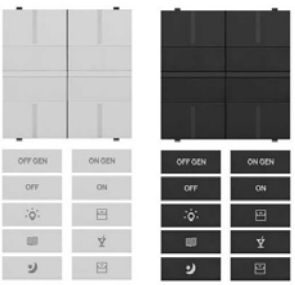
2-modules device with 1 16A relay. Equipped with programming button for identification and LED for functional signaling. Flush-mounted installation.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	146056	2CSYE1101C	2CSY214605R1101			1
Black	147459	2CSYE1101S	2CSY214745R1101			1

16A relay actuator, 1 rocker switch

2-modules device with 1 16A relay with rocker switch (pre-programmed linkage). Equipped with LED for load functional signaling. Flush-mounted installation.

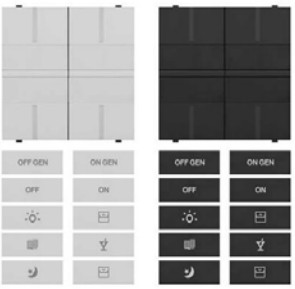
	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	146155	2CSYE1102C	2CSY214615R1102			1
Black	147558	2CSYE1102S	2CSY214755R1102			1



16A relay actuator, 2 rocker switches

2-modules device equipped with:1 16A relay with rocker switch (pre-programmed linkage with the opportunity to invert the button to be associated); 1 rocker switch to be used as input channel. Equipped with LED for functional signaling of the loads the channels are associated with. Flush-mounted installation.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	146254	2CSYE1103C	2CSY214625R1103			1
Black	147657	2CSYE1103S	2CSY214765R1103			1



Actuator, 2 8A relays, 2 rocker switches

2-modules device with 2 8A relays with rocker switches (the pre-programmed linkage cannot be changed). Equipped with LED for load functional signaling. Flush-mounted installation.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	146551	2CSYE1106C	2CSY214655R1106			1
Black	147954	2CSYE1106S	2CSY214795R1106			1

ABB-free@home®

Mylos

Blind actuator

2-modules device equipped with blind control actuator. Equipped with LED for functional signaling. Flush-mounted installation.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	146353	2CSYE1104C	2CSY214635R1104			1
Black	147756	2CSYE1104S	2CSY214775R1104			1

Blind actuator, 1 rocker switch

2-modules device equipped with blind control actuator and rocker switch. Equipped with LED for functional signaling. Flush-mounted installation.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	146452	2CSYE1105C	2CSY214645R1105			1
Black	147855	2CSYE1105S	2CSY214785R1105			1

350W dimmer with rocker switch

2-modules device with 350W dimmer and rocker switch (preprogrammed linkage). Suitable for inductive and capacitive load with automatic recognition. Equipped with LED for load functional signaling. Flush-mounted installation.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	146650	2CSYE1205C	2CSY214665R1205			1
Black	148050	2CSYE1205S	2CSY214805R1205			1

Reg1/10V dimmer with rocker switch

2-modules device equipped with 1/10V dimmer with rocker switch (pre-programmed linkage). Suitable for loads with ballast adjustment. Equipped with LED for load functional signaling. Flush-mounted installation.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	146759	2CSYE1206C	2CSY214675R1206			1
Black	148159	2CSYE1206S	2CSY214815R1206			1

Thermostat

2-modules thermostat with display. 4 operating modes, centralized management via touch panel or remotely. Flush-mounted installation.
NOTE: To be linked to the 8A thermostat ralay actuator (2CSYE1107C S) or to the 6/12-channel heating actuators (2CSYF1431M or 2CSYF1432M)

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	147053	2CSYE1202C	2CSY214705R1202			1
Black	148456	2CSYE1202S	2CSY214845R1202			1

8A heating relay actuator module

1-module device with 1 8A relay. To be used as an output channel or as an actuator for thermoregulation. Equipped with programming button for the identification. Flush-mounted installation.

	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	210658	2CSYE1107C	2CSY221065R1107			1
Black	210757	2CSYE1107S	2CSY221075R1107			1

ABB-free@home®

Mylos

1 module key cover

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	263364	2CSYE1501C	2CSY226336R1501			4
Black	263463	2CSYE1501S	2CSY226346R1501			4

Customization labels

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	263555	2CSYE1502C	2CSY226355R1502			1
Black	263654	2CSYE1502S	2CSY226365R1502			1

2 modules key cover

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	269359	2CSYE1503C	2CSY226935R1503			4
Black	269458	2CSYE1503S	2CSY226945R1503			4

2 modules key cover with blind symbol

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	269557	2CSYE1504C	2CSY226955R1504			4
Black	269656	2CSYE1504S	2CSY226965R1504			4

2 modules key cover with dimmer symbol

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
White	269755	2CSYE1505C	2CSY226975R1505			4
Black	269854	2CSYE1505S	2CSY226985R1505			4

Notes

ABB-free@home®

DINRail

Power supply
For ABB-free@home®
Power supply with integrated choke.
Fast diagnosis due to LED display for operational readiness and errors.
The bus can be connected via enclosed terminal block.
Display elements: Operational load/overload LED
Rated voltage: 127 - 230 V~, +10 % / -15 %
Secondary: 30 V, +2 V / --2 V
Rated frequency: 50 Hz/60 Hz
Outputs: 1
Rated current: 640 mA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 90 mm x 72 mm x 64 mm
Module width: 4 MW

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	941839	PS-M-64.1.1	2CDG510001R0011			1

Switch actuator, 4gang [1) 2)]
For ABB-free@home®
For switching 4 independent 127 V~/230 V~ loads.
Each contact has a manual operation function independent of auxiliary voltage for additionally displaying the contact setting.
The bus can be connected via enclosed terminal block.
Control element: Relay control element
Display elements: Relay control element
Bus voltage: 24 V
Outputs: 4
Suitable for: AC1
Rated current: 16 A, cos ϕ 0.8
Output voltage: 230 V~
Suitable for: AC3
Rated current: 8 A, cos ϕ 0.45
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 90 mm x 72 mm x 64 mm
Module width: 4 MW

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	942089	SA-M-0.4.1	2CDG510006R0011			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Heating actuator, 6gang [1) 2)]
For ABB-free@home®
For controlling thermoelectric actuating drives in heating/cooling systems.
The outputs are protected against short-circuit and overload.
The bus can be connected via enclosed terminal block.
Bus voltage: 24 V
Outputs: 6
Suitable for: ohmic
Rated current: 160 mA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 90 mm x 72 mm x 64 mm
Module width: 4 MW

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	941815	HA-M-0.6.1	2CDG510008R0011			1

Heating actuator, 12gang [1) 2)]
For ABB-free@home®
For controlling thermoelectric actuating drives in heating/cooling systems.
The outputs are protected against short-circuit and overload.
The bus can be connected via enclosed terminal block.
Bus voltage: 24 V
Outputs: 12
Suitable for: ohmic
Rated current: 160 mA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 90 mm x 144 mm x 64 mm
Module width: 8 MW

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	941808	HA-M-0.12.1	2CDG510009R0011			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

DINRail

I/O actuator, 8 gang
For ABB-free@home®
Combination device with 8 binary inputs and 8 switch actuators.
Conventional push-buttons or auxiliary contacts can be connected to 8 channels.
The information of the contact enquiry can be used for activating ABB-free@home® actuators or for recording status information.
The contact polling voltage is made available by the device itself.
Maximum cable length at a cable cross-section of 1.5 mm² < 100 m
For switching 8 independent 230 V~ loads.
Bus voltage: 24 V
Inputs: 8
Polling voltage: 32 V-
Outputs: 8 Normally open contact, potential free (for 1 fan)
Suitable for: AC1
Rated current: 6 A, cos ϕ 0.8
Output voltage: 230 V~
Suitable for: AC3
Rated current: 6 A, cos ϕ0.45
Output voltage: 230 V~
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 90 mm x 144 mm x 64.5 mm
Module width: 8 MW

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	945561	SA-M-8.8.1	2CDG510007R0011			1

Fan coil actuator, MDRC
For ABB-free@home®
For controlling blower convectors.
Supports 2-pipe and 4-pipe system for heating and cooling.
The fan speed levels can be switched using a changeover or step switch function.
Three contacts for switching a three-stage fan.
Two contacts for activating the heating and cooling valves.
Supports 24V and 230V valves.
With two binary inputs for connecting dewpoint and condensation contacts.
The scanning voltage is provided by the device.
The bus connection is provided via the enclosed bus terminal.
Bus voltage: 24 V
Inputs: 2
Polling voltage: 10 V-
Outputs: 3 Normally open contact, potential free
Suitable for: AC3
Rated current: 6 A
Output voltage: 230 V~
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 90 mm x 108 mm x 64.5 mm
Module width: 6 MW

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180433	FCA-M-2.3.1	2CDG510010R0011			1

Blind actuator, 4gang [1) 2)]
For ABB-free@home®
For controlling 4 independent blind or roller shutter drives.
The outputs are inversely blocked.
The bus can be connected via enclosed terminal block.
Bus voltage: 24 V
Outputs: 4
Suitable for: AC3
Rated current: 6 A, cos ϕ 0.45
Output voltage: 230 V~
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 90 mm x 72 mm x 64 mm
Module width: 4 MW

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	941785	BA-M-0.4.1	2CDG510011R0011			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

DINRail

Dimming actuator, 4gang [1) 2) 3)]

For ABB-free@home®

Multi-channel universal dimming actuator for controlling LEDs, incandescent lamps, 230 V halogen lamps, low-voltage halogen lamps with conventional or electronic transformers, and dimmable energy-saving halogen lamps.
For dimmable Retrofit-LEDs (LEDi).
Increasing the max. load via channel bridging possible.
The outputs can be switched parallel in any combination.
Outputs automatically recognise the connected load.
In addition, the operating mode can be selected manually.
Status indication of the channels via LED.
The bus can be connected via enclosed terminal block.
Display elements: Outputs status indication via LED.
Bus voltage: 24 V
Rated voltage: 230 V~
Rated frequency: 50 Hz/60 Hz
Outputs: 4x dimming channel
Suitable for: 230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer.
Rated power: 10 - 315 W/VA
Suitable for: LEDi and energy-saving bulbs; typical
Rated power: 2 - 80 W/VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 90 mm x 144 mm x 64 mm
Module width: 8 MW

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	180358	DA-M-0.4.2	2CKA006220A0395			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

Dimming actuator, 4gang [1) 2)]
For ABB-free@home®
Multi-channel universal dimming actuator for controlling LEDs, incandescent lamps, 127 V/230 V halogen lamps, low-voltage halogen lamps with conventional or electronic transformers, and dimmable energy-saving halogen lam
For dimmable Retrofit-LEDs (LEDi).
Increasing the max. load via channel bridging possible.
The outputs can be switched parallel in any combination.
Outputs automatically recognise the connected load.
In addition, the operating mode can be selected manually.
Status indication of the channels via LED.
The bus can be connected via enclosed terminal block.
Display elements: Outputs status indication via LED.
Bus voltage: 24 V
Rated voltage: 127 V~
Rated frequency: 50 Hz/60 Hz
Outputs: 4x dimming channel
Suitable for: 127 V/230 V incandescent lamps and low-voltage halogen lamps with conventional transformers or electronic transformer.
Rated power: 5 - 150 W/VA
Suitable for: LEDi and energy-saving bulbs; typical
Rated power: 2 - 40 W/VA
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 90 mm x 144 mm x 64 mm
Module width: 8 MW

	Bbn 4011395	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	187425	DA-M-0.4.127.2	2CKA006220A0723			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

DINRail

Binary input, 4gang 1) 2)
For ABB-free@home®
The device detects AC/DC signals of 10 - 230 V via 4 channels. The information of the signal evaluation can be used for controlling ABB-free@home® actuators or for recording status information.
The bus can be connected via enclosed terminal block.
Bus voltage: 24 V
Inputs: 4
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 90 mm x 36 mm x 64 mm
Module width: 2 MW

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	941778	BI-M-4.0.1	2CDG510004R0011			1

2gang binary input, flush-mounted [1) 2)]
For ABB-free@home®
Conventional push-buttons or auxiliary contacts can be connected to 2 channels. The information of the contact enquiry can be used for activating ABB-free@home® actuators or for recording status information.
The contact polling voltage is made available from the binary input itself. Extension of the connecting cables possible by a maximum of 10 m.
Flush-mounted device for installation in a 60 mm device box or distribution box.
The bus can be connected via enclosed terminal block.
Bus voltage: 24 V
Inputs: 2
Polling voltage: 20 V-,
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 39 mm x 40 mm x 12 mm

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	941679	BI-F-2.0.1	2CDG510002R0011			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

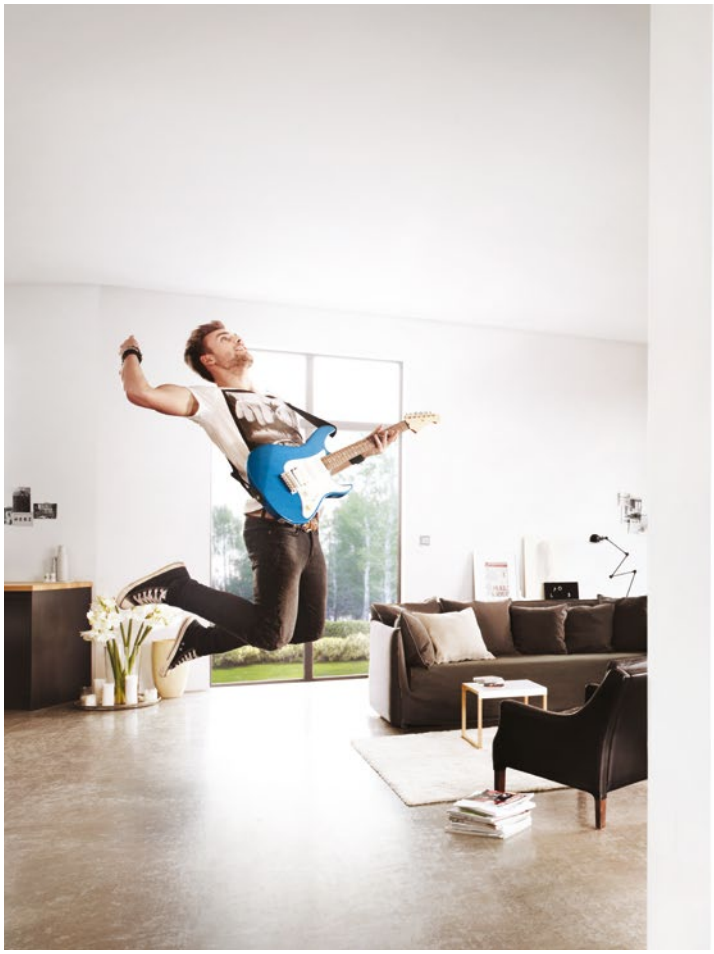
4gang binary input, flush-mounted [1) 2)]
For ABB-free@home®
Conventional push-buttons or auxiliary contacts can be connected to 4 channels. The information of the contact enquiry can be used for activating ABB-free@home® actuators or for recording status information.
The contact polling voltage is made available from the binary input itself. Extension of the connecting cables possible by a maximum of 10 m.
Flush-mounted device for installation in a 60 mm device box or distribution box.
The bus can be connected via enclosed terminal block.
Bus voltage: 24 V
Inputs: 4
Polling voltage: 20 V-,
Protection class (Device): IP 20
Temperature range (Device): -5 °C to 45 °C
Dimensions: (L x W x D): 39 mm x 40 mm x 12 mm

	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code		kg	pc.
	941884	BI-F-4.0.1	2CDG510003R0011			1

1) Programming only with bus voltage applied via the web interface of the System Access Point.
2) Additional information about commissioning and operation is contained in the system manual and the online operating manual of the current e-catalogue.

ABB-free@home®

Communicative and competent – The ABB partner close to you



Advice and assistance close to you. Your electrician will be happy to explain to you in detail the advantages of ABB-free@home® in a face-to-face discussion. This will allow home automation to be planned to suit your individual requirements.

The suitable electrician
The electrician familiar with ABB-free@home® can be found at www.abb.com/freeathome. Simply enter your postcode – and the firms in your region will be displayed.

Now scan the QR code to find out more about the advantages of ABB-free@home®.

Electrical installation solutions for buildings

Door entry system

Index

Welcome - Family home kits	15/6
Welcome - Outdoor stations	15/9
Welcome - Indoor stations	15/24
Welcome - System devices	15/31
Welcome IP - Product overview	15/36
Welcome IP - Outdoor stations	15/38
Welcome IP - Indoor stations	15/41
Welcome IP - System devices	15/42

You may also visit our Door entry systems website:

Door entry system
Simple but impressive

Thanks to its intuitive design, using the ABB-Welcome indoor station is as easy as saying, “hello”. Even without prior experience, residents will instantly understand the easily recognized symbols and functions at a glance.

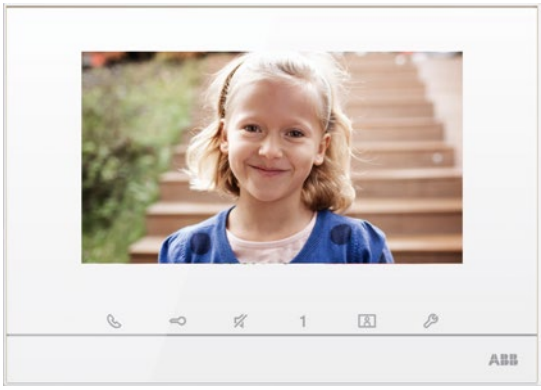


ABB-Welcome is designed with a beautiful modern style, and an elegant look. It is more than just a robust door entry system; ABB-Welcome also helps you to create an atmosphere of comfort, harmony and style in your home.

Communication
For receiving and ending calls.

Door opener
Open the electric door lock.

Mute function
Switch off the microphone of the indoor station during a conversation, and prevent the visitor at the front door from listening in. It can also be used to switch off the bell. The bell switches back on automatically after 10 hours.

1

Programmable button
For customized function, e.g. intercom, second lock control, relay actuator control for light switch or additional lock, etc.

Snapshot
For instantly taking a photo of visitors at the front door during communication.

Settings
For individually configuring the device.

Installation is as easy as 1-2-3. The screwless, snap-in design is used on both the outdoor and indoor stations. This makes installation an easy, quick and enjoyable process for both surface- and flush-mounted versions.

ABB-Welcome is the perfect compliment to your home. And, simple installation makes it easy for ABB-Welcome to become part of your life.

Door entry system
Overview

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01

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02

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03

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04

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06

ABB-Welcome outdoor station - stainless steel

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01 ABB-Welcome outdoor station, one button with/without NFC/IC
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02 ABB-Welcome outdoor station, two buttons with/without NFC/IC
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03 ABB-Welcome outdoor station, three buttons with/without NFC/IC
—
04 ABB-Welcome outdoor station, four buttons with/without NFC/IC
—
05 ABB-Welcome outdoor station, six buttons with/without NFC/IC
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06 ABB-Welcome outdoor station, Keypad with display

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08

ABB-Welcome outdoor station - aluminum

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01 ABB-Welcome outdoor station cover frame, 1 module, Dimensions: 128 x 125 x 19 mm
—
02 ABB-Welcome outdoor station cover frame, 3 modules, Dimensions: 274 x 125 x 19 mm
—
03 ABB-Welcome outdoor station cover frame, 6 modules, Dimensions: 274 x 230 x 19 mm
—
04 ABB-Welcome outdoor station cover frame, 2 modules, Dimensions: 201 x 125 x 19 mm
—
05 ABB-Welcome outdoor station cover frame, 4 modules, Dimensions: 347 x 125 x 19 mm
—
06 ABB-Welcome outdoor station cover frame, 8 modules, Dimensions: 347 x 230 x 19 mm
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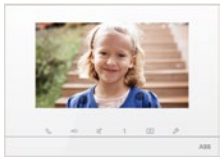
07 ABB-Welcome mini outdoor station, one button
—
08 ABB-Welcome mini outdoor station, two buttons

ABB-Welcome indoor station



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01 ABB-Welcome video indoor station, 7-inch hands-free
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02 ABB-Welcome video indoor station, 4.3-inch hands-free
—
03 ABB-Welcome video indoor station, 4.3-inch handset
—
04 ABB-Welcome video indoor station, basic 4.3-inch hands-free
—
05 ABB-Welcome audio indoor station, handset, three buttons
—
06 ABB-Welcome audio indoor station, handset, six buttons
—
07 ABB-Welcome audio indoor station, hands-free, four buttons

ABB-Welcome system devices

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01 ABB-Welcome telephone gateway
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02 ABB-Welcome IP gateway
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03 ABB-Welcome gateway
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04 ABB-Welcome outdoor video distributor
—
05 ABB-Welcome mini system controller
—
06 ABB-Welcome system controller
—
07 ABB-Welcome lift control module
—
08 ABB-Welcome M adaptor
—
09 ABB-Welcome video distributor
—
10 ABB-Welcome switch actuator
—
11 ABB-Welcome camera interface
—
12 ABB-Welcome guard unit

Door entry system
Welcome - Family home kits

Dimensions: 315 x 184 x 295 mm

Set	Description	Without Induction loop	With indution loop
Audio Kit	**Audio single-family home kit** – Audio outdoor station, 1/2 push button, aluminum – Flush mounted box, size 1/1 – Mini system controller – Audio handset indoor station, 3 buttons, white	**M20001** 	**M20003**
Audio Kit	**Audio single-family home kit** – Audio outdoor station, 1/2 push button, aluminum – Flush mounted box, size 1/1 – Mini system controller – Audio handsfree indoor station, 4 buttons, white	**M20011** 	

Set	Description	Without Induction loop	With indution loop
Video kit	**Video single-family home kit** – Video outdoor station, 1 button, stainless steel – Flush mounted box, size 1/3 – System controller – 7" video hands-free indoor station, white – IP-Gateway	**M20702** 	
Video kit	**Video single-family home kit** – Video outdoor station, 1/2 pushbuttons, aluminum – Flush-mounted box, size 1/2 – MinI system controller – 7" video hands-free indoor station, white	**M20701** 	
Video kit	**Video single-family home kit** – Video outdoor station, 1/2 push button, aluminum – Flush mounted box, size 1/2 – Mini system controller – 4.3" color video handset indoor station, white	**M20311** 	**M20313**
Video kit	**Video single-family home kit** – Video outdoor station, 1/2 push button, aluminum – Flush mounted box, size 1/2 – Mini system controller – 4.3" video hands-free indoor station, white	**M20321** 	**M20323**
Video kit	**Video 1 family kit** – Video outdoor station, 1/2 pushbuttons, aluminum – Flush-mounted box, size 1/2 – Rain hood, size 1/2 – Mini system controller – 4.3" video hands-free indoor station, white	**M20322** 	
Video kit	**Mini OS kit** – Mini video outdoor station, 1 pushbutton, aluminum – Basic 4.3" video hands-free indoor station – Mini system controller	**M20361** 	
Video kit	**Mini OS kit, with ID function** – Mini video outdoor station, 1 pushbutton, with ID card reader, aluminum – Basic 4.3" video hands-free indoor station, with induction loop – Mini system controller – Proximity key fob, ID card, white – Proximity key fob, ID card, black – ID sticker		**M20363**

Door entry system

Welcome - Family home kits

Set	Description	Without Induction loop	With indution loop
Video kit	**Video 2 family kit** – Mini video outdoor station, 2 push button, aluminum – 2× Basic 4.3" video hands-free indoor station, white – Mini system controller	**M20362** 	
Video kit	**Video 2 family kit** – Mini video outdoor station, 2 push button, with ID card reader, aluminum – 2× Basic 4.3" video hands-free indoor station, with indcution loop, white – Mini system controller – Proximity key fob, ID card, white – Proximity key fob, ID card, black – ID sticker		**M20364**
Video kit	**Video 2 family kit** – Mini video outdoor station, 1 pushbutton, with ID card reader, aluminum – Basic 4.3" video hands-free indoor station, with indcution loop, white – Mini system controller – IP-Gateway – Proximity key fob, ID card, white – Proximity key fob, ID card, black – ID sticker		**M20352**
Video kit	**Video 1 family kit** – Mini video outdoor station, 1 push button, aluminum – 4.3" Colour video handset indoor station, white – Mini system controller	**M20371** 	
Video kit	**Video 1 family kit** – Mini video outdoor station, 1 pushbutton, aluminum – 4.3" Video hands-free indoor station – Mini system controller	**M20381** 	
Video kit	**Video single-family home kit without indoor station** – Video outdoor station, 1/2 push button, aluminum – Flush mounted box, size 1/2 – Mini system controller – IP-Gateway (Indoor station is not included in the kit, but all indoor stations range can be selected.)	**M20351** 	
Video kit	**Video 1 family kit** – Mini video outdoor station, 1 pushbutton, aluminum – Min system controller – IP Gateway (Indoor station is not included in the kit, but all indoor stations range can be selected.)	**M20353** 	

Door entry system

Welcome - Outdoor stations

Outdoor station-stainless steel

Audio outdoor station, stainless steel

- Clean design with brushed stainless steel.
- Surface mounting, flush mounting and cavity wall set
- Different mode setting is possible for pushbutton, such as light switch and calling guard
- Weatherproof: Dustproof and waterproof as IP54, and vandal proof as IK07
- Product dimensions: size 1/2: 200 x 125 x 39 mm. size 1/3: 274 x 125 x 39 mm.

Article No.	Order No.	Description	Pack Qty
M21011P1-S		Audio outdoor station, 1 pushbutton, stainless steel	1/19
M21013N3-S		Audio outdoor station, without pushbuttons, size 1/2, stainless steel	1/19
M21013N6-S		Audio outdoor station, without pushbuttons, size 1/3, stainless steel	1/12

Video outdoor station,1 button and 2 button optional

- Clean design with brushed stainless steel
- Surface mounting, flush mounting and cavity wall set
- Different mode setting is possible for pushbutton, such as light switch and calling guard
- Weatherproof: Dustproof and waterproof as IP54, and vandal proof as IK07
- Product dimensions: size 1/3: 274 x 125 x 41 mm. size 1/4: 347 x 125 x 41 mm.

Article No.	Order No.	Description	Pack Qty
M21321P1-S		Video outdoor station, 1 pushbutton, Stainless steel	1/12
M21322P1-S		Video outdoor station, 1 pushbutton, stainless steel, with NFC/IC function	1/12
M21323N3-S		Video outdoor station, without pushbuttons, size 1/3, stainless steel	1/12
M21323N6-S		Video outdoor station, without pushbuttons, size 1/4, stainless steel	1/12

Video keypad outdoor station with speech synthesis

- Clean design with brushed stainless steel
- Built-in card reader in display module, support ID card (M21351K-A) and ID card (M21352K-A)
- Surface mounting (41024F and 51024RH needed), flush mounting (41024F needed) and cavity wall set (51021CS needed)
- Weatherproof: Dustproof and waterproof as IP54, and vandal proof as IK07
- Product dimensions: 347 x 125 x 41 mm.

Article No.	Order No.	Description	Pack Qty
M21321K-S		Video outdoor station with keypad, ID,stainless steel	1/12
M21322K-S		Video outdoor station with keypad, IC,stainless steel	1/12

Door entry system

Welcome - Outdoor stations

NEW

Outdoor station-aluminium

Mini outdoor station, one button / two buttons

- Compact size, surface mounted and flush mounted optional
- 1 button and 2 buttons optional, built-in ID card reader
- Clean design with integrated status display
- Light switch or calling guard programmable for the 2nd button
- Up to 2 locks connections
- Dustproof and waterproof as IP54, and vandal proof as IK07
- Product dimensions
  Mini video outdoor station (99mm width, SM): 168 x 99 x 26 mm
  Mini video outdoor station (105mm width, FM): 180 x 105 x 43 mm
  Pre-installation box: 174 x 98 x 45 mm

Article No.	Order No.	Description	Pack Qty
M21312P1-A		Mini video outdoor station (99mm width, SM), 1 pushbutton, with ID card reader, with surface-mounted box	1/16
M21312P2-A		Mini video outdoor station (99mm width, SM), 2 pushbuttons, with ID card reader, with surface-mounted box	1/16
M21311P1-A		Mini video outdoor station (99mm width, SM), 1 pushbutton, with surface-mounted box	1/16
M21311P2-A		Mini video outdoor station (99mm width, SM), 2 pushbuttons, with surface-mounted box	1/16
M21362P1-A		Mini video outdoor station (105mm width, FM), 1 pushbutton, with ID card reader with flush-mounted box	1/19
M21362P2-A		Mini video outdoor station (105mm width, FM), 2 pushbuttons, with ID card reader with flush-mounted box	1/19
41361F		Pre-installation box	1/19

Audio outdoor station, 1-row pushbutton for 1/2 calls

- The assembled product includes audio module with 1/2 pushbutton (M251022A-A) and 1-module cover frame (51021CF-A)
- Dustproof and waterproof as IP54, and vandal proof as IK07
- Different mode setting is possible for pushbutton, such as 1 call or 2 calls in one row
- Surface mounting (41021F and 51021RH needed) and flush mounting (41021F needed)
- The related tool is also provided in the package
- Product dimension: 128 x 125 x 40 mm.

Article No.	Order No.	Description	Pack Qty
M21021P1-A		Audio outdoor station, 1/2 pushbutton, aluminum	1/19

Video outdoor station, 1-row pushbutton for 1/2 calls

- The assembled product includes camera module (M251021C), audio module with 1/2 push button (M251022A-A) and 2-module cover frame (51022CF-A).
- Dustproof and waterproof as IP54, and vandal proof as IK07.
- Different mode setting is possible for pushbutton, such as 1 call or 2 calls in one row.
- Surface mounting (41022F and 51022RH needed) and flush mounting (41022F needed).
- The related tool is also provided in the package.
- Product dimensions: 201 x 125 x 43 mm.

Article No.	Order No.	Description	Pack Qty
M21351P1-A		Video outdoor station, 1/2 pushbutton, aluminum	1/19

Video keypad outdoor station with speech synthesis

- The assembled product includes camera module (M251021C), audio module with speech synthesis (M251024A-A), keypad module (M251021K-A) and display module (M251021CR/ M251022CR).
- Dustproof and waterproof as IP54, and vandal proof as IK07.
- Built-in card reader in display module, support ID card (M21351K-A) and IC card (M21352K-A).
- Surface mounting (41024F and 51024RH needed) and flush mounting (41024F needed).
- Product dimensions: 345 x 125 x 50 mm.

Article No.	Order No.	Description	Pack Qty
M21351K-A		Video outdoor station with keypad, with ID card reader	1/12
M21352K-A		Video outdoor station with keypad, with IC card reader	1/12

Door entry system

Welcome - Outdoor stations

Module

Camera module

- Video color camera with large detection angle (H 86°, V 67°, D 104°) and manually mechanical adjustment (H ± 15° ,V ± 15°), built-in infrared lighting ensures clear picture and comfortable to eyes at night and hidden surveillance from video indoor station.
- Anti-fog design with built-in heater ensures clear image even in wet conditions.
- Optional to connect one additional analog camera for surveillance inside the video indoor station.
- Product dimensions: 72 x 97 x 41 mm.

Article No.	Order No.	Description	Pack Qty
M251021C		Camera module	1/12/12

(Only for Aluminum)

Audio module, no button

- Audio module is compulsory for any audio or video outdoor station composition.
- 3 LED indicators for operation status indications: call established / system busy, communication possible and door unlocked.
- One lock can be directly connected without independent power supply for the lock.
- Additional terminal for second lock is available.
- Lock release time and speaker volume are adjustable.
- No button.
- Integrated optic sensor for day / night mode.
- Product dimensions: 72 x 97 x 38 mm.

Article No.	Order No.	Description	Pack Qty
M251021A-A		Audio module, aluminum	1/12/12
M251021A-W		Audio module, coated white	1/12/12

(Only for Aluminum)

Audio module, 1-row pushbutton for 1/2 calls

- Audio module is compulsory for any audio or video outdoor station composition.
- 3 LED indicators for operation status indications: call established / system busy, communication possible and door unlocked.
- One lock can be directly connected without independent power supply for the lock.
- Additional terminal for second lock is available.
- Lock release time and speaker volume are adjustable.
- 1-row button.
- Different mode setting is possible such as 1 call or 2 calls in one row, call guard or switching light for the first or second button.
- Integrated optic sensor for day / night mode.
- Product dimension: 72 x 97 x 38 mm.

Article No.	Order No.	Description	Pack Qty
M251022A-A		Audio module, 1 row pushbutton, aluminum	1/12/12
M251022A-W		Audio module, 1 row pushbutton, coated white	1/12/12

(Only for Aluminum)

Audio module, 2-row pushbutton for 2/4 calls

- Audio module is compulsory for any audio or video outdoor station composition.
- 3 LED indicators for operation status indications: call established / system busy, communication possible and door unlocked.
- One lock can be directly connected without independent power supply for the lock.
- Additional terminal for second lock is available.
- Lock release time and speaker volume are adjustable.
- 2-row button.
- Different mode setting is possible such as 1 call or 2 calls in one row, call guard or switching light for the first or second button.
- Integrated optic sensor for day / night mode.
- Product dimensions: 72 x 97 x 38 mm.

Article No.	Order No.	Description	Pack Qty
M251023A-A		Audio module, 2 rows pushbuttons, aluminum	1/12/12
M251023A-W		Audio module, 2 rows pushbuttons, coated white	1/12/12

(Only for Aluminum)

Audio module, no button, with speech synthesis

- Audio module is compulsory for any audio or video outdoor station composition.
- 3 LED indicators for operation status indications: call established / system busy, communication possible, door unlocked.
- One lock can be directly connected without independent power supply for the lock.
- Additional terminal for second lock is available.
- Lock release time and speaker volume are adjustable.
- No button, with speech synthesis to play voice message according to the status.
- Integrated optic sensor for day / night mode.
- Product dimensions: 72 x 97 x 38 mm.

Article No.	Order No.	Description	Pack Qty
M251024A-A		Audio module with speech synthesis, aluminum	1/12/12
M251024A-W		Audio module with speech synthesis, coated white	1/12/12

*

Pushbuttons module, 3-row for 3/6 calls

- Nameplate is extractable by tool, without the need to disassemble the panel.
- Backlight ensures clear visibility at night.
- 3-rows can be set for 3/6 calls.
- Either 1 or 2 calls for 1 row of buttons are set in the audio module.
- Product dimensions: 72 x 97 x 25 mm.

Article No.	Order No.	Description	Pack Qty
M251021P3		3/6 pushbutton module	1/10/8

* Accessory 51021P3 1/3 height cover for 3/6 pushbutton module, quantity: 10

*

Pushbuttons module, 4-row for 4/8 calls

- Nameplate is extractable by tool, without the need to disassemble the panel.
- Backlight ensures clear visibility at night.
- 4-rows can be set for 4/8 calls.
- Either 1 or 2 calls for 1 row of button are set in the audio module.
- Product dimensions: 72 x 97 x 25 mm.

Article No.	Order No.	Description	Pack Qty
M251021P4		4/8 pushbutton module	1/10/8

* Accessory 51021P4 1/4 height cover for 4/8 pushbutton module and audio module with button, quantity: 10

Door entry system

Welcome - Outdoor stations

Keypad module, letters A-Z

- Inputting device for keypad outdoor station.
- Letters from A-Z.
- Scroll up and down for residents‘ names or input letters of the calling name (display module must be accompanied, sorting is progressive upon inputting next letter of name).
- Names or call code can be downloaded from PC though USB cable or can be edited from the keyboard.
- Up to 3,000 names can be saved in the memory.
- Both public password and up to 6, 000 customized passwords are allowed.
- If wrong password is repeatly entered, the keypad will be locked.
- Password available with 3-8 digits and calling code with 1-6 digits.
- Call guard unit is also available.
- Backlight ensures clear visibilty at night.
- Product dimensions: 72 x 97 x 31 mm.

Article No.	Order No.	Description	Pack Qty
M251021K-A		Keypad module, letters A-Z, aluminum	1/10/8
M251021K-W		Keypad module, letters A-Z, coated white	1/10/8
M251021K-S		Keypad module, letters A-Z, stainless steel finish	1/10/8

Keypad module, letters A-L

- Inputting device for keypad outdoor station.
- Letters from A-L.
- Scroll up and down for residents‘ names or input letters of the calling name (display module must be accompanied, sorting is progressive upon inputting next letter of name).
- Calls can also be made by combining number and letter, e.g. 112A.
- Names or call code can be downloaded from PC through USB cable or can be edited from the keyboard.
- Up to 3, 000 names can be saved in the memory.
- Both public password and up to 6, 000 customized passwords are allowed.
- If wrong password is repeatly entered, the keypad will be locked.
- Password available with 3-8 digits and calling code with 1-6 digits.
- Call guard unit is also available.
- Backlight ensures clear visibility at night.
- Product dimensions: 72 x 97 x 31 mm.

Article No.	Order No.	Description	Pack Qty
M251022K-A		Keypad module, letters A-L , aluminum	1/10/8
M251022K-W		Keypad module, letters A-L , coated white	1/10/8

Display module with card reader

- Large screen ensures customized message, code, and legible names.
- Withstands temperatures to -40 °C.
- Wiegand output is available to connect to the third party controller.
- ID card reader (accept the card with frequency of 125KHz) or IC card reader (accept the card with frequency of 13.56MHz) is integrated into the module.
- Up to 3, 000 different cards can be registered.
- Register and delete cards locally in setting menu.
- Includes different feedback sounds for accepting or rejecting the card reader.
- Supports connection to audio module without the keypad module.
- Product dimensions: 72 x 97 x 31 mm.

Article No.	Order No.	Description	Pack Qty
M251021CR		Display module with ID card reader	1/10/8
M251022CR		Display module with IC card reader	1/10/8

Nameplate module

- Can be used to hold the address of the building or the resident directory for keypad outdoor station, or simply to fill the module within the cover frame.
- Backlight ensures clear visibility at night.
- Product dimensions: 72 x 97 x 24 mm.

Article No.	Order No.	Description	Pack Qty
51021DN		Directory nameplate module	1/10/8

Push button module, one round button

- 1 round push button with even backlight ensures legible nameplate at night.
- NFC/IC reader button optional.
- Screwless mounting module compatible for stainless steel and aluminum outdoor station.
- Supporting software ensures high quality nameplate printing.
- Product dimensions: 72 x 97 x 31 mm.

Article No.	Order No.	Description	Pack Qty
51011P1		Pushbutton module, 1 pushbutton	1/10/8
51012P1		Pushbutton module with NFC/IC function, 1 pushbutton	1/10/8

Push button module, two round pushbuttons

- 2 round push button with even backlight ensures legible nameplate at night.
- NFC/IC reader button optional.
- Screwless mounting module compatible for stainless steel and aluminum outdoor station ranges.
- Supporting software ensures high quality nameplate printing.
- Product dimensions: 72 x 97 x 31 mm.

Article No.	Order No.	Description	Pack Qty
51011P2		Pushbutton module, 2 pushbuttons	1/10/8
51012P2		Pushbutton module with NFC/IC function, 2 pushbuttons	1/10/8

Door entry system

Welcome - Outdoor stations

Push button module, three round pushbuttons

- 3 round push button with even backlight ensures legible nameplate at night.
- NFC/IC reader button optional.
- Screwless mounting module compatible for stainless steel and aluminum outdoor station.
- Supporting software ensures high quality nameplate printing.
- Product dimensions: 72 x 97 x 31 mm.

Article No.	Order No.	Description	Pack Qty
51011P3		Pushbutton module, 3 pushbuttons	1/10/8
51012P3		Pushbutton module with NFC/IC function, 3 pushbuttons	1/10/8

Camera module

- For the integration into letter boxes and bell systems of different manufacturers.
- The cutout must be created by the manufacturer.
- Extended audio module assembly with video function.
- Video camera with automatic day/night switchover and infrared LEDs to illuminate the night shots.
- Installed heating to keep the lens free of condensation.
- Vertical/horizontal detection angle: 86°/67°
- Setting angle horizontal/vertical: +/-15°, mechanically adjustable
- Product dimensions: 62 mm x 98 mm x 35 mm

Article No.	Order No.	Description	Pack Qty
83501-101-500-01		Camera module	1/12/12

Audio integration unit

- For the integration into letter boxes and bell systems of different manufacturers.
- Makes audio communication possible.
- Built-in relay for operating the door opener.
- 8 inputs for connecting the doorbell push-switches.
- Adjustable volume.
- With interface for the connection of built-in keypad extensions.
- With interface for the connection of the camera module.
- Product dimensions: 68 mm x 126 mm x 31 mm

Article No.	Order No.	Description	Pack Qty
83110-500-01		Audio integration unit	1/10/8

Extension unit

- Extends the built-in audio module assembly by a further 12 binary inputs.
- For the integration into letter boxes and bell systems of different manufacturers.
- With interface for the connection of additional built-in keypad extensions.
- The built-in audio module can be extended to a maximum of 99 inputs for doorbell push-switches with the aid of the built-in keypad extension.
- Product dimensions: 68 mm x 50 mm x 24 mm

Article No.	Order No.	Description	Pack Qty
83111-500-01		Extension unit	1/10/8

Accessories

Cover frame, size 1/1

- The invisible screw design with provision of double columns is aesthetically pleasing.
- The tool to dismount the end strip is also included in the package.
- Size 1/1, 128 x 125 x 19 mm.

Article No.	Order No.	Description	Pack Qty
51021CF-A		Cover frame, 1-module, size 1/1, aluminum	1/34
51021CF-W		Cover frame, 1-module, size 1/1, coated white	1/34

Cover frame, size 1/2

- The invisible screw design with provision of double columns is aesthetically pleasing.
- The tool to dismount the end strip is also included in the package.
- Size 1/2, 201 x 125 x 19 mm.

Article No.	Order No.	Description	Pack Qty
51022CF-A		Cover frame, 2-module, size 1/2, aluminum	1/34
51022CF-W		Cover frame, 2-module, size 1/2, coated white	1/34

Cover frame, size 1/3

- The invisible screw design with provision of double columns is aesthetically pleasing.
- The tool to dismount the end strip is also included in the package.
- Size 1/3, 274 x 125 x 19 mm.

Article No.	Order No.	Description	Pack Qty
51023CF-A		Cover frame, 3-module, size 1/3, aluminum	1/22
51023CF-W		Cover frame, 3-module, size 1/3, coated white	1/22

Cover frame, size 1/4

- The invisible screw design with provision of double columns is aesthetically pleasing.
- The tool to dismount the end strip is also included in the package.
- Size 1/4, 347 x 125 x 19 mm.

Article No.	Order No.	Description	Pack Qty
51024CF-A		**Cover frame, 4-module, size 1/4, aluminum**	**1/22**
51024CF-W		**Cover frame, 4-module, size 1/4, coated white**	**1/22**

Cover frame, size 1/5

- The invisible screw design with provision of double columns is aesthetically pleasing.
- The tool to dismount the end strip is also included in the package.
- Size 1/5, 420 x 125 x 19 mm.

Article No.	Order No.	Description	Pack Qty
51028CF-A		Cover frame, 5-module, size 1/5, aluminum	1/22

Cover frame, size 2/3

- The invisible screw design with provision of double columns is aesthetically pleasing.
- The tool to dismount the end strip is also included in the package.
- Size 2/3, 274 x 230 x 19 mm.

Article No.	Order No.	Description	Pack Qty
51025CF-W		Cover frame, 6-module, size 2/3, aluminum	1/11
51025CF-W		Cover frame, 6-module, size 2/3, coated white	1/11

Door entry system

Welcome - Outdoor stations

Cover frame, size 2/4

- The invisible screw design with provision of double columns ensures a pleasing appearance.
- The tool to dismount the end strip is also included in the package.
- Size 2/3, 347 x 230 x 19 mm.

Article No.	Order No.	Description	Pack Qty
51026CF-A		Cover frame, 8-module, size 2/4, aluminum	1/11
51026CF-W		Cover frame, 8-module, size 2/4, coated white	1/11

Cover frame, size 2/5

- The invisible screw design with provision of double columns ensures a pleasing appearance.
- The tool to dismount the end strip is also included in the package.
- Size 2/5, 420 x 230 x 19 mm.

Article No.	Order No.	Description	Pack Qty
51029CF-A		**Cover frame, 10-module, size 2/5, aluminum**	**1/11**

End strip

- End strip for outdoor station cover frame.
- 2 types available, one for single-column wide outdoor station (size 1/X, 125 x 19 x 15 mm), the other for double-column wide outdoor station (size 2/X, 230 x 19 x 15 mm)

Article No.	Order No.	Description	Pack Qty
51021EP-A		End strip, size 1/x, aluminum	1/36
51022EP-A		End strip, size 2/x, aluminum	1/20
51021EP-W		End strip, size 1/x, white	1/36
51022EP-W		End strip, size 2/x, white	1/20

Flush mounted box, size 1/1

- The anodized aluminum flush box is fitted with knock down holes for cabling from left, right, bottom or back.
- The product is packed with accessories to ensure quality installation.
- Size 1/1, 126 x 124 x 46 mm.

Article No.	Order No.	Description	Pack Qty
41021F		**Flush-mounted box, 1-module, size 1/1**	**1/19**

Flush mounted box, size 1/2

- The anodized aluminum flush box is fitted with knock down holes for cabling from left, right, bottom or back.
- The product is packed with accessories to ensure quality installation.
- Size 1/2, 199 x 124 x 46 mm.

Article No.	Order No.	Description	Pack Qty
41022F		**Flush-mounted box, 2-module, size 1/2**	**1/19**

Flush mounted box, size 1/3

- The anodized aluminum flush box is fitted with knock down holes for cabling from left, right, bottom or back.
- The product is packed with accessories to ensure quality installation.
- Size 1/3, 272 x 124 x 46 mm.

Article No.	Order No.	Description	Pack Qty
41023F		Flush-mounted box, 3-module, size 1/3	1/12

Flush mounted box, size 1/4

- The anodized aluminum flush box is fitted with knock down holes for cabling from left, right, bottom or back.
- The product is packed with accessories to ensure quality installation.
- Size 1/4, 345 x 124 x 46 mm.

Article No.	Order No.	Description	Pack Qty
41024F		Flush-mounted box, 4-module, size 1/4	1/12

Flush mounted box, size 1/5

- The anodized aluminum flush box is fitted with knock down holes for cabling from left, right, bottom or back.
- The product is packed with accessories to ensure quality installation.
- Size 1/5, 418 x 124 x 46 mm.

Article No.	Order No.	Description	Pack Qty
41028F		Flush-mounted box, 5-module, size 1/5	1/6

Flush mounted box, size 2/3

- The anodized aluminum flush box is fitted with knock down holes for cabling from left, right, bottom or back.
- The product is packed with accessories to ensure quality installation.
- Size 2/3, 272 x 228 x 47 mm.

Article No.	Order No.	Description	Pack Qty
41025F		Flush-mounted box, 6-module, size 2/3	1/6

Flush mounted box, size 2/4

- The anodized aluminum flush box is fitted with knock down holes for cabling from left, right, bottom or back.
- The product is packed with accessories to ensure quality installation.
- Size 2/4, 345 x 228 x 47 mm.

Article No.	Order No.	Description	Pack Qty
41026F		Flush-mounted box, 8-module, size 2/4	1/6

Flush mounted box, size 2/5

- The anodized aluminum flush box is fitted with knock down holes for cabling from left, right, bottom or back.
- The product is packed with accessories to ensure quality installation.
- Size 2/5, 418 x 228 x 47 mm.

Article No.	Order No.	Description	Pack Qty
41029F		Flush-mounted box, 10-module, size 2/5	1/6

Joining fixture

- It is used to integrate size 1/x flush mounted box together (size 1/2, size 1/3, size 1/4, size 1/5) to extend the outdoor station application.
- Product dimensions: 75 x 30 x 30 mm.

Article No.	Order No.	Description	Pack Qty
51021J		Joining fixture for multi- flush mounted boxes connection	1

Door entry system

Welcome - Outdoor stations

Cavity wall set

- For cavity/hallow wall mounting of the flush-mounted wall boxes.
- Product dimensions: 120 x 80 x 10 mm.

Article No.	Order No.	Description	Pack Qty
51021CS		Cavity wall set for outdoor station and 4.3" video handsfree	1/18

Rain hood, size 1/1

- The anodized aluminum rain hood is suitable for both surface mounting (by screwing into the flush box) and flush mounting (supporting tool kit is provided in the package).
- Size 1/1, 128 x 131 x 70 mm.

Article No.	Order No.	Description	Pack Qty
51021RH		Rain hood, 1-module, size 1/1	1/14

Rain hood, size 1/2

- The anodized aluminum rain hood is suitable for both surface mounting (by screwing into the flush box) and flush mounting (supporting tool kit is provided in the package).
- Size 1/2, 201 x 131 x 70 mm.

Article No.	Order No.	Description	Pack Qty
51022RH		Rain hood, 2-module, size 1/2	1/14

Rain hood, size 1/3

- The anodized aluminum rain hood is suitable for both surface mounting (by screwing into the flush box) and flush mounting (supporting tool kit is provided in the package).
- Size 1/3, 274 x 131 x 70 mm.

Article No.	Order No.	Description	Pack Qty
51023RH		Rain hood, 3-module, size 1/3	1/8

Rain hood, size 1/4

- The anodized aluminum rain hood is suitable for both surface mounting (by screwing into the flush box) and flush mounting (supporting tool kit is provided in the package).
- Size 1/4, 347 x 131 x 70 mm.

Article No.	Order No.	Description	Pack Qty
51024RH		Rain hood, 4-module, size 1/4	1/8

Rain hood, size 1/5

- The anodized aluminum rain hood is suitable for both surface mounting (by screwing into the flush box) and flush mounting (supporting tool kit is provided in the package).
- Size 1/5, 420 x 131 x 70 mm.

Article No.	Order No.	Description	Pack Qty
51028RH		Rain hood, 5-module, size 1/5	1/8

Rain hood, size 2/3

- The anodized aluminum rain hood is suitable for both surface mounting (by screwing into the flush box) and flush mounting (supporting tool kit is provided in the package).
- Size 2/3, 274 x 237 x 70 mm.

Article No.	Order No.	Description	Pack Qty
51025RH		Rain hood, 6-module, size 2/3	1/4

Rain hood, size 2/4

- The anodized aluminum rain hood is suitable for both surface mounting (by screwing into the flush box) and flush mounting (supporting tool kit is provided in the package).
- Size 2/4, 347 x 237 x 70 mm.

Article No.	Order No.	Description	Pack Qty
51026RH		Rain hood, 8-module, size 2/4	1/4

Rain hood, size 3/4

- The anodized aluminum rain hood is suitable for both surface mounting (by screwing into the flush box) and flush mounting (supporting tool kit is provided in the package).
- Size 3/4, 347 x 378 x 70 mm.

Article No.	Order No.	Description	Pack Qty
51027RH		Rain hood, 12-module, size 3/4	1/2

Rain hood, size 2/5

- The anodized aluminum rain hood is suitable for both surface mounting (by screwing into the flush box) and flush mounting (supporting tool kit is provided in the package).
- Size 2/5, 420 x 237 x 70 mm.

Article No.	Order No.	Description	Pack Qty
51029RH		Rain hood, 10-module, size 2/5	1/4

Labelling sheet, A4

- Quality labelling sheet for nameplate.
- Easy to be printed and cut.
- Waterproof.
- Size 2/5, 210 x 297 mm.

Article No.	Order No.	Description	Pack Qty
51021L		Labelling sheet for nameplate, A4	
51022L		Labelling sheet for 1/3 height, A4	
51023L		Labelling sheet for 1/4 height, A4	
51024L		Labelling sheet for round pushbutton module, A4	

ID card

- 125 KHz.
- ISO18000-2.

Article No.	Order No.	Description	Pack Qty
51021F-L		Proximity key fob, ID card	
51021B		Proximity badge, ID card	

IC card

- 13.56 MHz.
- ISO14443A.

Article No.	Order No.	Description	Pack Qty
51022F-Y		Proximity key fob, IC card, yellow	
51022F-R		Proximity key fob, IC card, red	
51022F-L		Proximity key fob, IC card, blue	

Door entry system

Welcome - Outdoor stations

Mounting tool

- Spare part for the outdoor station,stainless steel
- Product dimensions: 164 x 26 x 4 mm.

Article No.	Order No.	Description	Pack Qty
51022MT		**Mounting tool, stainless steel**	**1/10**

Label holder for round pushbutton module

- Label holder for the round pushbutton module, with stamped labelling
- Contains one support frame and two extension support frames.

Article No.	Order No.	Description	Pack Qty
83161-500-01		Label holder for round pushbutton	1/18

New Proximity key fob

- Product dimensions: 201 x 131 x 70 mm.

Article No.	Order No.	Description	Pack Qty
51023F-W		New Proximity key fob, ID card, white	
51023F-B		New Proximity key fob, ID card, black	
51024F-W		New Proximity key fob, IC card, white	
51024F-B		New Proximity key fob, IC card, black	

New ID sticker

- Product dimensions: 25 x 25x 0.6 mm.

Article No.	Order No.	Description	Pack Qty
51021S		New ID sticker	
51022S		New IC sticker	

Proximity badge, IC card

- Product dimensions: 40 x 31 x 5 mm.

Article No.	Order No.	Description	Pack Qty
83173-500-01		Proximity badge, IC card	

Quick composition guide for modular pushbutton outdoor station
(3-row or 4-row pushbutton)

Welcome provides a wide range of outdoor stations with pushbuttons by the combination of the modules, covers and boxes.

For pushbutton outdoor stations, it multiples the application by setting as one column or double column for the same pushbutton module. The setting is made by the audio modules. We refer to the pushbutton status as “single row” or “double row.”
3-row and 4-row pushbutton are optional for application.

To compose a pushbutton outdoor station, audio module (with no pushbutton, with 1-row or 2-row pushbutton), pushbutton module (3-row or 4-row pushbutton), cover frame and flush mounted boxes are compulsory. If surface mounting is required, a rain hood is needed.

There is a quick composition table for pushbutton outdoor station on pages 10-11. Please follow the guide below and refer to the table to choose the items needed for the desired pushbutton outdoor station.

Step 1:
Audio or video?
Please refer to page 10 for audio pushbutton outdoor station and page 11 for video pushbutton outdoor station.

Step 2:
3-row or 4-row pushbutton?
Please refer to the 3-row or 4-row pushbutton table for different pushbutton applications.

* It is technically possible but not aesthetically pleasing to combine audio module with pushbutton and 3-row pushbutton module. For better appearance as an outdoor station, the composition of pushbuttons follows the rule that every pushbutton should have the same height. Thus, if 3-row pushbutton module is used, audio module with pushbutton and 4-row pushbutton module are not recommended.

Step 3:
How many calls are needed?
Please decide whether single row or double row pushbutton is needed, then please turn to the button ranges to quickly locate the possible composition.

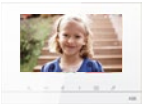
* In case the light and call guard functions are required for the outdoor station, then the total buttons should be the combination of the apartment no. and button number for the extra functions.
** If it's not certain whether single or double pushbuttons for one row is optimal, it is possible to turn to the pushbutton range to see all the possibilities.

Step 4:
Choose the right composition by balancing cost and aesthetics

* There may be more than one possibility of combining outdoor stations by choosing 3-row module or 4-row pushbutton module, choosing a nameplate module or not and setting as single row or double row for the same pushbutton module. It is advisable to consider both cost and aesthetics when making this decision.

Door entry system

Welcome - Indoor stations



7" video hands-free indoor station

- Both push button version and all touch version are available.
- Large 17.8 cm (7") color display with intuitive touch control.
- 6 buttons for communication, unlocking, mute, programmable button (can be set as intercom, call guard unit, etc.), surveillance and setting.
- During resident's absence, voice message of the resident will be played automatically in case of door calls, and three photos of the visitor will be automatically stored.
- The number of pictures that can be stored is decided by the capacity of the SD card (not provided).
- Call transfer among different apartments and guard unit is available.
- Doctor function for automatic unlock.
- 5 ringtones for different call sources, i.e. from default outdoor station, secondary outdoor station,door bell, intercom or guard unit.
- Send SOS alarm to guard unit in emergency.
- Surface mounting and desktop mounting (desktop bracket 42311D is needed).
- The detailed user manual can be downloaded through scanning the QR code on the screen.
- Product dimensions: 155 x 218 x 29 mm.

Article No.	Order No.	Description	Pack Qty
M22331-W		7" hands-free video indoor station, touch version, white	1/16
M22331-B		7" hands-free video indoor station, touch version, black	1/16
83220 AP-624-500-01		7" video hands-free indoor station, pushbutton, white	1/16
83220 AP-681-500-01		7" video hands-free indoor station, pushbutton, black	1/16
83220 AP-683-500-01		7" video hands-free indoor station, pushbutton, silver	1/16

4.3" video hands-free indoor station

- 4.3" color display with on screen display.
- 6 touch film buttons for communication unlocking, mute, programmable button (can be set as intercom, call guard unit, etc.), surveillance and setting.
- 2 photos of the visitor will be automatically stored in the picture memory for door calls during resident's absence.
- Holds up-to 50 photos
- Call transfer among different apartments and guard unit is available.
- Doctor function for automatic unlock.
- 5 ringtones for different call sources, i.e. from default outdoor station, secondary outdoor station, doorbell, intercom or guard unit.
- Broadcast by simply holding and pressing the communication button.
- Surface mounting, flush mounting (flush-mounted box 42311F is needed) and desktop mounting (desktop bracket 42311D is needed), and cavity wall set (51021CS needed)
- The detailed user manual can be downloaded through scanning the QR code on the screen.
- Product dimensions: 137 x 155 x 24 mm.

Article No.	Order No.	Description	Pack Qty
M22311-W		4.3" video hands-free indoor station, white	1/28
M22311-B		4.3" video hands-free indoor station, black	1/28

4.3" video hands-free indoor station with induction loop

- Electromagnetic signals will be emitted by a special inductive loop for auditory indication of any incoming calls. Functionable for users with hearing aids.
- 4.3" color display with on screen display.
- 6 touch film buttons for communication, unlocking, mute, programmable button (can be set as intercom, call guard unit, etc.), surveillance and setting.
- 2 photos of the visitor will be automatically stored in memory for door calls during resident‘s absence.
- Holds up to 50 photos.
- Call transfer among different apartments and guard unit is available.
- Doctor function for automatic unlock.
- 5 ringtones for different call sources, i.e. from default outdoor station, secondary outdoor station, door bell, intercom or guard unit.
- Broadcast by simply pressing and holding the communication button.
- Surface mounting, flush mounting (flush mounted box 42311F is needed), desktop mounting (desktop bracket 42311D is needed) and cavity wall set (51021CS needed).
- The detailed user manual can be downloaded through scanning the QR code on the screen.
- Product dimensions: 137 x 155 x 24 mm.

Article No.	Order No.	Description	Pack Qty
M22313-W		4.3" hands-free video indoor station, induction loop, white	1/28

4.3" video handset indoor station, color display

- Slim indoor station with handset (depth of 45 inches).
- 4.3" color display with on screen display.
- 6 touch film buttons for communication, unlocking, mute, programmable button (can be set as intercom, call guard unit, etc.), surveillance and setting.
- 2 photos of the visitor will be automatically stored in memory for door calls during resident‘s absence.
- Holds up to 25 photos.
- Call transfer among different apartments and guard unit is available.
- Doctor function for automatic unlock.
- 5 ringtones for different call sources, i.e. from default outdoor station, secondary outdoor station, door bell, intercom or guard unit.
- Surface mounting and desktop mounting (desktop bracket 42311D is needed).
- The detailed user manual can be downloaded through scanning the QR code on the screen.
- Product dimensions: 144 x 198 x 45 mm.

Article No.	Order No.	Description	Pack Qty
M22302-W		4.3" handset color video indoor station, white	1/15

Door entry system

Welcome - Indoor stations

4.3" video handset indoor station, color display with induction loop

- Electromagnetic signals will be emitted by a special inductive loop for auditory indication of any incoming calls. Function for users with hearing aids.
- Slim indoor station with handset (depth of 45 inches).
- 4.3" color display with on screen display.
- 6 touch film buttons for communication, unlocking, mute, programmable button (can be set as intercom, call guard unit, etc.), surveillance and setting.
- 2 photos of the visitor will be automatically stored in the memory for door calls during resident‘s absence.
- Holds up to 25 photos.
- Call transfer among different apartments and guard unit is available.
- Doctor function for automatic unlock.
- 5 ringtones for different call sources, i.e. from default outdoor station, secondary outdoor station, door bell, intercom or guard unit.
- Surface mounting and desktop mounting (desktop bracket 42311D is needed).
- The detailed user manual can be downloaded through scanning the QR code on the screen.
- Product dimensions: 144 x 198 x 45 mm.

Article No.	Order No.	Description	Pack Qty
M22303-W		4.3" handset color video indoor station with induction loop, white	1/ 15

Basic 4.3" video hands-free indoor station

- 4.3‘‘ color display with on screen display.
- 6 touch film buttons for communication unlocking, mute, programmble button (can be set as intercom, call guard unit, etc.), surveillance and setting.
- Doctor function for automatic unlock.
- 5 ringtones for different call sources, i.e. from default outdoor station, secondary outdoor station, doorbell, intercom or guard unit. The ringtone can be fixed or cycled
- The detailed user manual can be downloaded through scanning the QR code on the screen.
- Surface mounting and desktop mounting (desktop bracket 42311D is needed).
- Product dimensions: 154 x 134 x 23 mm.

Article No.	Order No.	Description	Pack Qty
M22341-W		Basic 4.3" video hands-free indoor station, white	1/24

Basic 4.3" video hands-free indoor station with induction loop

- Electromagnetic signals will be emitted by a special inductive loop for auditory indication of any incoming calls. Functionable for users with hearing aids.
- 4.3" color display with on screen display.
- 6 touch film buttons for communication, unlocking, mute, programmable button (can be set as intercom, call guard unit, etc.), surveillance and setting.
- 2 photos of the visitor will be automatically stored in memory for door calls during resident‘s absence.
- Holds up to 50 photos.
- Doctor function for automatic unlock.
- 5 ringtones for different call sources, i.e. from default outdoor station, secondary outdoor station, doorbell, intercom or guard unit. The ringtone can be fixed or cycled
- The detailed user manual can be downloaded through scanning the QR code on the screen.
- Surface mounting and desktop mounting (desktop bracket 42311D is needed).
- Product dimensions: 154 x 134 x 23 mm.

Article No.	Order No.	Description	Pack Qty
M22343-W		Basic 4.3" video hands-free indoor station, with induction loop, white	1/24

Audio handset indoor station, 3 buttons

- 1 easy pushbutton for unlock, and 2 additional buttons for self setting functions, e.g. intercom, door status check, second lock release or even calling the security guard, etc.
- Max-mid-mute volume adjuster on the side.
- 2 LEDs to indicate different working status.
- 5 ringtones for different call sources, i.e. from default outdoor station, secondary outdoor station, door bell, intercom or guard unit.
- The activating or deactivating of automatic unlock can be made by simply pressing the unlock button for 10 seconds.
- Surface mounted.
- Product dimensions: 198 x 81 x 43 mm.

Article No.	Order No.	Description	Pack Qty
M22002-W		Audio handset indoor station, 3 buttons, white	1/25

Audio handset indoor station, 3 buttons with induction loop

- 1 easy pushbutton for unlock, and 2 additional buttons for self setting functions, e.g. intercom door status check, second lock release or even calling the security guard, etc.
- Max-mid-mute volume adjuster on the side.
- 2 LEDs to indicate different working status.
- 5 ringtones for different call sources, i.e. from default outdoor station, secondary outdoor station, door bell, intercom or guard unit.
- The activating or deactivating of automatic unlock can be made by simply pressing the unlock button for 10 seconds.
- Electromagnetic signals will be emitted by a special inductive loop to provide hearing assistance to hearing aid users.
- Product dimensions: 198 x 81 x 43 mm.

Article No.	Order No.	Description	Pack Qty
M22003-W		Audio handset indoor station, 3 buttons with induction loop, white	1/25

Audio handset indoor station, 6 buttons

- 1 easy pushbutton for unlock, and 2 additional buttons for self setting functions, e.g. intercom door status check, second lock release or even calling the security guard, etc.
- Max-mid-mute volume adjuster on the side.
- 2 LEDs to indicate different working status.
- 5 ringtones for different call sources, i.e. from default outdoor station, secondary outdoor station, door bell, intercom or guard unit.
- The activating or deactivating of automatic unlock can be made by simply pressing the unlock button for 10 seconds.
- Electromagnetic signals will be emitted by a special inductive loop to provide hearing assistance to hearing aid users.
- Product dimensions: 198 x 81 x 43 mm.

Article No.	Order No.	Description	Pack Qty
M22001-W		Audio handset indoor station, 6 buttons, white	1/25

Door entry system

Welcome - Indoor stations

Audio hands-free indoor station, 4 buttons

- Light button can be customized as room-to-room intercom, call guard unit.
- Different bell tones for door-call and floor-call
- Choice of five different bell sounds
- Simple surface-mounting
- The ringtone can be fixed or cycled
- Floor-call function, a connected button functions as a floor-call button: all indoor stations with the same address trigger a floor call
- Diamentions: 175 x 81 x 22 mm.

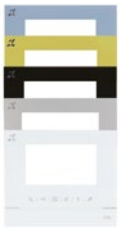
Article No.	Order No.	Description	Pack Qty
83210 AP-624-500-01		Audio handsfree, white	1/26
83210 AP-681-500-01		Audio handsfree, black	1/26
83210 AP-683-500-01		Audio handsfree, silver	1/26

Accessories

Changeable front cover for 4.3" video hands-free indoor station

- 5 face covers in different colors are available, which are easily changeable for 4.3" video hands-free indoor station to meet personal aesthetic preference.

Article No.	Order No.	Description	Pack Qty
52311FC-W		Front cover for 4.3" video hands-free, white	1/36
52311FC-S		Front cover for 4.3" video hands-free, silver	1/36
52311FC-B		Front cover for 4.3" video hands-free, black	1/36
52311FC-G		Front cover for 4.3" video hands-free, golden	1/36
52311FC-L		Front cover for 4.3" video hands-free, light blue	1/36



Changeable front cover for 4.3" video hands-free indoor station with induction loop

- 5 face covers in different colors are available, which are easily changeable for 4.3" video hands-free indoor station with induction loop to meet personal aesthetic preference.

Article No.	Order No.	Description	Pack Qty
52313FC-W		Front cover for 4.3" video hands-free with induction loop, white	1/36
52313FC-S		Front cover for 4.3" video hands-free with induction loop, silver	1/36
52313FC-B		Front cover for 4.3" video hands-free with induction loop, black	1/36
52313FC-G		Front cover for 4.3" video hands-free with induction loop, golden	1/36
52313FC-L		Front cover for 4.3" video hands-free with induction loop, light blue	1/36

Flush mounted box for 4.3" video hands-free indoor station

- Metal box for flush mounted 4.3" video hands-free indoor stations.
- Product dimensions: 145 x 125 x 27 mm.

Article No.	Order No.	Description	Pack Qty
42311F		Metal flush mounted box	1/60

Desktop bracket

- Full metal design with brushed finish base, suitable for 7" all touch, 4.3" hands-free video indoor station, 4.3" handset video indoor station and guard unit.
- Product dimensions: 125 x 107 x 134 mm.

Article No.	Order No.	Description	Pack Qty
42311D		Metal desktop bracket	1/ 12

Door entry system

Welcome - Indoor stations

Handset with induction loop

- Suitable for audio handset indoor station with induction loop and 4.3" video handset indoor station with induction loop.
- Product dimensions: 144 x 53 x 23 mm.

Article No.	Order No.	Description	Pack Qty
52303HS-W		Handset with induction loop (spare part)	1/9

Jumper

- Jumper set for audio / video handset indoor stations is used to set the address, master / slave indoor station and RC on / off of indoor stations.
- Product dimensions: 120 x 80 x 10 mm.

Article No.	Order No.	Description	Pack Qty
52001J		Jumper set for audio handset indoor station	1/10
52301J		Jumper set for 4.3" video handset indoor station	1/10

Cavity wall set

- For cavity wall mounting of the flush-mounted wall boxes.
- Product dimensions: 120 x 80 x 10 mm.

Article No.	Order No.	Description	Pack Qty
51021CS		Cavity wall set for outdoor station and 4.3" video handsfree	1/18

Door entry system

Welcome - System devices

System controller

- As the “brain” of the individual system, it manages the communication between the outdoor station and the indoor station.
- Two working modes : “all on” and “one on”.
- If in “all on” mode, and the apartment contains more than 1 video indoor station, all the screens in the apartment will be on while only one is on if in “one on” mode.
- It can also serve as auxiliary BUS power supply when connected to gateway in certain mode.
- 1 LED for normal working condition indication.
- Overheat, short-circuit and lightening protection.
- Product dimensions: 90 x 144 x 65 mm.

Article No.	Order No.	Description	Pack Qty
M2300		System controller, 1.2A output, MDRC 8U	1/10

Mini system controller

- As the “brain” of the individual system, it manages the communications between the outdoor station and the indoor station.
- Two working modes: “all on” and “one on”.
- If in “all on” mode, and the apartment contains more than 1 video indoor station, all the screens in the apartment will be on while only one is on if in “one on” mode.
- It can also serve as auxiliary BUS power supply when connected to gateway in certain mode.
- 1 LED for normal working condition indication.
- Overheat, short-circuit and lightening protection.
- Product dimensions: 90 x 72 x 65 mm.

Article No.	Order No.	Description	Pack Qty
M2301		Mini system controller, 0.65A output, MDRC 4U	1/10

Gateway

- It offers 5 different modes which can be set by dip switch: apartment gateway, floor gateway, building gateway, auxiliary BUS power supply interface and line amplifier.
- Product dimensions: 90 x 72 x 65 mm.

Article No.	Order No.	Description	Pack Qty
M2302		Gateway, MDRC 4U	1/10

Video outdoor distributor

- Used for buildings with more than 1 outdoor station.
- 2-way inputs are connected to different outdoor stations.
- Product dimensions: 90 x 36 x 65 mm.

Article No.	Order No.	Description	Pack Qty
83325/2-500-01		Video outdoor distributor, MDRC 2U	1/20

Door entry system

Welcome - System devices

Guard unit

- 4.3" touch screen and 6 touch film buttons can ensure the communication with calls from outdoor station, indoor station or other guard unit (if any).
- It can be manually or automatically set into intercept mode to increase security level for all users or only certain individuals.
- Surveillance can be done through the camera of outdoor stations or integrated analog camera.
- Missed calls and alarm messages stored in the memory can be reviewed.
- It can be surface mounted on the wall or desktop mounted (desktop bracket 42311D is needed).
- Product dimensions: 144 x 198 x 45 mm.

Article No.	Order No.	Description	Pack Qty
M2303		Guard Unit	1/15

Video distributor

- This compact device supports 4-way outputs connected to different apartments or different high-rise buildings.
- Flush-mounted into box or surface mounted through the hole in the middle, or DIN rail mounted via DIN adaptor(Article no. 53001DR)
- Product dimensions: 45 x 45 x 26 mm.

Article No.	Order No.	Description	Pack Qty
M2304		Video distributor, FM	1/18

Switch actuator

- This compact device has 3 working modes: extend door bell, door opener and time relay.
- Local pushbutton can be connected as control input.
- The switching duration of unlock or switching on lightings is adjustable.
- Flush-mounted or DIN rail mounted via DIN adaptor(Article no. 53001DR)
- Product dimensions: 51 x 51 x 29 mm.

Article No.	Order No.	Description	Pack Qty
M2305		Switch actuator, FM	1/18

BNC connector

- Used to connect the external camera to the camera interface or outdoor station’s camera module.
- The connector accepts a BNC plug connection directly.
- Product dimensions: 42 x 15 x 14 mm.

Article No.	Order No.	Description	Pack Qty
55001BC		BNC connector	1/10

Camera interface

- Supports up to 4 analog 3rd party cameras for one device.
- Supports camera connection to the existing video/audio outdoor station.
- Supports transfer of image from guard unit to the indoor station.
- Supports the camera for viewing the area of the floor (for example with the connection from indoor station to this interface, where it connects to the analog camera.
- Supports input and output of video signal of outdoor station to 3rd party VDR during the call, which can be viewed from the video indoor station).
- Supports installation in DIN, surface mounted.
- Product dimensions: 77 x 61 x 25 mm.

Article No.	Order No.	Description	Pack Qty
83327-500-01		4-way analog camera interface	1/18

DIN rail adaptor

- One DIN rail adaptor fit for all the flush mounted devices: video distributor, switch actuator, and camera interface
- Adjustable and consistent looking cover can be taken out if needed.
- Product dimensions: 90 x 72 x 65 mm.

Article No.	Order No.	Description	Pack Qty
53001DR		DIN rail adaptor	1/10

IP Gateway & ABB-Welcome App

- The installation of the ABB-Welcome App enables to use smartphones and tablets (iOS and Android) as virtual video indoor station.
- Both WIFI and remote access under 3G/4G through internet service provider.
- IP Gateway acts as a PC interface to program the telephone gateway more efficiently.
  New features:
- Enables the integration with ABB Comfort touch as indoor station.
- Supports to monitor multi-cameras connected with camera interface
- Supports intercom calls, including home to home & room to room call by ABB-Welcome App
- Supports to communicate with guard unit by ABB-Welcome App
- Supports to control relay actuator, and one actuator can be activated during the call if necessary by ABB-Welcome App
- Supports to control two locks during the call by ABB-Welcome App
- Supports to make a SOS call if there is emergency by ABB-Welcome App
- Notification function of App is always available: while App is open in the foreground, background or even closed totally.
- Product dimensions: 90 x 180 x 65 mm.

Article No.	Order No.	Description	Pack Qty
83342-500-01		IP Gateway, MDRC 10U	1/24

Telephone Gateway

- PSTN Telephone integrated as audio indoor station.
- Unlock the door, switch the light, communication can be done through normal telephone.
- Any mobile device can be set as extended indoor station.
- Efficient programming through PC by IP Gateway.
- Product dimensions: 90 x 72 x 65 mm.

Article No.	Order No.	Description	Pack Qty
83350-500-01		Telephone Gateway	1/10

Door entry system

Welcome - System devices

Lift control module

- Enhance security to allow authorized visitor/resident to ONLY go to the designated floor while unauthorized visitor can not activate any floor button in the lift.
- Efficient programming through PC by dedicated commissioning software.
- Each module supports up to 16 floors, total up to 16 modules can be cascaded.
  Size of relay mode: 216 x 110 x 45 mm; size of M adaptor: 90 x 72 x 65 mm.

Article No.	Order No.	Description	Pack Qty
M2307		Lift control relay module	1/30
M2306		M adaptor (two functions: PC adaptor and lift control module)	1/10

NEW

2-wire adaptor

- supports to connect PC with management software into 2-wire DES system
- PC management software supports centralized management of user card no. /user names/
  logic addresses, registration/deletion/change.
- Supports the building system without floor system
- PC management software records system logs, e,g unlock log, SOS log.
- PC management software supports to configure lift control modules.
- 2-wire adaptor dimensions: 90 x 180 x 65 mm

Article No.	Order No.	Description	Pack Qty
M2308		2-wire adaptor, MDRC 10U	1/24

NEW

External camera

- Analogue camera solutions for the camera interface from the ABB-Welcome range
- Three types are optional for different application, normal camera/dome camera/mini dome camera
- Image Sensor: 1/3” 1.3MP SONY Exmor CMOS.
- Effective Pixels: 1305(H)×1049(V).
- Resolution: 700TVL
- Horizontal detection angle: 30 °- 90° (manually adjustable for video camera & dome camera); 75°(fixed for mini dome camera)
- S/N Ratio: ≥50 dB
- Min. illumination (Day): 0.1 Lux @ F2.0
- Min. illumination (Night): 0 Lux @ F2.0
- Video signal: 1 x CVBS, 1Vpp, 75 Ohm (BNC)
- White Balance: AWB, 1 800 K – 10 800 K
- Lens: 2.8-12 mm (manually adjustable for video camera & dome camera); 3.6 mm (fixed for mini dome camera)
- IR Range: 50 m (video camera), 40 m (dome camera), 30 m (mini dome camera)
- Input Voltage: DC 12 V +/- 10 %
- Dustproof and waterproof as IP 66
- Product dimensions:
  Video camera: 286 x 86 x 77 mm
  Dome camera: 130 x 119 x 104 mm
  Mini dome camera: 105 x 94 x 83 mm

Article No.	Order No.	Description	Pack Qty
83550/1-500-01		Video camera	1/4
83550/2-500-01		Dome camera	1/12
83550/3-500-01		Mini dome camera	1/12

Notes

ABB-Welcome IP
Product overview

—
01

—
02

—
03

—
04

—
05

—
06

—
07

—
01 Video keypad outdoor station, stainless steel
—
02 Video outdoor station, stainless steel
—
03 Mini video outdoor station, aluminum
—
04 Secondary mini video outdoor station, aluminum
—
05 IC/ID-card reader, stainless steel
—
06 7" video hands-free indoor station
—
07 Guard unit

—
01

—
02

—
03

—
04

—
05

—
06

—
07

—
01 Flush-mounted box, size 1/4, aluminum
—
02 Flush-mounted box, size 1/3, aluminum
—
03 Pre-installation box, grey
—
04 Lift control module
—
05 Relay module
—
06 IP gateway
—
07 Power supply

Outdoor stations

Stainless steel

Video keypad outdoor station, stainless steel

Description	Video outdoor station with display, transponder and keypad serves as communication device with the indoor station, guard unit or property management.	
Features	- 1M pixel high definition and with 130° wide angle view camera (anti-fog) - Supports to open the door by passwords(public/private), NFC cellphones, C/NFC cards or ID cards. - Elevator calling after door is released - Surveillance by residents, guard unit or property management - Customized welcome message on outdoor display - Call forward in security mode - Support 3rd party access control system - After flush-mounted installation, the outdoor station sticks out 7 mm above the wall	
Technical details	- Flush mounting - Dustproof and waterproof as IP54, vandal proof as IK07 - Dimensions: 347 x 135 x 49 mm	
Version	With ID	With IC/NFC
Article no. **Order no.**	H81371K-S 2TMA100010X0007	H81372K-S 2TMA100010X0008

Video keypad outdoor station, stainless steel

Description	Video outdoor station with transponder and pushbutton(s) serves as end device for the communication with the indoor station, guard unit or property management.			
Features	- 1M pixel high definition and 130° wide angle view camera (anti-fog) - Available with 1 or 2 pushbuttons - Supports to unlock by passwords or cards (IC/NFC), call to resident / guard unit - Surveillance by residents or guard unit possible - Support 3rd party access control system - After flush-mounted installation, the outdoor station sticks out 7 mm above the wall			
Technical details	- Flush mounting and surface mounting - Dustproof and waterproof as IP54, vandal proof as IK07 - Dimensions: 247 x 135 x 49 mm			
Version	1 pushbutton	1 pushbutton, with NFC/IC card reader	2 pushbuttons	2 pushbuttons, with NFC/IC card reader
Article no. **Order no.**	H81371P1-S 2TMA100010X0003	H81372P1-S 2TMA100010X0004	H81371P2-S 2TMA100010X0005	H81372P2-S 2TMA100010X0006

IC/ID-card reader to stainless steel

Description	The stand-alone card reader allows to unlock doors and gives access only to authorized users.
Features	- Supports entering the home with ID/ IC cards - 3 LED indicators
Technical details	- Dustproof and waterproof: IP44 - Product dimension: 125 x 120 x 25 mm
Order no. **Article no.**	YSM14-CR+ 2TMA060090X0001

Outdoor stations
Aluminum

Mini video outdoor station, aluminum

Description	Mini outdoor station with transponder and pushbutton(s) serves as communication device with the indoor station, guard unit or property management.			
Features	- 0.3M pixel and 100°wide angle view camera - (anti-fog with inside heater) - 1 or 2 pushbuttons with up to 2 locks connections - With ID card reader (64 cards) - Surveillance by residents or guard unit - Supports 3rd party access control system - After flush-mounted installation, the outdoor station sticks out 10 mm above the wall			
Technical details	- Compact size, surface mounted by wiegand output and flush mounted - Dustproof and waterproof as IP54, vandal proof to IK07 - Dimensions for flush-mounted: 180 x 105 x 43 mm - Dimensions for surface-mounted: 168 x 99 x 26 mm			
Version	1 push button, ID, surface-mounted	2 push button, ID, surface-mounted	1 push button, ID, flush-mounted	2 push button, ID flush-mounted
Article no. **Order no.**	H81312P1- 2TMA110010A0001	H81312P2-A 2TMA110010A0002	H81362P1-A 2TMA110010A0003	H81362P2-A 2TMA110010A0004

Secondary mini video outdoor station, aluminum

Description	The secondary outdoor station is equipped with one pushbutton. It serves for calling the resident for a second confirmation directly at the front door.
Features	- 0.3M pixel and 100° wide angle view camera (anti-fog) - One push button only - Surveillance only by residents - Support 3rd party access control system - After flush-mounted installation, the outdoor station sticks out 10 mm above the wall
Technical details	- Flush mounted installation - Dustproof and waterproof as IP54, vandal proof as IK07 - Product dimension: 180 x 105 x 43 mm
Article no. **Order no.**	H81361P1-A 2TMA110010A0005

Outdoor stations
Accessories

Flush-mounted box, size 1/3, aluminum

Description	Mounting of outdoor stations into the wall.
Features	- The anodized aluminum flush box is fitted with knock down holes for cabling from left, right, bottom or back. - The product is packed with accessories to ensure quality installation.
Technical details	- Product dimension: 263 x 110 x 42 mm
Article no. **Order no.**	41023F+ 2TMA110160A0001

Flush-mounted box, size 1/4, aluminum

Description	Mounting of outdoor stations into the wall.
Features	- The anodized aluminum flush box is fitted with knock down holes for cabling from left, right, bottom or back. - The product is packed with accessories to ensure quality installation.
Technical details	- Product dimension: 336 x 110 x 42 mm
Article no. **Order no.**	41024F+ 2TMA110160A0002

Pre-installation box

Description	Serves for the mounting of mini outdoor station into the wall for higher stability.
Features	- The anodized pre-installation box is fitted with knock down holes for cabling from left right, bottom or back. - The product is packed with accessories to ensure quality installation.
Technical details	- Product dimension: 174 x 98 x 45 mm
Article no. **Order no.**	41361F 2TMA110010N0001

Indoor stations

7" video hands-free indoor station

Description	Indoor video station displays everything what is happening in front of the front door. It supports multiple functions to control surveillance and communication with other indoor stations, outdoor stations and guard units.		
Features	- Large 17.8 cm (7") color display with a TFT touch control screen, resolution 1024 x 600 pixel. - 6 quick buttons for calls with visitors, guard unit or property management, unlock the door, mute signal or sound, text mes sage to guard or property management, intercom home-to home or apartment-to-apartment, absent audio messaging to residents and visitors - Supports second call waiting with picture in picture mode and the showing of the third incoming call as missing call - Integrated multimedia player for pictures and video - 3 different colors: white, black, gold		
Technical details	- Surface-mounted installation - Dustproof and waterproof: IP30 - Product dimensions: 216 x 153 x 25 mm		
Version	white color	black color	gold color
Article no. **Order no.**	H82351-W 2TMA110050W0001	H82351-B 2TMA110050B0001	H82351-G 2TMA110050G0001

Guard unit

Description	The guard unit provides access to various services using the intuitive icons menu on the screen. Communication is possible with indoor stations, outdoor stations and other guard units.
Features	- Stainless steel desktop frame with 7" white color display with intuitive control - 6 mechanical shortcut buttons - Both handset and hands-free communication possible - Unlock the door, call foward, surveillance of outdoor station and community IP camera, door release, alarm messages - Additionally with installation file for property management office including Windows version, server installation and client installation - Property management software supports the communication with outdoor and indoor station and guard unit, surveillance of outdoor station and community IP camera, receiving alarm information, bulletin and text messaging with indoor stations, we come message for outdoor station, card management, history storage include intercom and unlock the doors
Technical details	- Desktop mounted - Dustproof and waterproof: IP30 - Product dimensions: 332 x 239 x 127mm
Article no. **Order no.**	HSM36-GU 2TMA110050W0002

System devices

Power supply

Description	Power supply supplies the power for system devices.
Features	- Includes battery backup interface for mains failur - Supports over-voltage, over-current, over-heat and short-circuit protection.
Technical details	- Lightning proof, dustproof and waterproof: IP30 - Product dimensions: 175 x 90 x 65 mm
Article no. **Order no.**	YSM01-PS 2TMA010080N00001

Elevator control

Description	Lift control module servers as the communication interface to the elevator system. Relay module supplies the relays output to communicate with dry contact input of elevator.	
Features	- High security by allowing authorized visitors/residents to go ONLY to the designated floor. - Authorize elevator floor access for visitor after door has been released - Authorize elevator floor access for neighbor during apartment to apartment - intercom Calling the elevator via indoor station before going out - Efficient programming through PC by dedicated commissioning software. - Up to 16 modules can be cascaded.	
Technical details	- Surface mounted - Size of relay mode: 210 x 110 x 45 mm - Size of M adaptor 71 x 90 x 65 mm.	
Version	Lift control module	Relay module
Article no. **Order no.**	YSM23-LC 2TMA010150G0001	4825-Y 2TMA010150G0003

IP Gateway

Description	The IP gateway serves as apartment entry gateway to gain security for your home private devices.
Features	- Dual LAN port to isolate private devices from public device - Supports ABB-Welcome IP app connection (Android and iOS) - Supports multiple indoor station(s) in one apartment
Technical details	- Lightning proof, dustproof and waterproof: IP30 - Product dimension: 107 x 90 x 65 mm
Article no. **Order no.**	H8301 2TMA110160H0001

Electrical installation solutions for buildings
Intrusion alarm systems

Index

Alarm Systems	16/3
Motion Detectors	16/19
Magnetic Contacts	16/20
Glass Break Detectors	16/22
Lock Monitoring	16/24
Panic Buttons	16/25
Technical Detectors	16/26
Arming Systems	16/30
Signalling Devices	16/31
Installation Material	16/32
Batteries	16/34

You may also visit our Intrusion alarm systems website:

Intrusion alarm systems
Intrusion Systems – We make buildings safe and secure

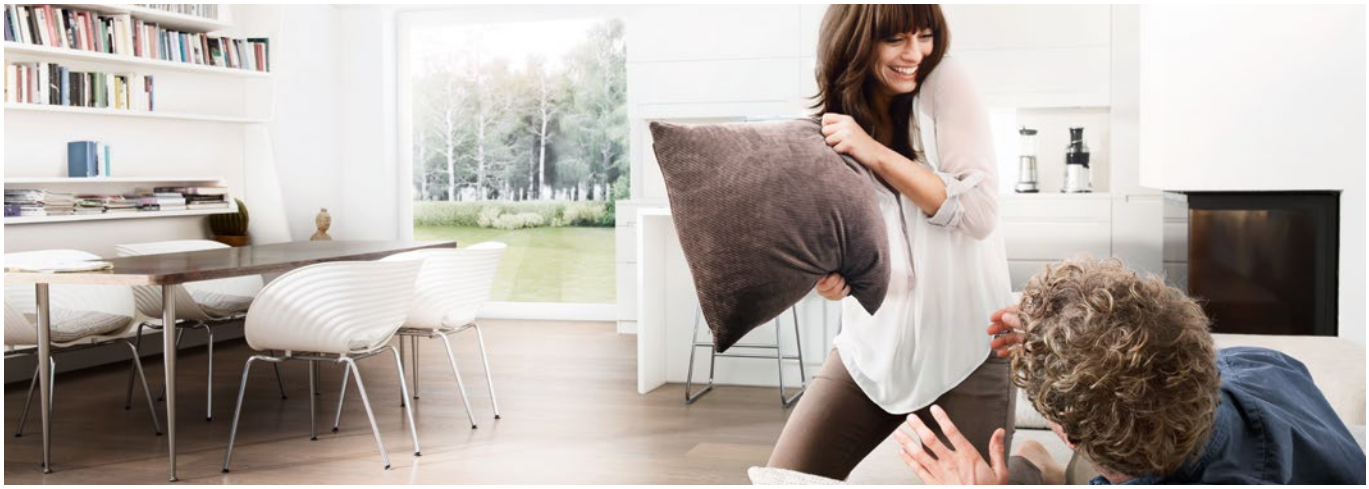


ABB combines reliable alarm technology with easy-to-use home and building automation technologies. This allows the entire system to react directly in cases of emergency. The ABB offer includes a perfect solution: alarm panels, arming modules and alarm sensors (glass break sensors, motion detectors and more). The security system can be connected to building automation systems to become a smarter solution.
We offer reliable Intrusion Alarm Systems for intrusion-, hold-up- and technical alarms. The intrusion alarm systems are conform to the requirements of EN 50131.

Highest safety & security in case of an alarm
If an alarm is triggered, lights can be switched on and shutters can be opened as an additional deterrent. Even when you're at home, ABB solution can, for example, ensure the peripheral protection of your house and, in the event of an alarm, also switch on lights together with the siren and open the shutters.

Being safe at home, even when the alarm system is not activated
Imagine the following: you are at home, some intruders may try to gain access at night or using unwatched entrances. The alarm system is switched off. You can activate the panic function by a press of a button: lights switch on, blinds roll up.

Increased comfort and safety
By disarming the security system, the system switches the lights on in the entrance area and sets the heating to comfort mode. All the security sensors, such as those for water, gas, and smoke are active at all times. If there is an alarm, they control useful functions such as sockets, shutters and lights.

Intrusion alarm systems

Alarm Systems

This section shows the Alarm Systems that are available from ABB from the protection of small to medium properties, residential as well as commercial.

Alarm System – ABB-secure@home

Alarm Panels

SAS-W1.1E
SAS-W2.1E

SAS-W1.1F
SAS-W2.1F

Central Unit **NEW**

The central unit is at the heart of the ABB-secure@home® system; it complies with EN 50131-1 grade 2 class I standard.
It communicates with other system devices based on radio frequency with two-way protocol, by making the following features available to the user:

- management of anti-intrusion and home safety devices;
- management of anti-panic signaling;
- alarm notification via voice or SMS messages to the programmed telephone numbers;
- interfacing ABB-free@home® to integrate safety and home automation systems.

The central unit, equipped with a backup battery, indicates a power failure and its subsequent recovery inside the home.
Via the integrated GSM unit, available into some specific models, it can send alarms both in speech synthesis and SMS messages, to a maximum of 12 telephone numbers. In addition, the GSM unit enables the reception of commands through SMS messages.
Spare rechargeable battery pack (Order code: 2CSY255111R0801).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
with GSM, Square, glass white	–	SAS-W1.1E	2CSY233921R0003		1.37	1
Basic, Square, glass white	–	SAS-W2.1E	2CSY245181R0004		1.37	1
with GSM, Square, glass black	–	SAS-W1.1F	2CSY233541R0003		1.37	1
Basic, Square, glass black	–	SAS-W2.1F	2CSY255461R0004		1.37	1

Intrusion alarm systems

Alarm Systems

Startkit

ABB-secure@home Startkit **NEW**

The startkits represent the installation base for the solutions of extended system, containing all the basic devices usually common to any installation. They are easily expandable to fit any customer needs.

SAS-W1.1E

SAD-W1.1F

SMC-W1.1A

SMD-W1.1A

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Startkit GSM, white	–	SSK-W1.1E	2CSY295371R0051		4.87	1
It includes the following:						
Central Unit with GSM, Square	–	SAS-W1.1E	2CSY233921R0003		1.37	1
Preconfigured Remote Control, Square	–	SAD-W1.1F	2CSY202821R0305		0.07	1
Perimeter Magnet Reed Contact Detector	–	SMC-W1.1A	2CSY255791R0104		0.165	1
Indoor Passive IR Motion Detector	–	SMD-W1.1A	2CSY255701R0105		0.09	1

ABB-secure@home Startkit **NEW**

The startkits represent the installation base for the solutions of extended system, containing all the basic devices usually common to any installation. They are easily expandable to fit any customer needs.

SAS-W2.1E

SAD-W1.1F

SMC-W1.1A

SMD-W1.1A

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Startkit Basic, white	–	SSK-W2.1E	2CSY295411R0050		4.87	1
It includes the following:						
Central Unit Basic, Square	–	SAS-W2.1E	2CSY245181R0004		1.37	1
Preconfigured Remote Control, Square	–	SAD-W1.1F	2CSY202821R0305		0.07	1
Perimeter Magnet Reed Contact Detector	–	SMC-W1.1A	2CSY255791R0104		0.165	1
Indoor Passive IR Motion Detector	–	SMD-W1.1A	2CSY255701R0105		0.09	1

Intrusion alarm systems

Alarm Systems

Motion Detectors

Motion Detectors – Indoor

SMD-W1.1A

Indoor Passive IR Motion Detector **NEW**

The indoor passive IR motion detector reveal the presence of intruders inside the controlled area, providing pet immunity. The is equipped with a passive IR sensor with Fresnel lens and by default it operates with a wide-ranging coverage (90° angle and 11 m distance); it is possible, through a different configuration, to make it operate with a long-distance coverage (10° angle and 17 m distance). This device communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or delayed mode (with a programmable delay from 0 to 90 seconds that can be different for input and output).
It is possible to configure these parameters during the system commissioning.
Spare lithium battery (Order code: 2CSY255331R0802).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SMD-W1.1A	2CSY255701R0105		0.09	1
Mounting Bracket for IR Motion Detector, white	–	SIM-W2.1A	2CSY255101R0607			1

SKP-W2.1A
SMD-W2.1D

Dual Passive IR Perimeter Motion Detector **NEW**

The dual passive IR perimeter motion detector protects doors and/or windows using a tent-type cover on the opening and two infrared sensors. The device is also equipped with an extra input (it can be disabled, leaving only the active IR mode) where you can connect an external wired magnetic contact (with its anti-tampering).
The detector provides the anti-masking feature (that can be disabled).
It is supervised by the central unit at programmable intervals (every 15 minutes by default); it can be programmed in real time or delayed mode (with a programmable delay from 0 to 90 seconds that can be different for input and output). It is possible to configure these parameters during the system commissioning.
Spare lithium battery (Order code: 2CSY255331R0802).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SMD-W2.1A	2CSY235871R0103		0.22	1
brown	–	SMD-W2.1D	2CSY200091R0103		0.22	1

Motion Detectors – Outdoor

SMD-W4.1A

Perimeter Bidirectional Dual Passive IR Motion Detector NEW

The perimeter bidirectional dual passive IR motion detector allows the external control of the building's perimeter, ideal for the protection of doors and windows. It has to be installed on a wall.
Inside the machine there are four infrared detectors, two per side; both sensors on one side, coupled, can be adjusted horizontally at 0° or 3°. In the vertical direction, for each side, the upper sensor is fixed, while the lower one is adjustable to 4 positions (with detection distance of 2, 5, 8 and 12 m).
The alarm is triggered only if both sensors, even on just one side, detect a presence; this operation mode makes the device particularly suitable to avoid false signals due to the presence of pets. This device communicates bidirectionally with the central unit, that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or delayed mode (with a programmable delay from 0 to 90 seconds that can be different for input and output). It is possible to configure these parameters during the system commissioning.
Spare lithium battery (Order code: 2CSY255331R0802).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SMD-W4.1A	2CSY254971R0202		0.57	1

SMD-W5.1A

Compact Dual Passive IR Perimeter Motion Detector NEW

This compact-size device allows to control the building's external perimeter and it is particularly suitable for the protection of doors and windows. it has to be installed on the wall.
The curtain-type detection area (5° detection angle) has an adjustable length from 2 to 5 meters.
The device is internally fitted with two infrared detectors, one of which is adjustable.
The alarm is triggered only if both sensors detect a presence; this operation mode makes the device particularly suitable to avoid false signals due to the presence of pets.
The detector provides also an anti-masking function.
It communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or delayed mode (with a programmable delay from 0 to 90 seconds, that can be different for input and output).
It is possible to configure these parameters during the system commissioning.
Spare lithium battery (Order code: 2CSY255331R0802).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SMD-W5.1A	2CSY254981R0203		0.32	1

Intrusion alarm systems

Alarm Systems

SMD-W3.1A

Outdoor Dual Passive IR Motion Detector **NEW**

The outdoor dual passive IR motion detector is suitable to control the building's external areas. It has to be installed on wall or pole.
The device integrates two infrared detectors: the upper one is fixed, the lower one is vertically adjustable in 5 positions (with 2, 3, 6, 8 and 12 m average coverage area). The alarm is triggered only if both sensors detect a presence; this operation mode makes the device particularly suitable to avoid false signals due to the presence of pets.
The horizontal detection area is 90°. It can be rotated according to six possible angle positions. The detector provides an anti-masking function (that can be disabled).
This device communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or delayed mode (with a programmable delay from 0 to 90 seconds that can be different for input and output). It is possible to configure these parameters during the system commissioning.
Spare lithium battery (Order code: 2CSY255331R0802).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SMD-W3.1A	2CSY255211R0201		0.55	1

SMD-W6.1A

Outdoor Dual Passive IR Motion Detector for Height **NEW**

This device, specific to be installed on the wall at a height of 2.5 - 3 m, allows to control building's external areas. Through the two IR detectors, the device indicates the presence of intruders avoiding false alarm alerts.
The detector provides an anti-masking function (that can be disabled).
This device communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or delayed mode (with a programmable delay from 0 to 90 seconds that can be different for input and output).
It is possible to configure these parameters during the system commissioning.
Spare lithium battery (Order code: 2CSY255331R0802).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SMD-W6.1A	2CSY255311R0204		0.55	1

Magnetic Contacts

SMC-W1.1D
SMC-W1.1A

Perimeter Magnet Reed Contact Detector NEW

The perimeter magnet reed contact detector controls doors, windows and detects their opening or closing through the internal reed contact and the external magnet. This device communicates bidirectionally with the central unit that supervises it at programmable intervals (every 15 minutes by default); it can be programmed in real time or delayed mode (with a programmable delay from 0 to 90 seconds that can be different for input and output).
It is possible to configure these parameters during the system commissioning.
Spare lithium battery (Order code: 2CSY255331R0802).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SMC-W1.1A	2CSY255791R0104		0.165	1
brown	–	SMC-W1.1D	2CSY255731R0104		0.165	1

Magnetic Contacts – Accessories

SMC-W3.1A

Magnet Reed Contact for Surface/Flush Mounting NEW

The device signals the opening of windows or doors. As flush mounting device, it can be instaled in 8 millimetes round holes; to be installed as surface mounting, it needs the provided adapter.
It must be necessarily connected to a perimeter magnet reed contact detector (SMC-W1.1x) or to a dual passive IR perimeter motion detector (SMD-W2.1x); for this purpose it is equipped with a 1.2 meter connection cable.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SMC-W3.1A	2CSY295241R0606		0.12	1
brown	–	SMC-W3.1D	2CSY295201R0606		0.12	1

SMC-W2.1

Rolling Door Magnet Reed Contact NEW

The device signals the opening of overhead or rolling doors. It must be necessarily connected to a perimeter magnet reed contact detector (SMC-W1.1x) or to a dual passive IR perimeter motion detector (SMD-W2.1x); for this purpose it is equipped with a 1.2 meter connection cable.
It is made of aluminum with high resistance to the transit of heavy vehicles.
The minimum fixing distance is 20 millimeters from ferrous materials and 25 mm from non-ferrous materials.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SMC-W2.1	2CSY255341R0602		0.12	1

Intrusion alarm systems

Alarm Systems

SLM-W1.1

Roller Shutter Sensor **NEW**

The device detects the lifting of shutters through the movement of the retractable rope.
It is made of thermoplastic material; the rope is 3.5 m long.
It must be necessarily connected to a perimeter magnet reed contact detector (SMC-W1.1x).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SLM-W1.1	2CSY255001R0603		0.28	1

SGB-W1.1A

Shock Inertial Sensor **NEW**

This device detects a possible shock occurred on a door, window or the surface on which it is installed. Equipped with a 2-meter connection cable, it must be necessarily connected to a perimeter magnet reed contact detector (SMC-W1.1x). Assembly: projecting on door/window/generic surfaces using screws or double-sided adhesive tape.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SGB-W1.1A	2CSY255871R0604		0.07	1

Technical Detectors

STD-W1.1

Secure@home Wireless Interface Module for Busch-Smoke Alarm **NEW**

The module is required for interfacing the smoke detectors (article no. 6800-0-2721) or heat detectors (article no. 6800-0-2723) to the central unit.
The module is equipped with an integrated lithium battery – minimum battery life: 10 years.
The device features a bidirectional communication with the central unit that supervises it with a programmable supervision interval (typically every 15 minutes). It is possible to configure this parameter during the system commissioning.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	STD-W1.1	2CSY254961R0701		0.02	1

STD-W5.1A

Water Detector **NEW**

It detects the presence of water. The minimum detectable level of the liquid is 1 millimeter, but it can be adjusted to higher levels.
It is equipped with an anti-tamper (breakage or removal), self-diagnostics and control of battery charge device.
The detector ic composed by the interface module and the flood detection probe. It features a bidirectional communication with the central unit that supervises it with a programmable supervision interval (typically every 15 minutes).iIt is possible to configure this parameter during the system commissioning.
Spare lithium battery (Order code: 2CSY255331R0802).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	STD-W5.1A	2CSY255191R0705		0.15	1

Arming Systems

SAD-W1.1F

Preconfigured Remote Control **NEW**

The remote control is a mobile system device used to manage the anti-intrusion system in the simplest way. It has 5 with symbolic identification.
One key is freely configurable and the other 4 keys are pre-configured with the following functions: external arming, internal arming, disarming and panic alarm. All the keys are equipped with LEDs.
Spare lithium button battery, 3V (CR2032) are normally available on the market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
glass black	–	SAD-W1.1F	2CSY202821R0305		0.07	1

SAD-W2.1F

Remote Control **NEW**

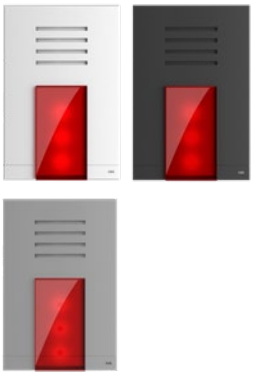
The remote control is a mobile system device used to manage the anti-intrusion system in the simplest way. It has 5 fully configurable keys with numerical identification; each of them can be confiured to arm/disarm the anti-intrusion zones, but also to trigger secial functions such as anti-theft alarm, panic alarm, first aid alarm. All the keys are equipped with fully configurable LEDs.
Spare lithium button battery, 3V (CR2032) normally available on the market.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
glass black	–	SAD-W2.1F	2CSY251641R0306		0.07	1

Intrusion alarm systems

Alarm Systems

Signalling Devices



SSD-W1.1A
SSD-W1.1B
SSD-W1.1C

Outdoor Siren **NEW**

The outdoor siren is a two-way self-powered device capable of emitting acoustic and light alarms. It is installed outdoor on a wall and is equipped with anti-opening, anti-removal, anti-perforation, anti-shock protection, as well as an anti-foaming patented system.
Alarm sound type, duration, sound levels and LEDs, etc.can be configured and personalized while commissioning the system.
Spare battery pack (Order code: 2CSY254991R0803).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Square, white	–	SSD-W1.1A	2CSY277631R0502		2.17	1
Square, anthracite	–	SSD-W1.1B	2CSY229751R0502		2.17	1
Square, silver	–	SSD-W1.1C	2CSY296961R0502		2.17	1

Batteries and Installation Material

SBA-W1.1

Rechargeable Battery Pack, Ni-Mh, 6 V, 1.6 Ah **NEW**

This is the central units' dedicated battery pack. It is rechargeable, therefore it normally must not be replaced. Buy a spare battery only if its duration is significantly decreased, which could mean that the battery has reached its end-of-life.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SBA-W1.1	2CSY255111R0801		0.02	1

SBA-W2.1

Lithium Battery, 3 V, 1.4 Ah **NEW**

This lithium batteries are the ones used by all the ABB-secure@home safety and security sensors.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SBA-W2.1	2CSY255331R0802		0.01	1

SBA-W3.1

Battery Pack, LR20, 7.5 V, 12 Ah **NEW**

This is the outdoor sirens's dedicated battery pack.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SBA-W3.1	2CSY254991R0803		0.40	1

SIM-W1.1

Wireless Repeater **NEW**

This device repeats the signal between detectors, remote controls, sirens and central units, extending the range to the radio frequency transmissions.
The repeater features a bidirectional communication with the central unit that supervises it with a programmable supervision interval (typically every 15 minutes).It is possible to configure these parameters during the system commissioning.
Up to 4 repeaters can be configured for each central unit; each repeater has a list of devices to be managed: the update of the devices list for a repeater is done directly through specific functions of the central unit.
The device can be powered by a plug-in 220 V power supply; in this case the battery has a backup function in the event of a mains power failure.
It is equipped with an anti-tamper (breakage or removal), self-diagnostics and control of battery charge device.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SIM-W1.1	2CSY255201R0601		0.47	1

Intrusion alarm systems

Alarm Systems

Alarm System – ABB safe&smart

Alarm Panels

GM/A 8.1

KNX Security Panel, SM

for the protection of small to medium residential or commercial properties against intrusion and technical faults. The Security Panel is suitable for up to five logical areas. It has 8 integrated zones for detectors, a Security Bus for Bus-detectors, Bus-Zone Modules and Setting devices, Ethernet connection (RJ45) for programming, operating and displaying system status via Web-Browser and an integrated KNX interface. The Security Panel GM/A 8.1 complies with the requirements to VdS classes A, B and C, to the European Standard EN 50131, Grade 1 to 3 and to ISO/IEC 62642 Grade 1 to 3.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	GM/A 8.1	2CDG110150R0011		10.5	1
Off the wall tamper contact for GM/A	–	WA/Z 1.1	2CDG110174R0011		0.2	1

System Components

BT/A 1.1

BT/A 2.1

Keypad for GM/A 8.1

to connect to Security Panel GM/A 8.1 via the Keypad-Bus. The Keypad allows easy operation of the Security Panel. System messages are displayed on a four-line LCD display. Fife Keypads can be connected to each Security Panel. There is no need for an external voltage supply, the keypads are supplied via the Keypad-Bus.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Black	–	BT/A 1.1	2CDG280001R0011		0.5	1
White	–	BT/A 2.1	2CDG280002R0011		0.5	1

MG/A 4.4.1

Zone Module, 4-fold

to connect to Security Panel GM/A 8.1 via the Security-Bus. For expansion of the Security-Panel by 4 detector zones. Used for connection to the exterior perimeter detectors such as magnetic reed contacts and passive glass break sensors. The module has 4 zones to which several detectors can be connected. The status of each zone is displayed with a status LED. The Zone Module delivers the control signals and the supply voltage for the external detectors. There is no need for an external voltage supply, the Zone Modules are supplied via the Security-Bus.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
to mount in the Security Panel housing	–	MG/E 4.4.1	2CDG110178R0011		0.1	1
in a surface mounting housing for installation in the building	–	MG/A 4.4.1	2CDG110186R0011		0.1	1

Motion Detectors

IR/XB
IR/XC

Passive IR Bus Motion Detector, 15 m

For direct connection to the security-bus of the Intrusion Alarm Panel GM/A 8.1. The motion detectors with passive infra-red technology are registered for VdS classes B/EN Grade 2 and C/EN Grade 3 (anti-masking monitored). They facilitate monitoring of an area with an IR range of up to 15 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS B/EN Grade 2	–	IR/XB	2CDG230023R0011		0.15	1
VdS C/EN Grade 3	–	IR/XC	2CDG230024R0011		0.15	1

EIM/XB
EIM/XC

Dualtech Bus Motion Detector, 15 m

For direct connection to the security-bus of the Intrusion Alarm Panel GM/A 8.1. The Dual-Motion Detector combines proven passive infra-red technology with temperature independent microwave technology. The combination of both functional principles results in a detector featuring high immunity to false alarms, even with unfavourable ambient conditions, and which still has high detection security. The detectors are registered for VdS classes B/EN Grade 2 and C/EN Grade 3 (anti-masking monitored). They facilitate monitoring of an area with an IR range of up to 15 m.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS B/EN Grade 2	–	EIM/XB	2CDG230025R0011		0.15	1
VdS C/EN Grade 3	–	EIM/XC	2CDG230026R0011		0.15	1

MW

Mounting Bracket for IR/x and EIM/x

For motion detectors.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	MW	GHV9230039V0020		0.03	1

Intrusion alarm systems

Alarm Systems

Arming Systems

L240/BS

SafeKey Evaluation Module

For connection of the SafeKey components as well as all components required for a setting door (magnetic contacts, lock bolt switching contact, bolt lock, internal siren). For direct connection to the security-bus of the Intrusion Alarm Panel GM/A 8.1. The management of the electronic keys from the SafeKey range is undertaken completely via the WebUI of the Security Panel GM/A 8.1.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	L240/BS	GHQ3050031R0001		0.13	1

WEL/A, ES

SafeKey Wall Reader, SM

For setting/unsetting with the Evaluation Module L240/BS. The unit is actuated by inserting the electronic SafeKey chipkey. The SafeKey Wall Reader WEL is equipped with the key reader and an acknowledgement buzzer. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
stainless steel	–	WEL/A, ES	GHQ3050023R0001		0.38	1

WELT/A, ES

SafeKey Wall Reader with Keypad, SM

For setting/unsetting with the Evaluation Module L240/BS. The unit is actuated by inserting the electronic SafeKey chipkey and/or code. The SafeKey Wall Reader WELT is equipped with the key reader, keypad and an acknowledgement buzzer. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
stainless steel	–	WELT/A, ES	GHQ3050024R0001		0.45	1

SCS

SafeKey Chipkey

It is an electronic carrier medium for setting / unsetting via a SafeKey Wall Reader. A SafeKey Chipkey can be authorized for any number of different SafeKey systems with different levels of authorization.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SCS	GHQ3050027R0001		0.02	1

Signalling Devices

SSS

Electronic Solid-State Siren

Electronic solid-state siren with intermittent tone for alarm purposes in indoor installations.
External dimensions: ø x H = 90 x 37 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSS	GHV9270001V0001		0.17	1

SSF/G

Outdoor Sirene

An aluminium protective housing with additional protective enamel coating. Protected against sabotage by a case tamper contact. The alarm inputs are wired onto a terminal strip. With fixing screw (M4) for potential equalization on the base.
Dimensions: H x W x D = 200 x 205 x 88 mm; Color: RAL 9002 Environmental class III to VdS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSF/G	GHQ3050017R0001		1.64	1

SSF/GB

Combination Signalling Device

An aluminium protective housing with additional protective enamel coating. Protected against sabotage by a case tamper contact. The alarm inputs are wired onto a terminal strip. With fixing screw (M4) for potential equalization on the base.
Dimensions: H x W x D = 258 x 205 x 88 mm; Color: RAL 9002 Environmental class III to VdS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSF/GB	GHQ3050018R0001		1.81	1

Installation Material

SAD/GAP

Distribution Enclosure, SM

For installation of the Bus Module L240/BS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Surface mounting, white	–	SAD/GAP	2CDG220021R0011		0.131	1

Intrusion alarm systems

Alarm Systems

Batteries

SAK17

Sealed Lead Acid Battery, 12 V DC

Sealed lead acid battery for power backup up of alarm systems. Maintenance free.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
17 Ah	–	SAK17	GHV9240001V0013		7.15	1

Intrusion alarm systems

Motion Detectors

Motion detectors directly evaluate movements within closed rooms. The change to specific physical variables is evaluated and signaled as an attempted intrusion. The passive infrared detector is used for normal environmental influences.
For critical environmental influences a combination of passive infrared and microwave, so called dual technologie, is used.
Compatible systems: ABB safe&smart, KNX.

IR/KB

Passive IR Motion Detector, 15 m

For conventional wiring to zone inputs of an Intrusion Alarm Panel or a KNX Sercurity Terminal. With a volumetric lens for interior monitoring. Can be optionally set for hall monitoring function up to 15 m. Color: RAL 9010 pure white; for use up to VdS class B/EN Grade 2.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS B/EN Grade 2	–	IR/KB	2CDG230027R0011		0.15	1

EIM/KB

Dualtech Motion Detector, 15 m

The dual detector is based on proven infrared technology and microwave detection. The detector enables a detection range of 15 m with 17 zones on 6 levels. The range of the infra-red component and the microwave can be adjusted separately using a jumper. Up to VdS class C/EN Grade 3; Color RAL 9010 pure white.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
VdS B/EN Grade 2	–	EIM/KB	2CDG230028R0011		0.15	1
VdS C/EN Grade 3	–	EIM/KC	2CDG230029R0011		0.15	1

EIM/D

Dual Ceiling Detector

Operates according to the proven detection principle of infra-red technology and microwave over 360°. The range of the infrared component can be adapted via the mounting height while the range of the microwave can be adjusted separately using a jumper. The detector is fitted with a walk test LED. Colour: RAL 9010 pure white.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	EIM/D	2CDG230039R0011		0.14	1

Intrusion alarm systems

Magnetic Contacts

Magnetic contacts monitor windows, doors, hatches or other access points for their open or closed state. The state is evaluated by the alarm system to trigger an intrusion alarm. Compatible systems: ABB safe&smart, ABB-secure@home, KNX.

MRS/W

Magnet Reed Contact Set

For opening surveillance of windows and doors, complete for bolting or drilling. Contents: 1 magnet, 1 reed contact with 4.0 m connection cable LIYY 4 x 0.14 mm², 2 housings, 2 spacer plates, 2 flanges and 4 anti-magnetic fixing screws. VdS class B.

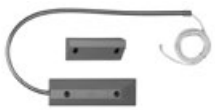
Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	MRS/W	GHQ3201972R0001		0.1	1
brown	–	MRS/B	GHQ3201972R0002		0.1	1
Saver Set (20 pcs.), white	–	VMRS/W	GHQ3201972R0011		1.99	1
Saver Set (20 pcs.), brown	–	VMRS/B	GHQ3201972R0012		1.99	1

SMC-W3.1A

Magnet Reed Contact for Surface/Flush Mounting NEW

The device signals the opening of windows or doors. As flush mounting device, it can be instaled in 8 millimetes round holes; to be installed as surface mounting, it needs the provided adapter.
It must be necessarily connected to a perimeter magnet reed contact detector (SMC-W1.1x) or to a dual passive IR perimeter motion detector (SMD-W2.1x); for this purpose it is equipped with a 1.2 meter connection cable.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SMC-W3.1A	2CSY295241R0606		0.12	1
brown	–	SMC-W3.1D	2CSY295201R0606		0.12	1



RTK

Rolling Door Magnet Reed Contact Set

For monitoring opening or rolling doors or other large doors in the industrial field. Contents: 1 magnet, 1 reed contact with 2 m connection cable 4 x 0.14 mm², 1 m protective tubing and 1 set of mounting accessories. Degree of protection: IP 68; Environmental class to VdS 4; VdS class B.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	RTK	GHQ3201973R0021		0.43	1

SMC-W2.1

Rolling Door Magnet Reed Contact **NEW**

The device signals the opening of overhead or rolling doors. It must be necessarily connected to a perimeter magnet reed contact detector (SMC-W1.1x) or to a dual passive IR perimeter motion detector (SMD-W2.1x); for this purpose it is equipped with a 1.2 meter connection cable.

It is made of aluminum with high resistance to the transit of heavy vehicles.

The minimum fixing distance is 20 millimeters from ferrous materials and 25 mm from non-ferrous materials.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SMC-W2.1	2CSY255341R0602		0.12	1

Intrusion alarm systems

Glass Break Detectors

Glass break detectors evaluate glass breakage of glass surfaces from windows or doors. Compatible systems: ABB safe&smart, ABB-secure@home, KNX.

SPGS/W

Glass Break Sensor

For opening surveillance of windows and doors, complete for bolting or drilling. VdS class B.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SPGS/W	GHV9220004V0009		0.11	1
brown	–	SPGS/B	GHV9220004V0010		0.11	1

AGM

Acoustic Glass Break Detector

Acoustic Glassbreak Detector evaluates typical glass-breakage noises. Built in microphone.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	AGM	GHV9210030V0010		0.09	1

SGB-W1.1A

Shock Inertial Sensor NEW

This device detects a possible shock occurred on a door, window or the surface on which it is installed. Equipped with a 2-meter connection cable, it must be necessarily connected to a perimeter magnet reed contact detector (SMC-W1.1x). Assembly: projecting on door/window/generic surfaces using screws or double-sided adhesive tape.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SGB-W1.1A	2CSY255871R0604		0.07	1

LKS

Loctite Adhesive for Glass Break Detector

Loctite Adhesive for mounting Glass Break Sensors SPGS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	LKS	GHQ4001906R0001		0.06	1

GP2

Tester for Glass Break Detector

Mechanical tester for SPGS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	GP2	GHV9220004V0004		0.1	1

Intrusion alarm systems

Lock Monitoring

The lock monitoring of windows, doors, hatches or other access points for their unlocked or locked state ensures that every access point is locked before the building is left. Also it helps to reduce false alarms in the building. Compatible systems: ABB safe&smart, ABB-secure@home, KNX.

WRK/W

Lock Bolt Switching Contact with Cable

For installation in the strike plate, for lock monitoring on doors. Water-tight IP 67, with 2.5 m connection cable LIYY 3 x 0.14 mm². VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	WRK/W	2CDG250003R0011		0.03	1

VSUE

Window Lock Monitoring Contact

Lock monitoring is carried out with a special magnet and a reed contact. The magnet is mounted on the push rod of the window sash while the reed contact is mounted on the frame. The connection cable LIYY 4 x 0.14 mm² is 4 m in length. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	VSUE	GHV9210018V0022		0.09	1

SLM-W1.1

Roller Shutter Sensor **NEW**

The device detects the lifting of shutters through the movement of the retractable rope.
It is made of thermoplastic material; the rope is 3.5 m long.
It must be necessarily connected to a perimeter magnet reed contact detector (SMC-W1.1x).

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	SLM-W1.1	2CSY255001R0603		0.07	1

Intrusion alarm systems

Panic Buttons

Panic buttons are push buttons which can be pressed by a person in danger. The actuation of a panic button immediately leads to an alarm. In case of a hold-up alarm the panic button can be used to trigger a remote alarm only. Compatible systems: ABB safe&smart, KNX.

ND/W

Emergency Call Button, white

For manual alarm tripping. Complies with the police regulations since it features permanent trip recognition, momentary-contact function, with cover contact. Surface mount version. Colour: white. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Surface mounting	–	ND/W	GHQ7132443R0011		0.15	1
Flush mounting	–	NDU/W	GHQ7132443R0021		0.15	1

NDA/W

Cover Plate for Emergency Call Button

Used primarily in the banking sector or other institutions, where unintentional alarm triggering is possible due to public access.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white	–	NDA/W	GHQ7132443R0004		0.03	1

Intrusion alarm systems

Technical Detectors

No matter whether they are smoke, gas or water leakage, the right detector will recognize it.

SGL

Gas Detector

For measurement and evaluation of the concentration of natural gas or liquefied gas in the air. The detector requires a 10 – 30 V DC voltage supply and has a normally open relay output contact for connection to the intrusion alarm panels features an LED display and a Piezo buzzer. For ceiling and wall mounting.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SGL	GHQ3050008R0001		0.16	1

SWM 4

Water Detector for Zone Inputs

A resin-encapsulated water detector with gold-plated Termipoint pins, detects water ingress, e.g., pipe fractures, ingress of groundwater and sewage, water damage caused by washing machines and dishwashers etc. before the damage becomes too expensive.
For operation directly on detector circuits of intrusion alarm panels or security terminals.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SWM 4	GHQ4030001R0004		0.16	1

SWM 4/RN

Water Detector with Relay Output

Features a potential free changeover contact output, an LED parallel output and a LED display. The detector resets itself automatically when the affected area dries out. The device draws its power from an external 10 ... 23 V DC voltage source.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SWM4/RN	GHQ4030001R0012		0.23	1

6833/01-84

Busch-Smoke Alarm® ProfessionalLine

For early detection of smouldering fires and open fires with smoke development indoors according to the photooptical measurement principle (Tyndall). With installed Lithium battery. Battery life min. 10 years. With test button and muting. Can be networked with up to 12 detectors using the radio module. Can be networked via 2-wire twisted pair cable with up to 12 detectors. Acoustic alarm: installed horn (85 dBA). Cyclic functional test. Including attachment material – VdS certified. Conform to EN 14604 studio white.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
not networkable	–	6833-84	6800-0-2717			1
networkable	–	6833/01-84	6800-0-2718			1

6835/01-84

Busch-Heat Alarm ProfessionalLine
Signal triggered at over 57 °C. With installed Lithium battery. Battery life min. 10 years. With test button and muting. Can be networked via 2-wire twisted pair cable with up to 12 detectors. Can be networked with up to 12 detectors using the radio module. Acoustic alarm: installed horn (85 dBA). Cyclic functional test. Including attachment material – VdS certified. Conform to EN 14604.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white	–	6835/01-84	6800-0-2722			1

6827-84

Busch-Smoke Alarm® Radio Module
For wireless networking of multiple Busch smoke alarms® / heat alarms.
With installed Lithium battery. Battery life min. 10 years. Radio frequency: 868 MHz.
Range: max. 100 m outdoors, max. 30 m indoors.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	6828	6800-0-2514			1

6829-84

Busch-Smoke Alarm® Relay
For connecting external systems, e.g. KNX. Relay contact, floating changeover contact 230 V~ max. 5 A. Cable connection: up to 2 x 2 x 1.5 mm². With installed radio module.
Rated voltage: 230 V~.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white	–	6829-84	6800-0-2515			1

6824-84

Busch-Smoke Alarm® Remote Control
For service purposes. With muting, test and search function.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
studio white	–	6824-84	6800-0-2516			1

Intrusion alarm systems

Technical Detectors

FC650/O

Optical Smoke Detector

Optical smoke detector in threshold alarm technology that detects smoke according to the scattered-light principle The detectors feature an alarm indicator on the detector head that is visible from all angles, and which can be be triggered with a permanent magnet for test purposes. A detector base is provided for mounting and cable connection purposes into which the detector is simply screwed in via the bayonet connection. Each detector is equipped with an alarm LED, which displays the stored alarm in the event of an a alarm Detector/base diameter: 110 mm. VdS approved.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FC650/O	2CDG430079R0011		0.09	1

FC650/TDIFF

Differential Maxium Heat Detector

The FC650/TDIFF is a thermal maximum and rate heat detector with an alarm temperature of 58 °C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FC650/TDIFF	2CDG430080R0011		0.09	1

FC650/TMAX

Maximum Heat Detector

Static Heat Detector in threshold alarm technology, – trigger temperature 78 °C. The detectors feature an alarm indicator on the detector head that is visible from all angles, and which can be be triggered with a permanent magnet for test purposes. A detector base is provided for mounting and cable connection purposes into which the detector is simply screwed-in via the bayonet connection. Each detector is equipped with an alarm LED, which displays the stored alarm in the event of an a alarm. Detector/base diameter: 110 mm. VdS approved.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FC650/TMAX	2CDG430081R0011		0.09	1

FC600/BREL

Detector Base, 12 V

Enables system-independent connection of the FC650 series fire detector to systems or devices that are not specifically designed for this detector technology. Examples include Intrusion Alarm Panels, KNX Security Terminals, elevator controls or other signal processing equipment. The detector base must be supplied by either a 12 V or a 24 V DV voltage supply. A floating 30 V DC/1 A changeover contacting is provided for transferring an alarm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FC600/BREL	2CDG430051R0011		0.08	1

FPA03

Testing Aerosol for Smoke Detectors, 250 ml

For optical smoke detector testing, 250 ml.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	FPA03	GHV9020012V0021			1

Intrusion alarm systems

Arming Systems

Arming devices for alarm systems ensure a comfort and secure usage for activation or deactivation of the intrusion alarm functions. Compatible systems: ABB safe&smart, KNX.

ESPE/M

Electrical Mini Bolt Lock

The ESPE/M Mini Bolt Lock is used together with an intrusion alarm system to implement the inevitability condition. The motorized bolt lock additionally locks the door to the set area, preventing unintentional opening of the door when the intrusion alarm system is set. The ESPE/M Mini Bolt Lock is connected to the L240/BS Evaluation module for GM/A 8.1 KNX Security Panel.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ESPE/M	2CDG270010R0011		0.13	1

ESPE

Electromechanical Bolt Lock

Prevents access to the set area of an Intrusion Alarm Panel. The unit is mounted in the door frame. Only a single bore or the counterpart for the locking bolt in the door panel is required. Suitable for use with WEL and WELT. VdS class C.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	ESPE	GHV9250010V0001		0.55	1
Replacement Locking Bolt	–	EVSB	GHV9250010V0002		0.02	1
Mounting Kit for flat door panel and frame	–	AMSE	GHV9250010V0003		1.02	1
Mounting Kit for raised door panel and frame	–	AMSP	GHV9250010V0004		0.94	1

Intrusion alarm systems

Signalling Devices

Signalling devices are used for local alarming. A distinction is made between internal and external alarming. Internal alarming is used, i.e. when people are present in the monitored building. It is used solely to make people aware of a danger. External alarming is carried out using acoustic signaling devices (sirens) and visual signaling devices (strobe light). External alarming is used to contact the neighborhood or the general public. Compatible systems: ABB safe&smart, KNX.

SSS

Electronic Solid-State Siren

Electronic solid-state siren with intermittent tone for alarm purposes in indoor installations. External dimensions: ø x H = 90 x 37 mm.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSS	GHV9270001V0001		0.17	1

SSF/G

Outdoor Sirene

An aluminium protective housing with additional protective enamel coating. Protected against sabotage by a case tamper contact. The alarm inputs are wired onto a terminal strip. With fixing screw (M4) for potential equalization on the base.
Dimensions: H x W x D = 200 x 205 x 88 mm; Color: RAL 9002 Environmental class III to VdS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSF/G	GHQ3050017R0001		1.64	1

SSF/GB

Combination Signalling Device

An aluminium protective housing with additional protective enamel coating. Protected against sabotage by a case tamper contact. The alarm inputs are wired onto a terminal strip. With fixing screw (M4) for potential equalization on the base.
Dimensions: H x W x D = 258 x 205 x 88 mm; Color: RAL 9002 Environmental class III to VdS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
	–	SSF/GB	GHQ3050018R0001		1.81	1

Intrusion alarm systems

Installation Material

Installation material (junction boxes, cable hoses) for alarm systems ensure a safe and clean installation of all components.

SAD/GAP

Distribution Enclosure, SM

For installation of the Bus Module L240/BS.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
Surface mounting, white	–	SAD/GAP	2CDG220021R0011		0.131	1

SAD...8...

Junction boxes

NEW

Junction boxes are used for the safe and clean connection of the different components in the installation. The boxes are available in different installation sizes and types.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
white, SM	–	SADK/W	GHV9260005V0002		0.02	1
white, 8x2 pole, SM	–	SAD8L	GHQ3050004R0001		0.04	1
white, with Tamper Contact, 8x2 pole, SM	–	SADD8L	GHQ3050009R0001		0.05	1
white, with Tamper Contact, 28x2 pole, SM	–	SADD28L	GHQ3050016R0001		0.09	1
white, LSA, 8x2 pole, SM	–	SADD8S	GHQ3050012R0001		0.05	1
white, LSA, 15x2 pole, SM	–	SADD15S	GHQ3050006R0001		0.09	1
white, LSA, 30x2 pole, SM	–	SADD30S	GHQ3050014R0001		0.17	1
white, LSA, 8x2 pole, FM	–	UP8S	GHQ3050015R0001		0.06	1
white, 16x2 pole, FM	–	UP16L	GHQ3050007R0001		0.06	1

SKUES

Cable Hoses

NEW

Cable hoses are needed to protect cables mounted on the moving part of a window or door. The cable hoses are available in different sizes.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
50 cm, 9/7 mm	–	SKUES	GHV9260033V0002		0.07	1
white, 50 cm, 10/7 mm	–	SKUES/W	GHV9260033V0003		0.07	1

Intrusion alarm systems

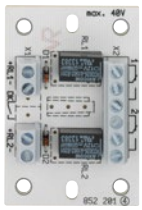
Installation Material

SKUES/M

Mini-Cable Hose, 7/5 mm **NEW**

Cable hoses are needed to protect cables mounted on the moving part of a window or door. The cable hoses are available in different sizes.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
50 cm, 9/7 mm	–	SKUES/M	GHV9260033V0011		0.07	1



RPV10-2

Reed Relay

The reed relays are used to convert a transistor signal to a potential free signal via a relay contact.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
PCB	–	RPV10-2 **NEW**	GHQ3050002R0001		0.04	1
12 V	–	RL	GHV9270013V0101		0.015	1

Intrusion alarm systems

Batteries

Rechargeable batteries ensure back-up power for the alarm system in case the power supply fails. The entire alarm system remains fully operational, even for multiple hours.

SAK7

Sealed Lead Acid Batteries, 12 V DC

Sealed lead acid battery for power backup up of alarm systems. Maintenance free.

Description	Mod. width	Order details		Price 1 piece	Weight 1 piece	Pack unit
		Type code	Order code		kg	pc.
7.2 Ah	–	SAK7	GHV9240001V0011		2.98	1
18 Ah	–	SAK17	GHV9240001V0013		7.15	1

Electrical installation solutions for buildings
Subdistribution boards

Index

Compact distribution boards AT, U series 17/2
Wall-mounting compact distribution boards – AT series 17/5
Flush-mounting compact distribution boards – U series 17/11
Accessories for distribution boards of AT and U series 17/17

Compact distribution boards AL, UL series 17/22
Wall-mounting compact distribution boards – AL series 17/25
Flush- and hollow wall-mounting compact distribution boards – UL series 17/28
Accessories for distribution boards – AL and UL series 17/30

Compact distribution boards accessories 17/35

A wall-mounting cabinets IP43 indoor installation 17/40

B wall-mounting cabinets IP43 indoor installation 17/48

Wall-mounting and floor-standing cabinets – TwinLine N 17/55
Floor-standing cabinets - TwinLine N 44 17/62
Wall-mounting and floor-standing cabinets – TwinLine N 55 17/74

Modular distribution panel system – CombiLine N 17/104

Complete cabinet system in all sizes – TwinLine S 43 17/234

TwinLine S 55 17/252

Distribution panel system – CombiLine S 17/274

AT/U Series

The details make the difference

Compact distribution boards AT/U series: for wall-mounting, flush-mounting and hollow-wall mounting (in connection with ZKV200P4)

Doors are assembled and disassembled without tools, and the door hinges can be adjusted steplessly

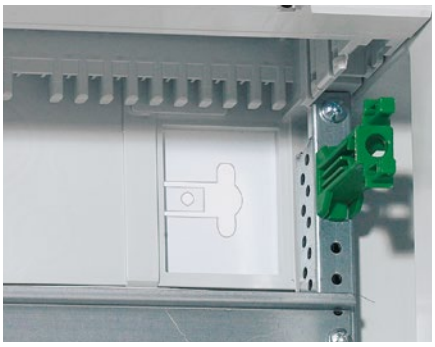
Integrated cable strain-relief, spacious wall mounting

The installed distribution panels can be removed for equipping and wiring

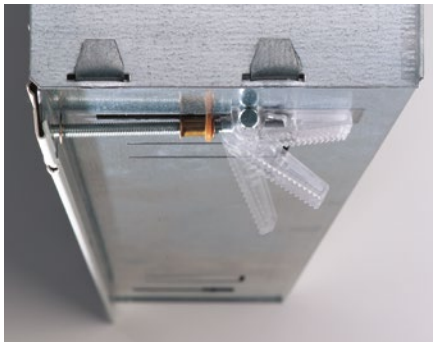
Wide range: with metal or transparent door; Range from 36 up to 240 modules (18 mm)

With its slightly inclined sides, the bright white cabinet and the attractive locking system, the compact distribution boards sets new standards in design.

All AT wall-mounting compact distribution boards are equipped with one integrated flush fitting membrane flange per panel width on top.



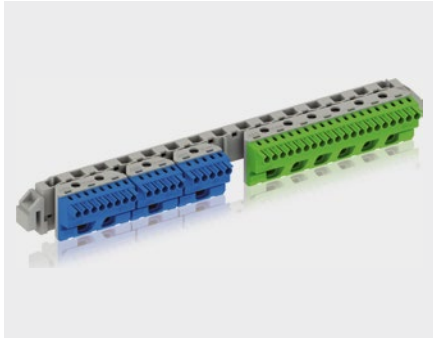
A further standard feature per panel width is the cable strain-relief at the top and the bottom, which considerably simplifies the installation for every wall-mounting and flush-mounting type.



All flush-mounting compact distribution boards can be installed in the hollow wall in just a few steps using the hollow wall set (accessory). No longer two separate cabinets need to be kept on stock - you only need one cabinet for two applications.

An alternative picture frame door is available for the U flush-mounting version. Control panels for commercial and industrial buildings are also available: they can be supplied to be finished and wired by the user, or can be printed and wired according to the user's requirements already in the factory.

Easy any flexible: AT and U Series offers a wide range for almost all applications: wall-mounting, flush-mounting, with metal, transparent or design door, with mounting plates or with DIN-Rails and many more. And all with one single order number.



AT and U series allows with its user-friendly snap-in type N/PE quick busbars considerable time-saving.

Fast assembly of the sealable covers using 90° press and turn closures, which fit into all modular cabinets.

Prepared for all requirements: An earthing set for conversion to protection class I (earthed) is available as an accessory for AT and for U Series.

Subdistribution boards

Compact distribution boards For wall-, flush- and hollow-wall mounting

2CSC000850F0014

Surface, flush or hollow installation

Compact distribution boards with panels and doors
125 mm or 150 mm DIN-Rail spacing
I_n up to 125 A
DIN EN 61439-1-3 (VDE 0660-500)
Degree of protection IP43 (AT)
Degree of protection IP31 (U)
Protection class II, double insulated
Protection class I, earthed in connection with an earthing set (accessory)
The installed distribution board panels can be removed for equipping and wiring
The covers of U and AT compact distribution boards are made of polystyrene
Panels for DIN-Rail devices come with N/PE quick terminals
125 mm or 150 mm DIN-Rail spacing
Enclosures and doors made of sheet steel, 1 mm
Colour: white, RAL 9016
3 or more panels wide: double-wing doors
With N/PE Quick-terminals for panels for rail mounting devices
Without N/PE Quick-terminals for panels with wiring space or mounting plates
Panels for terminals have DIN-Rails assembled insulated (without N/PE Quick terminals) (K)
Panels with mounting plate (without N/PE Quick-terminal) (M)
Hollow-wall-mounting set for flush-mounting versions (accessory)
With cable strain relief
With one membrane flange per panel width on top (AT)
With labelling system
Trim frame adjusted for uneven surfaces (U)
Cable entry covers (accessory)

Subdistribution boards

Wall mounted compact distribution boards AT series

2CSC000851F0014

Compact distribution boards, IP43 (AT) ⧈ ⏚*
I_n up to 125 A
DIN EN 61439-1-3 (VDE 0660-500)
The installed distribution board panels can be removed for equipping and wiring
125 mm or 150 mm DIN-Rail spacing
Enclosures and doors made of sheet steel, 1 mm
Colour: white, RAL 9016
3 or more panels wide: Double-wing doors
With new N/PE Quick-terminals for panels for rail mounting devices
Without N/PE Quick-terminals for panels with wiring space or mounting plates
With cable strain relief
With one membrane flange per panel width on top (AT)
With labelling system

* In connection with earthing set

Subdistribution boards

AT wall-mounting distribution boards with panels and sheet steel doors

AT31

AT42

AT42/2

AT53

AT54E

PW	Rows	Mod.	External dimensions	Order details		Price
			H x W x D in mm	Type	Order code	
For rail mounting devices, 125 mm DIN-Rail spacing, with membran flanges						
1	3	36	524 x 324 x 140	AT31	2CPX030099R9999	
	4	48	674 x 324 x 140	AT41	2CPX030121R9999	
	5	60	824 x 324 x 140	AT51	2CPX030124R9999	
	6	72	974 x 324 x 140	AT61	2CPX030130R9999	
2	2	48	374 x 574 x 140	AT22E	2CPX071740R9999	
	4	96	674 x 574 x 140	AT42	2CPX030122R9999	
	5	120	824 x 574 x 140	AT52	2CPX030125R9999	
	6	144	974 x 574 x 140	AT62	2CPX030131R9999	
	7	168	1124 x 574 x 140	AT72	2CPX030134R9999	
2 (1/1)	3	72	524 x 574 x 140	AT32	2CPX030120R9999	
	4	96	674 x 574 x 140	AT42/2	2CPX030138R9999	
	5	120	824 x 574 x 140	AT52/2	2CPX030139R9999	
3 (2/1)	4	144	674 x 824 x 140	AT43	2CPX030123R9999	
	5	180	824 x 824 x 140	AT53	2CPX030127R9999	
	6	216	974 x 824 x 140	AT63E	2CPX071751R9999	
4 (2/2)	5	240	824 x 1074 x 140	AT54E	2CPX071748R9999	

2CSC000863F0014

AT41R3

2CSC000864F0014

AT42R3

2CSC000865F0014

AT53R4

2CSC000866F0014

AT54R4

2CSC000867F0014

AT41R3IE

2CSC000868F0014

AT42R3IE

2CSC000869F0014

AT53R4IE

2CSC000870F0014

AT54R4IE

PW	Rows	Mod.	External dimensions	Order details		Price
			H x W x D in mm	Type	Order code	
For rail mounting devices, 150 mm DIN-Rail spacing, with membran flanges						
1	3	36	674 x 324 x 140	AT41R3	2CPX071681R9999	
	4	48	824 x 324 x 140	AT51R4	2CPX071684R9999	
	5	60	974 x 324 x 140	AT61R5	2CPX071688R9999	
2	2	48	524 x 574 x 140	AT32R2	2CPX071680R9999	
	3	72	674 x 574 x 140	AT42R3	2CPX071682R9999	
	4	96	824 x 574 x 140	AT52R4	2CPX071685R9999	
	5	120	974 x 574 x 140	AT62R5	2CPX071689R9999	
	6	144	1124 x 574 x 140	AT72R6	2CPX071691R9999	
3 (2/1)	3	108	674 x 824 x 140	AT43R3	2CPX071683R9999	
	4	144	824 x 824 x 140	AT53R4	2CPX071686R9999	
	5	180	974 x 824 x 140	AT63R5	2CPX071690R9999	
	6	216	1124 x 824 x 140	AT73R6	2CPX071692R9999	
4 (2/2)	4	192	824 x 1074 x 140	AT54R4	2CPX071687R9999	
For rail mounting devices, 150 mm DIN-Rail spacing, with sheet steel flange						
1	3	36	674 x 324 x 140	AT41R3IE	2CPX071681R9999	
	4	48	824 x 324 x 140	AT51R4IE	2CPX071684R9999	
	5	60	974 x 324 x 140	AT61R5	2CPX071688R9999	
2	2	48	524 x 574 x 140	AT32R2IE	2CPX071680R9999	
	3	72	674 x 574 x 140	AT42R3IE	2CPX071682R9999	
	4	96	824 x 574 x 140	AT52R4IE	2CPX071685R9999	
	5	120	974 x 574 x 140	AT62R5IE	2CPX071689R9999	
	6	144	1124 x 574 x 140	AT72R6IE	2CPX071691R9999	
3 (2/1)	3	108	674 x 824 x 140	AT43R3IE	2CPX071683R9999	
	4	144	824 x 824 x 140	AT53R4IE	2CPX071686R9999	
	5	180	974 x 824 x 140	AT63R5IE	2CPX071690R9999	
	6	216	1124 x 824 x 140	AT73R6IE	2CPX071692R9999	
4 (2/2)	4	192	824 x 1074 x 140	AT54R4IE	2CPX071687R9999	

Subdistribution boards

AT wall-mounting distribution boards with panels and sheet steel doors

AT52K

AT53K

AT64K

AT42M

AT53M

AT32EP

AT42EP

AT52EP

PW	Rows	Mod.	External dimensions	Order details		Price
			H x W x D in mm	Type	Order code	
For rail mounting devices and terminals, DIN-Rail spacing 125 mm						
2	5	120	824 x 574 x 140	AT52K	2CPX030126R9999	
	6	144	974 x 574 x 140	AT62K	2CPX030132R9999	
	7	168	1124 x 574 x 140	AT72K	2CPX030135R9999	
3 (2/1)	5	180	824 x 824 x 140	AT53K	2CPX030128R9999	
	6	216	974 x 824 x 140	AT63K	2CPX030133R9999	
	7	252	1124 x 824 x 140	AT73K	2CPX030136R9999	
4 (2/2)	5	240	824 x 1074 x 140	AT54K	2CPX030129R9999	
	6	288	974 x 1074 x 140	AT64K	2CPX030137R9999	
For rail mounting devices and mounting plates, DIN-Rail spacing 125 mm						
2 (1/1)	4	96	674 x 574 x 140	AT42M	2CPX030148R9999	
3 (2/1)	5	180	824 x 824 x 140	AT53M	2CPX030149R9999	
For rail mounting devices and meter plates, DIN-Rail spacing 125 mm						
2 (1/1)	3	72	524 x 574 x 140	AT32EP	2CPX071760R9999	
2 (1/1)	4	96	674 x 574 x 140	AT42EP	2CPX071761R9999	
2 (1/1)	5	120	824 x 574 x 140	AT52EP	2CPX071762R9999	

Subdistribution boards

AT wall-mounting distribution boards with panels and transparent doors

AT41TE

AT32TE

AT52TE

AT41TR3

AT52TR4

AT63TR5

AT54TR4

PW	Rows	Mod.	External dimensions	Order details		Price
			H x W x D in mm	Type	Order code	
For rail mounting devices, 125 mm DIN-Rail spacing						
1	4	48	674 x 324 x 140	AT41TE	2CPX071585R9999	
	5	60	824 x 324 x 140	AT51TE	2CPX071587R9999	
	6	72	974 x 324 x 140	AT61TE	2CPX071589R9999	
2 (1/1)	3	72	524 x 574 x 140	AT32TE	2CPX071584R9999	
2	4	96	674 x 574 x 140	AT42TE	2CPX071586R9999	
	5	120	824 x 574 x 140	AT52TE	2CPX071588R9999	
	6	144	974 x 574 x 140	AT62TE	2CPX071590R9999	
For rail mounting devices, 150 mm DIN-Rail spacing						
1	3	36	674 x 324 x 140	AT41TR3	2CPX071695R9999	
	4	48	824 x 324 x 140	AT51TR4	2CPX071698R9999	
	5	60	974 x 324 x 140	AT61TR5	2CPX071702R9999	
2	2	48	524 x 574 x 140	AT32TR2	2CPX071694R9999	
	3	72	674 x 574 x 140	AT42TR3	2CPX071696R9999	
	4	96	824 x 574 x 140	AT52TR4	2CPX071699R9999	
	5	120	974 x 574 x 140	AT62TR5	2CPX071703R9999	
	6	144	1124 x 574 x 140	AT72TR6	2CPX071705R9999	
3 (2/1)	3	108	674 x 824 x 140	AT43TR3	2CPX071697R9999	
	4	144	824 x 824 x 140	AT53TR4	2CPX071700R9999	
	5	180	974 x 824 x 140	AT63TR5	2CPX071704R9999	
	6	216	1124 x 824 x 140	AT73TR6	2CPX071706R9999	
4 (2/2)	4	192	82 x 1074 x 140	AT54TR4	2CPX071701R9999	

Subdistribution boards

Accessories cable entry covers for AT wall-mounting distribution boards

2CSC000886F0014

KB19

2CSC000887F0014

KB219

2CSC000888F0014

KBS9

2CSC000889F0014

KBW1

Article	Order details		Price
	Type	Order code	
Cable entry covers			
With end plates and mounting brackets colour RAL 9016, adjusted to the colour of the cabinets			
Panel width 1, width = 300 mm	KB19	2CPX044049R9999	
Panel width 2, width = 550 mm	KB29	2CPX044050R9999	
Panel width 3, width = 800 mm	KB39	2CPX044051R9999	
Panel width 4, width = 1050 mm	KB49	2CPX044052R9999	
Profile			
Colour RAL 9016, width 2000 mm	KB219	2CPX044055R9999	
End plate left/right			
Colour RAL 9016	KBS9	2CPX044057R9999	
Mounting brackets	KBW1	2CPX044058R9999	

Subdistribution boards

Flush or hollow wall mounted compact distribution boards U series

2CSC000851F0014

Compact distribution boards, IP31(U), ⧈ ⏚* ▽*1
I_n up to 125 A
DIN EN 61439-1-3 (VDE 0660-500)
The installed distribution board panels can be removed for equipping and wiring
125 mm or 150 mm DIN-Rail spacing
Enclosures and doors made of sheet steel, 1 mm
Colour: white, RAL 9016
3 or more panels wide: Double-wing doors
With new N/PE Quick-terminals for panels for rail mounting devices
Without N/PE Quick-terminals for panels with wiring space or mounting plates
With cable strain relief
With labelling system
Trim frame adjusted for uneven surfaces (U)

* In connection with earthing set
*1 In connection with a hollow-wall set ZKV200P4

Subdistribution boards

U flush-mounting compact distribution boards with panels and sheet steel doors

U41

U52

U42/2

U53

U54E

U41R3

U42R3

U53R4

U54R4

PW	Rows	Mod.	Wall cut out dimensions	Trim frame dimensions	Order details		Price
			H x W x D in mm	H x W x D in mm	Type	Order code	
For rail mounting devices, 125 mm DIN-Rail spacing							
1	4	48	684 x 310 x 120	694 x 354 x 27	U41	2CPX030101R9999	
	5	60	834 x 310 x 120	844 x 354 x 27	U51	2CPX030104R9999	
	6	72	984 x 310 x 120	994 x 354 x 27	U61	2CPX030110R9999	
2	4	96	684 x 560 x 120	694 x 604 x 27	U42	2CPX030102R9999	
	5	120	834 x 560 x 120	844 x 604 x 27	U52	2CPX030105R9999	
	6	144	984 x 560 x 120	994 x 604 x 27	U62	2CPX030111R9999	
	7	168	1134 x 560 x 120	1144 x 604 x 27	U72	2CPX030114R9999	
2 (1/1)	3	72	534 x 560 x 120	544 x 604 x 27	U32	2CPX030100R9999	
	4	96	684 x 560 x 120	694 x 604 x 27	U42/2	2CPX030118R9999	
	5	120	834 x 560 x 120	844 x 604 x 27	U52/2	2CPX030119R9999	
3 (2/1)	4	144	684 x 810 x 120	694 x 854 x 27	U43	2CPX030103R9999	
	5	180	834 x 810 x 120	844 x 854 x 27	U53	2CPX030107R9999	
	6	216	984 x 810 x 120	994 x 854 x 27	U63E	2CPX071787R9999	
4 (2/2)	5	240	834 x 1060 x 120	844 x 1104 x 27	U54E	2CPX071784R9999	
For rail mounting devices, 150 mm DIN-Rail spacing							
1	3	36	684 x 310 x 120	694 x 354 x 27	U41R3	2CPX071708R9999	
	4	48	834 x 310 x 120	844 x 354 x 27	U51R4	2CPX071711R9999	
	5	60	984 x 310 x 120	994 x 354 x 27	U61R5	2CPX071715R9999	
2	2	48	534 x 560 x 120	544 x 604 x 27	U32R2	2CPX071707R9999	
	3	72	684 x 560 x 120	694 x 604 x 27	U42R3	2CPX071709R9999	
	4	96	834 x 560 x 120	844 x 604 x 27	U52R4	2CPX071712R9999	
	5	120	984 x 560 x 120	994 x 604 x 27	U62R5	2CPX071716R9999	
	6	144	1134 x 560 x 120	1144 x 604 x 27	U72R6	2CPX071718R9999	
3 (2/1)	3	108	684 x 810 x 120	694 x 854 x 27	U43R3	2CPX071710R9999	
	4	144	834 x 810 x 120	844 x 854 x 27	U53R4	2CPX071713R9999	
	5	180	984 x 810 x 120	994 x 854 x 27	U63R5	2CPX071717R9999	
	6	216	1134 x 810 x 120	1144 x 854 x 27	U73R6	2CPX071719R9999	
4 (2/2)	4	192	834 x 1060 x 120	844 x 1104 x 27	U54R4	2CPX071714R9999	

Subdistribution boards

U flush-mounting compact distribution boards with panels and transparent doors

U52K

U53K

U54K

U42M

U53M

U51EP

U32EP

U42EP

U52EP

PW	Rows	Mod.	Wall cut out dimensions	Trim frame dimensions	Order details		Price
			H x W x D in mm	H x W x D in mm	Type	Order code	
For rail mounting devices and terminals, DIN-Rail spacing 125 mm							
2	5	120	834 x 560 x 120	844 x 604 x 27	U52K	2CPX030106R9999	
	6	144	984 x 560 x 120	994 x 604 x 27	U62K	2CPX030112R9999	
	7	168	1134 x 560 x 120	1144 x 604 x 27	U72K	2CPX030115R9999	
3 (2/1)	5	180	834 x 810 x 120	844 x 854 x 27	U53K	2CPX030108R9999	
	6	216	984 x 810 x 120	994 x 854 x 27	U63K	2CPX030113R9999	
	7	252	1134 x 810 x 120	1144 x 854 x 27	U73K	2CPX030116R9999	
4 (2/2)	5	240	834 x 1060 x 120	844 x 1104 x 27	U54K	2CPX030109R9999	
	6	288	984 x 1060 x 120	994 x 1104 x 27	U64K	2CPX030117R9999	
For rail mounting devices and mounting plates, 125 mm DIN-Rail spacing							
2 (1/1)	4	96	684 x 560 x 120	694 x 604 x 27	U42M	2CPX030146R9999	
3 (2/1)	5	180	834 x 810 x 120	844 x 854 x 27	U53M	2CPX030147R9999	
For rail mounting devices and meter plates, DIN-Rail spacing 125 mm							
1	5	60	834 x 310 x 120	844 x 354 x 27	U51EP	2CPX071564R9999	
2 (1/1)	3	72	534 x 560 x 120	544 x 604 x 27	U32EP	2CPX071560R9999	
2 (1/1)	4	96	684 x 560 x 120	694 x 604 x 27	U42EP	2CPX071561R9999	
2 (1/1)	5	120	834 x 560 x 120	844 x 604 x 27	U52EP	2CPX071562R9999	

Subdistribution boards

U flush-mounting compact distribution boards with panels and transparent doors

U41TE

U32TE

U42TE

U41TR3

U42TR3

AT53TR4

U54TR4

PW	Rows	Mod.	Wall cut out dimensions	Trim frame dimensions	Order details		Price
			H x W x D in mm	H x W x D in mm	Type	Order code	
For rail mounting devices, 125 mm DIN-Rail spacing							
1	4	48	684 x 310 x 120	694 x 354 x 27	U41TE	2CPX071592R9999	
	5	60	834 x 310 x 120	844 x 354 x 27	U51TE	2CPX071594R9999	
	6	72	984 x 310 x 120	994 x 354 x 27	U61TE	2CPX071596R9999	
2 (1/1)	3	72	534 x 560 x 120	544 x 604 x 27	U32TE	2CPX071591R9999	
2	4	96	684 x 560 x 120	694 x 604 x 27	U42TE	2CPX071593R9999	
	5	120	834 x 560 x 120	844 x 604 x 27	U52TE	2CPX071595R9999	
	6	144	984 x 560 x 120	994 x 604 x 27	U62TE	2CPX071597R9999	
For rail mounting devices, 150 mm DIN-Rail spacing							
1	3	36	684 x 310 x 120	694 x 354 x 27	U41TR3	2CPX071722R9999	
	4	48	834 x 310 x 120	844 x 354 x 27	U51TR4	2CPX071725R9999	
	5	60	984 x 310 x 120	994 x 354 x 27	U61TR5	2CPX071729R9999	
2	2	48	534 x 560 x 120	544 x 604 x 27	U32TR2	2CPX071721R9999	
	3	72	684 x 560 x 120	694 x 604 x 27	U42TR3	2CPX071723R9999	
	4	96	834 x 560 x 120	844 x 604 x 27	U52TR4	2CPX071726R9999	
	5	120	984 x 560 x 120	994 x 604 x 27	U62TR5	2CPX071730R9999	
	6	144	1134 x 560 x 120	1144 x 604 x 27	U72TR6	2CPX071733R9999	
3 (2/1)	3	108	684 x 810 x 120	694 x 854 x 27	U43TR3	2CPX071724R9999	
	4	144	834 x 810 x 120	844 x 854 x 27	U53TR4	2CPX071727R9999	
	5	180	984 x 810 x 120	994 x 854 x 27	U63TR5	2CPX071731R9999	
	6	216	1134 x 810 x 120	1144 x 854 x 27	U73TR6	2CPX071734R9999	
4 (2/2)	4	192	834 x 1060 x 120	844 x 1104 x 27	U54TR4	2CPX071728R9999	

Subdistribution boards

U flush-mounting compact distribution boards with panels and picture frame doors

U42D

U42FPT

PW	Rows	Mod.	Wall cut out dimensions	Trim frame dimensions	Order details		Price
			H x W x D in mm	H x W x D in mm	Type	Order code	
With picture frame door, aluminium anodized, DIN-Rail spacing 125 mm							
2	4	96	684 x 560 x 120	716 x 625 x 25	U42D	2CPX038152R9999	
With control panel, unprinted and not wired, distribution board panel without cover and N/PE rail							
2	4	96	684 x 560 x 120	716 x 625 x 25	U42FPT	2CPX038151R9999	

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01

—
02

—
01 Example picture frame door with decoration picture (delivery without picture)

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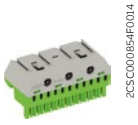
02 Example control panel with layout and control lights (delivery unprinted/not wired)

Subdistribution boards

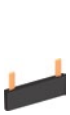
N/PE Quick-terminals accessories

ZK113B

ZK50BT



ZK113G

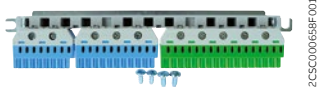


ZK10P10

ZK13

ZK15

ZK220



ZK225

Article	Type	Equipment with new N/PE Quick-terminals
		Compact distribution boards*
N/PE quick carriers	ZK13	1 pc.
N Quick terminal	ZK82B	1 pc.
	ZK113B	1 pc.
PE Quick-terminal	ZK175G	1 pc.

* Included in the scope of delivery for distribution board panels for rail mounting devices

Article	Number of terminals 1.5 - 4 mm²	Number of terminals 2.5 - 25 mm²	External dimensions H x W x D in mm	Pcs.	Order details Type	Order details Order code	Price
N Quick-terminals							
For quick carriers	5	0	23 x 32 x 21	1	ZK50B	2CPX062750R9999	
	5	1	32 x 32 x 31	1	ZK51B	2CPX062751R9999	
	8	2	32 x 49 x 31	1	ZK82B	2CPX062752R9999	
	11	3	32 x 65 x 31	1	ZK113B	2CPX062753R9999	
	14	4	32 x 82 x 31	1	ZK144B	2CPX062754R9999	
	17	5	32 x 98 x 31	1	ZK175B	2CPX062755R9999	
	20	6	32 x 115 x 31	1	ZK206B	2CPX062756R9999	
N Quick-terminal with adapter ZK15							
For lateral assembly to the UK5... , A3...or for fastening to the DIN-Rail	5	0	28 x 39 x 25	1	ZK50BT	2CPX062745R9999	
PE Quick-terminals							
For quick carriers	5	1	32 x 32 x 31	1	ZK51G	2CPX062757R9999	
	8	2	32 x 49 x 31	1	ZK82G	2CPX062758R9999	
	11	3	32 x 65 x 31	1	ZK113G	2CPX062759R9999	
	14	4	32 x 82 x 31	1	ZK144G	2CPX062760R9999	
	17	5	32 x 98 x 31	1	ZK175G	2CPX062761R9999	
	20	6	32 x 115 x 31	1	ZK206G	2CPX062762R9999	
Connecting bridges							
For Quick-terminals				10	ZK10P10	2CPX062763R9999	
Quick carriers							
For consumer units AT/U Usable width for Quick-terminals 214 mm				1	ZK13	2CPX064982R9999	
Adapter for ZK50B							
Engaging the ZK50B N Quick-terminal in the adapter ZK15, leads to ZK50BT to be laterally fastened UK5... , A3 or to the DIN-Rail				1	ZK15	2CPX064984R9999	
Terminals							
N/PE for AT/U N=14, 10p. PE=22p.					ZK220	2CPX063132R9999	
N/PE for V-Feld N=14, 10p. PE=22p.					ZK225	2CPX063133R9999	

Subdistribution boards

Accessories for AT/U Series

ZB113

ZB111

ZX456

ZX440

ZH800

ZH220

ZH130

ZH132

ZH134

ZH137

Article	Pcs.	Order details		Price
		Type	Order code	
Standard closure				
Included in the scope of delivery	1	ZB113	2CPX038478R9999	
Closure with lock				
With 2 keys	1	ZB111	2CPX038479R9999	
Espagnolette closure				
In combination with standard closure ZB113* (earthing partl) or closure with lock ZB111				
Overall height 4 GU	1	ZX456	2CPX039586R9999	
Overall height 5 GU	1	ZX457	2CPX039587R9999	
Overall height 6 GU	1	ZX458	2CPX039588R9999	
Overall height 7 GU	1	ZX459	2CPX039589R9999	
Espagnolette closure				
In combination with ZH203, ZH220, ZH221, ZH222, ZH227, ZH228				
Overall height 4 GU	1	ZX440	2CPX039570R9999	
Overall height 5 GU	1	ZX441	2CPX039571R9999	
Overall height 6 GU	1	ZX442	2CPX039572R9999	
Overall height 7 GU	1	ZX443	2CPX039573R9999	
Installation set*				
Of different closure systems in combination with ZH220/ZH221/ZH222	1	ZH800	2CPX038544R9999	
Latch plate				
Double bit operating pin, 3 mm standard and 5 mm (ZH800 must be ordered separately)	1	ZH220	2CPX045700R9999	
For triangular or square operating pins and for Daimler-Benz insert (ZH800 must be ordered separately)	1	ZH221	2CPX045701R9999	
For T-handle or latch handle (ZH800 must be ordered separately)	1	ZH222	2CPX045702R9999	
Operating pin				
Double-bit 3 mm	1	ZH130	2CPX060490R9999	
Double-bit 5 mm	1	ZH131	2CPX060491R9999	
Triangular 7 mm	1	ZH132	2CPX060492R9999	
Triangular 8 mm	1	ZH133	2CPX060493R9999	
Square 6 mm	1	ZH134	2CPX060494R9999	
Square 7 mm	1	ZH135	2CPX060495R9999	
Square 8 mm	1	ZH136	2CPX060496R9999	
Daimler-Benz insert	1	ZH137	2CPX060497R9999	

* Leave not less than 2 SU for DIN-Rail devices behind the closure

Subdistribution boards

Accessories

ZH157

ZH91

ZH138

ZH139

ZH140

ZH141

ZH228

ZH227

ZH203

ZH142

Article	Pcs.	Order details		Price
		Type	Order code	
Operating keys				
Triangular 7 mm	1	ZH157	2CPX060657R9999	
Triangular 8 mm	1	ZH158	2CPX060658R9999	
Double-bit 3 mm	1	ZH160	2CPX060660R9999	
Double-bit 5 mm	1	ZH161	2CPX060661R9999	
Square 6 mm	1	ZH162	2CPX060662R9999	
Square 7 mm	1	ZH163	2CPX060663R9999	
Square 8 mm	1	ZH164	2CPX060664R9999	
Daimler-Benz insert	1	ZH165	2CPX060665R9999	
Universal key				
Double bit 3 and 5 mm Triangular 8 mm Square 6 and 8 mm	1	ZH91	2CPX066091R9999	
T-handle*				
Without lock	1	ZH138	2CPX060498R9999	
With lock	1	ZH139	2CPX060498R9999	
Latch handle*				
Without lock	1	ZH140	2CPX060500R9999	
With lock	1	ZH141	2CPX060501R9999	
Swivel handle with lead sealable cap*				
For semi-cylinder 40 mm (30/10)	1	ZH228	2CPX045709R9999	
Swivel handle with lead sealable cap*				
With cabinet handle Berlin	1	ZH227	2CPX045708R9999	
Swivel handle with lead sealable cap*				
With closure E0 12	1	ZH203	2CPX045707R9999	
Dummy insert				
Instead of a semi-cylinder for the swivel handle ZH228	1	ZH142	2CPX060502R9999	

* Leave not less than 2 SU for DIN-Rail devices behind the closure

2CSC000948F0014

ZKV200P4

2CSC000949F0014

ZE11

2CSC000950F0014

ZE12

2CSC000951F0014

ZB43

2CSC000952F0014

ZB40

2CSC000953F0014

ZB101

2CSC000954F0014

ZX69

2CSC000955F0014

ZA1P5

2CSC000956F0014

ZA6

2CSC000957F0014

ZA5

2CSC000958F0014

ZX139LR

Article	Pcs.	Order details		Price
		Type	Order code	
Hollow-wall-mounting set For retrofitting flush-mounted distribution boards Wall thickness: min. 14 mm, max. 58 mm	1	ZB19	2CPX038187R9999	
Earthing set for wall-mounting compact distribution boards				
For conversion into protection class 1	1	ZE11	2CPX038143R9999	
Earthing set for flush-mounting compact distribution boards				
For conversion into protection class 1	1	ZE12	2CPX038144R9999	
Membrane flange				
For inserting the cable from below	1	ZB43	2CPX038183R9999	
Nipple Flange	1	ZB40	2CPX038195R9999	
Closing Flange	1	ZB101	2CPX038181R9999	
Flange for conduits (bottom)	1	ZB107E	2CPX071211R9999	
Flange for conduits (top)	1	ZB108E	2CPX071212R9999	
Vertical partitions				
Between distribution board panels, not arc-resistant				
Overall height 3 GU	1	ZX69	2CPX039069R9999	
Overall height 4 GU	1	ZX70	2CPX039070R9999	
Overall height 5 GU	1	ZX71	2CPX039071R9999	
Overall height 6 GU	1	ZX72	2CPX039072R9999	
Overall height 7 GU	1	ZX73	2CPX039073R9999	
Slot cover				
Colour RAL 7035 For 12 space units, break-off type	5	ZA1P5	2CPX062384R9999	
	50	ZA1P50	2CPX062378R9999	
Document holder DIN A4				
Self-adhesive with transparent sleeve	1	ZA6	2CPX038227R9999	
	10	ZA6P10	2CPX062380R9999	
Self-adhesive with transparent sleeve and reinforced back	10	ZA61P10	2CPX062375R9999	
Document holder DIN A4				
Self-adhesive	1	ZA13	2CPX038233R9999	
	10	ZA13P10	2CPX062381R9999	
Document holder DIN A5				
Self-adhesive	1	ZA5	2CPX038228R9999	
	10	ZA5P10	2CPX062382R9999	
Door hinge (plastic)	2	ZX139LR	2CPX039139R9999	

Subdistribution boards

Accessories

ZX464

ZX374

ZH411

ZH412

ZH425

ZH428

ZX371

ZK90P2

ZX21

ZB32P20

Article	Pcs.	Order details		Price
		Type	Order code	
Door bolt for double-wing doors				
For cabinets with three or more panel widths	1	ZX464	2CPX039596R9999	
Cross member				
For fuse switch disconnectors size 00, 1 panel wide	1	ZX374	2CPX068079R9999	
Fuse switch disconnector				
Size 00 160 A (without trim cover)				
With M8 screw connection	1	ZH411	2CPX062947R9999	
With clip terminal up to 50 mm2	1	ZH412	2CPX062948R9999	
Trim cover				
For fuse switch disconnector size 00				
Single trim cover	1	ZH425	2CPX062952R9999	
Double trim cover	1	ZH426	2CPX062953R9999	
Blank cover	1	ZH428	2CPX062955R9999	
DIN-Rail for terminals				
35 x 7.5 mm For recessed mounting in conjunction with mounting bracket ZX372P2 and insulator ZK90P2				
1 panel wide	1	ZX371	2CPX068076R9999	
2 panels wide	1	ZX389	2CPX068190R9999	
Insulator for DIN-Rails				
35 x 7.5 mm including fastening material	2	ZK90P2	2CPX062426R9999	
DIN-Rail				
35 x 7.5 mm				
1 panel wide	1	ZX21	2CPX039021R9999	
2 panels wide	1	ZX22	2CPX039022R9999	
Fastening screws for DIN-Rails				
Slotted/hexalobular socket pan head thread rolling screw T25 –	20	ZB32P20	2CPX062651R9999	
Slotted/hexalobular socket pan head thread rolling screw T25 –	500	ZB32P500	2CPX062652R9999	

2CSC000969F0014

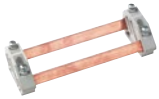
ED137P4

2CSC000970F0014

ED50P12

2CSC000971F0014

ZKV201


2CSC000972F0014

ZK300

2CSC000973F0014

ZX518

2CSC000974F0014

ZX400

2CSC000975F0014

ZB19

2CSC000976F0014

2CSC000977F0014

2CSC000978F0014

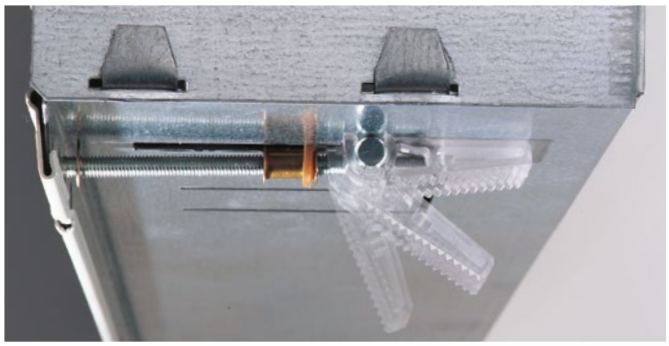
ZA122 **ZA20** **ZA120**

Article	Pcs.	Order details		Price
		Type	Order code	
Cover holder 45 mm high For fastening on the EDF profile For DIN-Rails 35 x 7.5 mm, use only these cover holders	4	ED137P4	2CPX062600R9999	
	40	ED137P40	2CPX062601R9999	
Press-and-turn fixing				
To cover distribution board panels	12	ED50P12	2CPX062337R9999	
Labelling system				
Self-adhesive, for AT and U distribution boards	1	ZKV201	2CPX038148R9999	
Busbar system for N/PE Cu 12 x 5 mm, max. connection 95 mm2				
1 panel wide	1	ZK300	2CPX038551R9999	
2 panels wide	1	ZK301	2CPX038552R9999	
N/PE busbar holder				
For copper busbars 12 x 5 mm, 20 x 5 mm, 30 x 5 mm	1	ZX518	2CPX067805R9999	
	10	ZX518P10	2CPX062551R9999	
Copper busbars 12 x 5 mm = 250 A				
1 m long		ZX400	2CPX061400R9999	
2 m long		ZX401	2CPX061401R9999	
3 m long		ZX402	2CPX061402R9999	
4 m long		ZX350	2CPX061350R9999	
Cover profile				
For copper busbars 12 x 5 and 12 x 10 mm, length 1 m To clip on busbars		ZB19	2CPX038187R9999	
Cleaner				
For distribution board panel covers Spray dispenser, 500 ml	1	ZA122	2CPX038293R9999	
Spray paint can				
Colour RAL 9016, 150 ml	1	ZA20	2CPX038229R9999	
Touch-up applicator				
Colour RAL 9016, 12 ml	1	ZA120	2CPX039043R9999	

Subdistribution boards

Compact distribution boards For wall-, flush- and hollow-wall mounting*

User-friendliness in series – compact distribution boards from STRIEBEL & JOHN
The new compact distribution boards, which have been developed in close cooperation with technicians from the field, stand out by entirely new solutions.
Flexibility and speed will support the users in their daily tasks. Be it for commercial, industrial or domestic uses - this broad range of products offers a solution to any type of mounting - from flush-mounting and wall-mounting up to hollow-wall mounting applications.
All enclosures are double insulated. An earthing set is available as accessory. Depending on the version, degrees of protection between IP31 and IP43 are available.



—
Simply insert the ZKV200P4 hollow-wall set, fix it, ready

—
Standard equipment - membrane flange on top

—
Integrated cable strain-relief, spacious wall mounting

Unique – The flexibility and speed of hollow-wall mounting
All flush-mounting compact distribution boards can be installed in the hollow wall in just a few steps using the hollow wall sets provided as accessories.

Besides the electrical installer, the wholesalers also benefit from this well-thought solution, as they no longer need to keep two separate cabinets in stock but are able to supply one cabinet for two applications.

Perfection to detail
Wall-mounting compact distribution boards offer the possibility of cable entry on the top, at the bottom and from the back. All wall-mounting compact distribution boards are equipped with one integrated flush fitting membrane flange per panel width on top. This enables quick and easy installation and improves the overall appearance.

A further standard feature per panel width is the cable strain relief at the the top and bottom, which considerably simplifies the installation for every wall-mounting and flush-mounting type.

—
Slightly inclining sides - elegant and attractive design

Convincing design
With its slightly inclined sides, the bright white cabinet and the attractive locking system, the compact distribution boards set new standards - not only in design but also in terms of stability that is achieved by a special bending technique.

Furthermore, only STRIEBEL & JOHN offers an alternative picture frame for the two-panel wide and the four-row high cabinets – an extension of the well known UK500 "addition line".

Control panels which can be supplied to be finished and wired by the user, or which are printed and wired according to the user's requirements, are also available for commercial and industrial buildings.

Subdistribution boards

Compact distribution boards empty cabinets without doors

Compact distribution boards -Empty cabinets without doors
Prepared to be fitted with CombiLine modules
I_n up to 125 A
DIN EN 61439-1/-3 (VDE 0660-600)
Degree of protection without door IP30* (AL and UL)
Degree of protection with door IP43 (AL)
Degree of protection with door IP31 (UL)
Protection class II, double insulated
Protection class I, earthed in connection with an earthing set (accessory)
Enclosure made of sheet steel, 1 mm
Colour: white, RAL 9016
Media panels (accessory)
Trim frame with sheet steel door (accessory)
Trim frame with transparent door (accessory)
Sheet steel door (accessory)
Transparent door (accessory)
Cable entry covers (accessory)
Hollow-wall mounting set for flush-mounting versions (accessory)
Without N/PE Quick-terminals
With cable strain relief
With one membrane flange per panel width on top (AL)

* For an extension as sub-distribution board with distribution board panels or CombiLine modules
* Leave not less than 2 SU for DIN rail devices behind the closure

Subdistribution boards

AL Wall-mounting distribution boards empty cabinets without door

AL31

AL42

AL53

AL64

PW	Rows	Mod.	External dimensions	Order details		Price
			H x W x D in mm	Type	Order code	
1	3	36	524 x 324 x 140	AL31	2CPX030770R9999	
	4	72	674 x 324 x 140	AL41	2CPX030772R9999	
	5	60	824 x 324 x 140	AL51	2CPX030775R9999	
	6	72	974 x 324 x 140	AL61	2CPX030779R9999	
2	2	48	374 x 574 x 140	AL22	2CPX030769R9999	
	3	72	524 x 574 x 140	AL32	2CPX030771R9999	
	4	96	674 x 574 x 140	AL42	2CPX030773R9999	
	5	120	824 x 574 x 140	AL52	2CPX030776R9999	
	6	144	974 x 574 x 140	AL62	2CPX030780R9999	
	7	168	1124 x 574 x 140	AL72	2CPX030783R9999	
3	4	144	674 x 842 x 140	AL43	2CPX030774R9999	
	5	180	824 x 824 x 140	AL53	2CPX030777R9999	
	6	216	974 x 824 x 140	AL63	2CPX030781R9999	
	7	252	1124 x 824 x 140	AL73	2CPX030784R9999	
4	5	240	824 x 1074 x 140	AL54	2CPX030778R9999	
	6	288	974 x 1074 x 140	AL64	2CPX030782R9999	

Subdistribution boards

AL Wall-mounting distribution boards accessories cabinet doors

T20

TTS20

PW	Rows	To be used with...	Order details		Price
			Type	Order code	
Sheet steel doors					
1	3	AL31	T100	2CPX062057R9999	
	4	AL41	T10	2CPX062059R9999	
	5	AL51	T11	2CPX062062R9999	
	6	AL61	T12	2CPX062066R9999	
2	2	AL22	T220	2CPX062056R9999	
	3	AL32	T200	2CPX062058R9999	
	4	AL42	T20	2CPX062060R9999	
	5	AL52	T21	2CPX062063R9999	
	6	AL62	T22	2CPX062067R9999	
	7	AL72	T23	2CPX062070R9999	
3*	4	AL43	T30	2CPX062061R9999	
	5	AL53	T31	2CPX062064R9999	
	6	AL63	T32	2CPX062068R9999	
	7	AL73	T33	2CPX062071R9999	
4*	5	AL54	T41	2CPX062065R9999	
	6	AL64	T42	2CPX062069R9999	
Transparent doors					
1	3	AL31	TTS100	2CPX062021R9999	
	4	AL41	TTS10	2CPX062026R9999	
	5	AL51	TTS11	2CPX062031R9999	
	6	AL61	TTS12	2CPX062036R9999	
2	3	AL32	TTS200	2CPX062022R9999	
	4	AL42	TTS20	2CPX062027R9999	
	5	AL52	TTS21	2CPX062032R9999	
	6	AL62	TTS22	2CPX062037R9999	
	7	AL72	TTS23	2CPX062042R9999	
3*	4	AL43	TTS30	2CPX062028R9999	
	5	AL53	TTS31	2CPX062033R9999	
	6	AL63	TTS32	2CPX062038R9999	
	7	AL73	TTS33	2CPX062043R9999	
4*	5	AL54	TTS41	2CPX062034R9999	
	6	AL64	TTS42	2CPX062039R9999	

* 3 or more panels wide: double-wing doors

Subdistribution boards

AL Wall-mounting distribution boards accessories cable entry covers

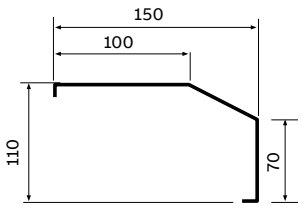
KB19

KB219

KBS9

KBW1

Article	Pieces	Order details		Price
		Type	Order code	
Cable entry covers With end plates and mounting brackets, colour RAL 9016, adjusted to the colour of the cabinets				
Panel width 1, width = 300 mm	1	KB19	2CPX044049R9999	
Panel width 2, width = 550 mm	1	KB29	2CPX044050R9999	
Panel width 3, width = 800 mm	1	KB39	2CPX044051R9999	
Panel width 4, width = 1050 mm	1	KB49	2CPX044052R9999	
Profile Colour RAL 9016, width 2000 mm	1	KB219	2CPX044055R9999	
End plate left/right Colour RAL 9016	2	KBS9	2CPX044057R9999	
Mounting brackets	1	KBW1	2CPX044058R9999	



Cross section
Cable entry cover

Subdistribution boards

UL compact distribution boards* empty cabinets without door

UL41

UL42

UL53

UL64

PW	Rows	Mod.	Wall cut out dimensions	Order details		Price
			H x W x D in mm	Type	Order code	
Empty cabinets without door						
1	4	72	684 x 310 x 120	UL41	2CPX030756R9999	
	5	60	834 x 310 x 120	UL51	2CPX030759R9999	
	6	72	984 x 310 x 120	UL61	2CPX030763R9999	
2	3	72	534 x 560 x 120	UL32	2CPX030755R9999	
	4	96	684 x 560 x 120	UL42	2CPX030757R9999	
	5	120	834 x 560 x 120	UL52	2CPX030760R9999	
	6	144	984 x 560 x 120	UL62	2CPX030764R9999	
	7	168	1134 x 560 x 120	UL72	2CPX030767R9999	
3	4	144	684 x 810 x 120	UL43	2CPX030758R9999	
	5	180	834 x 810 x 120	UL53	2CPX030761R9999	
	6	216	984 x 810 x 120	UL63	2CPX030765R9999	
	7	252	1134 x 810 x 120	UL73	2CPX030768R9999	
4	5	240	834 x 1060 x 120	UL54	2CPX030762R9999	
	6	288	984 x 1060 x 120	UL64	2CPX030766R9999	

* For flush-mounting and hollow-wall mounting. In connection with a hollow-wall set ZKV200P4

BLU42

BLT42

PW	Rows	Trim frame dimensions	To be used with...	Order details		Price
		H x W x D in mm		Type	Order code	
Trim frame with sheet steel door, powder-coated, white RAL 9016,						
1	4	694 x 354 x 27	UL41	BLU41	2CPX031501R9999	
	5	844 x 354 x 27	UL51	BLU51	2CPX031504R9999	
	6	994 x 354 x 27	UL61	BLU61	2CPX031508R9999	
2	3	544 x 604 x 27	UL32	BLU32	2CPX031500R9999	
	4	694 x 604 x 27	UL42	BLU42	2CPX031502R9999	
	5	844 x 604 x 27	UL52	BLU52	2CPX031505R9999	
	6	994 x 604 x 27	UL62	BLU62	2CPX031509R9999	
	7	1144 x 604 x 27	UL72	BLU72	2CPX031511R9999	
3*[1]	4	694 x 854 x 27	UL43	BLU43	2CPX031503R9999	
	5	844 x 854 x 27	UL53	BLU53	2CPX031506R9999	
	6	994 x 854 x 27	UL63	BLU63	2CPX031510R9999	
	7	1144 x 854 x 27	UL73	BLU73	2CPX031512R9999	
4*[1]	5	844 x 1104 x 27	UL54	BLU54	2CPX031507R9999	
	6	994 x 1104 x 27	UL64	BLU64	2CPX031513R9999	
Trim frame with transparent door						
1	4	694 x 354 x 27	UL41	BLT41	2CPX030786R9999	
	5	844 x 354 x 27	UL51	BLT51	2CPX030789R9999	
	6	994 x 354 x 27	UL61	BLT61	2CPX030793R9999	
2	3	544 x 604 x 27	UL32	BLT32	2CPX030785R9999	
	4	694 x 604 x 27	UL42	BLT42	2CPX030787R9999	
	5	844 x 604 x 27	UL52	BLT52	2CPX030790R9999	
	6	994 x 604 x 27	UL62	BLT62	2CPX030794R9999	
	7	1144 x 604 x 27	UL72	BLT72	2CPX030797R9999	
3*[1]	4	694 x 854 x 27	UL43	BLT43	2CPX030788R9999	
	5	844 x 854 x 27	UL53	BLT53	2CPX030791R9999	
	6	994 x 854 x 27	UL63	BLT63	2CPX030795R9999	
	7	1144 x 854 x 27	UL73	BLT73	2CPX030798R9999	
4*[1]	5	844 x 1104 x 27	UL54	BLT54	2CPX030792R9999	
	6	994 x 1104 x 27	UL64	BLT64	2CPX030796R9999	

* 3 or more panels wide: double-wing doors

* For flush-mounting and hollow-wall mounting. In connection with a hollow-wall set ZKV200P4

Subdistribution boards

Media Enclosures and media panels for AL and UL compact distribution boards - empty cabinets

Technical specifications
Enclosures with Media panel and distribution panel
For the AL and UL cabinet series
Media panels with perforated sheet steel mounting plate without cover
With fitted DIN rail
Wire holders supplied
Quick mounting of devices without drilling
Protection class depends on type and installation of equipment

1MM0A

Article	Pieces	Order details		Price
		Type	Order code	
Media panel with perforated sheet steel mounting plate				
Overall height 3 rows	1	1MM00A	2CPX030982R9999	
Overall height 4 rows	1	1MM0A	2CPX030987R9999	
Overall height 5 rows	1	1MM1A	2CPX030988R9999	
Overall height 6 rows	1	1MM2A	2CPX030989R9999	

AT42MM

PW	Rows	Mod.	External dimensions	Trim Frame dimensions	Order details		Price
			H x W x D in mm	H x W x D in mm	Type	Order code	
Wall mounted media enclosure, with intergrated mediapanel with perforeted sheet steel mountingplate, row distance 125 mm							
2	4	96	674 x 574 x 140		AT42MM	2CPX030157R9999	
	5	120	824 x 574 x 140		AT52MM	2CPX030158R9999	
	6	144	974 x 574 x 140		AT62MM	2CPX030159R9999	

U42MM

Flush mounted media enclosure, with intergrated mediapanel with perforeted sheet steel mountingplate, row distance 125 mm							
2	4	96	684 x 560 x 120	694 x 604 x 27	U42MM	2CPX030160R9999	
	5	120	834 x 560 x 120	844 x 604 x 27	U52MM	2CPX030161R9999	
	6	144	984 x 560 x 120	994 x 604 x 27	U62MM	2CPX030162R9999	

Subdistribution boards

Accessories for consumer units, compact distribution boards and meter cabinets

ZE225

ZX29

ZE227

Article	Pieces	Type	Ord. no.	Price
Dual socket 230 V AC to be mounted to ZX28 support For media enclosures UK... and media enclosures 1MM...	1	ZE225	2CPX061177R9999	
Support for dual socket ZE225 For an assembly to the perforated sheet steel mounting plate of the multimedia enclosures UK... and of the multimedia enclosures 1MM...	1	ZX29	2CPX061178R9999	
Triple socket 230 V AC voltage, 120° swiveling with EURO insert to be snapped on to the cable inlet or DIN rail; to be screwed to the mounting plate	1	ZE227	2CPX061211R9999	

Subdistribution boards

Accessories for consumer units, compact distribution boards and meter cabinets

ZE321

ZE338

ZE316

ZE317

ZE318

ZE319

ZE320

ZE311

ZE310

ED44P10

ED45P10

ED57P10

ZX287P10

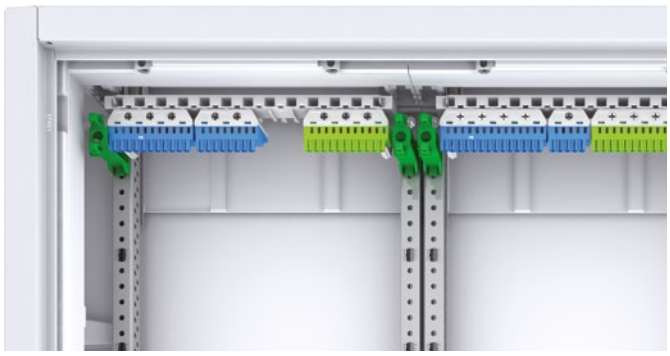
Article	Pieces	Type	Ord. no.	Price
Patch panel empty for communication modules, e.g. RJ45, COAX module, etc. For the direct and insulated assembly to the EDF-rail, DIN rail or mounting plate				
Patch panel, 6-fold	1	ZE335	2CPX031423R9999	
Patch panel, 12-fold	1	ZE336	2CPX031424R9999	
Patch panel holder	1	ZE338	2CPX031426R9999	
Connectors for patch panels				
COAX module F / F connector	1	ZE316	2CPX039246R9999	
COAX module IEC connector	1	ZE317	2CPX039247R9999	
COAX module IEC plug	1	ZE318	2CPX039248R9999	
OpDAT module LC (Ph-Br)	1	ZE319	2CPX039249R9999	
Blind module	1	ZE320	2CPX039250R9999	
RJ45 connector Plastic	1	ZE311	2CPX038612R9999	
IP patch module RJ45 module with adapter to assemble the DIN rail	1	ZE310	2CPX038625R9999	
Wire holder To be inserted at the mounting cross member of the communication panels or with adapter ED57P10 for an assembly to the perforated sheet steel mounting plate				
Overall size 28.5 mm	10	ED44P10	2CPX062335R9999	
	50	ED44P50	2CPX062308R9999	
Overall size 55 mm	10	ED45P10	2CPX062336R9999	
	50	ED45P50	2CPX062310R9999	
Adapter For assembling ED44P10 wire holders to the perforated sheet steel mounting plate	10	ED57P10	2CPX061179R9999	
Screws M4 x 14 thread rolling for the perforated sheet steel mounting plate	10	ZX287P10	2CPX061180R9999	

Subdistribution boards

N/PE quick-terminals: Standardised, future-oriented and flexible

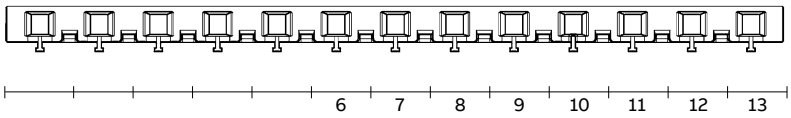
Tidy and flexible installation

The N/PE Quick-terminals simplify your work: Just choose the right terminal blocks and plug them in!
Extremely flexible in terms of expandability, these N/PE Quick-terminals are unmatched for safe, efficient and future-oriented conductor connections.



Product benefits

- Flexible terminal system for several N power circuits: Screw connections: 2.5 to 25 mm² with steep conductor; up to 25 mm² with flexible conductor with sleeve; spring terminals: 1.5 to 4 mm² with steep conductor; 2.5 mm² with flexible conductor with sleeve
- Optimal when using several residual current circuit breakers (RCDs)
- Ease of expansion using connecting bridges
- Precise assignment of the terminal blocks (clear colour coding: N = blue, PE = yellow-green)
- Easy labelling of the terminals (DIN VDE 0603 Part 1) using pre-printed, self-adhesive number strips
- Wide range of applications: can be used with the UK500 and A300 consumer unit series, in all compact distribution boards, and with all meter-, wall-mounting and floor-standing cabinets.



quick carrier type ZK11

units

N/PE (Neutral/Earth) Terminal block	N (Neutral) Quick-Terminals	Screw-Terminals technic	Spring terminal technic	PE (Earthing) Quick terminals	Screw-Terminals technic	Spring terminal technic
	ZK50B	0 x 25 mm²	5 x 1,5 - 4 mm²	-	-	-
	ZK51B	1 x 25 mm²	5 x 1,5 - 4 mm²	ZK51G	1 x 25 mm²	5 x 1,5 - 4 mm²
	ZK82B	2 x 25 mm²	8 x 1,5 - 4 mm²	ZK82G	2 x 25 mm²	8 x 1,5 - 4 mm²
	ZK113B	3 x 25 mm²	11 x 1,5 - 4 mm²	ZK113G	3 x 25 mm²	11 x 1,5 - 4 mm²
	ZK144B	4 x 25 mm²	14 x 1,5 - 4 mm²	ZK144G	4 x 25 mm²	14 x 1,5 - 4 mm²
	ZK175B	5 x 25 mm²	17 x 1,5 - 4 mm²	ZK175G	5 x 25 mm²	17 x 1,5 - 4 mm²
	ZK206B	6 x 25 mm²	20 x 1,5 - 4 mm²	ZK206G	6 x 25 mm²	20 x 1,5 - 4 mm²
	ZK50BT	0 x 25 mm²	5 x 1,5 - 4 mm²	-	-	-

Subdistribution boards

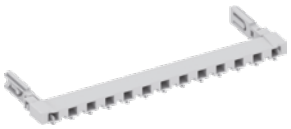
N/PE quick-terminals accessories

ZK113B

ZK50BT

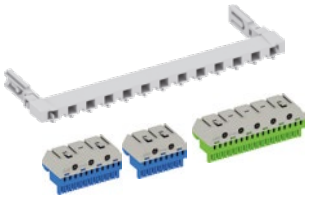
ZK113G

ZK10P10



ZK13

ZK15



ZK220

Article	Number of terminals 1.5 - 4 mm²	Number of terminals 2.5 - 25 mm²	External dimensions H x W x D in mm	Pieces	Order details		Price
					Type	Order code	
N Quick-terminals For quick carriers	5	0	23 x 32 x 21	1	ZK50B	2CPX062750R9999	
	5	1	32 x 32 x 31	1	ZK51B	2CPX062751R9999	
	8	2	32 x 49 x 31	1	ZK82B	2CPX062752R9999	
	11	3	32 x 65 x 31	1	ZK113B	2CPX062753R9999	
	14	4	32 x 82 x 31	1	ZK144B	2CPX062754R9999	
	17	5	32 x 98 x 31	1	ZK175B	2CPX062755R9999	
	20	6	32 x 115 x 31	1	ZK206B	2CPX062756R9999	
N Quick terminal with adapter ZK15 For fastening to DIN rail	5	0	28 x 39 x 25	1	ZK50BT	2CPX062745R9999	
PE Quick-terminals **For quick carriers**	5	1	32 x 32 x 31	1	ZK51G	2CPX062757R9999	
	8	2	32 x 49 x 31	1	ZK82G	2CPX062758R9999	
	11	3	32 x 65 x 31	1	ZK113G	2CPX062759R9999	
	14	4	32 x 82 x 31	1	ZK144G	2CPX062760R9999	
	17	5	32 x 98 x 31	1	ZK175G	2CPX062761R9999	
	20	6	32 x 115 x 31	1	ZK206G	2CPX062762R9999	
Connecting bridges for Quick-terminals				10	ZK10P10	2CPX062763R9999	
Quick carriers For compact distribution boards AT/U Usable width for Quick-terminals 214 mm				1	ZK13	2CPX064982R9999	
Adapter for ZK50B Engaging the ZK50B N Quick-terminal in the adapter ZK15 leads to ZK50BT to be fastened to the DIN rail				1	ZK15	2CPX064984R9999	
N/PE Quick-terminal-set for compact distribution boards In combination with quick carrier ZK13 and quick terminals: ZK113B: N 3 x 25 + 11 x 4 mm² ZK82B: N 2 x 25 + 8 x 4 mm² ZK175G: PE 5 x 25 + 17 x 4 mm²				1 Set	ZK220	2CPX063132R9999	

Subdistribution boards

Compact distribution boards accessories

ZB113

ZB111

ZX456

ZX440

ZH800

ZH220

ZH130

ZH132

ZH134

ZH137

Article	Pieces	Order details		Price
		Type	Order code	
Standard closure Included in the scope of delivery	1	ZB113	2CPX038478R9999	
Closure with lock With 2 keys	1	ZB111	2CPX038479R9999	
Espagnolette closure In combination with standard closure ZB113* (earthing part) or closure with lock ZB111				
Overall height 4 GU	1	ZX456	2CPX039586R9999	
Overall height 5 GU	1	ZX457	2CPX039587R9999	
Overall height 6 GU	1	ZX458	2CPX039588R9999	
Overall height 7 GU	1	ZX459	2CPX039589R9999	
Espagnolette closure In combination with ZH203, ZH220, ZH221, ZH222, ZH227, ZH228				
Overall height 4 GU	1	ZX440	2CPX039570R9999	
Overall height 5 GU	1	ZX441	2CPX039571R9999	
Overall height 6 GU	1	ZX442	2CPX039572R9999	
Overall height 7 GU	1	ZX443	2CPX039573R9999	
Installation set* of different closure systems in combination with ZH220/ZH221/ZH222	1	ZH800	2CPX038544R9999	
Latch plate				
Double bit operating pin, 3 mm standard and 5 mm (ZH800 must be ordered separately)	1	ZH220	2CPX045700R9999	
For triangular or square operating pins and for Daimler-Benz insert (ZH800 must be ordered separately)	1	ZH221	2CPX045701R9999	
For T-handle or latch handle (ZH800 must be ordered separately)	1	ZH222	2CPX045702R9999	
Operating pin				
Double-bit 3 mm	1	ZH130	2CPX060490R9999	
Double-bit 5 mm	1	ZH131	2CPX060491R9999	
Triangular 7 mm	1	ZH132	2CPX060492R9999	
Triangular 8 mm	1	ZH133	2CPX060493R9999	
Square 6 mm	1	ZH134	2CPX060494R9999	
Square 7 mm	1	ZH135	2CPX060495R9999	
Square 8 mm	1	ZH136	2CPX060496R9999	
Daimler-Benz insert	1	ZH137	2CPX060497R9999	

* Leave not less than 2 SU for DIN rail devices behind the closure

Subdistribution boards

Compact distribution boards accessories

ZH157

ZH91

ZH138

ZH139

ZH140

ZH141

ZH228

ZH227

ZH203

ZH142

Article	Pieces	Order details		Price
		Type	Order code	
Operating keys				
Triangular 7 mm	1	ZH157	2CPX060657R9999	
Triangular 8 mm	1	ZH158	2CPX060658R9999	
Double-bit 3 mm	1	ZH160	2CPX060660R9999	
Double-bit 5 mm	1	ZH161	2CPX060661R9999	
Square 6 mm	1	ZH162	2CPX060662R9999	
Square 7 mm	1	ZH163	2CPX060663R9999	
Square 8 mm	1	ZH164	2CPX060664R9999	
Daimler-Benz insert	1	ZH165	2CPX060665R9999	
Universal key Double bit 3 and 5 mm Triangular 8 mm Square 6 and 8 mm	1	ZH91	2CPX066091R9999	
T-handle*				
Without lock	1	ZH138	2CPX060498R9999	
With lock	1	ZH139	2CPX060499R9999	
Latch handle*				
Without lock	1	ZH140	2CPX060500R9999	
With lock	1	ZH141	2CPX060501R9999	
Swivel handle with lead sealable cap* For semi-cylinder 40 mm (30/10)	1	ZH228	2CPX045709R9999	
Swivel handle with lead sealable cap* With cabinet handle Berlin, simultaneous locking	1	ZH227	2CPX045708R9999	
Swivel handle with lead sealable cap* With closure E0 12	1	ZH203	2CPX045707R9999	
Dummy insert instead of a semi-cylinder for the swivel handle ZH228	1	ZH142	2CPX060502R9999	

* Leave not less than 2 SU for DIN rail devices behind the closure

ZKV200P4

ZE11

ZE12

ZB43

ZX69K

ZA1P5

ZA6

ZA5

ZA53

ZX139LR

Article	Pieces	Order details		Price
		Type	Order code	
Hollow-wall mounting set For retrofitting flush-mounted distribution boards Wall thickness: min. 14 mm, max. 58 mm	1	ZKV200P4	2CPX062446R9999	
Earthing set for wall-mounting compact distribution boards For conversion into protection class 1	1	ZE11	2CPX038143R9999	
Earthing set for flush-mounting compact distribution boards For conversion into protection class 1	1	ZE12	2CPX038144R9999	
Membrane flange For inserting the cable from below	1	ZB43	2CPX038183R9999	
Vertical partitions between distribution board panels, not arc-resistant				
Overall height 3 GU	1	ZX69K	2CPX039332R9999	
Overall height 4 GU	1	ZX70K	2CPX039333R9999	
Overall height 5 GU	1	ZX71K	2CPX039334R9999	
Overall height 6 GU	1	ZX72K	2CPX039335R9999	
Overall height 7 GU	1	ZX73K	2CPX039336R9999	
Slot cover Colour RAL 7035 For 12 space units, break-off type	5	ZA1P5	2CPX062384R9999	
	50	ZA1P50	2CPX062378R9999	
Document holder DIN A4 Self-adhesive with transparent sleeve	1	ZA6	2CPX038227R9999	
	10	ZA6P10	2CPX062380R9999	
Self-adhesive with transparent sleeve and reinforced back	10	ZA61P10	2CPX062375R9999	
Document holder DIN A4 Self-adhesive	1	ZA13	2CPX038233R9999	
	10	ZA13P10	2CPX062381R9999	
Document holder DIN A5 Self-adhesive	1	ZA5	2CPX038228R9999	
	10	ZA5P10	2CPX062382R9999	
Document holder	1	ZA53	2CPX071103R9999	
Door hinge (plastic)	2	ZX139LR	2CPX039139R9999	

Subdistribution boards

Compact distribution boards accessories

ZX464

ZX371

ZK90P2

ZX21

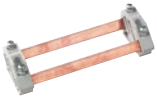
ZB32P20

ED137P4

ED50P12

ZKV201

Article	Pieces	Order details		Price
		Type	Order code	
Door bolt for double-wing doors **For cabinets with three or more panel widths**	1	ZX464	2CPX039596R9999	
DIN rail for terminals 35 x 7.5 mm For recessed mounting in conjunction with mounting bracket ZX372P2 and insulator ZK90P2				
1 panel wide	1	ZX371	2CPX068076R9999	
2 panel wide	1	ZX389	2CPX068190R9999	
Insulator for DIN rails **35 x 7.5 mm including fastening material**	2	ZK90P2	2CPX062426R9999	
DIN rail 35 x 7.5 mm				
1 panel wide	1	ZX21	2CPX039021R9999	
2 panel wide	1	ZX22	2CPX039022R9999	
Fastening screws for DIN rails				
Slotted/hexalobular socket pan head thread rolling screw T25 –	20	ZB32P20	2CPX062651R9999	
Slotted/hexalobular socket pan head thread rolling screw T25 –	500	ZB32P500	2CPX062652R9999	
Cover holder 45 mm high For fastening on the EDF profile For DIN rails 35 x 7.5 mm, use only these cover holders	4	ED137P4	2CPX062600R9999	
	40	ED137P40	2CPX062601R9999	
Press-and-turn fixing To cover distribution board panels	12	ED50P12	2CPX062337R9999	
Labelling system Self-adhesive, for AT and U distribution boards	1	ZKV201	2CPX038148R9999	



ZK300

ZX518

ZX400

ZB19

ZA122

ZA20

ZA120

Article	Pieces	Order details		Price
		Type	Order code	
Busbar system for N/PE Cu 12 x 5 mm, max. connection 95 mm²				
1 panel wide	1	ZK300	2CPX038551R9999	
2 panel wide	1	ZK301	2CPX038552R9999	
N/PE busbar holder For copper busbars 12 x 5 mm, 20 x 5 mm, 30 x 5 mm	1	ZX518	2CPX067805R9999	
	10	ZX518P10	2CPX062551R9999	
Copper busbars 12 x 5 mm = 250 A				
1 m long		ZX400	2CPX061400R9999	
2 m long		ZX401	2CPX061401R9999	
3 m long		ZX402	2CPX061402R9999	
4 m long		ZX350	2CPX061350R9999	
Cover profile For copper busbars 12 x 5 and 12 x 10 mm, length 1 m To clip on busbars		ZB19	2CPX038187R9999	
Cleaner For distribution board panel covers Spray dispenser, 500 ml	1	ZA122	2CPX038293R9999	
Spray paint can Colour RAL 9016, 150 ml	1	ZA20	2CPX038229R9999	
Touch-up applicator Colour RAL 9016, 12 ml	1	ZA120	2CPX039043R9999	

Subdistribution boards

A wall-mounting cabinets IP43 indoor installation ⧈

A wall-mounting cabinets IP43 ,, Cabinet depth 215 mm
Empty cabinets for surface mounting, flush mounting and partially recessed mounting in solid walls for indoor use
In up to 250 A (400 A)*
Enclosure and door made of sheet steel, with recessed plastic profile for double insulation
Rear wall made of plastic
RAL 9016, powder-coated
Prepared to be fitted with meter and distribution board panels/combination sets
Prepared to be fitted with CombiLine-M modules on the EDF mounting frame
Double-wing doors on cabinets with three or more panel widths
Door opening angle: 130 degree
With standard closure ZB113
Flange openings are provided on the bottom and sides
Membrane flanges are mounted in the upper connection area
One nipple flange ZB40 also included
Knockouts for incoming cables are provided on the rear side
Cable inlets are located in the lower and upper connection area (per panel width)

> For distribution board panels, combination sets and CombiLine-M, see Chapter Distribution panel system
* Depending on the switchgear assembly in accordance with IEC 61439-1/-2/-3

3/2A

OH	GU	Height	PW	SU	External dimensions	A wall-mounting cabinets IP43 ⧈		
		in mm			H x W x D (mm)	Order details		Price
						Type	Order code	
00	3	500	1	36	500 x 300 x 215	1/00A	2CPX036061R9999	
			2	72	500 x 550 x 215	2/00A	2CPX036062R9999	
			3	108	500 x 800 x 215	3/00A	2CPX036063R9999	
			4	144	500 x 1050 x 215	4/00A	2CPX036064R9999	
			5	180	500 x 1300 x 215	5/00A	2CPX036065R9999	
0	4	650	1	48	650 x 300 x 215	1/0A	2CPX036001R9999	
			2	96	650 x 550 x 215	2/0A	2CPX036002R9999	
			3	144	650 x 800 x 215	3/0A	2CPX036003R9999	
			4	192	650 x 1050 x 215	4/0A	2CPX036004R9999	
			5	240	650 x 1300 x 215	5/0A	2CPX036005R9999	
1	5	800	1	60	800 x 300 x 215	1/1A	2CPX036011R9999	
			2	120	800 x 550 x 215	2/1A	2CPX036012R9999	
			3	180	800 x 800 x 215	3/1A	2CPX036013R9999	
			4	240	800 x 1050 x 215	4/1A	2CPX036014R9999	
			5	300	800 x 1300 x 215	5/1A	2CPX036015R9999	
2	6	950	1	72	950 x 300 x 215	1/2A	2CPX036021R9999	
			2	144	950 x 550 x 215	2/2A	2CPX036022R9999	
			3	216	950 x 800 x 215	3/2A	2CPX036023R9999	
			4	288	950 x 1050 x 215	4/2A	2CPX036024R9999	
			5	360	950 x 1300 x 215	5/2A	2CPX036025R9999	
3	7	1100	1	84	1100 x 300 x 215	1/3A	2CPX036031R9999	
			2	168	1100 x 550 x 215	2/3A	2CPX036032R9999	
			3	252	1100 x 800 x 215	3/3A	2CPX036033R9999	
			4	336	1100 x 1050 x 215	4/3A	2CPX036034R9999	
			5	420	1100 x 1300 x 215	5/3A	2CPX036035R9999	
4	8	1250	1	96	1250 x 300 x 215	1/4A	2CPX036041R9999	
			2	192	1250 x 550 x 215	2/4A	2CPX036042R9999	
			3	288	1250 x 800 x 215	3/4A	2CPX036043R9999	
			4	384	1250 x 1050 x 215	4/4A	2CPX036044R9999	
			5	480	1250 x 1300 x 215	5/4A	2CPX036045R9999	
5	9	1400	1	108	1400 x 300 x 215	1/5A	2CPX036051R9999	
			2	216	1400 x 550 x 215	2/5A	2CPX036052R9999	
			3	324	1400 x 800 x 215	3/5A	2CPX036053R9999	
			4	432	1400 x 1050 x 215	4/5A	2CPX036054R9999	
			5	540	1400 x 1300 x 215	5/5A	2CPX036055R9999	

Subdistribution boards

A wall-mounting cabinets IP43 accessories

ZX455

ZX454

ZX206P4

ZB43

ZB40

ZB113

ZB111

ZX456

ZH800

ZH220

ZH130

Article	Pieces	Order details		Price
		Type	Order code	
Insulating frame for cabinet to cabinet connection For the side flange cut-outs (to maintain double insulation when cabinets are assembled next to each other) (with connection material)	1	ZX455	2CPX039192R9999	
Insulating frame for cabinet to cabinet connection For the top/bottom flange cut-outs (to maintain double insulation when cabinets are assembled one above the other)	1	ZX454	2CPX039199R9999	
External mounting brackets	4	ZX206P4	2CPX062491R9999	
Membrane flange* For inserting the cable	1	ZB43	2CPX038183R9999	
Nipple flange* For inserting the cable	1	ZB40	2CPX038195R9999	
Standard closure*	1	ZB113	2CPX038478R9999	
Closure with lock With 2 keys	1	ZB111	2CPX038479R9999	
Espagnolette closure In conjunction standard closure and lock for retrofitting into A-, B-cabinets				
For overall height 0 (4 GU)	1	ZX456	2CPX039586R9999	
For overall height 1 (5 GU)	1	ZX457	2CPX039587R9999	
For overall height 2 (6 GU)	1	ZX458	2CPX039588R9999	
For overall height 3 (7 GU)	1	ZX459	2CPX039589R9999	
For overall height 4 (8 GU)	1	ZX460	2CPX039590R9999	
For overall height 5 (9 GU)	1	ZX461	2CPX039591R9999	
Set for installing Actuation options in conjunction with ZH220/ZH221/ZH222	1	ZH800	2CPX038544R9999	
Latch plate for double-bit operating pin (order installation set ZH800 separately) 3 and 5 mm	1	ZH220	2CPX045700R9999	
Operating pins				
Double-bit 3 mm	1	ZH130	2CPX060490R9999	
Double-bit 5 mm	1	ZH131	2CPX060491R9999	

Article	Pieces	Order details		Price
		Type	Order code	
Latch plate For triangular, square and Daimler-Benz operating pins (also order ZH800 installation set for A cabinets)	1	ZH221	2CPX045701R9999	
Operating pins				
Triangular 7 mm	1	ZH132	2CPX060492R9999	
Triangular 8 mm	1	ZH133	2CPX060493R9999	
Square 6 mm	1	ZH134	2CPX060494R9999	
Square 7 mm	1	ZH135	2CPX060495R9999	
Square 8 mm	1	ZH136	2CPX060496R9999	
Daimler-Benz	1	ZH137	2CPX060497R9999	
Latch plate For T-handle or latch handle (order installation set ZH800 separately)	1	ZH222	2CPX045702R9999	
T-handle				
Without lock	1	ZH138	2CPX060498R9999	
With lock	1	ZH139	2CPX060499R9999	
Latch handle				
Without lock	1	ZH140	2CPX060500R9999	
With lock	1	ZH141	2CPX060501R9999	
Swivel handle for semi-cylinder 40 mm (30/10) with lead sealable cap	1	ZH228	2CPX045709R9999	
Dummy insert (instead of semi-cylinder)	1	ZH142	2CPX060502R9999	
Swivel handle With closure E0 12	1	ZH203	2CPX045707R9999	

ZH221

ZH132

ZH134

ZH137

ZH222

ZH138

ZH139

ZH140

ZH141

ZH228

ZH142

ZH203

Subdistribution boards

A wall-mounting cabinets IP43 accessories

ZX456

ZX139LR

ZX464

KB19

KB219

KBS9

KBW1

ZA20

ZA120

Article	Pieces	Order details		Price
		Type	Order code	
Espagnolette closure in conjunction with ZH203, ZH220, ZH221, ZH222, ZH227 and ZH228				
For overall height 0 (4 GU)	1	ZX440	2CPX039570R9999	
For overall height 1 (5 GU)	1	ZX441	2CPX039571R9999	
For overall height 2 (6 GU)	1	ZX442	2CPX039572R9999	
For overall height 3 (7 GU)	1	ZX443	2CPX039573R9999	
For overall height 4 (8 GU)	1	ZX444	2CPX039574R9999	
For overall height 5 (9 GU)	1	ZX445	2CPX039575R9999	
Door hinge (plastic)*	2	ZX139LR	2CPX039139R9999	
Door bolt for double-wing doors* For cabinets with three or more panel widths	1	ZX464	2CPX039596R9999	
Cable entry covers with end plates and mounting brackets. Colour RAL9016 adjusted to the colour of the cabinets				
1 panel wide, width 300 mm	1	KB19	2CPX044049R9999	
2 panel wide, width 550 mm	1	KB29	2CPX044050R9999	
3 panel wide, width 800 mm	1	KB39	2CPX044051R9999	
4 panel wide, width 1050 mm	1	KB49	2CPX044052R9999	
5 panel wide, width 1300 mm	1	KB59	2CPX044053R9999	
Profile Colour RAL9016 Width 2000 mm	1	KB219	2CPX044055R9999	
End plate left/right Colour RAL9016 1 set, 2 pcs.	1	KBS9	2CPX044057R9999	
Mounting brackets	1	KBW1	2CPX044058R9999	
Spray paint can Colour RAL 9016, 150 ml	1	ZA20	2CPX038229R9999	
Touch-up applicator Colour RAL 9016, 12 ml	1	ZA120	2CPX039043R9999	

* Spare part included in the scope of delivery

ZA6

ZA5

Article	Pieces	Order details		Price
		Type	Order code	
Accessories for all cabinet types				
Document holder DIN A4 Self-adhesive with transparent sleeve	1	ZA6	2CPX038227R9999	
	10	ZA6P10	2CPX062380R9999	
Self-adhesive with transparent sleeve and reinforced back	10	ZA61P10	2CPX062375R9999	
Document holder DIN A4 Self-adhesive	1	ZA13	2CPX038233R9999	
	10	ZA13P10	2CPX062381R9999	
Document holder DIN A5 Self-adhesive	1	ZA5	2CPX038228R9999	
	10	ZA5P10	2CPX062382R9999	

Subdistribution boards

A wall-mounting cabinets IP43 sheet steel doors

2CPX062060R9999

T20

PW	OH	To be used with... A wall-mounting cabinet	Order details door left side			Order details door right side		
			Type	Order code	Price	Type	Order code	Price
1	00	1/00A				T100	2CPX062057R9999	
2		2/00A				T200	2CPX062058R9999	
3		3/00A	T300L	2CPX062192R9999		T300R	2CPX062191R9999	
4		4/00A	T500L	2CPX062194R9999		T300R	2CPX062191R9999	
5		5/00A	T500L	2CPX062194R9999		T500R	2CPX062193R9999	
1	0	1/0A				T10	2CPX062059R9999	
2		2/0A				T20	2CPX062060R9999	
3		3/0A	T30L	2CPX062196R9999		T30R	2CPX062195R9999	
4		4/0A	T50L	2CPX062198R9999		T30R	2CPX062195R9999	
5		5/0A	T50L	2CPX062198R9999		T50R	2CPX062197R9999	
1	1	1/1A				T11	2CPX062062R9999	
2		2/1A				T21	2CPX062063R9999	
3		3/1A	T31L	2CPX062200R9999		T31R	2CPX062199R9999	
4		4/1A	T51L	2CPX062202R9999		T31R	2CPX062199R9999	
5		5/1A	T51L	2CPX062202R9999		T51R	2CPX062201R9999	
1	2	1/2A				T12	2CPX062066R9999	
2		2/2A				T22	2CPX062067R9999	
3		3/2A	T32L	2CPX062204R9999		T32R	2CPX062203R9999	
4		4/2A	T52L	2CPX062206R9999		T32R	2CPX062203R9999	
5		5/2A	T52L	2CPX062206R9999		T52R	2CPX062209R9999	
1	3	1/3A				T13	2CPX062079R9999	
2		2/3A				T23	2CPX062070R9999	
3		3/3A	T33	2CPX062208R9999		T33R	2CPX062207R9999	
4		4/3A	T53	2CPX062210R9999		T33R	2CPX062207R9999	
5		5/3A	T53	2CPX062210R9999		T53R	2CPX062209R9999	
1	4	1/4A				T14	2CPX062082R9999	
2		2/4A				T24	2CPX062083R9999	
3		3/4A	T34	2CPX062212R9999		T34R	2CPX062211R9999	
4		4/4A	T54	2CPX062214R9999		T34R	2CPX062211R9999	
5		5/4A	T54	2CPX062214R9999		T54R	2CPX062213R9999	
1	5	1/5A				T15	2CPX062087R9999	
2		2/5A				T25	2CPX062088R9999	
3		3/5A	T35	2CPX062216R9999		T35R	2CPX062215R9999	
4		4/5A	T55	2CPX062218R9999		T35R	2CPX062215R9999	
5		5/5A	T55	2CPX062218R9999		T55R	2CPX062217R9999	

Subdistribution boards

A wall-mounting cabinets IP43 transparent doors

2CPX062027R9999

TTS20

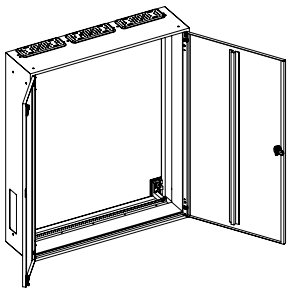
PW	OH	To be used with... A wall-mounting cabinet	Order details door left side			Order details door right side		
			Type	Order code	Price	Type	Order code	Price
1	00	1/00A				TTS100	2CPX062021R9999	
2		2/00A				TTS200	2CPX062022R9999	
3		3/00A	TTS300L	2CPX062248R9999		TTS300R	2CPX062247R9999	
4		4/00A	TTS500L	2CPX062250R9999		TTS300R	2CPX062247R9999	
5		5/00A	TTS500L	2CPX062250R9999		TTS500R	2CPX062249R9999	
1	0	1/0A				TTS10	2CPX062026R9999	
2		2/0A				TTS20	2CPX062027R9999	
3		3/0A	TTS30L	2CPX062252R9999		TTS30R	2CPX062251R9999	
4		4/0A	TTS50L	2CPX062254R9999		TTS30R	2CPX062251R9999	
5		5/0A	TTS50L	2CPX062254R9999		TTS50R	2CPX062253R9999	
1	1	1/1A				TTS11	2CPX062031R9999	
2		2/1A				TTS21	2CPX062032R9999	
3		3/1A	TTS31L	2CPX062256R9999		TTS31R	2CPX062255R9999	
4		4/1A	TTS51L	2CPX062258R9999		TTS31R	2CPX062255R9999	
5		5/1A	TTS51L	2CPX062258R9999		TTS51R	2CPX062257R9999	
1	2	1/2A				TTS12	2CPX062036R9999	
2		2/2A				TTS22	2CPX062037R9999	
3		3/2A	TTS32L	2CPX062260R9999		TTS32R	2CPX062259R9999	
4		4/2A	TTS52L	2CPX062262R9999		TTS32R	2CPX062259R9999	
5		5/2A	TTS52L	2CPX062262R9999		TTS52R	2CPX062261R9999	
1	3	1/3A				TTS13	2CPX062041R9999	
2		2/3A				TTS23	2CPX062042R9999	
3		3/3A	TTS33	2CPX062264R9999		TTS33R	2CPX062263R9999	
4		4/3A	TTS53	2CPX062266R9999		TTS33R	2CPX062263R9999	
5		5/3A	TTS53	2CPX062266R9999		TTS53R	2CPX062265R9999	
1	4	1/4A				TTS14	2CPX062046R9999	
2		2/4A				TTS24	2CPX062047R9999	
3		3/4A	TTS34	2CPX062268R9999		TTS34R	2CPX062267R9999	
4		4/4A	TTS54	2CPX062270R9999		TTS34R	2CPX062267R9999	
5		5/4A	TTS54	2CPX062270R9999		TTS54R	2CPX062269R9999	
1	5	1/5A				TTS15	2CPX062051R9999	
2		2/5A				TTS25	2CPX062052R9999	
3		3/5A	TTS35	2CPX062272R9999		TTS35R	2CPX062271R9999	
4		4/5A	TTS55	2CPX062274R9999		TTS35R	2CPX062271R9999	
5		5/5A	TTS55	2CPX062274R9999		TTS55R	2CPX062273R9999	

Subdistribution boards

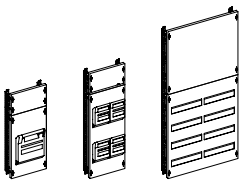
B wall-mounting cabinets IP43 indoor installation ⏚

B wall-mounting cabinets IP43 ., Cabinet depth 215 mm
Empty cabinets for surface, flush and partially recessed mounting
In up to 250 A (400 A)*
Enclosure and door made of sheet steel
Rear wall made of plastic
RAL 9016 powder-coated
Prepared to be fitted with a mounting plate made of galvanised sheet steel
Prepared to be fitted with distribution board panels/combination sets
Prepared to be fitted with CombiLine-M modules on the EDF mounting frame
Double-wing doors on cabinets with three or more panel widths
Door opening angle: 130 degree
With standard closure ZB113
Flange openings on the sides, open at the bottom. Nipple flanges ZB40 included
Membrane flanges are mounted in the upper connection area

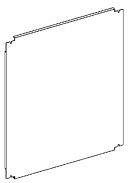
* Depending on the switchgear assembly in accordance with IEC 61439-1/-2/-3



B wall-mounting cabinets IP43 ⏚, Cabinet depth 215 mm



Distribution board panels/ combination sets CombiLine modules on EDF mounting frame, see chapter distribution panel system



Mounting plate

Subdistribution boards

B wall-mounting cabinets IP43 / mounting plates indoor installation ⏚

3/2B

GM32

GU	OH	Height	PW	SU	External dimens.	B wall-mounting cabinets IP43 ⧈			External dimens.	Mounting plates		
		in mm			H x W x D (mm)	Order details		Price	H x W x D (mm)	Order details		Price
						Type	Order code			Type	Order code	
3	00	500	1	36	500 x 300 x 215	1/00B	2CPX036360R9999		-	-	-	
			2	72	500 x 550 x 215	2/00B	2CPX036361R9999		-	-	-	
			3	108	500 x 800 x 215	3/00B	2CPX036362R9999		-	-	-	
4	0	650	1	48	650 x 300 x 215	1/0B	2CPX036370R9999		-	-	-	
			2	96	650 x 550 x 215	2/0B	2CPX036371R9999		600 x 500	GM20	2CPX034473R9999	
			3	144	650 x 800 x 215	3/0B	2CPX036372R9999		600 x 750	GM30	2CPX034474R9999	
			4	192	650 x 1050 x 215	4/0B	2CPX036373R9999		600 x 1000	GM40	2CPX034475R9999	
			5	240	650 x 1300 x 215	5/0B	2CPX036374R9999		600 x 1250	GM50	2CPX034476R9999	
5	1	800	1	60	800 x 300 x 215	1/1B	2CPX036380R9999		-	-	-	
			2	120	800 x 550 x 215	2/1B	2CPX036381R9999		-	-	-	
			3	180	800 x 800 x 215	3/1B	2CPX036382R9999		-	-	-	
			4	240	800 x 1050 x 215	4/1B	2CPX036383R9999		-	-	-	
			5	300	800 x 1300 x 215	5/1B	2CPX036384R9999		-	-	-	
6	2	950	1	72	950 x 300 x 215	1/2B	2CPX036390R9999		900 x 250	GM12	2CPX034482R9999	
			2	144	950 x 550 x 215	2/2B	2CPX036391R9999		900 x 500	GM22	2CPX034483R9999	
			3	216	950 x 800 x 215	3/2B	2CPX036392R9999		900 x 750	GM32	2CPX034484R9999	
			4	288	950 x 1050 x 215	4/2B	2CPX036393R9999		900 x 1000	GM42	2CPX034485R9999	
			5	360	950 x 1300 x 215	5/2B	2CPX036394R9999		900 x 1250	GM52	2CPX034486R9999	
7	3	1100	1	84	1100 x 300 x 215	1/3B	2CPX036400R9999		-	-	-	
			2	168	1100 x 550 x 215	2/3B	2CPX036401R9999		-	-	-	
			3	252	1100 x 800 x 215	3/3B	2CPX036402R9999		-	-	-	
			4	336	1100 x 1050 x 215	4/3B	2CPX036403R9999		-	-	-	
			5	420	1100 x 1300 x 215	5/3B	2CPX036404R9999		-	-	-	
8	4	1250	1	96	1250 x 300 x 215	1/4B	2CPX036410R9999		-	-	-	
			2	192	1250 x 550 x 215	2/4B	2CPX036411R9999		1200 x 500	GM24	2CPX034488R9999	
			3	288	1250 x 800 x 215	3/4B	2CPX036412R9999		1200 x 750	GM34	2CPX034489R9999	
			4	384	1250 x 1050 x 215	4/4B	2CPX036413R9999		1200 x 1000	GM44	2CPX034490R9999	
			5	480	1250 x 1300 x 215	5/4B	2CPX036414R9999		1200 x 1250	GM54	2CPX034491R9999	
9	5	1400	1	108	1400 x 300 x 215	1/5B	2CPX036420R9999		-	-	-	
			2	216	1400 x 550 x 215	2/5B	2CPX036421R9999		1350 x 500	GM25	2CPX034493R9999	
			3	324	1400 x 800 x 215	3/5B	2CPX036422R9999		1350 x 750	GM35	2CPX034494R9999	
			4	432	1400 x 1050 x 215	4/5B	2CPX036423R9999		1350 x 1000	GM45	2CPX034495R9999	
			5	540	1400 x 1300 x 215	5/5B	2CPX036424R9999		1350 x 1250	GM55	2CPX034496R9999	

Subdistribution boards

B wall-mounting cabinets IP43 accessories

ZP74P4

ZX131

ZB43

ZB40

ZB113

ZB111

ZX456

ZH800

ZH203

ZH228

Article	Pieces	Order details		Price
		Type	Order code	
External mounting brackets	4	ZP74P4	2CPX062636R9999	
Connection set For connecting cabinets in series, 1 set	1	ZX131	2CPX039131R9999	
Membrane flange* For inserting the cable	1	ZB43	2CPX038183R9999	
Nipple flange* For inserting the cable	1	ZB40	2CPX038195R9999	
Standard closure*	1	ZB113	2CPX038478R9999	
Closure with lock with 2 keys	1	ZB111	2CPX038479R9999	
Espagnolette closure *In conjunction with standard closure and closure with lock (ZB113, ZB111)				
For overall height 0 (4 GU)	1	ZX456	2CPX039586R9999	
For overall height 1 (5 GU)	1	ZX457	2CPX039587R9999	
For overall height 2 (6 GU)	1	ZX458	2CPX039588R9999	
For overall height 3 (7 GU)	1	ZX459	2CPX039589R9999	
For overall height 4 (8 GU)	1	ZX460	2CPX039590R9999	
For overall height 5 (9 GU)	1	ZX461	2CPX039591R9999	
Set for installing Actuation options in conjunction with ZH220/ZH221/ ZH222 Please find more accessories on page 14/99 (types: ZH221, ZH132-ZH137, ZH222, ZH138-141).	1	ZH800	2CPX038544R9999	
Swivel handle Closure E0 12	1	ZH203	2CPX045707R9999	
Swivel handle For semi-cylinder 40 mm (30/10), with lead sealable cap	1	ZH228	2CPX045709R9999	

*Spare part included in the scope of delivery

Subdistribution boards

B wall-mounting cabinets IP43 accessories / cable entry covers

ZX440

ZA20

ZA120

KB19

KB219

KBS9

KBW1

ZA6

ZA5

Article	Pieces	Order details		Price
		Type	Order code	
B wall-mounting cabinet				
Espagnolette closure in conjunction with ZH203, ZH220, ZH221, ZH222, ZH227 and ZH228 closure system				
For overall height 0 (4 GU)	1	ZX440	2CPX039570R9999	
For overall height 1 (5 GU)	1	ZX441	2CPX039571R9999	
For overall height 2 (6 GU)	1	ZX442	2CPX039572R9999	
For overall height 3 (7 GU)	1	ZX443	2CPX039573R9999	
For overall height 4 (8 GU)	1	ZX444	2CPX039574R9999	
For overall height 5 (9 GU)	1	ZX445	2CPX039575R9999	
Spray paint can Colour RAL 9016, 150 ml	1	ZA20	2CPX038229R9999	
Touch-up applicator Colour RAL 9016, 12 ml	1	ZA120	2CPX039043R9999	
Cable entry covers with end plates and mounting brackets Colour RAL9016 adjusted to the colour of the cabinets				
1 panel wide, width 300 mm	1	KB19	2CPX044049R9999	
2 panel wide, width 550 mm	1	KB29	2CPX044050R9999	
3 panel wide, width 800 mm	1	KB39	2CPX044051R9999	
4 panel wide, width 1050 mm	1	KB49	2CPX044052R9999	
4 panel wide, width 1300 mm	1	KB59	2CPX044053R9999	
Profile Colour RAL9016 Width 2000 mm	1	KB219	2CPX044055R9999	
End plate left/right Colour RAL9016 1 set, 2 pcs.	1	KBS9	2CPX044057R9999	
Mounting brackets	1	KBW1	2CPX044058R9999	
Document holder DIN A4 Self-adhesive with transparent sleeve	1	ZA6	2CPX038227R9999	
	10	ZA6P10	2CPX062380R9999	
Self-adhesive with transparent sleeve and reinforced back	10	ZA61P10	2CPX062375R9999	
Document holder DIN A4 Self-adhesive	1	ZA13	2CPX038233R9999	
	10	ZA13P10	2CPX062381R9999	
Document holder DIN A5 Self-adhesive	1	ZA5	2CPX038228R9999	
	10	ZA5P10	2CPX062382R9999	

Subdistribution boards

B wall-mounting cabinets IP43 sheet steel doors

2CPX062060R9999

T20

PW	OH	To be used with... B wall-mounting cabinet	Order details door left side			Order details door right side		
			Type	Order code	Price	Type	Order code	Price
1	00	1/00B				T100	2CPX062057R9999	
2		2/00B				T200	2CPX062058R9999	
3		3/00B	T300L	2CPX062192R9999		T300R	2CPX062191R9999	
4		-						
5		-						
1	0	1/0B				T10	2CPX062059R9999	
2		2/0B				T20	2CPX062060R9999	
3		3/0B	T30L	2CPX062196R9999		T30R	2CPX062195R9999	
4		4/0B	T50L	2CPX062198R9999		T30R	2CPX062195R9999	
5		5/0B	T50L	2CPX062198R9999		T50R	2CPX062197R9999	
1	1	1/1B				T11	2CPX062062R9999	
2		2/1B				T21	2CPX062063R9999	
3		3/1B	T31L	2CPX062200R9999		T31R	2CPX062199R9999	
4		4/1B	T51L	2CPX062202R9999		T31R	2CPX062199R9999	
5		5/1B	T51L	2CPX062202R9999		T51R	2CPX062201R9999	
1	2	1/2B				T12	2CPX062066R9999	
2		2/2B				T22	2CPX062067R9999	
3		3/2B	T32L	2CPX062204R9999		T32R	2CPX062203R9999	
4		4/2B	T52L	2CPX062206R9999		T32R	2CPX062203R9999	
5		5/2B	T52L	2CPX062206R9999		T52R	2CPX062209R9999	
1	3	1/3B				T13	2CPX062079R9999	
2		2/3B				T23	2CPX062070R9999	
3		3/3B	T33	2CPX062208R9999		T33R	2CPX062207R9999	
4		4/3B	T53	2CPX062210R9999		T33R	2CPX062207R9999	
5		5/3B	T53	2CPX062210R9999		T53R	2CPX062209R9999	
1	4	1/4B				T14	2CPX062082R9999	
2		2/4B				T24	2CPX062083R9999	
3		3/4B	T34	2CPX062212R9999		T34R	2CPX062211R9999	
4		4/4B	T54	2CPX062214R9999		T34R	2CPX062211R9999	
5		5/4B	T54	2CPX062214R9999		T54R	2CPX062213R9999	
1	5	1/5B				T15	2CPX062087R9999	
2		2/5B				T25	2CPX062088R9999	
3		3/5B	T35	2CPX062216R9999		T35R	2CPX062215R9999	
4		4/5B	T55	2CPX062218R9999		T35R	2CPX062215R9999	
5		5/5B	T55	2CPX062218R9999		T55R	2CPX062217R9999	

Subdistribution boards

B wall-mounting cabinets IP43 transparent doors

2CPX062027R9999

TTS20

PW	OH	To be used with... B wall-mounting cabinet	Order details door left side			Order details door right side		
			Type	Order code	Price	Type	Order code	Price
1	00	1/00B				TTS100	2CPX062021R9999	
2		2/00B				TTS200	2CPX062022R9999	
3		3/00B	TTS300L	2CPX062248R9999		TTS300R	2CPX062247R9999	
4		-						
5		-						
1	0	1/0B				TTS10	2CPX062026R9999	
2		2/0B				TTS20	2CPX062027R9999	
3		3/0B	TTS30L	2CPX062252R9999		TTS30R	2CPX062251R9999	
4		4/0B	TTS50L	2CPX062254R9999		TTS30R	2CPX062251R9999	
5		5/0B	TTS50L	2CPX062254R9999		TTS50R	2CPX062253R9999	
1	1	1/1B				TTS11	2CPX062031R9999	
2		2/1B				TTS21	2CPX062032R9999	
3		3/1B	TTS31L	2CPX062256R9999		TTS31R	2CPX062255R9999	
4		4/1B	TTS51L	2CPX062258R9999		TTS31R	2CPX062255R9999	
5		5/1B	TTS51L	2CPX062258R9999		TTS51R	2CPX062257R9999	
1	2	1/2B				TTS12	2CPX062036R9999	
2		2/2B				TTS22	2CPX062037R9999	
3		3/2B	TTS32L	2CPX062260R9999		TTS32R	2CPX062259R9999	
4		4/2B	TTS52L	2CPX062262R9999		TTS32R	2CPX062259R9999	
5		5/2B	TTS52L	2CPX062262R9999		TTS52R	2CPX062261R9999	
1	3	1/3B				TTS13	2CPX062041R9999	
2		2/3B				TTS23	2CPX062042R9999	
3		3/3B	TTS33	2CPX062264R9999		TTS33R	2CPX062263R9999	
4		4/3B	TTS53	2CPX062266R9999		TTS33R	2CPX062263R9999	
5		5/3B	TTS53	2CPX062266R9999		TTS53R	2CPX062265R9999	
1	4	1/4B				TTS14	2CPX062046R9999	
2		2/4B				TTS24	2CPX062047R9999	
3		3/4B	TTS34	2CPX062268R9999		TTS34R	2CPX062267R9999	
4		4/4B	TTS54	2CPX062270R9999		TTS34R	2CPX062267R9999	
5		5/4B	TTS54	2CPX062270R9999		TTS54R	2CPX062269R9999	
1	5	1/5B				TTS15	2CPX062051R9999	
2		2/5B				TTS25	2CPX062052R9999	
3		3/5B	TTS35	2CPX062272R9999		TTS35R	2CPX062271R9999	
4		4/5B	TTS55	2CPX062274R9999		TTS35R	2CPX062271R9999	
5		5/5B	TTS55	2CPX062274R9999		TTS55R	2CPX062273R9999	

System pro *E* energy

Wall-mounting and floor-standing cabinets TwinLine N

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N. One cabinet system for every requirement

The TwinLine N wall-mounting and floor-standing cabinets meet in all respects the requirements in the field.
The continuous portfolio in both protection classes and the quick and flexible internal configuration with ease of installation fulfill every demand.

A simplified accessories concept guarantees full flexibility while reducing inventory levels.
In combination with CombiLine N modules, TwinLine N offers unlimited possibilities for the internal configuration.

Product benefits

- Innovative flange technology
- Significantly more usable area for cable entry
- All flanges are compatible with all flange openings and knockouts within the entire TwinLine system
- Flexible internal configuration with CombiLine N modules
- Optimal accessibility and ease of installation thanks to 180 degree door opening angle
- Time-saving plinth assembly and safe transport
- Simplified accessories concept for reduced inventory levels
- Speedy and concise planning and calculations with the PDC software

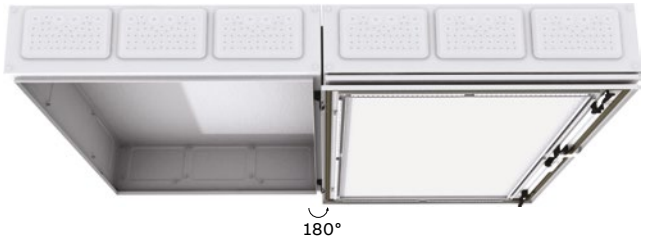
Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N. The common product benefits of TwinLine.

A wide range of flanges offers more useable area for cable entry and a innovative flange technology for toolless assembly.

Following flange types are available:
- Membrane flange
- Flange for M screw fittings
- Flange with cable sleeves
- Closing flange

An innovative plinth concept offers time-saving installation and safe transport.
- Plinth in 50 and 100 mm heigth
- Up to three plinth can be “stacked” on top of each other
- The plinths of 50 and 100 mm height can be combined
- Optimal feed-through of cables using the side knockouts for cable ducts or cable screw fittings
- Simple cable fastening rail installation
- Quick cable duct installation in the plinth



Optimal accessibility and ease of installation are guaranteed.
- The door opening angle is 180 degrees
- The innovative locking system is easy to install and allows you to quickly modify the door hinge
- Significantly reduced installation time

Subdistribution boards

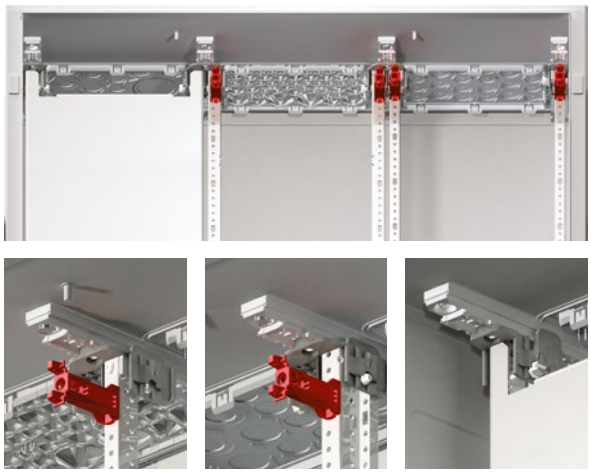
Wall-mounting and floor-standing cabinets TwinLine N. Product benefits of TwinLine N 44

- Prepared to be fitted with CombiLine N modules on EDF mounting frame
- Simplified installation thanks to premounted mounting frame holder
- Premounted frame holders per panel width offer flexible installation
- Depth adjustment possible on two positions

- Flexible interior configuration with CombiLine N modules
- For time-saving installation premounted mounting frame holders as well as center support rail and touch guard

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N. Product benefits of TwinLine N 55



- Time-saving installation thanks to uniform fastening of mounting plates and EDF and WR mounting frames
- Combination of EDF and WR mounting frames in one cabinet
- Drastic reduction in the number of mounting components for economical warehousing
- Depth adjustment position can be read on the mounting rail in increments of 12.5 mm

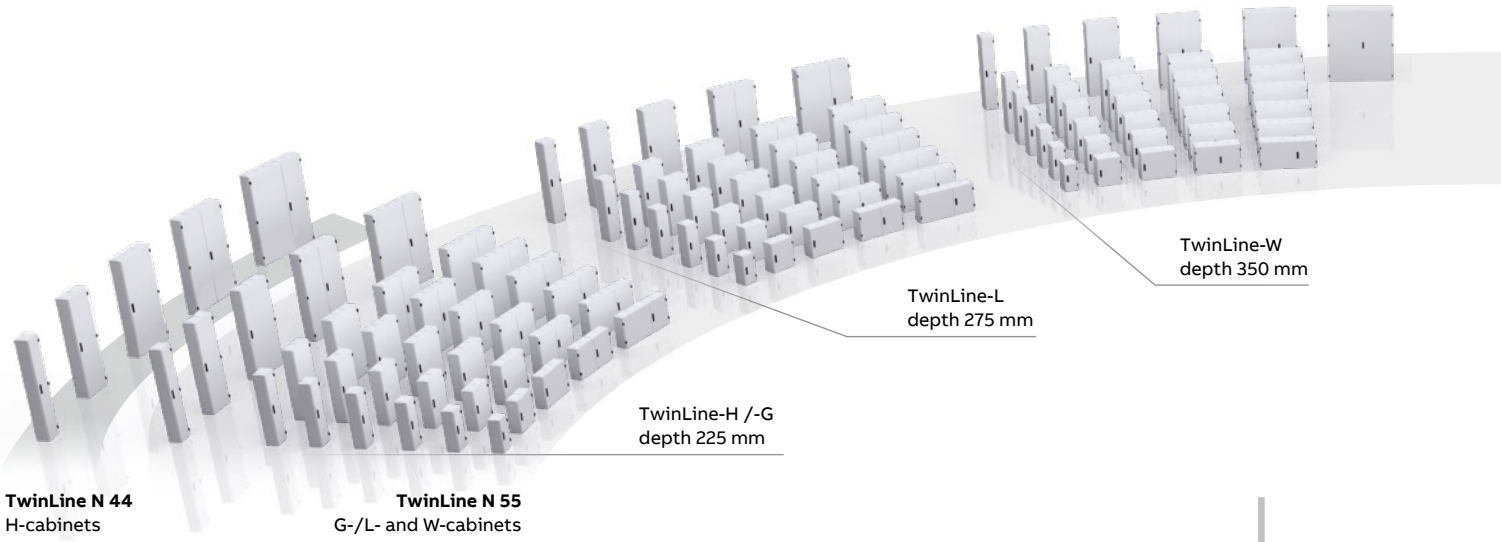
- If used with the TwinLine basic cabinets (enclosures without door), the high degree of protection of IP55 is also guaranteed with transparent doors.
- Transparent glass for an appealing look of the distribution board assembly
- Safety glass offering superb shock and impact protection
- Visual inspection of the device status also with the door closed
- Optimal accessibility and ease of installation thanks to 180 degree door opening angle

- All cabinets can be easily connected in series both, vertically and horizontally
- Two side knockouts for feeding busbars through or connecting cabinets in series
- Cabinet connection set for IP55 and additional insulating frames are available as accessories

Subdistribution boards

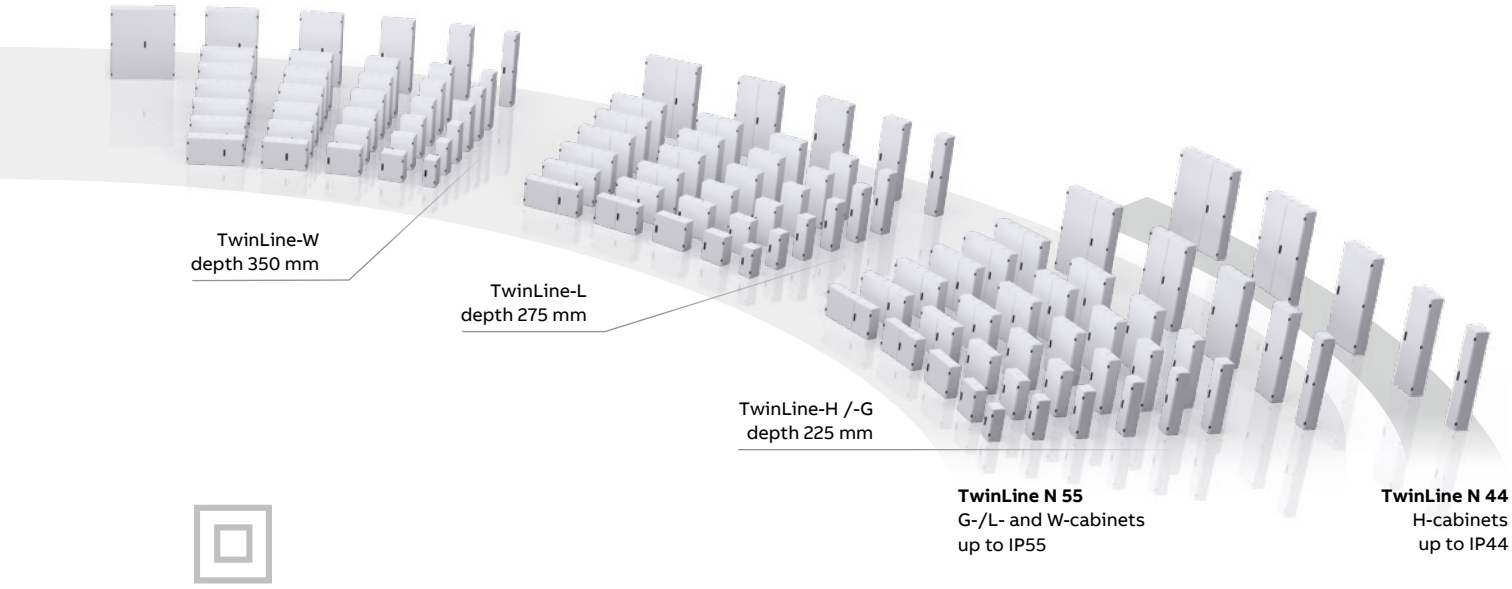
Wall-mounting and floor-standing cabinets TwinLine N. The complete cabinet system in all sizes

One system
Two protection classes
Three cabinet depth
Unlimited possibilites



		TwinLine N 44					TwinLine N 55															
Cabinet series		TwinLine-H					TwinLine-G					TwinLine-L					TwinLine-W					
Protection class		up to IP44					up to IP55					up to IP55					up to IP55					
Depth		225					225					275					350					
Width		300	550	800	1050	1300	300	550	800	1050	1300	300	550	800	1050	1300	300	550	800	1050	1300	1550
Height	GU 4 650	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 5 800	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 6 950	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 7 1100	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 8 1250	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 9 1400	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 12 1850	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

> Dimensions in mm



		TwinLine N 44					**TwinLine N 55**															
Cabinet series		TwinLine-H					TwinLine-G					TwinLine-L					TwinLine-W					
Protection class		up to IP44					up to IP55					up to IP55					up to IP55					
Depth		225					225					275					350					
Width		300	550	800	1050	1300	300	550	800	1050	1300	300	550	800	1050	1300	300	550	800	1050	1300	1550
Height	GU 4 650	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 5 800	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 6 950	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 7 1100	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 8 1250	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 9 1400	-	-	-	-	-	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-
	GU 12 1850	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

> Dimensions in mm

Subdistribution boards
Floor-standing cabinets TwinLine N 44

Subdistribution boards

Floor-standing cabinets TwinLine N 44

Technical specifications and product features

Technical specifications for TwinLine-H	
Standards / requirements	According to DIN EN 61439-1/-2/-3, DIN VDE 0660-600-1/-2/-3*
Protection class	I, earthed
	II, double insulated
Degree of protection	With door IP44
	Without door IP30, for a configuration as meter distribution board,
	With distribution board panels, combination sets or CombiLine N modules
Mechanical impact strength	IK 08 for the cabinet enclosure with sheet steel door
	IK 07 in the area of the flange knockouts
	Conditions of installation indoor installation
	Ambient air temperature max. + 40°C
	Ambient air temperature min. - 5°C
	Operating temperature max. + 55°C
	Storage temperature max. + 55°C
	Storage temperature min. - 40°C
Product features for TwinLine-H	
Housing and door material	Sheet steel, RAL 7035, powder-coated
	One flange opening per panel width at the top; knockouts are provided at the bottom
	Door opening angle: 180 degree
	Double-wing doors in all cabinets of a width of 4 panels and more
	Doors with espagnolette closure
	Standard lock: 3 mm double bit
Assembly options*	Prepared to be fitted with distribution board panels,
	combination sets or CombiLine N modules on EDF mounting frame
Forms of delivery	Enclosure with door
	External mounting brackets included in the scope of delivery
	Supporting elements per panel width are included in the scope of delivery
	The touch guard is included in the scope of delivery
	The center support rail is included in the scope of delivery
Accessories	Flanges must be ordered separately
	Plinths must be ordered separately

* The allowed heating for switchgear assemblies above 630 A rated current can be evidenced by the process according to section 10.10.4.2.
The required values of the Verlustleistungs-Abgabevermögens entnehmen Sie bitte den Tabellen siehe auf Seite 14;
Above 630 A rated current the process according to 10.10.4.3 (IEC 60890) must be applied;

Subdistribution boards

Floor-standing cabinets TwinLine N 44
Delivery status and extension options

TH312G

- Supports for an extensions with EDF mounting frame are already mounted per panel width
- Center support rail in scope of delivery

Assembly with EDF mounting frame
Assembly as meter or distribution board with distribution board panels, combi-sets or CombiLine N modules on EDF mounting frame

Subdistribution boards

Floor-standing cabinets TwinLine N 44

TwinLine-H, cabinet depth 225 mm, ⏚ ⧈

Height		Width		External dimensions	Floor-standing cabinets with door IP44		
GU	OH	PW	SU	H x W in mm	Type	Art no.	Price
TwinLine-H, cabinet depth 225 mm, ⏚							
12	8	1	144	1850 x 300	TH112G	2CPX010948R9999	
		2	288	1850 x 550	TH212G	2CPX010950R9999	
		3	432	1850 x 800	TH312G	2CPX010952R9999	
		4	576	1850 x 1050	TH412G	2CPX010954R9999	
		5	720	1850 x 1300	TH512G	2CPX010957R9999	
TwinLine-H, cabinet depth 225 mm, ⧈							
12	8	1	144	1850 x 300	TH112S	2CPX010949R9999	
		2	288	1850 x 550	TH212S	2CPX010951R9999	
		3	432	1850 x 800	TH312S	2CPX010953R9999	
		4	576	1850 x 1050	TH412S	2CPX010955R9999	
		5	720	1850 x 1300	TH512S	2CPX010958R9999	

TH312G

Included in the scope of delivery

- External mounting brackets
- Supports for an extension with EDF mounting frame
- Center support rail
- Touch guard

Accessories must be ordered separately

- Flanges
- Plinth

Subdistribution boards

Floor-standing cabinets TwinLine N 44

Flanges

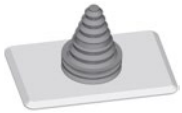
TZ101

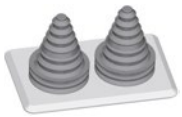
TZ102

TZ103

TZ110

TZ111


TZ112


TZ104

TZ105

TZ107

TZ106

Article	Pcs.	Type	Ord. no.	Price
Membrane flange **Material plastic for cable sections** 2 x 6 - 32.5 mm, 2 x 6 - 25 mm, 4 x 6 - 19 mm, 10 x 6 - 15 mm, 2 x 6 - 12 mm, 31 x 6 - 11 mm, 1 x 6 - 7 mm	1	TZ101	2CPX010450R9999	
	10	TZ101P10	2CPX010451R9999	
	100	TZ101P100	2CPX010826R9999	
Flanges for M screw fittings **Material plastic**				
1 x M63 / M50, 2 x M32 / M20, 5 x M25, 5 x M20	1	TZ102	2CPX010452R9999	
	10	TZ102P10	2CPX010453R9999	
4 x M20 / M25, 18 x M20	1	TZ103	2CPX010454R9999	
	10	TZ103P10	2CPX010455R9999	
Flange with cable sleeves **Material: plastic** Flange with 8 cable sleeves For cable sections 8 x 13 up to 34 mm	1	TZ110	2CPX010850R9999	
	10	TZ110P10	2CPX010934R9999	
Flange with 11 cable sleeves For cable sections 1 x 14 up to 54 mm, 3 x 13 up to 34 mm, 3 x 13 up to 26.5 mm, 4 x 5 up to 21 mm	1	TZ111	2CPX010851R9999	
	10	TZ111P10	2CPX010935R9999	
Flange with 1 cable sleeve For cable sections 1 x 14 up to 68 mm	1	TZ112	2CPX010852R9999	
Flange with 2 cable sleeves For cable sections 2 x 14 up to 68 mm	1	TZ104	2CPX010456R9999	
	10	TZ104P10	2CPX010932R9999	
Flange with 3 cable sleeves For cable sections 3 x 14 up to 54 mm	1	TZ105	2CPX010457R9999	
	10	TZ105P10	2CPX010933R9999	
Closing flanges Material: plastic	1	TZ107	2CPX010460R9999	
	10	TZ107P10	2CPX010461R9999	
Material sheet steel For earthed cabinets	1	TZ106	2CPX010458R9999	
	10	TZ106P10	2CPX010459R9999	

Subdistribution boards

Floor-standing cabinets TwinLine N 44

Plinth

TZG305

TZG310

TZ627P2

TZ323

ZK143

Article	Depth mm	Width PW	Width mm	Pcs.	Type	Ord. no.	Price
Plinth, height 50 mm, colour RAL 9005 For TwinLine-H*	225	1	300	1	TZG105	2CPX010571R9999	
	225	2	550	1	TZG205	2CPX010573R9999	
	225	3	800	1	TZG305	2CPX010575R9999	
	225	4	1050	1	TZG405	2CPX010577R9999	
	225	5	1300	1	TZG505	2CPX010579R9999	
Plinth, height 100 mm, colour RAL 9005 For TwinLine-H* Lateral knock-outs 1 x M32/M50 or 80 x 80 mm	225	1	300	1	TZG110	2CPX010572R9999	
	225	2	550	1	TZG210	2CPX010574R9999	
	225	3	800	1	TZG310	2CPX010576R9999	
	225	4	1050	1	TZG410	2CPX010578R9999	
	225	5	1300	1	TZG510	2CPX010580R9999	
Plinth bracket To fasten the plinth from the outside to the cabinet for plinth heights of 50 and 100 mm				2	TZ627P2	2CPX010853R9999	
Cable fastening rail For plinth, height 100 mm		1	250	1	TZ321	2CPX010473R9999	
		2	500	1	TZ322	2CPX010474R9999	
		3	750	1	TZ323	2CPX010475R9999	
		4	1000	1	TZ324	2CPX010476R9999	
		5	1250	1	TZ325	2CPX010477R9999	
Clamp for cable fastening rail							
22 - 28 mm				1	ZK143	2CPX060005R9999	
40 - 46 mm				1	ZK144	2CPX060006R9999	
64 - 70 mm				1	ZK145	2CPX060007R9999	

* From 4-panel cabinets on, an additional one is included in the scope of delivery

Subdistribution boards

Floor-standing cabinets TwinLine N 44

Lock replacement parts

TZ507

TZ508

ZH130

ZH132

ZH134

ZH137

TZ503

TZ504

TZ505

TZ506

TZ510

ZH142

Article	Pcs.	Type	Ord. no.	Price
Latch plates for operating pins				
3 mm (standard)* 5 mm (similar to RAL 9005)	1	TZ507	2CPX010491R9999	
For triangular and square operating pin and for Daimer Benz insert	1	TZ508	2CPX010492R9999	
Operating pins				
Double-bit, 3 mm*	1	ZH130	2CPX060490R9999	
Double bit 5 mm	1	ZH131	2CPX060491R9999	
Triangular 7 mm	1	ZH132	2CPX060492R9999	
Triangular 8 mm	1	ZH133	2CPX060493R9999	
Square 6 mm	1	ZH134	2CPX060494R9999	
Square 7 mm	1	ZH135	2CPX060495R9999	
Square 8 mm	1	ZH136	2CPX060496R9999	
Daimler-Benz	1	ZH137	2CPX060497R9999	
Latch handle				
With latch plate and lock	1	TZ503	2CPX010487R9999	
With latch plate, without lock	1	TZ504	2CPX010488R9999	
T-handle With latch plate and lock	1	TZ505	2CPX010489R9999	
With latch plate, without lock	1	TZ506	2CPX010490R9999	
Swivel handle For semi-cylinder 40 mm (30/10) with lead sealable cap	1	TZ510	2CPX010494R9999	
Dummy insert Instead of a semi-cylinder for the swivel handle TZ510	1	ZH142	2CPX060502R9999	

ZH91

ZH160

ZH157

ZH162

ZH165

TZ206

TZ511

TZ501

TZ502

Article	Pcs.	Type	Ord. no.	Price
Universal key Double bit 3 mm/5 mm Triangular 8 mm, square 6 mm/8 mm	1	ZH91	2CPX066091R9999	
Double bit 3 mm*	1	ZH160	2CPX060660R9999	
Double bit 5 mm	1	ZH161	2CPX060661R9999	
Triangular 7 mm	1	ZH157	2CPX060657R9999	
Triangular 8 mm	1	ZH158	2CPX060658R9999	
Square 6 mm	1	ZH162	2CPX060662R9999	
Square 7 mm	1	ZH163	2CPX060663R9999	
Square 8 mm	1	ZH164	2CPX060664R9999	
Daimler-Benz	1	ZH165	2CPX060665R9999	
Espagnolette closure				
12 GU = 1800 mm with lock part*	1	TZ212	2CPX010468R9999	
Espagnolette guide*	1	TZ511	2CPX010495R9999	
Shoe* For espagnolette closure	1	TZ501	2CPX010485R9999	
Rubber seal * For double-wing door	1	TZ502	2CPX010486R9999	

*Spare part included in the scope of delivery

Subdistribution boards

Floor-standing cabinets TwinLine N 44

General accessories

TZ433

TZ601

ZW125P4

TZ615P4

TZ607

TZ630P10

Article	Pcs.	Type	Ord. no.	Price
Center support rails * For fastening in the floor-standing cabinet Two additional mounting rails TZ601 are required				
Panel width 1 = 250 mm	1	TZ431	2CPX010960R9999	
Panel width 2 = 500 mm	1	TZ432	2CPX010961R9999	
Panel width 3 = 750 mm	1	TZ433	2CPX010962R9999	
Panel width 4 = 1000 mm	1	TZ434	2CPX010963R9999	
Panel width 5 = 1250 mm	1	TZ435	2CPX010964R9999	
Mounting rails* To fasten the center support rail	1	TZ601	2CPX010779R9999	
	10	TZ601P10	2CPX010814R9999	
	100	TZ601P100	2CPX010815R9999	
External mounting bracket* For securing cabinets to the wall	4	ZW125P4	2CPX062461R9999	
Transport lugs	4	TZ615P4	2CPX010510R9999	
Door hinge 180 degrees* Colour RAL 9005	1	TZ607	2CPX010502R9999	
Pin* For the door hinge 180 degrees	10	TZ630P10	2CPX010929R9999	

* Included in the scope of delivery

ZL8

TZ617P10

TZ628P10

ZA6

ZA5

ZA123

ZA16

ZA116

Article	Pcs.	Type	Ord. no.	Price
Door earthing set 10 mm²	1	ZL8	2CPX038001R9999	
Locking plug*	10	TZ617P10	2CPX010512R9999	
Blind plug* For hinge break outs	10	TZ628P10	2CPX010854R9999	
Document holder DIN A4 Self-adhesive with transparent sleeve and reinforced back	1	ZA6	2CPX038227R9999	
	10	ZA6P10	2CPX062380R9999	
Self-adhesive with transparent sleeve	10	ZA61P10	2CPX062375R9999	
Document holder DIN A4 Self-adhesive	1	ZA13	2CPX038233R9999	
	10	ZA13P10	2CPX062381R9999	
Document holder DIN A5 Self-adhesive	1	ZA5	2CPX038228R9999	
	10	ZA5P10	2CPX062382R9999	
Document holder support plate				
For document holder ZA13, to screw on to the door strengthening profiles	1	ZA123	2CPX038471R9999	
For document holder ZA5, to screw on to the door strengthening profiles	1	ZA125	2CPX038472R9999	
Spray paint can Colour RAL 7035, 150 ml	1	ZA16	2CPX038235R9999	
Touch-up applicator Colour RAL 7035, 12 ml	1	ZA116	2CPX039042R9999	

* Included in the scope of delivery

Subdistribution boards

Floor-standing cabinets TwinLine N 44

Accessories meter applications

TZ614

TZ610

TZ616

TZ618

Article	Pcs.	Unmounted			Installed to the cabinet*		
		Type	Ord. no.	Price	Type	Ord. no.	Price
Cover rail[*1] For the installation of meter panels to cover the fastening points of the centre support rail in the double insulated floor-standing cabinet							
For TwinLine-H	1	TZ612	2CPX010507R9999		TZ612A	2CPX010796R9999	
Internal cladding[*1] For meter panels, depth = 225 mm Additional profile for meter panels with 150 mm cable connection area on top, in the double insulated cabinet	1	TZ610	2CPX010505R9999		TZ610A	2CPX010795R9999	
Mounting set For the installation of meter panels into floor-standing cabinets order one additional TZ616 per panel width (250 mm)	1	TZ616	2CPX010511R9999		TZ616A	2CPX010799R9999	
Touch guard For earthed cabinets							
For single meter panels	1	TZ618	2CPX010673R9999		TZ618A	2CPX010800R9999	
For double meter panels	1	TZ619	2CPX010674R9999		TZ619A	2CPX010801R9999	

* Only in combination with factory-assembled meter and distribution board panels, combination sets or CombiLine N

*[1] For ordering information see opposite page

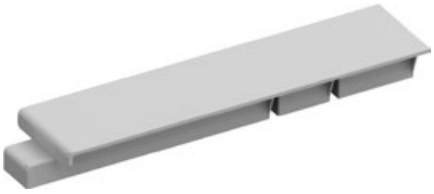
Subdistribution boards

Floor-standing cabinets TwinLine N 44

Meter applications

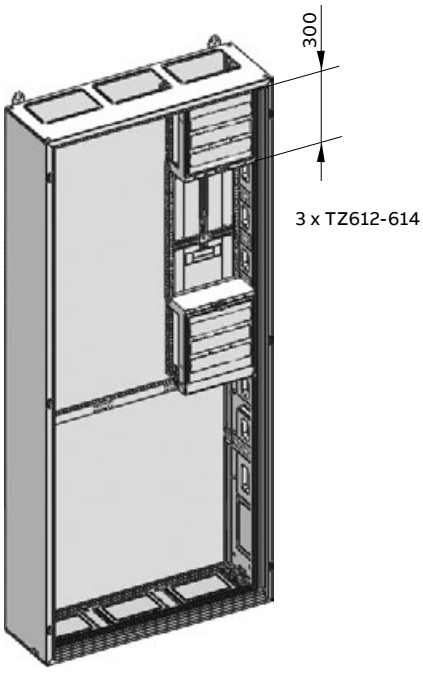
—
01
Cover rail TZ612
Required to integrate meter panels into double insulated floor-standing cabinets of the IPXXB degree of protection in the area of the available fastening holes for the centre support rail

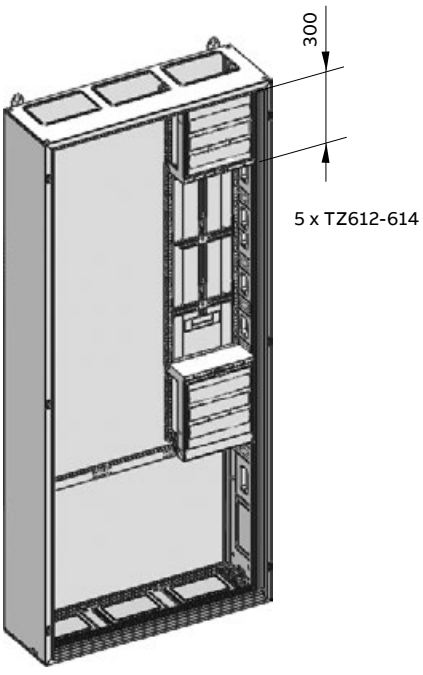
—
02
Internal cladding TZ610
For meter panels, depth = 225 mm
Additional profile for meter panels with 150 mm connection area in double insulated cabinets



01

02





Subdistribution boards

Wall-mounting and floor-standing cabinets
TwinLine N 55. Wall-mounting cabinets

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

Wall-mounting cabinets / Technical specifications and product features

Technical specifications for TwinLine-G, L and W	
Standards / requirements	According to DIN EN 61439-1/-2/-3, DIN VDE 0660-600-1/-2/-3*[1]
Protection class	I, earthed
	II, double insulated
Degree of protection	With door IP55
	Without door IP30, for an extension as meter distribution board with distribution board panels, combination sets or
Mechanical impact strength	IK 08 for the cabinet enclosure
	IK 07 in the area of the flange knockouts and transparent doors
Conditions of installation	Indoor installation
	Ambient air temperature max. + 40°C
	Ambient air temperature min. - 5°C
	Operating temperature max. + 55°C
	Storage temperature max. + 55°C
	Storage temperature min. - 40°C

Product features for TwinLine-G, L and W	
Housing and door material	Sheet steel, RAL 7035, powder-coated
	One flange opening per panel width at the top; knockouts are provided on the sides and bottom
	Door opening angle: 180 degrees
	Double-wing doors in all cabinets of a width of 4 panels and more
	Doors with espagnolette closure
	Standard lock: 3 mm double bit
Assembly options*	Prepared to be fitted with distribution board panels, combination sets or CombiLine modules on EDF mounting frame
	Prepared to be fitted with CombiLine modules on WR mounting frame and mounting plates by removing the EDF adapter
Forms of delivery	Enclosure with door
	Enclosure without door
	External mounting brackets included in the scope of delivery
	Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional included in the scope of delivery
	Touch guard for the double insulated cabinet included in the scope of delivery
	Touch guards for earthed cabinets must be ordered separately as accessory
Accessories	For enclosures without door the door may also be ordered separately, if necessary
	Flanges must be ordered separately
	Touch guards for earthed cabinets must be ordered separately

* For a detailed description of the extension options, see page 4/20

*[1] The allowed heating for switchgear assemblies above 630 A rated current must be evidenced by the process according to section 10.10.4.2. The required values of the power loss capacity are specified in the tables on page 4/46. Above 630 A rated current the process according to 10.10.4.3 (IEC 60890) must be applied.

Subdistribution boards

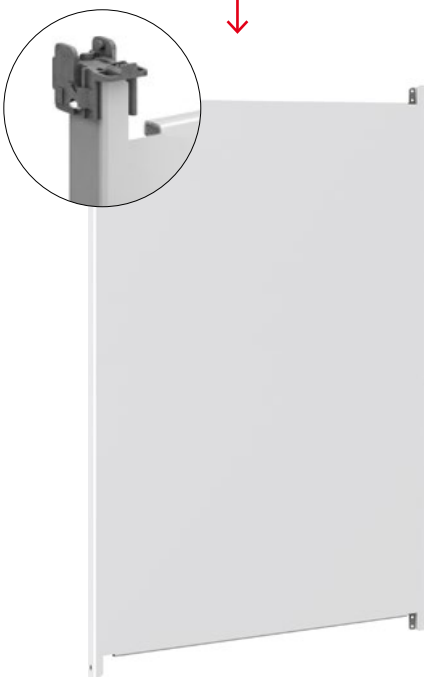
Wall-mounting and floor-standing cabinets TwinLine N 55

Wall mounting cabinets / extension options ⏚

TG306G

Touch guard must be ordered separately

Touch guard must be ordered separately



Assembly with a mounting plate*
Option for control technologies with mounting plate, by removing EDF adapters

Assembly with EDF mounting frame
Assembly as meter or distribution board with distribution board panels, combi-sets or CombiLine N modules on EDF mounting frame

Assembly with WR mounting frame*
Assembly as distribution board with CombiLine N modules on WR mounting frame by removing EDF adapters

* The combination of the different extension options side by side is possible

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

Wall-mounting cabinets / extension options

TG306S

Touch guard included in the scope of delivery

Touch guard included in the scope of delivery

Assembly with EDF mounting frame
Assembly as meter or distribution board with distribution board panels, combi-sets or CombiLine N modules on EDF mounting frame

Assembly with WR mounting frame
Assembly as distribution board with CombiLine N modules on WR mounting frame by removing EDF adapters

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55
TwinLine-G wall-mounting cabinets, cabinet depth 225 mm ⏚

TG306G

Scope of delivery
- External mounting brackets
- Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional
- Holders for an extension with distribution board panels, combination sets or CombiLine modules on EDF mounting frame
- Holders for an extension with CombiLine modules on WR mounting frame and mounting plates by removing the EDF adapter
-

Accessories must be ordered separately
- Flanges
- Touch guard for an extension with distribution board panels, combination sets or CombiLine modules

Height		Width	SU	External dimensions*2	Wall-mounting cabinets with door IP55			Wall-mounting cabinets without door IP30*1		
GU	OH	PW		H x W in mm	Order details		Price	Order details		Price
					Type	Order code		Type	Order code	
4	0	1	48	650 x 300	TG104G	2CPX010000R9999		TG104GB	2CPX010221R9999	
		2	96	650 x 550	TG204G	2CPX010001R9999		TG204GB	2CPX010222R9999	
		3	144	650 x 800	TG304G	2CPX010002R9999		TG304GB	2CPX010223R9999	
		4	192	650 x 1050	TG404G	2CPX010003R9999		TG404GB	2CPX010224R9999	
		5	240	650 x 1300	TG504G	2CPX010004R9999		TG504GB	2CPX010225R9999	
5	1	1	60	800 x 300	TG105G	2CPX010005R9999		TG105GB	2CPX010226R9999	
		2	120	800 x 550	TG205G	2CPX010006R9999		TG205GB	2CPX010227R9999	
		3	180	800 x 800	TG305G	2CPX010007R9999		TG305GB	2CPX010228R9999	
		4	240	800 x 1050	TG405G	2CPX010008R9999		TG405GB	2CPX010229R9999	
		5	300	800 x 1300	TG505G	2CPX010009R9999		TG505GB	2CPX010230R9999	
6	2	1	72	950 x 300	TG106G	2CPX010010R9999		TG106GB	2CPX010231R9999	
		2	144	950 x 550	TG206G	2CPX010011R9999		TG206GB	2CPX010232R9999	
		3	216	950 x 800	TG306G	2CPX010012R9999		TG306GB	2CPX010233R9999	
		4	288	950 x 1050	TG406G	2CPX010013R9999		TG406GB	2CPX010234R9999	
		5	360	950 x 1300	TG506G	2CPX010014R9999		TG506GB	2CPX010235R9999	
7	3	1	84	1100 x 300	TG107G	2CPX010015R9999		TG107GB	2CPX010236R9999	
		2	168	1100 x 550	TG207G	2CPX010016R9999		TG207GB	2CPX010237R9999	
		3	252	1100 x 800	TG307G	2CPX010017R9999		TG307GB	2CPX010238R9999	
		4	336	1100 x 1050	TG407G	2CPX010018R9999		TG407GB	2CPX010239R9999	
		5	420	1100 x 1300	TG507G	2CPX010019R9999		TG507GB	2CPX010240R9999	
8	4	1	96	1250 x 300	TG108G	2CPX010020R9999		TG108GB	2CPX010241R9999	
		2	192	1250 x 550	TG208G	2CPX010021R9999		TG208GB	2CPX010242R9999	
		3	288	1250 x 800	TG308G	2CPX010022R9999		TG308GB	2CPX010243R9999	
		4	384	1250 x 1050	TG408G	2CPX010023R9999		TG408GB	2CPX010244R9999	
		5	480	1250 x 1300	TG508G	2CPX010024R9999		TG508GB	2CPX010245R9999	
9	5	1	108	1400 x 300	TG109G	2CPX010025R9999		TG109GB	2CPX010246R9999	
		2	216	1400 x 550	TG209G	2CPX010026R9999		TG209GB	2CPX010247R9999	
		3	324	1400 x 800	TG309G	2CPX010027R9999		TG309GB	2CPX010248R9999	
		4	432	1400 x 1050	TG409G	2CPX010028R9999		TG409GB	2CPX010249R9999	
		5	540	1400 x 1300	TG509G	2CPX010029R9999		TG509GB	2CPX010250R9999	

*1 For an extension as meter distribution board with distribution board panels, combination sets or CombiLine modules
*2 External dimensions without prepunches for more information

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

TwinLine-G wall-mounting cabinets, cabinet depth 225 mm ⧈

TG306S

Scope of delivery

- External mounting brackets
- Touch guard
- Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional
- Holders for an extension with distribution board panels, combination sets or CombiLine modules on EDF mounting frame
- Holders for an extension with CombiLine modules on WR mounting frame by removing the EDF adapter

Accessories must be ordered separately

- Flanges

Height		Width	SU	External dimensions*2	Wall-mounting cabinets with door IP55			Wall-mounting cabinets without door IP30*1		
GU	OH	PW		H x W in mm	Order details		Price	Order details		Price
					Type	Order code		Type	Order code	
4	0	1	48	650 x 300	TG104S	2CPX010035R9999		TG104SB	2CPX010256R9999	
		2	96	650 x 550	TG204S	2CPX010036R9999		TG204SB	2CPX010257R9999	
		3	144	650 x 800	TG304S	2CPX010037R9999		TG304SB	2CPX010258R9999	
		4	192	650 x 1050	TG404S	2CPX010038R9999		TG404SB	2CPX010259R9999	
		5	240	650 x 1300	TG504S	2CPX010039R9999		TG504SB	2CPX010260R9999	
5	1	1	60	800 x 300	TG105S	2CPX010040R9999		TG105SB	2CPX010261R9999	
		2	120	800 x 550	TG205S	2CPX010041R9999		TG205SB	2CPX010262R9999	
		3	180	800 x 800	TG305S	2CPX010042R9999		TG305SB	2CPX010263R9999	
		4	240	800 x 1050	TG405S	2CPX010043R9999		TG405SB	2CPX010264R9999	
		5	300	800 x 1300	TG505S	2CPX010044R9999		TG505SB	2CPX010265R9999	
6	2	1	72	950 x 300	TG106S	2CPX010045R9999		TG106SB	2CPX010266R9999	
		2	144	950 x 550	TG206S	2CPX010046R9999		TG206SB	2CPX010267R9999	
		3	216	950 x 800	TG306S	2CPX010047R9999		TG306SB	2CPX010268R9999	
		4	288	950 x 1050	TG406S	2CPX010048R9999		TG406SB	2CPX010269R9999	
		5	360	950 x 1300	TG506S	2CPX010049R9999		TG506SB	2CPX010270R9999	
7	3	1	84	1100 x 300	TG107S	2CPX010050R9999		TG107SB	2CPX010271R9999	
		2	168	1100 x 550	TG207S	2CPX010051R9999		TG207SB	2CPX010272R9999	
		3	252	1100 x 800	TG307S	2CPX010052R9999		TG307SB	2CPX010273R9999	
		4	336	1100 x 1050	TG407S	2CPX010053R9999		TG407SB	2CPX010274R9999	
		5	420	1100 x 1300	TG507S	2CPX010054R9999		TG507SB	2CPX010275R9999	
8	4	1	96	1250 x 300	TG108S	2CPX010055R9999		TG108SB	2CPX010276R9999	
		2	192	1250 x 550	TG208S	2CPX010056R9999		TG208SB	2CPX010277R9999	
		3	288	1250 x 800	TG308S	2CPX010057R9999		TG308SB	2CPX010278R9999	
		4	384	1250 x 1050	TG408S	2CPX010058R9999		TG408SB	2CPX010279R9999	
		5	480	1250 x 1300	TG508S	2CPX010059R9999		TG508SB	2CPX010280R9999	
9	5	1	108	1400 x 300	TG109S	2CPX010060R9999		TG109SB	2CPX010281R9999	
		2	216	1400 x 550	TG209S	2CPX010061R9999		TG209SB	2CPX010282R9999	
		3	324	1400 x 800	TG309S	2CPX010062R9999		TG309SB	2CPX010283R9999	
		4	432	1400 x 1050	TG409S	2CPX010063R9999		TG409SB	2CPX010284R9999	
		5	540	1400 x 1300	TG509S	2CPX010064R9999		TG509SB	2CPX010285R9999	

*1 For an extension as meter distribution board with distribution board panels, combination sets or CombiLine modules
*2 External dimensions without prepunches for more information

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55
TwinLine-L wall-mounting cabinets, cabinet depth 275 mm ⏚

TL306G

Scope of delivery
- External mounting brackets
- Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional
- Holders for an extension with distribution board panels, combination sets or CombiLine modules on EDF mounting frame
- Holders for an extension with CombiLine modules on WR mounting frame and mounting plates by removing the EDF adapter

Accessories must be ordered separately
- Flanges
- Touch guard for an extension with distribution board panels, combination sets or CombiLine modules

Height		Width	SU	External dimensions*2	Wall-mounting cabinets with door IP55			Wall-mounting cabinets without door IP30*1		
GU	OH	PW		H x W in mm	Order details		Price	Order details		Price
					Type	Order code		Type	Order code	
4	0	1	48	650 x 300	TL104G	2CPX010070R9999		TL104GB	2CPX010291R9999	
		2	96	650 x 550	TL204G	2CPX010071R9999		TL204GB	2CPX010292R9999	
		3	144	650 x 800	TL304G	2CPX010072R9999		TL304GB	2CPX010293R9999	
		4	192	650 x 1050	TL404G	2CPX010073R9999		TL404GB	2CPX010294R9999	
		5	240	650 x 1300	TL504G	2CPX010074R9999		TL504GB	2CPX010295R9999	
5	1	1	60	800 x 300	TL105G	2CPX010075R9999		TL105GB	2CPX010296R9999	
		2	120	800 x 550	TL205G	2CPX010076R9999		TL205GB	2CPX010297R9999	
		3	180	800 x 800	TL305G	2CPX010077R9999		TL305GB	2CPX010298R9999	
		4	240	800 x 1050	TL405G	2CPX010078R9999		TL405GB	2CPX010299R9999	
		5	300	800 x 1300	TL505G	2CPX010079R9999		TL505GB	2CPX010300R9999	
6	2	1	72	950 x 300	TL106G	2CPX010080R9999		TL106GB	2CPX010301R9999	
		2	144	950 x 550	TL206G	2CPX010081R9999		TL206GB	2CPX010302R9999	
		3	216	950 x 800	TL306G	2CPX010082R9999		TL306GB	2CPX010303R9999	
		4	288	950 x 1050	TL406G	2CPX010083R9999		TL406GB	2CPX010304R9999	
		5	360	950 x 1300	TL506G	2CPX010084R9999		TL506GB	2CPX010305R9999	
7	3	1	84	1100 x 300	TL107G	2CPX010085R9999		TL107GB	2CPX010306R9999	
		2	168	1100 x 550	TL207G	2CPX010086R9999		TL207GB	2CPX010307R9999	
		3	252	1100 x 800	TL307G	2CPX010087R9999		TL307GB	2CPX010308R9999	
		4	336	1100 x 1050	TL407G	2CPX010088R9999		TL407GB	2CPX010309R9999	
		5	420	1100 x 1300	TL507G	2CPX010089R9999		TL507GB	2CPX010310R9999	
8	4	1	96	1250 x 300	TL108G	2CPX010090R9999		TL108GB	2CPX010311R9999	
		2	192	1250 x 550	TL208G	2CPX010091R9999		TL208GB	2CPX010312R9999	
		3	288	1250 x 800	TL308G	2CPX010092R9999		TL308GB	2CPX010313R9999	
		4	384	1250 x 1050	TL408G	2CPX010093R9999		TL408GB	2CPX010314R9999	
		5	480	1250 x 1300	TL508G	2CPX010094R9999		TL508GB	2CPX010315R9999	
9	5	1	108	1400 x 300	TL109G	2CPX010095R9999		TL109GB	2CPX010316R9999	
		2	216	1400 x 550	TL209G	2CPX010096R9999		TL209GB	2CPX010317R9999	
		3	324	1400 x 800	TL309G	2CPX010097R9999		TL309GB	2CPX010318R9999	
		4	432	1400 x 1050	TL409G	2CPX010098R9999		TL409GB	2CPX010319R9999	
		5	540	1400 x 1300	TL509G	2CPX010099R9999		TL509GB	2CPX010320R9999	

*1 For an extension as meter distribution board with distribution board panels, combination sets or CombiLine modules
*2 External dimensions without prepunches

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

TwinLine-L wall-mounting cabinets, cabinet depth 275 mm

TL306S

Scope of delivery

- External mounting brackets
- Touch guard
- Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional
- Holders for an extension with distribution board panels, combination sets or CombiLine modules on EDF mounting frame
- Holders for an extension with CombiLine modules on WR mounting frame by removing the EDF adapter

Accessories must be ordered separately

- Flanges

Height		Width	SU	External dimensions *1	Wall-mounting cabinets with door IP55			Wall-mounting cabinets without door IP30*1		
GU	OH	PW		H x W in mm	Order details		Price	Order details		Price
					Type	Order code		Type	Order code	
4	0	1	48	650 x 300	TL104S	2CPX010105R9999		TL104SB	2CPX010326R9999	
		2	96	650 x 550	TL204S	2CPX010106R9999		TL204SB	2CPX010327R9999	
		3	144	650 x 800	TL304S	2CPX010107R9999		TL304SB	2CPX010328R9999	
		4	192	650 x 1050	TL404S	2CPX010108R9999		TL404SB	2CPX010329R9999	
		5	240	650 x 1300	TL504S	2CPX010109R9999		TL504SB	2CPX010330R9999	
5	1	1	60	800 x 300	TL105S	2CPX010110R9999		TL105SB	2CPX010331R9999	
		2	120	800 x 550	TL205S	2CPX010111R9999		TL205SB	2CPX010332R9999	
		3	180	800 x 800	TL305S	2CPX010112R9999		TL305SB	2CPX010333R9999	
		4	240	800 x 1050	TL405S	2CPX010113R9999		TL405SB	2CPX010334R9999	
		5	300	800 x 1300	TL505S	2CPX010114R9999		TL505SB	2CPX010335R9999	
6	2	1	72	950 x 300	TL106S	2CPX010115R9999		TL106SB	2CPX010336R9999	
		2	144	950 x 550	TL206S	2CPX010116R9999		TL206SB	2CPX010337R9999	
		3	216	950 x 800	TL306S	2CPX010117R9999		TL306SB	2CPX010338R9999	
		4	288	950 x 1050	TL406S	2CPX010118R9999		TL406SB	2CPX010339R9999	
		5	360	950 x 1300	TL506S	2CPX010119R9999		TL506SB	2CPX010340R9999	
7	3	1	84	1100 x 300	TL107S	2CPX010120R9999		TL107SB	2CPX010341R9999	
		2	168	1100 x 550	TL207S	2CPX010121R9999		TL207SB	2CPX010342R9999	
		3	252	1100 x 800	TL307S	2CPX010122R9999		TL307SB	2CPX010343R9999	
		4	336	1100 x 1050	TL407S	2CPX010123R9999		TL407SB	2CPX010344R9999	
		5	420	1100 x 1300	TL507S	2CPX010124R9999		TL507SB	2CPX010345R9999	
8	4	1	96	1250 x 300	TL108S	2CPX010125R9999		TL108SB	2CPX010346R9999	
		2	192	1250 x 550	TL208S	2CPX010126R9999		TL208SB	2CPX010347R9999	
		3	288	1250 x 800	TL308S	2CPX010127R9999		TL308SB	2CPX010348R9999	
		4	384	1250 x 1050	TL408S	2CPX010128R9999		TL408SB	2CPX010349R9999	
		5	480	1250 x 1300	TL508S	2CPX010129R9999		TL508SB	2CPX010350R9999	
9	5	1	108	1400 x 300	TL109S	2CPX010130R9999		TL109SB	2CPX010351R9999	
		2	216	1400 x 550	TL209S	2CPX010131R9999		TL209SB	2CPX010352R9999	
		3	324	1400 x 800	TL309S	2CPX010132R9999		TL309SB	2CPX010353R9999	
		4	432	1400 x 1050	TL409S	2CPX010133R9999		TL409SB	2CPX010354R9999	
		5	540	1400 x 1300	TL509S	2CPX010134R9999		TL509SB	2CPX010355R9999	

*1 For an extension as meter distribution board with distribution board panels, combination sets or CombiLine modules
*2 External dimensions without prepunches

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55
TwinLine-W wall-mounting cabinets, cabinet depth 350 mm ⏚

TW306G

Scope of delivery
- External mounting brackets
- Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional
- Holders for an extension with distribution board panels, combination sets or CombiLine modules on EDF mounting frame
- Holders for an extension with CombiLine modules on WR mounting frame and mounting plates by removing the EDF adapter

Accessories must be ordered separately
- Flanges
- Touch guard for an extension with distribution board panels. combination sets or CombiLine modules

Height		Width	SU	External dimensions*2	Wall-mounting cabinets with door IP55			Wall-mounting cabinets without door IP30*1		
GU	OH	PW		H x W in mm	Order details		Price	Order details		Price
					Type	Order code		Type	Order code	
4	0	1	48	650 x 300	TW104G	2CPX010140R9999		TW104GB	2CPX010361R9999	
		2	96	650 x 550	TW204G	2CPX010141R9999		TW204GB	2CPX010362R9999	
		3	144	650 x 800	TW304G	2CPX010142R9999		TW304GB	2CPX010363R9999	
		4	192	650 x 1050	TW404G	2CPX010143R9999		TW404GB	2CPX010364R9999	
		5	240	650 x 1300	TW504G	2CPX010144R9999		TW504GB	2CPX010365R9999	
5	1	1	60	800 x 300	TW105G	2CPX010202R9999		TW105GB	2CPX010366R9999	
		2	120	800 x 550	TW205G	2CPX010203R9999		TW205GB	2CPX010367R9999	
		3	180	800 x 800	TW305G	2CPX010204R9999		TW305GB	2CPX010368R9999	
		4	240	800 x 1050	TW405G	2CPX010205R9999		TW405GB	2CPX010369R9999	
		5	300	800 x 1300	TW505G	2CPX010206R9999		TW505GB	2CPX010370R9999	
6	2	1	72	950 x 300	TW106G	2CPX010145R9999		TW106GB	2CPX010371R9999	
		2	144	950 x 550	TW206G	2CPX010146R9999		TW206GB	2CPX010372R9999	
		3	216	950 x 800	TW306G	2CPX010147R9999		TW306GB	2CPX010373R9999	
		4	288	950 x 1050	TW406G	2CPX010148R9999		TW406GB	2CPX010374R9999	
		5	360	950 x 1300	TW506G	2CPX010149R9999		TW506GB	2CPX010375R9999	
7	3	1	84	1100 x 300	TW107G	2CPX010150R9999		TW107GB	2CPX010376R9999	
		2	168	1100 x 550	TW207G	2CPX010151R9999		TW207GB	2CPX010377R9999	
		3	252	1100 x 800	TW307G	2CPX010152R9999		TW307GB	2CPX010378R9999	
		4	336	1100 x 1050	TW407G	2CPX010153R9999		TW407GB	2CPX010379R9999	
		5	420	1100 x 1300	TW507G	2CPX010154R9999		TW507GB	2CPX010380R9999	
8	4	1	96	1250 x 300	TW108G	2CPX010155R9999		TW108GB	2CPX010381R9999	
		2	192	1250 x 550	TW208G	2CPX010156R9999		TW208GB	2CPX010382R9999	
		3	288	1250 x 800	TW308G	2CPX010157R9999		TW308GB	2CPX010383R9999	
		4	384	1250 x 1050	TW408G	2CPX010158R9999		TW408GB	2CPX010384R9999	
		5	480	1250 x 1300	TW508G	2CPX010159R9999		TW508GB	2CPX010385R9999	
9	5	1	108	1400 x 300	TW109G	2CPX010160R9999		TW109GB	2CPX010386R9999	
		2	216	1400 x 550	TW209G	2CPX010161R9999		TW209GB	2CPX010387R9999	
		3	324	1400 x 800	TW309G	2CPX010162R9999		TW309GB	2CPX010388R9999	
		4	432	1400 x 1050	TW409G	2CPX010163R9999		TW409GB	2CPX010389R9999	
		5	540	1400 x 1300	TW509G	2CPX010164R9999		TW509GB	2CPX010390R9999	

*1 For an extension as meter distribution board with distribution board panels, combination sets or CombiLine modules
*2 External dimensions without prepunches

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55
TwinLine-W wall-mounting cabinets, cabinet depth 350 mm ⧈

TW306S

Scope of delivery

- External mounting brackets
- Touch guard
- Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional
- Holders for an extension with distribution board panels, combination sets or CombiLine modules on EDF mounting frame
- Holders for an extension with CombiLine modules on WR mounting frame by removing the EDF adapter

Accessories must be ordered separately

- Flanges

Height		Width	SU	External dimensions*2	Wall-mounting cabinets with door IP55			Wall-mounting cabinets without door IP30*1		
GU	OH	PW		H x W in mm	Order details		Price	Order details		Price
					Type	Order code		Type	Order code	
4	0	1	48	650 x 300	TW104S	2CPX010171R9999		TW104SB	2CPX010397R9999	
		2	96	650 x 550	TW204S	2CPX010172R9999		TW204SB	2CPX010398R9999	
		3	144	650 x 800	TW304S	2CPX010173R9999		TW304SB	2CPX010399R9999	
		4	192	650 x 1050	TW404S	2CPX010174R9999		TW404SB	2CPX010400R9999	
		5	240	650 x 1300	TW504S	2CPX010175R9999		TW504SB	2CPX010401R9999	
5	1	1	60	800 x 300	TW105S	2CPX010207R9999		TW105SB	2CPX010402R9999	
		2	120	800 x 550	TW205S	2CPX010208R9999		TW205SB	2CPX010403R9999	
		3	180	800 x 800	TW305S	2CPX010209R9999		TW305SB	2CPX010404R9999	
		4	240	800 x 1050	TW405S	2CPX010210R9999		TW405SB	2CPX010405R9999	
		5	300	800 x 1300	TW505S	2CPX010211R9999		TW505SB	2CPX010406R9999	
6	2	1	72	950 x 300	TW106S	2CPX010176R9999		TW106SB	2CPX010407R9999	
		2	144	950 x 550	TW206S	2CPX010177R9999		TW206SB	2CPX010408R9999	
		3	216	950 x 800	TW306S	2CPX010178R9999		TW306SB	2CPX010409R9999	
		4	288	950 x 1050	TW406S	2CPX010179R9999		TW406SB	2CPX010410R9999	
		5	360	950 x 1300	TW506S	2CPX010180R9999		TW506SB	2CPX010411R9999	
7	3	1	84	1100 x 300	TW107S	2CPX010181R9999		TW107SB	2CPX010412R9999	
		2	168	1100 x 550	TW207S	2CPX010182R9999		TW207SB	2CPX010413R9999	
		3	252	1100 x 800	TW307S	2CPX010183R9999		TW307SB	2CPX010414R9999	
		4	336	1100 x 1050	TW407S	2CPX010184R9999		TW407SB	2CPX010415R9999	
		5	420	1100 x 1300	TW507S	2CPX010185R9999		TW507SB	2CPX010416R9999	
8	4	1	96	1250 x 300	TW108S	2CPX010186R9999		TW108SB	2CPX010417R9999	
		2	192	1250 x 550	TW208S	2CPX010187R9999		TW208SB	2CPX010418R9999	
		3	288	1250 x 800	TW308S	2CPX010188R9999		TW308SB	2CPX010419R9999	
		4	384	1250 x 1050	TW408S	2CPX010189R9999		TW408SB	2CPX010420R9999	
		5	480	1250 x 1300	TW508S	2CPX010190R9999		TW508SB	2CPX010421R9999	
9	5	1	108	1400 x 300	TW109S	2CPX010191R9999		TW109SB	2CPX010422R9999	
		2	216	1400 x 550	TW209S	2CPX010192R9999		TW209SB	2CPX010423R9999	
		3	324	1400 x 800	TW309S	2CPX010193R9999		TW309SB	2CPX010424R9999	
		4	432	1400 x 1050	TW409S	2CPX010194R9999		TW409SB	2CPX010425R9999	
		5	540	1400 x 1300	TW509S	2CPX010195R9999		TW509SB	2CPX010426R9999	

*1 For an extension as meter distribution board with distribution board panels, combination sets or CombiLine modules
*2 External dimensions without prepunches

Subdistribution boards

Wall-mounting and floor-standing cabinets
TwinLine N 55. Floor-standing cabinets.

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

Floor-standing cabinets / Technical specifications and product features

Technical specifications for TwinLine-G, L and W	
Standards / requirements	According to DIN EN 61439-1/-2/-3, DIN VDE 0660-600-1/-2/-3*1
Protection class	I, earthed
	II, double insulated
Degree of protection	With door IP55
	Without door IP30 for an extension as meter distribution board with distribution board panels, combination sets or CombiLine modules
Mechanical impact strength	IK 08 for the cabinet enclosure
	IK 07 in the area of the flange knockouts and transparent doors
Conditions of installation	Indoor installation
	Ambient air temperature max. + 40°C
	Ambient air temperature min. - 5°C
	Operating temperature max. + 55°C
	Storage temperature max. + 55°C
	Storage temperature min. - 40°C

Product features for TwinLine-G, L and W	
Housing and door material	Sheet steel, RAL 7035, powder-coated
	One flange opening per panel width at the top; knockouts are provided on the sides and bottom
	Door opening angle: 180 degrees
	Double-wing doors in all cabinets of a width of 4 panels and more
	Doors with espagnolette closure
	Standard lock: 3 mm double bit
Assembly options*	Prepared to be fitted with CombiLine module on WR mounting frame or mounting plates
	Prepared to be fitted with distribution board panels, combination sets or CombiLine modules on EDF mounting frame; EDF adapter and centre support rail must be ordered as accessories
Forms of delivery	Enclosure with door
	Enclosure without door
	External mounting brackets included in the scope of delivery
	Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional included in the scope of delivery
	Touch guard for the double insulated cabinet included in the scope of delivery
	Touch guards for earthed cabinets must be ordered separately as accessory
Accessories	For enclosures without door, the door may also be ordered separately, if necessary
	Flanges must be ordered separately
	Plinths must be ordered separately
	Touch guards for earthed cabinets must be ordered separately
	EDF adapter must be ordered separately, if required*
	Centre support rails must be ordered separately, if required*

* For a more detailed description of the extension options for floor-standing cabinets, see page 4/30

*1 The allowed heating for switchgear assemblies above 630 A rated current must be evidenced by the process according to section 10.10.4.2. The required values of the power loss capacity are specified in the tables on page 6/45. Above 630 A rated current the process according to 10.10.4.3 (IEC 60890) must be applied.
For the power loss transfer rates, see table on page 4/47

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

Floor-standing cabinets / extension options ⏚

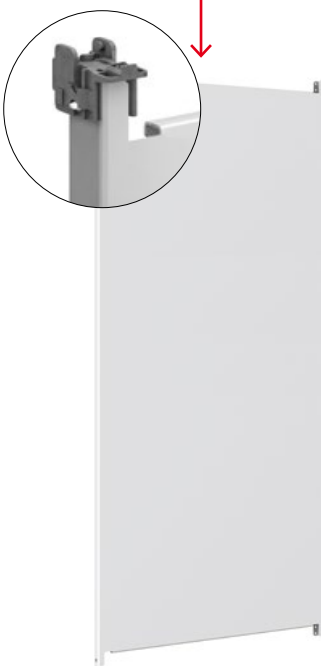
TW312G

Touch guard must be ordered separately

EDF adapter must be ordered separately

Support rail. centre must be ordered separately

Touch guard must be ordered separately



Assembly with a mounting plate*
Assembly for control technologies with mounting plate

Assembly with EDF mounting frame
Assembly as meter or distribution board with distribution board panels, combi-sets or CombiLine N modules on EDF mounting frame

Assembly with WR mounting frame*
Assembly as distribution board with CombiLine N modules on WR mounting frame

* The combination of mounting plate and WR mounting frame side by side is possible

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

Floor-standing cabinets / extension options ⧈

TW312S

Touch guard included in the scope of delivery

EDF adapter must be ordered separately

Support rail, centre must be ordered separately

Assembly with EDF mounting frame
Assembly as meter or distribution board with distribution board panels, combi-sets or CombiLine N modules on EDF mounting frame

Touch guard included in the scope of delivery

Assembly with WR mounting frame
Assembly as distribution board with CombiLine N modules on WR mounting frame

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55
Floor-standing cabinets / cabinet depth 225 / 275 / 350 mm ⏚

TG312G

Scope of delivery
- External mounting brackets
- Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional
- Holders for an extension with CombiLine modules on WR mounting frame and mounting plates

Accessories must be ordered separately
- Flanges
- Plinth
- Touch guard for the extension with CombiLine modules
- EDF adapter, centre support rails and touch guard for an extension with distribution board panels, combination sets or CombiLine modules on EDF mounting frame

Height		Width	SU	External dimensions*2	Floor-standing cabinets with door IP55			Floor-standing cabinets without door IP30*1		
GU	OH	PW		H x W in mm	Order details		Price	Order details		Price
					Type	Order code		Type	Order code	
TwinLine-G, cabinet depth 225 mm ⏚										
12	8	1	144	1850 x 300	TG112G	2CPX010030R9999		TG112GB	2CPX010251R9999	
		2	288	1850 x 550	TG212G	2CPX010031R9999		TG212GB	2CPX010252R9999	
		3	432	1850 x 800	TG312G	2CPX010032R9999		TG312GB	2CPX010253R9999	
		4	576	1850 x 1050	TG412G	2CPX010033R9999		TG412GB	2CPX010254R9999	
		5	720	1850 x 1300	TG512G	2CPX010034R9999		TG512GB	2CPX010255R9999	
TwinLine-L, cabinet depth 275 mm ⏚										
12	8	1	144	1850 x 300	TL112G	2CPX010100R9999		TL112GB	2CPX010321R9999	
		2	288	1850 x 550	TL212G	2CPX010101R9999		TL212GB	2CPX010322R9999	
		3	432	1850 x 800	TL312G	2CPX010102R9999		TL312GB	2CPX010323R9999	
		4	576	1850 x 1050	TL412G	2CPX010103R9999		TL412GB	2CPX010324R9999	
		5	720	1850 x 1300	TL512G	2CPX010104R9999		TL512GB	2CPX010325R9999	
TwinLine-W, cabinet depth 350 mm ⏚										
12	8	1	144	1850 x 300	TW112G	2CPX010165R9999		TW112GB	2CPX010391R9999	
		2	288	1850 x 550	TW212G	2CPX010166R9999		TW212GB	2CPX010392R9999	
		3	432	1850 x 800	TW312G	2CPX010167R9999		TW312GB	2CPX010393R9999	
		4	576	1850 x 1050	TW412G	2CPX010168R9999		TW412GB	2CPX010394R9999	
		5	720	1850 x 1300	TW512G	2CPX010169R9999		TW512GB	2CPX010395R9999	
		6	864	1850 x 1550	TW612G	2CPX010170R9999		TW612GB	2CPX010396R9999	

*1 For an extension as meter distribution board with distribution board panels, combination sets or CombiLine modules
*2 External dimensions without prepunches

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

Floor-standing cabinets / cabinet depth 225 / 275 / 350 mm ⧈

TG312S

Scope of delivery

- External mounting brackets
- Touch guard
- Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional
- Holders for an extension with CombiLine modules on WR mounting frame

Accessories must be ordered separately

- Flanges
- Plinth
- EDF adapter and centre support rails for an extension with distribution board panels, combination sets or CombiLine modules on EDF mounting frame

Height		Width	SU	External dimensions*2	Floor-standing cabinets with door IP55			Floor-standing cabinets without door IP30*1		
GU	OH	PW		H x W in mm	Order details		Price	Order details		Price
					Type	Order code		Type	Order code	
TwinLine-G, cabinet depth 225 mm ⧈										
12	8	1	144	1850 x 300	TG112S	2CPX010065R9999		TG112SB	2CPX010286R9999	
		2	288	1850 x 550	TG212S	2CPX010066R9999		TG212SB	2CPX010287R9999	
		3	432	1850 x 800	TG312S	2CPX010067R9999		TG312SB	2CPX010288R9999	
		4	576	1850 x 1050	TG412S	2CPX010068R9999		TG412SB	2CPX010289R9999	
		5	720	1850 x 1300	TG512S	2CPX010069R9999		TG512SB	2CPX010290R9999	
TwinLine-L, cabinet depth 275 mm ⧈										
12	8	1	144	1850 x 300	TL112S	2CPX010135R9999		TL112SB	2CPX010356R9999	
		2	288	1850 x 550	TL212S	2CPX010136R9999		TL212SB	2CPX010357R9999	
		3	432	1850 x 800	TL312S	2CPX010137R9999		TL312SB	2CPX010358R9999	
		4	576	1850 x 1050	TL412S	2CPX010138R9999		TL412SB	2CPX010359R9999	
		5	720	1850 x 1300	TL512S	2CPX010139R9999		TL512SB	2CPX010360R9999	
TwinLine-W, cabinet depth 350 mm ⧈										
12	8	1	144	1850 x 300	TW112S	2CPX010196R9999		TW112SB	2CPX010427R9999	
		2	288	1850 x 550	TW212S	2CPX010197R9999		TW212SB	2CPX010428R9999	
		3	432	1850 x 800	TW312S	2CPX010198R9999		TW312SB	2CPX010429R9999	
		4	576	1850 x 1050	TW412S	2CPX010199R9999		TW412SB	2CPX010430R9999	
		5	720	1850 x 1300	TW512S	2CPX010200R9999		TW512SB	2CPX010431R9999	
		6	864	1850 x 1550	TW612S	2CPX010201R9999		TW612SB	2CPX010432R9999	

*1 For an extension as meter distribution board with distribution board panels, combination sets or CombiLine modules
*2 External dimensions without prepunches

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

Flange

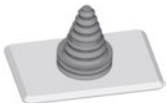
TZ101

TZ102

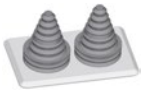
TZ103

TZ110

TZ111



TZ112



TZ104

TZ105

TZ107

TZ106

Article	Pieces	Order details		Price
		Type	Order code	
Membrane flange Material: plastic For cable sections 2 x 6 - 32.5 mm, 2 x 6 - 25 mm, 4 x 6 - 19 mm, 10 x 6 -15 mm, 2 x 6 -12 mm, 31 x 6 - 11 mm, 1 x 6 - 7 mm	1	TZ101	2CPX010450R9999	
	10	TZ101P10	2CPX010451R9999	
	100	TZ101P100	2CPX010826R9999	
Flanges for M screw fittings Material: plastic				
1 x M63 / M50, 2 x M32 / M20, 5 x M25, 5 x M20	1	TZ102	2CPX010452R9999	
	10	TZ102P10	2CPX010453R9999	
4 x M20 / M25, 18 x M20	1	TZ103	2CPX010454R9999	
	10	TZ103P10	2CPX010455R9999	
Flanges with cable sleeves Material: plastic				
Flanges with 8 cable sleeves **For cable sections 8 x 13 up to 34 mm**	1	TZ110	2CPX010850R9999	
	10	TZ110P10	2CPX010934R9999	
Flanges with 11 cable sleeves **For cable sections** 1 x 14 up to 54 mm, 3 x 13 up to 34 mm, 3 x 13 up to 26,5 mm, 4 x 5 up to 21 mm	1	TZ111	2CPX010851R9999	
	10	TZ111P10	2CPX010935R9999	
Flange with 1 cable sleeve For cable **sections** 1 x 14 up to 68 mm	1	TZ112	2CPX010852R9999	
Flange with 2 cable sleeves For cable **sections** 2 x 14 up to 68 mm	1	TZ104	2CPX010456R9999	
	10	TZ104P10	2CPX010932R9999	
Flange with 3 cable sleeves For cable **sections** 3 x 14 up to 54 mm	1	TZ105	2CPX010457R9999	
	10	TZ105P10	2CPX010933R9999	
Closing flanges				
Material: plastic	1	TZ107	2CPX010460R9999	
	10	TZ107P10	2CPX010461R9999	
Material: sheet steel For earthed cabinets	1	TZ106	2CPX010458R9999	
	10	TZ106P10	2CPX010459R9999	

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

Plinth

TZW305

TZW310

TZ627P2

TZ323

ZK143

Article	Depth	Width		Pieces	Order details		Price
	mm	PW	mm		Type	Order code	
Plinth, height 50 mm, Colour RAL 9005							
For TwinLine-G	225	1	300	1	TZG105	2CPX010571R9999	
	225	2	550	1	TZG205	2CPX010573R9999	
	225	3	800	1	TZG305	2CPX010575R9999	
	225	4	1050	1	TZG405	2CPX010577R9999	
	225	5	1300	1	TZG505	2CPX010579R9999	
For TwinLine-L	275	1	300	1	TZL105	2CPX010581R9999	
	275	2	550	1	TZL205	2CPX010583R9999	
	275	3	800	1	TZL305	2CPX010585R9999	
	275	4	1050	1	TZL405	2CPX010587R9999	
	275	5	1300	1	TZL505	2CPX010589R9999	
For TwinLine-W	350	1	300	1	TZW105	2CPX010661R9999	
	350	2	550	1	TZW205	2CPX010663R9999	
	350	3	800	1	TZW305	2CPX010665R9999	
	350	4	1050	1	TZW405	2CPX010667R9999	
	350	5	1300	1	TZW505	2CPX010669R9999	
	350	6	1550	1	TZW605	2CPX010671R9999	
Plinth, height 100 mm, Colour RAL 9005							
For TwinLine-G Lateral knock-outs 1 x M32/M50 or 80 x 80 mm	225	1	300	1	TZG110	2CPX010572R9999	
	225	2	550	1	TZG210	2CPX010574R9999	
	225	3	800	1	TZG310	2CPX010576R9999	
	225	4	1050	1	TZG410	2CPX010578R9999	
	225	5	1300	1	TZG510	2CPX010580R9999	
For TwinLine-L* Lateral knock-outs 1 x M32/M50 or 80 x 80 mm	275	1	300	1	TZL110	2CPX010582R9999	
	275	2	550	1	TZL210	2CPX010584R9999	
	275	3	800	1	TZL310	2CPX010586R9999	
	275	4	1050	1	TZL410	2CPX010588R9999	
	275	5	1300	1	TZL510	2CPX010590R9999	
For TwinLine-W* Lateral knock-outs 2 x M32/M50 or 2 x 80 x 80 mm	350	1	300	1	TZW110	2CPX010662R9999	
	350	2	550	1	TZW210	2CPX010664R9999	
	350	3	800	1	TZW310	2CPX010666R9999	
	350	4	1050	1	TZW410	2CPX010668R9999	
	350	5	1300	1	TZW510	2CPX010670R9999	
	350	6	1550	1	TZW610	2CPX010672R9999	
Plinth mounting brackets For external plinth assembly on the cabinet For 50 mm and 100 mm plinths height				2	TZ627P2	2CPX010853R9999	
Cable fastening rail For plinth, height 100 mm		1	250	1	TZ321	2CPX010473R9999	
		2	500	1	TZ322	2CPX010474R9999	
		3	750	1	TZ323	2CPX010475R9999	
		4	1000	1	TZ324	2CPX010476R9999	
		5	1250	1	TZ325	2CPX010477R9999	
		6	1500	1	TZ326	2CPX010478R9999	
Clamp For cable fastening rail							
From 22 - 28 mm				1	ZK143	2CPX060005R9999	
From 40 - 46 mm				1	ZK144	2CPX060006R9999	
From 64 - 70 mm				1	ZK145	2CPX060007R9999	

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55
Lock replacement parts

TZ507

TZ508

ZH130

ZH132

ZH134

ZH137

TZ503

TZ504

TZ505

TZ506

TZ510

ZH142

Article	Pieces	Order details		Price
		Type	Order code	
Latch plates for operating pins				
For operating pin 3 mm (standard)* and 5 mm (similar to RAL 9005)	1	TZ507	2CPX010491R9999	
For triangular and square operating pin and for Daimer Benz insert	1	TZ508	2CPX010492R9999	
Operating pins				
Double-bit, 3 mm*	1	ZH130	2CPX060490R9999	
Double bit 5 mm	1	ZH131	2CPX060491R9999	
Triangular 7 mm	1	ZH132	2CPX060492R9999	
Triangular 8 mm	1	ZH133	2CPX060493R9999	
Square 6 mm	1	ZH134	2CPX060494R9999	
Square 7 mm	1	ZH135	2CPX060495R9999	
Square 8 mm	1	ZH136	2CPX060496R9999	
Daimler-Benz	1	ZH137	2CPX060497R9999	
Latch handle				
With latch plate and lock	1	TZ503	2CPX010487R9999	
With latch plate, without lock	1	TZ504	2CPX010488R9999	
T-handle				
With latch plate and lock	1	TZ505	2CPX010489R9999	
With latch plate, without lock	1	TZ506	2CPX010490R9999	
Swivel handle For semi-cylinder 40 mm (30/10) with lead sealable cap	1	TZ510	2CPX010494R9999	
Dummy insert Instead of a semi-cylinder for the swivel handle TZ510	1	ZH142	2CPX060502R9999	

*Accessory included in the scope of delivery

ZH91

ZH160

ZH157

ZH162

ZH165

TZ206

TZ511

TZ501

TZ502

Article	Pieces	Order details		Price
		Type	Order code	
Universal key Double bit 3 mm/5 mm Triangular 8 mm, square 6 mm/8 mm	1	ZH91	2CPX066091R9999	
Double bit 3 mm*	1	ZH160	2CPX060660R9999	
Double bit 5 mm	1	ZH161	2CPX060661R9999	
Triangular 7 mm	1	ZH157	2CPX060657R9999	
Triangular 8 mm	1	ZH158	2CPX060658R9999	
Square 6 mm	1	ZH162	2CPX060662R9999	
Square 7 mm	1	ZH163	2CPX060663R9999	
Square 8 mm	1	ZH164	2CPX060664R9999	
Daimler-Benz	1	ZH165	2CPX060665R9999	
Espagnolette closure				
4 GU = 600 mm with lock part*	1	TZ204	2CPX010462R9999	
5 GU = 750 mm with lock part*	1	TZ205	2CPX010463R9999	
6 GU = 900 mm with lock part*	1	TZ206	2CPX010464R9999	
7 GU = 1050 mm with lock part*	1	TZ207	2CPX010465R9999	
8 GU = 1200 mm with lock part*	1	TZ208	2CPX010466R9999	
9 GU = 1350 mm with lock part*	1	TZ209	2CPX010467R9999	
12 GU = 1800 mm with lock part*	1	TZ212	2CPX010468R9999	
Espagnolette guide*	1	TZ511	2CPX010495R9999	
Shoe* For espagnolette closure	1	TZ501	2CPX010485R9999	
Rubber seal* For double-wing door	1	TZ502	2CPX010486R9999	

*Accessory included in the scope of delivery

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

General accessories

TZ601

TZ604

TZ605

TZ606

TZ631P10

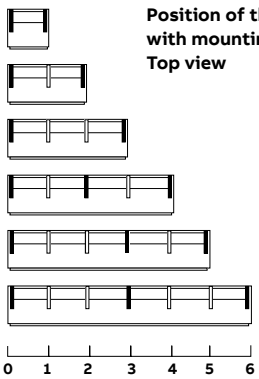
TZ632P10

Article	Pieces	Unmounted			Installed to the cabinet*		
		Order details		Price	Order details		Price
		Type	Order code		Type	Order code	
Mounting rails[*1] For mounting frame holder							
For TwinLine-G	1	TZ601	2CPX010779R9999		TZ601A	2CPX010787R9999	
	10	TZ601P10	2CPX010814R9999				
	100	TZ601P100	2CPX010815R9999				
For TwinLine-L	1	TZ602	2CPX010780R9999		TZ602A	2CPX010788R9999	
	10	TZ602P10	2CPX010816R9999				
	100	TZ602P100	2CPX010817R9999				
For TwinLine-W	1	TZ603	2CPX010781R9999		TZ603A	2CPX010789R9999	
	10	TZ603P10	2CPX010818R9999				
	100	TZ603P100	2CPX010819R9999				
Mounting frame holder centre[*1] For an extension with WR and EDF mounting frame or to connect mounting plates in series (please order ZT 606 EDF adapters separately)	1	TZ604	2CPX010782R9999		TZ604A	2CPX010790R9999	
	10	TZ604P10	2CPX010820R9999				
	100	TZ604P100	2CPX010821R9999				
Mounting frame holder[*1] **left or right** For an extension with WR and EDF mounting frame or with mounting plates or centre support rails (please order ZT 606 EDF adapters separately)	1	TZ605	2CPX010783R9999		TZ605A	2CPX010791R9999	
	10	TZ605P10	2CPX010822R9999				
	100	TZ605P100	2CPX010823R9999				
EDF adapter[*1] for mounting frame holder For an extension with EDF mounting frame	1	TZ606	2CPX010784R9999		TZ606A	2CPX010792R9999	
	10	TZ606P10	2CPX010824R9999				
	100	TZ606P100	2CPX010825R9999				
Montagebolzen[*2] Für TZ604 Montagegerüsthalter mittig	10	TZ631P10	2CPX010930R9999		-	-	-
Montagebolzen[*2] Für TZ605 Montagegerüsthalter rechts oder links	10	TZ632P10	2CPX010931R9999		-	-	-

* Only in combination with factory-assembled meter and distribution board panels, combination sets or CombiLine modules

[*1] Required as accessory depending on the type of assembly

[*2] Included in the delivery



Position of the mounting rails with mounting frame holder Top view

Factory-assembled
Mounting rails with mounting frame holder on left and right, and from 4-panel cabinets on, one additional

Upgradeable
Depending on the configuration. additional mounting rails, mounting frame holders and EDF-adapters will be required

TZ313

Article	Pieces	Unmounted			Installed to the cabinet*		
		Order details		Price	Order details		Price
		Type	Order code		Type	Order code	
Cable fastening rails For the assembly in the cabinet, for TwinLine-L and TwinLine-W							
Panel width 1 = 250 mm	1	TZ311	2CPX010469R9999		TZ311A	2CPX010808R9999	
Panel width 2 = 500 mm	1	TZ312	2CPX010470R9999		TZ312A	2CPX010809R9999	
Panel width 3 = 750 mm	1	TZ313	2CPX010471R9999		TZ313A	2CPX010810R9999	
Panel width 4 = 1000 mm	1	TZ314	2CPX010472R9999		TZ314A	2CPX010811R9999	
Panel width 5 = 1250 mm	1	TZ315	2CPX010785R9999		TZ315A	2CPX010812R9999	
Panel width 6 = 1500 mm	1	TZ316	2CPX010786R9999		TZ316A	2CPX010813R9999	

TZ413

Centre support rails For fastening in the floor-standing cabinet two additional mounting rails (depending on the cabinet depth TZ601, TZ602 or TZ603) required for fastening							
Panel width 1 = 250 mm	1	TZ431	2CPX010960R9999		TZ431A	2CPX010966R9999	
Panel width 2 = 500 mm	1	TZ432	2CPX010961R9999		TZ432A	2CPX010967R9999	
Panel width 3 = 750 mm	1	TZ433	2CPX010962R9999		TZ433A	2CPX010968R9999	
Panel width 4 = 1000 mm	1	TZ434	2CPX010963R9999		TZ434A	2CPX010969R9999	
Panel width 5 = 1250 mm	1	TZ435	2CPX010964R9999		TZ435A	2CPX010970R9999	
Panel width 6 = 1500 mm	1	TZ436	2CPX010965R9999		TZ436A	2CPX010971R9999	

* Only in combination with factory-assembled meter and distribution board panels, combination sets or CombiLine modules

ZW125P4

TZ615P4

TZ609

TZ608

TZ607

Article	Pieces	Order details		Price
		Type	Order code	
External mounting brackets* For mounting cabinets on the wall	4	ZW125P4	2CPX062461R9999	
Transport lugs	4	TZ615P4	2CPX010510R9999	
Protective frame IP55 to combine cabinets in series				
Required for double insulated cabinets	1	TZ609	2CPX010504R9999	
Required for earthed cabinets	1	TZ626	2CPX010778R9999	
Connection set IP55 for cabinet to cabinet connections For connecting wall-mounting cabinets side by side or stacked, order one TZ608 Order two TZ608 for floor-standing cabinets	1	TZ608	2CPX010503R9999	
Door hinge: 180 degree*	1	TZ607	2CPX010502R9999	

*Included in the scope of delivery

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55

General accessories

ZL8

TZB004

TZ617P10

TZ628P10

ZA6

ZA5

ZA123

ZA18

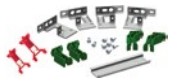
ZA116

Article	Pieces	Order details		Price
		Type	Order code	
Door earthing set 10 mm²	1	ZL8	2CPX038001R9999	
Türversteifungsprofil Für Schrankhöhe 4 und 5 RE	1	TZB004	2CPX010856R9999	
Locking plug*	10	TZ617P10	2CPX010512R9999	
Locking plug* For door hinge knockouts	10	TZ628P10		
Document holder DIN A4 Self-adhesive with transparent sleeve	1	ZA6	2CPX038227R9999	
	10	ZA6P10	2CPX062380R9999	
Self-adhesive with transparent sleeve and reinforced back	10	ZA61P10	2CPX062375R9999	
Document holder DIN A4 Self-adhesive	1	ZA13	2CPX038233R9999	
	10	ZA13P10	2CPX062381R9999	
Document holder DIN A5 Self-adhesive	1	ZA5	2CPX038228R9999	
	10	ZA5P10	2CPX062382R9999	
Document holder support plate				
For document holder ZA13, to screw on to the door strengthening profiles	1	ZA123	2CPX038471R9999	
For document holder ZA5, to screw on to the door strengthening profiles	1	ZA125	2CPX038472R9999	
Spray paint can Colour RAL 7005, 150 ml	1	ZA18	2CPX038237R9999	
Colour RAL 7035, 150 ml	1	ZA16	2CPX038235R9999	
Touch-up applicator Colour RAL 7035, 12 ml	1	ZA116	2CPX039042R9999	

*Included in the scope of delivery

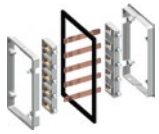
TZ614

TZ610



TZ616

TZ618



TZ620

TZ622

TZ623

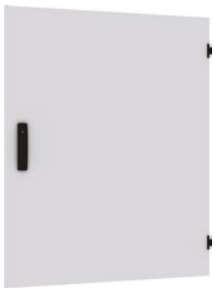
Article	Pieces	Unmounted			Installed to the cabinet*		
		Order details		Price	Order details		Price
		Type	Order code		Type	Order code	
Cover rail[*1] For the installation of meter panels to cover the fastening points of the centre support rail in the double insulated floor-standing cabinet							
For TwinLine-G	1	TZ612	2CPX010507R9999		TZ612A	2CPX010796R9999	
For TwinLine-L	1	TZ613	2CPX010508R9999		TZ613A	2CPX010797R9999	
For TwinLine-W	1	TZ614	2CPX010509R9999		TZ614A	2CPX010798R9999	
Internal cladding*[1] For meter panels, depth = 225 - 350 mm Additional profile for meter panels with 150 mm cable connection area on top, in the double insulated cabinet	1	TZ610	2CPX010505R9999		TZ610A	2CPX010795R9999	
Mounting set For the installation of meter panels, in floor standing cabinets, order one additional TZ616 per panel width (250 mm)	1	TZ616	2CPX010511R9999		TZ616A	2CPX010799R9999	
Touch guard for earthed cabinets							
For single meter panels	1	TZ618	2CPX010673R9999		TZ618A	2CPX010800R9999	
For double meter panels	1	TZ619	2CPX010674R9999		TZ619A	2CPX010801R9999	
Cabinet to cabinet connector							
5-pole, for Cu 12 x 5 mm	1	TZ620	2CPX010793R9999		-	-	
5-pole, for Cu 2 x 12 x 5 mm	1	TZ621	2CPX010794R9999		-	-	
Glanding box made of sheet steel: IP55. RAL7035 For TwinLine meter cabinet, bottom connection For cables of not more than 120 mm² For spreading the feeder cables With cable fastening rail H x W x D: 500 x 300 x 225 mm	1	TZ622	2CPX010448R9999		-	-	
Glanding box made of sheet steel: IP55. RAL7035 For TwinLine meter cabinets, lateral connection For cables of not more than 120 mm² For spreading the feeder cables With cable fastening rail H x W x D: 500 x 300 x 225 mm Busbar system Cu 12 x 5 mm, 5 pole with 1 connector to the busbar system of the meter panel	1	TZ623	2CPX010449R9999		-	-	

> For more information on incoming enclosures, see section Meter cabinets

* Only in combination with factory-assembled meter and distribution board panels, combination sets or CombiLine modules

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55
Sheet steel doors with 180 degree door hinge



TZB306

Height		Width	Remark	Order details		Price
GU	OH	PW		Type	Order code	
4	0	1		TZB104	2CPX010528R9999	
		2		TZB204	2CPX010535R9999	
		3		TZB304	2CPX010542R9999	
		4*	Door left	TZB204L	2CPX010549R9999	
			Door right	TZB204R	2CPX010550R9999	
		5*	Door left	TZB304L	2CPX010563R9999	
			Door right	TZB204R	2CPX010550R9999	
5	1	1		TZB105	2CPX010529R9999	
		2		TZB205	2CPX010536R9999	
		3		TZB305	2CPX010543R9999	
		4*	Door left	TZB205L	2CPX010551R9999	
			Door right	TZB205R	2CPX010552R9999	
		5*	Door left	TZB305L	2CPX010564R9999	
			Door right	TZB205R	2CPX010552R9999	
6	2	1		TZB106	2CPX010530R9999	
		2		TZB206	2CPX010537R9999	
		3		TZB306	2CPX010544R9999	
		4*	Door left	TZB206L	2CPX010553R9999	
			Door right	TZB206R	2CPX010554R9999	
		5*	Door left	TZB306L	2CPX010565R9999	
			Door right	TZB206R	2CPX010554R9999	
7	3	1		TZB107	2CPX010531R9999	
		2		TZB207	2CPX010538R9999	
		3		TZB307	2CPX010545R9999	
		4*	Door left	TZB207L	2CPX010555R9999	
			Door right	TZB207R	2CPX010556R9999	
		5*	Door left	TZB307L	2CPX010566R9999	
			Door right	TZB207R	2CPX010556R9999	
8	4	1		TZB108	2CPX010532R9999	
		2		TZB208	2CPX010539R9999	
		3		TZB308	2CPX010546R9999	
		4*	Door left	TZB208L	2CPX010557R9999	
			Door right	TZB208R	2CPX010558R9999	
		5*	Door left	TZB308L	2CPX010567R9999	
			Door right	TZB208R	2CPX010558R9999	
9	5	1		TZB109	2CPX010533R9999	
		2		TZB209	2CPX010540R9999	
		3		TZB309	2CPX010547R9999	
		4*	Door left	TZB209L	2CPX010559R9999	
			Door right	TZB209R	2CPX010560R9999	
		5*	Door left	TZB309L	2CPX010568R9999	
			Door right	TZB209R	2CPX010560R9999	
12	8	1		TZB112	2CPX010534R9999	
		2		TZB212	2CPX010541R9999	
		3		TZB312	2CPX010548R9999	
		4*	Door left	TZB212L	2CPX010561R9999	
			Door right	TZB212R	2CPX010562R9999	
		5*	Door left	TZB312L	2CPX010569R9999	
			Door right	TZB212R	2CPX010562R9999	
		6*	Door left	TZB312L	2CPX010569R9999	
			Door right	TZB312R	2CPX010570R9999	

*4 or more panels wide: double-wing doors

Subdistribution boards

Wall-mounting and floor-standing cabinets TwinLine N 55
Transparent doors with 180 degree door hinge

TZT206

Height		Width	Remark	Order details		Price
GU	OH	PW		Type	Order code	
4	0	2		TZT204	2CPX010860R9999	
		3		TZT304	2CPX010867R9999	
		4*	Door left	TZT204L	2CPX010874R9999	
			Door right	TZT204R	2CPX010875R9999	
		5*	Door left	TZT304L	2CPX010888R9999	
			Door right	TZT204R	2CPX010875R9999	
5	1	2		TZT205	2CPX010861R9999	
		3		TZT305	2CPX010868R9999	
		4*	Door left	TZT205L	2CPX010876R9999	
			Door right	TZT205R	2CPX010877R9999	
		5*	Door left	TZT305L	2CPX010889R9999	
			Door right	TZT205R	2CPX010877R9999	
6	2	2		TZT206	2CPX010862R9999	
		3		TZT306	2CPX010869R9999	
		4*	Door left	TZT206L	2CPX010878R9999	
			Door right	TZT206R	2CPX010879R9999	
		5*	Door left	TZT306L	2CPX010890R9999	
			Door right	TZT206R	2CPX010879R9999	
7	3	2		TZT207	2CPX010863R9999	
		3		TZT307	2CPX010870R9999	
		4*	Door left	TZT207L	2CPX010880R9999	
			Door right	TZT207R	2CPX010881R9999	
		5*	Door left	TZT307L	2CPX010891R9999	
			Door right	TZT207R	2CPX010881R9999	
8	4	2		TZT208	2CPX010864R9999	
		3		TZT308	2CPX010871R9999	
		4*	Door left	TZT208L	2CPX010882R9999	
			Door right	TZT208R	2CPX010883R9999	
		5*	Door left	TZT308L	2CPX010892R9999	
			Door right	TZT208R	2CPX010883R9999	
9	5	2		TZT209	2CPX010865R9999	
		3		TZT309	2CPX010872R9999	
		4*	Door left	TZT209L	2CPX010884R9999	
			Door right	TZT209R	2CPX010885R9999	
		5*	Door left	TZT309L	2CPX010893R9999	
			Door right	TZT209R	2CPX010885R9999	
12	8	2		TZT212	2CPX010866R9999	
		3		TZT312	2CPX010873R9999	
		4*	Door left	TZT212L	2CPX010886R9999	
			Door right	TZT212R	2CPX010887R9999	
		5*	Door left	TZT312L	2CPX010894R9999	
			Door right	TZT212R	2CPX010887R9999	
		6*	Door left	TZT312L	2CPX010894R9999	
			Door right	TZT312R	2CPX010895R9999	

*4 or more panels wide: double-wing doors

Subdistribution boards

TwinLine N 55 wall-mounting and floor-standing cabinets IP55

Touch guard

TZP306

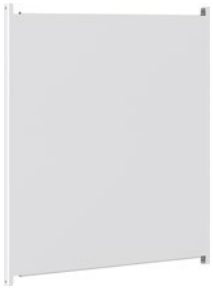
Height		Width	Touch guard Unmounted			Touch guard Installed to the cabinet*		
GU	OH	PW	Order details		Price	Order details		Price
			Type	Order code		Type	Order code	
4	0	1	TZP104	2CPX010625R9999		TZP104A	2CPX010708R9999	
		2	TZP204	2CPX010632R9999		TZP204A	2CPX010715R9999	
		3	TZP304	2CPX010639R9999		TZP304A	2CPX010722R9999	
		4	TZP404	2CPX010646R9999		TZP404A	2CPX010729R9999	
		5	TZP504	2CPX010653R9999		TZP504A	2CPX010736R9999	
5	1	1	TZP105	2CPX010626R9999		TZP105A	2CPX010709R9999	
		2	TZP205	2CPX010633R9999		TZP205A	2CPX010716R9999	
		3	TZP305	2CPX010640R9999		TZP305A	2CPX010723R9999	
		4	TZP405	2CPX010647R9999		TZP405A	2CPX010730R9999	
		5	TZP505	2CPX010654R9999		TZP505A	2CPX010737R9999	
6	2	1	TZP106	2CPX010627R9999		TZP106A	2CPX010710R9999	
		2	TZP206	2CPX010634R9999		TZP206A	2CPX010717R9999	
		3	TZP306	2CPX010641R9999		TZP306A	2CPX010724R9999	
		4	TZP406	2CPX010648R9999		TZP406A	2CPX010731R9999	
		5	TZP506	2CPX010655R9999		TZP506A	2CPX010738R9999	
7	3	1	TZP107	2CPX010628R9999		TZP107A	2CPX010711R9999	
		2	TZP207	2CPX010635R9999		TZP207A	2CPX010718R9999	
		3	TZP307	2CPX010642R9999		TZP307A	2CPX010725R9999	
		4	TZP407	2CPX010649R9999		TZP407A	2CPX010732R9999	
		5	TZP507	2CPX010656R9999		TZP507A	2CPX010739R9999	
8	4	1	TZP108	2CPX010629R9999		TZP108A	2CPX010712R9999	
		2	TZP208	2CPX010636R9999		TZP208A	2CPX010719R9999	
		3	TZP308	2CPX010643R9999		TZP308A	2CPX010726R9999	
		4	TZP408	2CPX010650R9999		TZP408A	2CPX010733R9999	
		5	TZP508	2CPX010657R9999		TZP508A	2CPX010740R9999	
9	5	1	TZP109	2CPX010630R9999		TZP109A	2CPX010713R9999	
		2	TZP209	2CPX010637R9999		TZP209A	2CPX010720R9999	
		3	TZP309	2CPX010644R9999		TZP309A	2CPX010727R9999	
		4	TZP409	2CPX010651R9999		TZP409A	2CPX010734R9999	
		5	TZP509	2CPX010658R9999		TZP509A	2CPX010741R9999	
12	8	1	TZP112	2CPX010631R9999		TZP112A	2CPX010714R9999	
		2	TZP212	2CPX010638R9999		TZP212A	2CPX010721R9999	
		3	TZP312	2CPX010645R9999		TZP312A	2CPX010728R9999	
		4	TZP412	2CPX010652R9999		TZP412A	2CPX010735R9999	
		5	TZP512	2CPX010659R9999		TZP512A	2CPX010742R9999	
		6	TZP612	2CPX010660R9999		TZP612A	2CPX010743R9999	

* Only in combination with factory-assembled meter and distribution board panels, combination sets or CombiLine modules
> The touch guard in the double insulated cabinet is included in the scope of delivery

Subdistribution boards

TwinLine N 55 wall-mounting and floor-standing cabinets IP55

Mounting plates, sheet steel, 2 mm, galvanised



TZM306

Height		Width	Mounting plate unmounted			Mounting plate Installed to the cabinet*1		
GU	OH	PW	Order details		Price	Order details		Price
			Type	Order code		Type	Order code	
4	0	1	TZM104	2CPX010591R9999		TZM104A	2CPX010744R9999	
		2	TZM204	2CPX010598R9999		TZM204A	2CPX010750R9999	
		3	TZM304	2CPX010605R9999		TZM304A	2CPX010756R9999	
		4	TZM404	2CPX010612R9999		TZM404A	2CPX010762R9999	
		5	TZM504	2CPX010619R9999		TZM504A	2CPX010768R9999	
5	1	1	TZM105	2CPX010592R9999		TZM105A	2CPX010745R9999	
		2	TZM205	2CPX010599R9999		TZM205A	2CPX010751R9999	
		3	TZM305	2CPX010606R9999		TZM305A	2CPX010757R9999	
		4	TZM405	2CPX010613R9999		TZM405A	2CPX010763R9999	
		5	TZM505	2CPX010620R9999		TZM505A	2CPX010769R9999	
6	2	1	TZM106	2CPX010593R9999		TZM106A	2CPX010746R9999	
		2	TZM206	2CPX010600R9999		TZM206A	2CPX010752R9999	
		3	TZM306	2CPX010607R9999		TZM306A	2CPX010758R9999	
		4	TZM406	2CPX010614R9999		TZM406A	2CPX010764R9999	
		5	TZM506	2CPX010621R9999		TZM506A	2CPX010770R9999	
7	3	1	TZM107	2CPX010594R9999		TZM107A	2CPX010747R9999	
		2	TZM207	2CPX010601R9999		TZM207A	2CPX010753R9999	
		3	TZM307	2CPX010608R9999		TZM307A	2CPX010759R9999	
		4	TZM407	2CPX010615R9999		TZM407A	2CPX010765R9999	
		5	TZM507	2CPX010622R9999		TZM507A	2CPX010771R9999	
8	4	1	TZM108	2CPX010595R9999		TZM108A	2CPX010748R9999	
		2	TZM208	2CPX010602R9999		TZM208A	2CPX010754R9999	
		3	TZM308	2CPX010609R9999		TZM308A	2CPX010760R9999	
		4	TZM408	2CPX010616R9999		TZM408A	2CPX010766R9999	
		5	TZM508	2CPX010623R9999		TZM508A	2CPX010772R9999	
9	5	1	TZM109	2CPX010596R9999		TZM109A	2CPX010749R9999	
		2	TZM209	2CPX010603R9999		TZM209A	2CPX010755R9999	
		3	TZM309	2CPX010610R9999		TZM309A	2CPX010761R9999	
		4	TZM409	2CPX010617R9999		TZM409A	2CPX010767R9999	
		5	TZM509	2CPX010624R9999		TZM509A	2CPX010773R9999	
12	8	1	TZM112	2CPX010940R9999		TZM112A	2CPX010944R9999	
		2	TZM212	2CPX010941R9999		TZM212A	2CPX010945R9999	
		3	TZM312	2CPX010942R9999		TZM312A	2CPX010946R9999	
		4	TZM412	2CPX010943R9999		TZM412A	2CPX010947R9999	
		5*	TZM212	2CPX010941R9999		TZM212A	2CPX010945R9999	
			TZM312	2CPX010942R9999		TZM312A	2CPX010946R9999	
		6*	TZM312	2CPX010942R9999		TZM312A	2CPX010946R9999	
			TZM312	2CPX010942R9999		TZM312A	2CPX010946R9999	

*In floor-standing cabinets from 5-panel width two separate mounting plates

*1 Factory assembled mounting plate only in combination with empty cabinet

System pro E energy

Distribution panel system CombiLine N

Subdistribution boards

Modular distribution panel system CombiLine N
The modular distribution panel system up to 850 A

The highly sophisticated quick mounting system from ABB STRIEBEL & JOHN makes the completion of modular cabinets with distribution panels an effortless process. Simple, quick and safe – these are the three attributes of this system that speak for themselves. Thanks to the uniform screw driving methods using Torx, the distribution panel system CombiLine N is now even more convenient to use!

Modular distribution panel system CombiLine N
A single ditribution panel system for all cabinet types

Convenient to use with Torx

- Very high torque transmission
- Excellent lateral support of the insert
- Quick and convenient screwing
- Uniform tool set for the complete distribution panel system

Subdistribution boards

Modular distribution panel system CombiLine N

A single distribution panel system for all cabinet types

Fire protection enclosures

Compact distribution boards

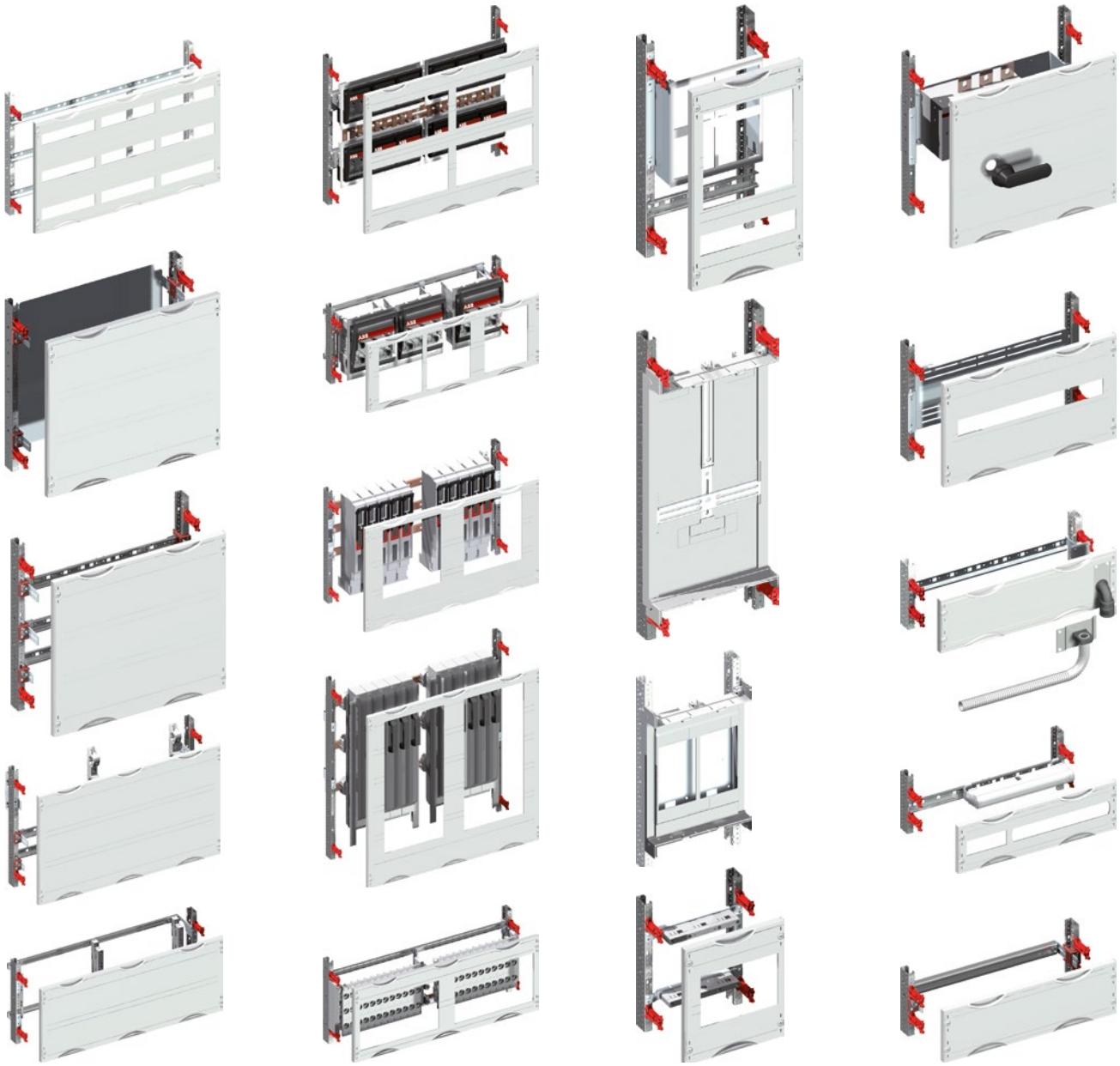
Switchgear cabinets

Floor-standing cabinets

Wall-mounting cabinets

Subdistribution boards

Modular distribution panel system CombiLine N
The right module for every type of application



Subdistribution boards

Modular distribution panel system CombiLine N
Extension with EDF or WR mounting frame

Empty cabinets for an extension with EDF mounting frame
Compact distribution boards
UL and AL ⧈

Wall-mounting cabinets
U and A ⧈, B⏚, TwinLine-G,
TwinLine-L and TwinLine-W ⏚⧈

Floor-standing cabinets
TwinLine-H ⧈ ⏚
TwinLine-G, TwinLine-L and TwinLine-W ⏚⧈

Switchgear cabinets TriLine®, System pro *E* power ⏚

Fire protection enclosures UF, AF and SF ⏚

Empty cabinets for an extension with WR mounting frame
Wall-mounting cabinets
TwinLine-G, TwinLine-L and TwinLine-W ⏚⧈

Floor-standing cabinets
TwinLine-G, TwinLine-L and TwinLine-W ⏚⧈

Switchgear cabinets
TriLine®, System pro *E* power ⏚

EDF mounting frame up to 400 A

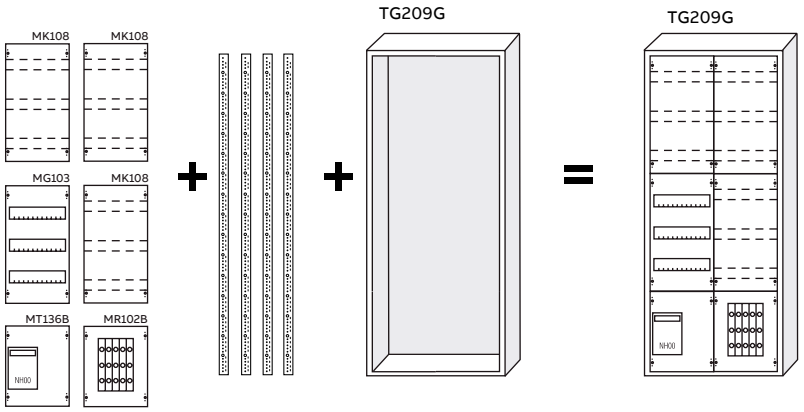
WR mounting frame up to 850 A

Subdistribution boards

Modular distribution panel system CombiLine N
The right module for every type of application

UL and AL compact distribution boards / U, A and B wall-mounting cabinets and G, L and W TwinLine, UF, AF fire protection enclosures

Example: Extension with modules (mounted) to EDF mounting frame in TwinLine-G wall-mounting cabinet

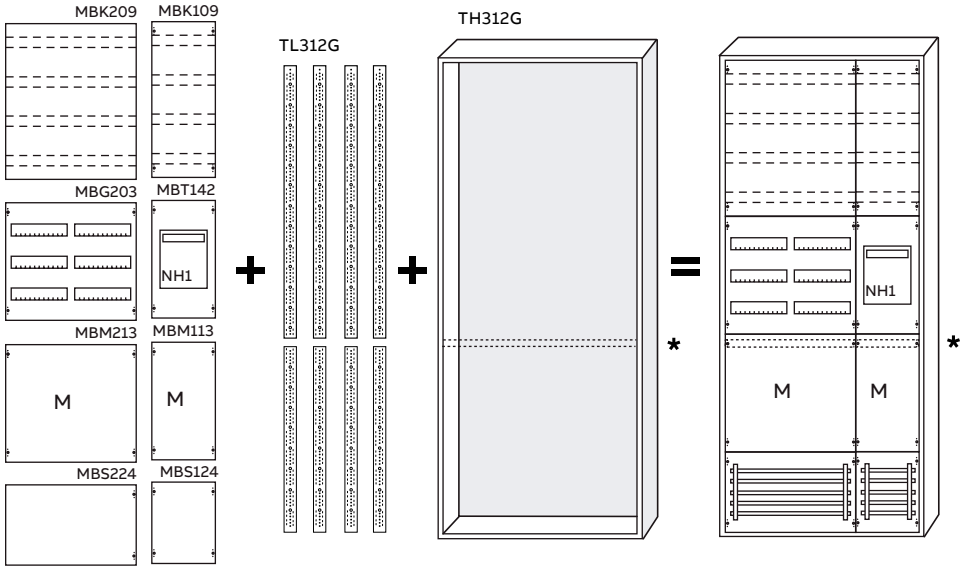


Supply format
Modules are mounted on the EDF mounting frame at the factory and integrated into the cabinet prior to delivery.

Modules (mounted) + EDF mounting frame + empty cabinet = wall-mounted distribution board

TwinLine-H as well as TwinLine G, L, W switchgear cabinets TriLine® / SF fire protection enclosures

Example: Configuration with modules (flatpacks, not mounted) and EDF mounting frame in a TwinLine-L floor-standing cabinet



+ 5 pcs. ZX1001 Cu busbar
+ 5 pcs. ZX1002 Cu busbar

Modules (Flatpacks) + EDF-Mounting frame + Empty cabinet = floor-standing distribution board

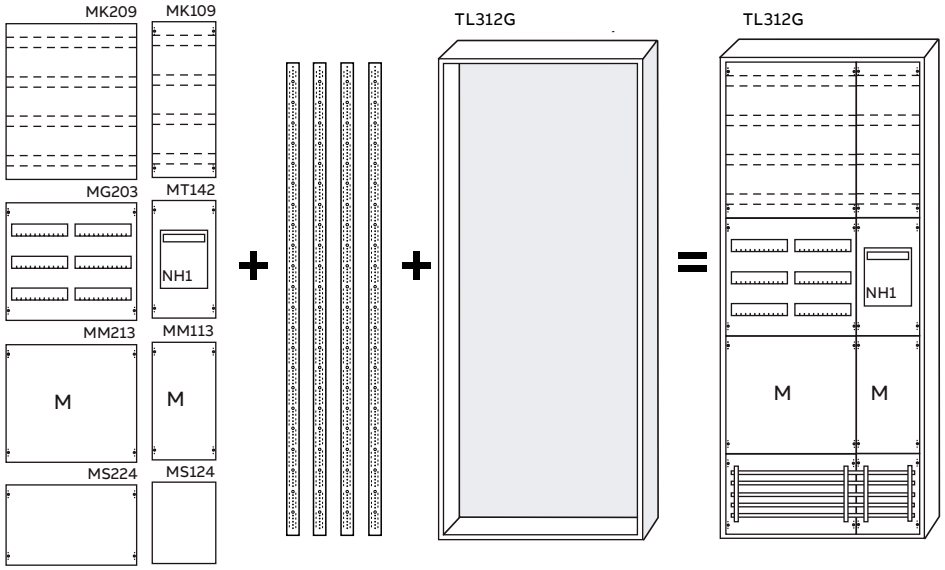
Supply format
Module flatpacks, EDF profiles, Cu busbars and empty cabinet are supplied as individually packaged units.

* The EDF mounting frame must not exceed a total height of 1,350 mm (OH 5). This is why, for design reasons, floor-standing cabinets (prepared for EDF mounting frame) come with a centre support rail installed. This centre rail can be repositioned up or down in grid steps of 150 mm.

Subdistribution boards

Modular distribution panel system CombiLine N
Extension with EDF or WR mounting frame

Floor-standing cabinets TwinLine G, L, W / TriLine® and System pro E power switchgear cabinets
Example: Extension with modules (mounted) to WR mounting frame in C-floor-standing cabinet



+ 5 pcs. ZXM1003 Cu busbar

Modules (mounted) + WR mounting frame + empty cabinet = floor-standing distribution board

Supply format
Modules are mounted
WR mounting frame at the
factory and integrated into the
cabinet
prior to delivery.

Subdistribution boards

Modular distribution panel system CombiLine N

The right choice for every user

The highly sophisticated quick mounting system from ABB STRIEBEL & JOHN makes the completion of modular cabinets with distribution panels an effortless process. Simple, quick and safe – these are the three attributes of this system that speak for themselves.
You choose the best suited supply format: Select from the following options: complete delivery if you wish to receive the modules mounted to the empty cabinet, or flatpack with instructions to install the modules to the mounting frame yourself, or a delivery in individual parts.

Complete delivery
The modular system panel is supplied with all modules fully assembled on the mounting frame and installed in the distribution cabinet. The mounting frame must be ordered separately.

The benefits: You select components best suited to your application from the CombiLine modules, which makes it really easy to obtain the right low-voltage distribution board. The modular system panel planned by you is assembled at the factory and delivered to you preinstalled in the cabinet. This means that no time is wasted in searching for system accessories such as brackets, screws or fastening elements. All you need to do is select the correct mounting frame for the job. Or, if required, our Panel Design Configurator software can make this decision for you.

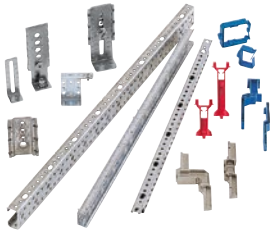
Delivery in individual parts
The parts are ordered individually, in order to create your own module, or to expand or modify an existing one.

The benefits: With our comprehensive selection of individual parts, you can remain quick and flexible when it comes to assembling, expanding or modifying a distribution panel.

Delivery as flatpack
All of the individual parts required for assembling a module are packed separately and supplied in the form of a flatpack, complete with mounting instructions. All you need to do is select the correct mounting frame for the job. The mounting frame parts must be ordered separately. If required, our Panel Design Configurator software can select the mounting frame for you.

The benefits: These flatpacks allow you to take a flexible approach towards stock keeping, and avoid a time-consuming search for system parts such as brackets, screws or fastening elements. The instructions supplied with the flatpack make assembly a child's play. Quick and clear planning and calculation become perfect with the assistance of the Panel Design Configurator software.

Complete delivery



Delivery in individual parts

Delivery as flatpack

Subdistribution boards

Modular distribution panel system CombiLine N
Technical specifications

Standards/regulations			
DIN EN 61439-1/-2/-3 (VDE 0660-600-1/-2/-3)*[1]	X		
DIN 43880 (DIN rail mounting devices)	X		
Degree of protection	IPXXB, IP2XC with protection rating II		

Electrical characteristics			
Rated impulse withstand voltage (U_{imp})	6 kV		
Overvoltage category	III		
Pollution degree	3		
Protection class	I / II		
Rated current of the switchgear assembly (I_{nA})	up to 850 A		
	Rail mounting devices acc. to DIN 43880	Fuse-Switch disconnectors	Busbars-systems
Rated peak withstand current (I_{pk}) 0.1 sec.	25 kA	up to 52 kA	up to 74 kA
Rated short-time withstand current (I_{cw}) 1.0 sec.	12.5 kA	up to 25 kA	up to 35 kA
	-	Values on request	see chapter busbar systems
Rated frequency (f)	50 Hz		
Rated insulation voltage (U_i)	690 V AC		
Rated operational voltage (U_e)	400 V AC		

*[1] For the allowed heat-up values of switchgear assemblies of the TwinLine wall-mounting and floor-standing cabinet systems, please refer to the information provided in the TwinLine chapter

Subdistribution boards

Modular distribution panel system CombiLine N
DIN rail mounting devices 125 mm / 150 mm spacing

MG303

MG433

- Extension with DIN rails 35 x 15 mm
- From 3 panels on the DIN rails are equipped with an additional stabilization rail
- For DIN rail mounting devices according to DIN 43880
- The mounting frame must be ordered separately

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Order details		Price	Order details		Price
								Type	Order code		Type	Order code	
125 mm DIN rail spacing													
1	150	1	250	12	■	■	120	MBG101	2CPX041650R9999		MG101	2CPX041200R9999	
		2	500	24	■	■	120	MBG201	2CPX041651R9999		MG201	2CPX041201R9999	
		3	750	36	■	■	120	MBG301	2CPX041652R9999		MG301	2CPX041202R9999	
2	300	1	250	24	■	■	120	MBG102	2CPX041653R9999		MG102	2CPX041203R9999	
		2	500	48	■	■	120	MBG202	2CPX041655R9999		MG202	2CPX041205R9999	
		3	750	72	■	■	120	MBG302	2CPX041657R9999		MG302	2CPX041207R9999	
3	450	1	250	36	■	■	120	MBG103	2CPX041659R9999		MG103	2CPX041209R9999	
		2	500	72	■	■	120	MBG203	2CPX041661R9999		MG203	2CPX041211R9999	
		3	750	108	■	■	120	MBG303	2CPX041663R9999		MG303	2CPX041213R9999	
4	600	1	250	48	■	■	120	MBG104	2CPX041665R9999		MG104	2CPX041215R9999	
		2	500	96	■	■	120	MBG204	2CPX041667R9999		MG204	2CPX041217R9999	
		3	750	144	■	■	120	MBG304	2CPX041669R9999		MG304	2CPX041219R9999	
5	750	1	250	60	■	■	120	MBG105	2CPX041671R9999		MG105	2CPX041221R9999	
		2	500	120	■	■	120	MBG205	2CPX041673R9999		MG205	2CPX041223R9999	
		3	750	180	■	■	120	MBG305	2CPX041675R9999		MG305	2CPX041225R9999	
150 mm DIN rail spacing													
1	150	1	250	12	■	■	120	MBG101	2CPX041650R9999		MG101	2CPX041200R9999	
		2	500	24	■	■	120	MBG201	2CPX041651R9999		MG201	2CPX041201R9999	
		3	750	36	■	■	120	MBG301	2CPX041652R9999		MG301	2CPX041202R9999	
2	300	1	250	24	■	■	120	MBG412	2CPX041654R9999		MG412	2CPX041204R9999	
		2	500	48	■	■	120	MBG422	2CPX041656R9999		MG422	2CPX041206R9999	
		3	750	72	■	■	120	MBG432	2CPX041658R9999		MG432	2CPX041208R9999	
3	450	1	250	36	■	■	120	MBG413	2CPX041660R9999		MG413	2CPX041210R9999	
		2	500	72	■	■	120	MBG423	2CPX041662R9999		MG423	2CPX041212R9999	
		3	750	108	■	■	120	MBG433	2CPX041664R9999		MG433	2CPX041214R9999	
4	600	1	250	48	■	■	120	MBG414	2CPX041666R9999		MG414	2CPX041216R9999	
		2	500	96	■	■	120	MBG424	2CPX041668R9999		MG424	2CPX041218R9999	
		3	750	144	■	■	120	MBG434	2CPX041670R9999		MG434	2CPX041220R9999	
5	750	1	250	60	■	■	120	MBG415	2CPX041672R9999		MG415	2CPX041222R9999	
		2	500	120	■	■	120	MBG425	2CPX041674R9999		MG425	2CPX041224R9999	
		3	750	180	■	■	120	MBG435	2CPX041676R9999		MG435	2CPX041226R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N

Touch guard

MB218

- Module as touch guard or for an extension with system parts
- The mounting frame must be ordered separately

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Order details		Price	Order details		Price
								Type	Order code		Type	Order code	
1	150	1	250	12	■	■	120	MBB116	2CPX041722R9999		MB116	2CPX041257R9999	
		2	500	24	■	■	120	MBB216	2CPX041723R9999		MB216	2CPX041258R9999	
		3	750	36	■	■	120	MBB316	2CPX041724R9999		MB316	2CPX041259R9999	
2	300	1	250	24	■	■	120	MBB117	2CPX041725R9999		MB117	2CPX041260R9999	
		2	500	48	■	■	120	MBB217	2CPX041726R9999		MB217	2CPX041261R9999	
		3	750	72	■	■	120	MBB317	2CPX041727R9999		MB317	2CPX041262R9999	
3	450	1	250	36	■	■	120	MBB118	2CPX041728R9999		MB118	2CPX041263R9999	
		2	500	72	■	■	120	MBB218	2CPX041729R9999		MB218	2CPX041264R9999	
		3	750	108	■	■	120	MBB318	2CPX041730R9999		MB318	2CPX041265R9999	
4	600	1	250	48	■	■	120	MBB119	2CPX041731R9999		MB119	2CPX041266R9999	
		2	500	96	■	■	120	MBB219	2CPX041732R9999		MB219	2CPX041267R9999	
		3	750	144	■	■	120	MBB319	2CPX041733R9999		MB319	2CPX041268R9999	
5	750	1	250	60	■	■	120	MBB120	2CPX041734R9999		MB120	2CPX041269R9999	
		2	500	120	■	■	120	MBB220	2CPX041735R9999		MB220	2CPX041270R9999	
		3	750	180	■	■	120	MBB320	2CPX041736R9999		MB320	2CPX041271R9999	

MB200

- Touch guard cover including the cover holder
- The covers are outside the 150 mm grid spacing
- To have a grid unit, always 2 pieces must be inserted per modular system panel
- The mounting frame must be ordered separately

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Order details		Price	Order details		Price
								Type	Order code		Type	Order code	
0.5	75	1	250	6	■	■	120	MBB100	2CPX041427R9999		MB100	2CPX041422R9999	
		2	500	12	■	■	120	MBB200	2CPX041428R9999		MB200	2CPX041423R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N

Mounting plates

MM213

- Mounting plates made of sheet steel, 2 mm
- Mounting plates steplessly depth-adjustable using deep-mounting bracket ZW59P2
- Usable depth from 103 up to 158 mm
- Usable width for devices: 1 panel wide: 188 mm, 2 panel wide 438 mm, 3 panel wide: 688 mm
- The mounting frame must be ordered separately

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
1	150	1	250	12	■	■	200	MBM111	2CPX041707R9999		MM111	2CPX041242R9999	
		2	500	24	■	■	200	MBM211	2CPX041708R9999		MM211	2CPX041243R9999	
		3	750	36	■	■	200	MBM311	2CPX041709R9999		MM311	2CPX041244R9999	
2	300	1	250	24	■	■	200	MBM112	2CPX041710R9999		MM112	2CPX041245R9999	
		2	500	48	■	■	200	MBM212	2CPX041711R9999		MM212	2CPX041246R9999	
		3	750	72	■	■	200	MBM312	2CPX041712R9999		MM312	2CPX041247R9999	
3	450	1	250	36	■	■	200	MBM113	2CPX041713R9999		MM113	2CPX041248R9999	
		2	500	72	■	■	200	MBM213	2CPX041714R9999		MM213	2CPX041249R9999	
		3	750	108	■	■	200	MBM313	2CPX041715R9999		MM313	2CPX041250R9999	
4	600	1	250	48	■	■	200	MBM114	2CPX041716R9999		MM114	2CPX041251R9999	
		2	500	96	■	■	200	MBM214	2CPX041717R9999		MM214	2CPX041252R9999	
		3	750	144	■	■	200	MBM314	2CPX041718R9999		MM314	2CPX041253R9999	
5	750	1	250	60	■	■	200	MBM115	2CPX041719R9999		MM115	2CPX041254R9999	
		2	500	120	■	■	200	MBM215	2CPX041720R9999		MM215	2CPX041255R9999	
		3	750	180	■	■	200	MBM315	2CPX041721R9999		MM315	2CPX041256R9999	

MM113K

- Mounting plates made of sheet steel, 2 mm
- Mounting plate solid assembly
- Usable depth from 82 mm
- Usable width for devices: 1 panel wide, 200 mm
- The mounting frame must be ordered separately

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	24	■	■	120	MBM112K	2CPX041640R9999		MM112K	2CPX041117R9999	
3	450	1	250	36	■	■	120	MBM113K	2CPX041641R9999		MM113K	2CPX041118R9999	
4	600	1	250	48	■	■	120	MBM114K	2CPX041642R9999		MM114K	2CPX041119R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N
Horizontal terminals

MK208

- With horizontal DIN rails 35 x 15 mm
- DIN rail steplessly depth-adjustable
- Usable depth with ZW39P2 - from 68 mm to 115 mm
- Usable depth with ZW59P2 - from 90 mm to 145 mm
- Usable width for terminals: 1 panel wide: 188 mm, 2 panel wide 438 mm, 3 panel wide: 688 mm
- Stepped supply formats
- 150 mm DIN rail spacing (adjustment possible, if required)
- For earthed and double insulated assemblies ⏚
- The mounting frame must be ordered separately

Note: The upper DIN rail is mounted with at least one pair of short deep-mounting brackets (ZW39P2)

Module design:

- 1 GU 1 X ZW39P2
- 2 GU: 1 X ZW39P2, 1 X ZW59P2
- 3 GU: 2 X ZW39P2, 1 X ZW59P2
- 4 GU: 2 X ZW39P2, 2 X ZW59P2
- 5 GU: 2 X ZW39P2, 3 X ZW59P2

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
1	150	1	250	12	■	■	200	MBK106	2CPX041677R9999		MK106	2CPX041227R9999	
		2	500	24	■	■	200	MBK206	2CPX041679R9999		MK206	2CPX041228R9999	
		3	750	36	■	■	200	MBK306	2CPX041681R9999		MK306	2CPX041229R9999	
2	300	1	250	24	■	■	200	MBK107	2CPX041683R9999		MK107	2CPX041230R9999	
		2	500	48	■	■	200	MBK207	2CPX041685R9999		MK207	2CPX041231R9999	
		3	750	72	■	■	200	MBK307	2CPX041687R9999		MK307	2CPX041232R9999	
3	450	1	250	36	■	■	200	MBK108	2CPX041689R9999		MK108	2CPX041233R9999	
		2	500	72	■	■	200	MBK208	2CPX041691R9999		MK208	2CPX041234R9999	
		3	750	108	■	■	200	MBK308	2CPX041693R9999		MK308	2CPX041235R9999	
4	600	1	250	48	■	■	200	MBK109	2CPX041695R9999		MK109	2CPX041236R9999	
		2	500	96	■	■	200	MBK209	2CPX041697R9999		MK209	2CPX041237R9999	
		3	750	144	■	■	200	MBK309	2CPX041699R9999		MK309	2CPX041238R9999	
5	750	1	250	60	■	■	200	MBK110	2CPX041701R9999		MK110	2CPX041239R9999	
		2	500	120	■	■	200	MBK210	2CPX041703R9999		MK210	2CPX041240R9999	
		3	750	180	■	■	200	MBK310	2CPX041705R9999		MK310	2CPX041241R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
Horizontal / vertical terminals

MK108K

- With horizontal DIN rails 35 x 7.5 mm
- DIN rails fixed using ZK90P2 insulator
- Usable depth from 51 mm
- Usable width for terminals: 1 panel wide: 214 mm, 2 panel wide: 464 mm
- Stepped supply formats
- 150 mm DIN rail spacing (adjustment possible, if required)
- For double insulated installations ,
- The mounting frame must be ordered separately

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
1	150	1	250	12	■	■	120	MBK106K	2CPX041632R9999		MK106K	2CPX041112R9999	
		2	500	24	■	■	120	MBK206K	2CPX041633R9999		MK206K	2CPX041113R9999	
2	300	1	250	24	■	■	120	MBK107K	2CPX041634R9999		MK107K	2CPX041114R9999	
		2	500	48	■	■	120	MBK207K	2CPX041635R9999		MK207K	2CPX041115R9999	
3	450	1	250	36	■	■	120	MBK108K	2CPX041636R9999		MK108K	2CPX041116R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MK213

- With vertical DIN rails 35 x 15 mm
- DIN rails completely steplessly depth-adjustable using deep-mounting bracket ZW39P2
- Usable depth from 66 up to 113 mm
- Usable height for terminals: 2 GU 244 mm, 3 GU 438 mm, 4 GU 591 mm
- For earthed and double insulated assemblies .,
- The mounting frame must be ordered separately

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	24	■	■	200	MBK112	2CPX041837R9999		MK112	2CPX041127R9999	
		2	500	48	■	■	200	MBK212	2CPX041838R9999		MK212	2CPX041128R9999	
		3	750	72	■	■	200	MBK312	2CPX041839R9999		MK312	2CPX041129R9999	
3	450	1	250	36	■	■	200	MBK113	2CPX041840R9999		MK113	2CPX041130R9999	
		2	500	72	■	■	200	MBK213	2CPX041841R9999		MK213	2CPX041131R9999	
		3	750	108	■	■	200	MBK313	2CPX041842R9999		MK313	2CPX041132R9999	
4	600	1	250	48	■	■	200	MBK114	2CPX041843R9999		MK114	2CPX041133R9999	
		2	500	96	■	■	200	MBK214	2CPX041844R9999		MK214	2CPX041134R9999	
		3	750	144	■	■	200	MBK314	2CPX041845R9999		MK314	2CPX041135R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N
Busbar system 40 mm, horizontal, M(B)S...24

MS324

- Busbar centre spacing 40 mm
- For not more than 5-pole busbars, see below
- With busbar holder type ZB5
- With end cover type ZX172
- 3 panels and more: additional centre support
- Rated current (I_n) max. 360 A
  Important: the module combination options are to be considered for TwinLine cabinet to cabinet connections
- The mounting frame must be ordered separately

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	24	■	■	200*1	MBS124	2CPX041737R9999		MS124	2CPX041272R9999	
		2	500	48	■	■	200*1	MBS224	2CPX041738R9999		MS224	2CPX041273R9999	
		3	750	72	■	■	225*1	MBS324	2CPX041739R9999		MS324	2CPX041274R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

ZX2015

- Busbars for single cabinets
- Using continuous busbars, it is possible to combine different module widths within a single cabinet
- Not more than 5 Cu busbars are required per module

Cu busbar	I_n	Width		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
12 x 5	250	1	181	1	ZX2001	2CPX042200R9999		ZXM2001	2CPX042300R9999	
		2	431	1	ZX2002	2CPX042201R9999		ZXM2002	2CPX042301R9999	
		3	681	1	ZX2003	2CPX042202R9999		ZXM2003	2CPX042302R9999	
		4	931	1	ZX2004	2CPX042203R9999		ZXM2004	2CPX042303R9999	
		5	1181	1	ZX2005	2CPX042204R9999		ZXM2005	2CPX042304R9999	
		6	1431	1	ZX2006	2CPX042792R9999		ZXM2006	2CPX042814R9999	
12 x 10	360	1	181	1	ZX2007	2CPX042205R9999		ZXM2007	2CPX042305R9999	
		2	431	1	ZX2008	2CPX042206R9999		ZXM2008	2CPX042306R9999	
		3	681	1	ZX2009	2CPX042207R9999		ZXM2009	2CPX042307R9999	
		4	931	1	ZX2010	2CPX042208R9999		ZXM2010	2CPX042308R9999	
		5	1181	1	ZX2011	2CPX042209R9999		ZXM2011	2CPX042309R9999	
		6	1431	1	ZX2012	2CPX042793R9999		ZXM2012	2CPX042815R9999	
20 x 5	320	1	181	1	ZX2013	2CPX042210R9999		ZXM2013	2CPX042310R9999	
		2	431	1	ZX2014	2CPX042211R9999		ZXM2014	2CPX042311R9999	
		3	681	1	ZX2015	2CPX042212R9999		ZXM2015	2CPX042312R9999	
		4	931	1	ZX2016	2CPX042213R9999		ZXM2016	2CPX042313R9999	
		5	1181	1	ZX2017	2CPX042214R9999		ZXM2017	2CPX042314R9999	
		6	1431	1	ZX2018	2CPX042794R9999		ZXM2018	2CPX042816R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
Busbar system 60 mm, horizontal, M(B)S...27

MS327

- Busbar centre spacing 60 mm
- For 3-pole busbars, see below
- With busbar holder type ZX151
- 3 panels and more: additional centre support
- Rated current (I_n) max. 630 A
  Important: the module combination options are to be considered for TwinLine cabinet to cabinet connection
- The mounting frame must be ordered separately

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	24	■	■	215*1	MBS127	2CPX041740R9999		MS127	2CPX041275R9999	
		2	500	48	■	■	215*1	MBS227	2CPX041741R9999		MS227	2CPX041276R9999	
		3	750	72	■	■	225*1	MBS327	2CPX041742R9999		MS327	2CPX041277R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

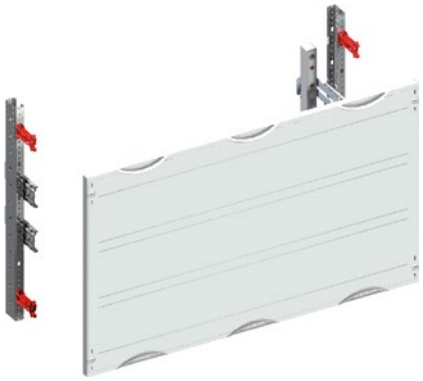
ZX2027

- Busbars for single cabinets
- Using continuous busbars, it is possible to combine different module widths within a single cabinet
- 3 Cu busbars are required per module

Cu busbar	I_n	Width		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 5	440	1	184	1	ZX2019	2CPX042215R9999		ZXM2019	2CPX042315R9999	
		2	434	1	ZX2020	2CPX042216R9999		ZXM2020	2CPX042316R9999	
		3	684	1	ZX2021	2CPX042217R9999		ZXM2021	2CPX042317R9999	
		4	934	1	ZX2022	2CPX042218R9999		ZXM2022	2CPX042318R9999	
		5	1184	1	ZX2023	2CPX042219R9999		ZXM2023	2CPX042319R9999	
		6	1434	1	ZX2024	2CPX042795R9999		ZXM2024	2CPX042817R9999	
30 x 10	630	1	184	1	ZX2025	2CPX042220R9999		ZXM2025	2CPX042320R9999	
		2	434	1	ZX2026	2CPX042221R9999		ZXM2026	2CPX042321R9999	
		3	684	1	ZX2027	2CPX042222R9999		ZXM2027	2CPX042322R9999	
		4	934	1	ZX2028	2CPX042223R9999		ZXM2028	2CPX042323R9999	
		5	1184	1	ZX2029	2CPX042224R9999		ZXM2029	2CPX042324R9999	
		6	1434	1	ZX2030	2CPX042796R9999		ZXM2030	2CPX042818R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
Busbar system 100 mm, horizontal, M(B)S...31

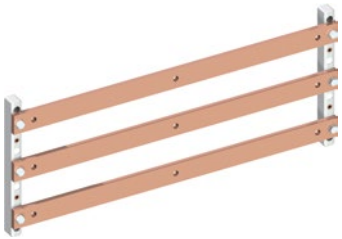


MS331

- Busbar centre spacing 100 mm
- For 3-pole busbars, see below
- With busbar holder type ZX520
- Rated current (I_n) max. 850 A
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	36		■	275	MBS131	2CPX041743R9999		MS131	2CPX041278R9999	
		2	500	72		■	275	MBS231	2CPX041744R9999		MS231	2CPX041279R9999	
		3	750	108		■	275	MBS331	2CPX041745R9999		MS331	2CPX041280R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame



ZX2033

- Busbars for single cabinets
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- 3 Cu busbars are required per module

Cu busbar	I_n	Width		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
40 x 10	850	1	184	1	ZX2031	2CPX042225R9999		ZXM2031	2CPX042325R9999	
		2	434	1	ZX2032	2CPX042226R9999		ZXM2032	2CPX042326R9999	
		3	684	1	ZX2033	2CPX042227R9999		ZXM2033	2CPX042327R9999	
		4	934	1	ZX2034	2CPX042228R9999		ZXM2034	2CPX042328R9999	
		5	1184	1	ZX2035	2CPX042229R9999		ZXM2035	2CPX042329R9999	
		6	1434	1	ZX2036	2CPX042797R9999		ZXM2036	2CPX042819R9999	

Subdistribution boards

Modular distribution panel system CombiLine N

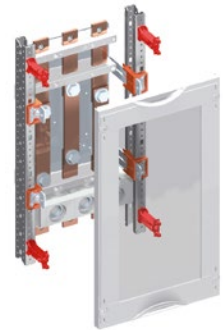
Busbar system, vertical, 45° inclined, M(B)S...28

MS128

- With 4 pole busbars 30 x 5 mm, drillings with M6 thread and connection with M8 captive nuts for the access
- With busbar holder type ZX518
- Rated current (I_n) max. 440 A
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	24	250	24	■	■	200	MBS128	2CPX041648R9999		MS128	2CPX041123R9999	
3	450	72	500	72	■	■	200	MBS228	2CPX041649R9999		MS228	2CPX041124R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame



MBW250A

- With 3 pole busbars 30x5mm
- With Busbar holder Type ZX146
- Rated currend (f) 250A
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	36	■	■	215	MBW250A	2CPX042102R9999		-	-	-

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N

N/PE busbar system, horizontal, M(B)N...69

MN369

- For 2-pole busbars, see below
- With busbar holder type ZX518
- 3 panels and more: additional centre support
- Rated current (I_n) max. 320 A
- The mounting frame must be ordered separately

Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
1	150	1	250	12	■	■	200	MBN169	2CPX041424R9999		MN169	2CPX041419R9999	
		2	500	24	■	■	200	MBN269	2CPX041425R9999		MN269	2CPX041420R9999	
		3	750	36	■	■	200	MBN369	2CPX041426R9999		MN369	2CPX041421R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

ZX2066

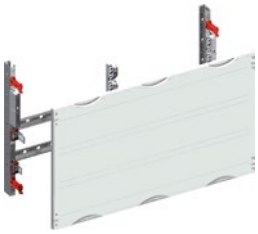
- Busbars for single cabinets
- Using continuous busbars, it is possible to combine different module widths within a single cabinet
- 2 Cu busbars are required per module

Cu busbar	I_n	Width		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
12 x 5	250	1	204	1	ZX2046	2CPX042538R9999		ZXM2046	2CPX042458R9999	
		2	454	1	ZX2047	2CPX042539R9999		ZXM2047	2CPX042459R9999	
		3	704	1	ZX2048	2CPX042540R9999		ZXM2048	2CPX042460R9999	
		4	954	1	ZX2049	2CPX042541R9999		ZXM2049	2CPX042461R9999	
		5	1204	1	ZX2050	2CPX042542R9999		ZXM2050	2CPX042462R9999	
		6	1454	1	ZX2051	2CPX042798R9999		ZXM2051	2CPX042820R9999	
20 x 5	320	1	204	1	ZX2064	2CPX042553R9999		ZXM2064	2CPX042473R9999	
		2	454	1	ZX2065	2CPX042554R9999		ZXM2065	2CPX042474R9999	
		3	704	1	ZX2066	2CPX042555R9999		ZXM2066	2CPX042475R9999	
		4	954	1	ZX2067	2CPX042556R9999		ZXM2067	2CPX042476R9999	
		5	1204	1	ZX2068	2CPX042557R9999		ZXM2068	2CPX042477R9999	
		6	1454	1	ZX2069	2CPX042799R9999		ZXM2069	2CPX042821R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
N/PE busbar system and terminals, M(B)N...74+75

MN374



MN375

- For 2-pole busbars, see below
- With busbar holder type ZX518
- With end cover type ZX519
- 3 panels and more: additional centre support
- DIN rail steplessly depth-adjustable using deep-mounting bracket ZW59P2
- Usable depth from 90 up to 145 mm
- Usable width for terminals: 1 panel wide: 138 mm, 2 panel wide 438 mm, 3 panel wide: 688 mm
- Rated current (I_n) max. 440 A
  Important: the module combination options are to be considered for TwinLine cabinet to cabinet connections
- The mounting frame must be ordered separately

With one additional DIN rail for terminals												
Height		Width		SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	24	■	■	200	MBN174	2CPX041746R9999		MN174	2CPX041281R9999	
		2	500	48	■	■	200	MBN274	2CPX041748R9999		MN274	2CPX041282R9999	
		3	750	72	■	■	200	MBN374	2CPX041750R9999		MN374	2CPX041283R9999	
With two additional DIN rails for terminals													
3	450	1	250	36	■	■	200	MBN175	2CPX041752R9999		MN175	2CPX041284R9999	
		2	500	72	■	■	200	MBN275	2CPX041754R9999		MN275	2CPX041285R9999	
		3	750	108	■	■	200	MBN375	2CPX041756R9999		MN375	2CPX041286R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

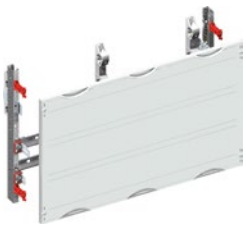
ZX1015

Cu busbar	I_n	Width		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
12 x 5	250	1	246	1	ZX1001	2CPX041870R9999		ZXM1001	2CPX041480R9999	
		2	496	1	ZX1002	2CPX041871R9999		ZXM1002	2CPX041481R9999	
		3	746	1	ZX1003	2CPX041872R9999		ZXM1003	2CPX041482R9999	
		4	996	1	ZX1004	2CPX041873R9999		ZXM1004	2CPX041483R9999	
		5	1246	1	ZX1005	2CPX041874R9999		ZXM1005	2CPX041484R9999	
		6	1496	1	ZX1006	2CPX042800R9999		ZXM1006	2CPX042822R9999	
20 x 5	320	1	246	1	ZX1013	2CPX041882R9999		ZXM1013	2CPX041492R9999	
		2	496	1	ZX1014	2CPX041883R9999		ZXM1014	2CPX041493R9999	
		3	746	1	ZX1015	2CPX041884R9999		ZXM1015	2CPX041494R9999	
		4	996	1	ZX1016	2CPX041885R9999		ZXM1016	2CPX041495R9999	
		5	1246	1	ZX1017	2CPX041886R9999		ZXM1017	2CPX041496R9999	
		6	1496	1	ZX1018	2CPX042801R9999		ZXM1018	2CPX042823R9999	
30 x 5	440	1	246	1	ZX1019	2CPX041888R9999		ZXM1019	2CPX041498R9999	
		2	496	1	ZX1020	2CPX041889R9999		ZXM1020	2CPX041499R9999	
		3	746	1	ZX1021	2CPX041890R9999		ZXM1021	2CPX041500R9999	
		4	996	1	ZX1022	2CPX041891R9999		ZXM1022	2CPX041501R9999	
		5	1246	1	ZX1023	2CPX041892R9999		ZXM1023	2CPX041502R9999	
		6	1496	1	ZX1024	2CPX042802R9999		ZXM1024	2CPX042824R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
N/PE busbar system and terminals, M(B)N...62+63

MN362



MN363

- For 2-pole busbars, see below
- With busbar holder type ZX149
- 3 panels and more: additional centre support
- DIN rail steplessly depth-adjustable using deep-mounting bracket ZW59P2
- Usable depth from 90 up to 145 mm
- Usable width for terminals: 1 panel wide: 188 mm, 2 panel wide 438 mm, 3 panel wide: 688 mm
- Rated current (I_n) max. 630 A
  Important: the module combination options are to be considered for TwinLine cabinet to cabinet connections
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

With one additional DIN rail for terminals												
Height		**Width**		**SU**	**EDF*1**	**WR*2**	**From cabinet depth**	**Flatpack Unmounted**			**Mounted Installed in the cabinet**		
GU	**mm**	**PW**	**mm**				**mm**	**Type**	**Ord. no.**	**Price**	**Type**	**Ord. no.**	**Price**
2	300	1	250	24		■	275	MBN162	2CPX041758R9999		MN162	2CPX041287R9999	
		2	500	48		■	275	MBN262	2CPX041760R9999		MN262	2CPX041288R9999	
		3	750	72		■	275	MBN362	2CPX041762R9999		MN362	2CPX041289R9999	
With two additional DIN rails for terminals													
3	450	1	250	36		■	275	MBN163	2CPX041764R9999		MN163	2CPX041290R9999	
		2	500	72		■	275	MBN263	2CPX041766R9999		MN263	2CPX041291R9999	
		3	750	108		■	275	MBN363	2CPX041768R9999		MN363	2CPX041292R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

ZX2084

Cu busbar	I_n	**Width**		**Pieces**	**Flatpack Unmounted**			**Mounted Installed in the cabinet**		
mm	**one**	**PW**	**mm**		**Type**	**Ord. no.**	**Price**	**Type**	**Ord. no.**	**Price**
30 x 10	630	1	201	1	ZX2082	2CPX042568R9999		ZXM2082	2CPX042488R9999	
		2	451	1	ZX2083	2CPX042569R9999		ZXM2083	2CPX042489R9999	
		3	701	1	ZX2084	2CPX042570R9999		ZXM2084	2CPX042490R9999	
		4	951	1	ZX2085	2CPX042571R9999		ZXM2085	2CPX042491R9999	
		5	1201	1	ZX2086	2CPX042572R9999		ZXM2086	2CPX042492R9999	
		6	1451	1	ZX2087	2CPX042803R9999		ZXM2087	2CPX042825R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
Busbar system 60 mm, horizontal, M(B)R...02(B)

MR302B

MR302

- Busbar centre spacing 60 mm
- For 3-pole busbars
- 32 mm spacing between Cu busbar and cover
- With busbar holder type ZX146
- With end cover ZX172
- 3 panels and more: additional centre support
- Rated current (I_n) max. 440 A
- Mounting fuse socket, see below
  Important: the module combination options are to be considered for TwinLine cabinet to cabinet connections
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Equipped module for devices with 3-pole vertical mounting fuse sockets, I_n up to max. 250 A

Height		Width		D02 elements	SU	EDF*1	WR*2	Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm					mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	5*4	24	■	■	120	-	-	-	MR102B	2CPX041409R9999	
		2	500	14*4	48	■	■	200	-	-	-	MR202B	2CPX041410R9999	
		3	750	24*4	72		■	225	-	-	-	MR302B	2CPX041411R9999	

Unequipped module for devices for the vertical assembly of mounting fuse sockets, D0 fuse switch disconnectors or size 00 fuse switch disconnectors*3, I_n up to max. 440 A

Height		Width		Usable Width	SU	EDF*1	WR*2	Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	1 x 215*4	24	■	■	120*3	MBR102	2CPX041825R9999		MR102	2CPX041406R9999	
		2	500	1 x 465*4	48	■	■	200*3	MBR202	2CPX041826R9999		MR202	2CPX041407R9999	
		3	750	2 x 320*4	72		■	225*3	MBR302	2CPX041827R9999		MR302	2CPX041408R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame| *3 The cabinet depth depends on the depth dimensions of the devices (matching of the cabinet views with the dimension information of the devices) For TwinLine cabinet to cabinet connections the changed usable width must be taken into account.

ZE60

ZE61

ZE62

ZA4P10

Article	Pieces	Order details		Price
		Type	Order code	
Neozed mounting fuse socket E18, width 26 mm For push-in guard rings, 3-pole, with covers and labelling strips, with E18 thread, fuses max. 63 A	1	ZE60	2CPX061045R9999	
	10	ZE60P10	2CPX062400R9999	
Diazed mounting fuse socket E27, width 42 mm For push-in guard rings, 3-pole, with covers and labelling strips, with E27 thread, fuses max. 25 A	1	ZE61	2CPX061046R9999	
	10	ZE61P10	2CPX062401R9999	
Diazed mounting fuse socket E33, width 56 mm For push-in guard rings, 3-pole, with covers and labelling strips, with E33 thread, fuses max. 63 A	1	ZE62	2CPX061047R9999	
	10	ZE62P10	2CPX062402R9999	
Trim covers instead of mounting fuse sockets Colour similar to RAL 7035 to comply with the touch protection IPXXC Usable width from 16 up to 34 mm	10	ZA4P10	2CPX062374R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
Busbar system 60 mm, horizontal, M(B)R...02

ZX1015

- Busbars for single cabinets
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- 3 Cu busbars are required per module

Cu busbar	I_n	Width		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
12 x 5	(100)* 250	1	246	1	ZX1001	2CPX041870R9999		ZXM1001	2CPX041480R9999	
		2	496	1	ZX1002	2CPX041871R9999		ZXM1002	2CPX041481R9999	
		3	746	1	ZX1003	2CPX041872R9999		ZXM1003	2CPX041482R9999	
		4	996	1	ZX1004	2CPX041873R9999		ZXM1004	2CPX041483R9999	
		5	1246	1	ZX1005	2CPX041874R9999		ZXM1005	2CPX041484R9999	
		6	1496	1	ZX1006	2CPX042800R9999		ZXM1006	2CPX042822R9999	
20 x 5	(250)* 320	1	246	1	ZX1013	2CPX041882R9999		ZXM1013	2CPX041492R9999	
		2	496	1	ZX1014	2CPX041883R9999		ZXM1014	2CPX041493R9999	
		3	746	1	ZX1015	2CPX041884R9999		ZXM1015	2CPX041494R9999	
		4	996	1	ZX1016	2CPX041885R9999		ZXM1016	2CPX041495R9999	
		5	1246	1	ZX1017	2CPX041886R9999		ZXM1017	2CPX041496R9999	
		6	1496	1	ZX1018	2CPX042801R9999		ZXM1018	2CPX042823R9999	
30 x 5	440	1	246	1	ZX1019	2CPX041888R9999		ZXM1019	2CPX041498R9999	
		2	496	1	ZX1020	2CPX041889R9999		ZXM1020	2CPX041499R9999	
		3	746	1	ZX1021	2CPX041890R9999		ZXM1021	2CPX041500R9999	
		4	996	1	ZX1022	2CPX041891R9999		ZXM1022	2CPX041501R9999	
		5	1246	1	ZX1023	2CPX041892R9999		ZXM1023	2CPX041502R9999	
		6	1496	1	ZX1024	2CPX042802R9999		ZXM1024	2CPX042824R9999	

*For the assembly with mounting fuse socket

Subdistribution boards

Modular distribution panel system CombiLine N
Busbar system 60 mm, horizontal, M(B)R...03

MR303

Height		Width		Usable width	SU	EDF*1	WR*2	Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	165	36		■	275*3	MBR103	2CPX041830R9999		MR103	2CPX041414R9999	
		2	500	415	72		■	275*3	MBR203	2CPX041831R9999		MR203	2CPX041415R9999	
		3	750	665	108		■	275*3	MBR303	2CPX041832R9999		MR303	2CPX041416R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame | *3 The cabinet depth depends on the depth dimensions of the devices (matching of the cabinet views with the dimension information of the devices)

ZX2060

- Busbars for single cabinets
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- 3 Cu busbars are required per module

Cu busbar	I_n	Width		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
12 x 5	250	1	195	1	ZX2040	2CPX042533R9999		ZXM2040	2CPX042453R9999	
		2	445	1	ZX2041	2CPX042534R9999		ZXM2041	2CPX042454R9999	
		3	695	1	ZX2042	2CPX042535R9999		ZXM2042	2CPX042455R9999	
		4	945	1	ZX2043	2CPX042536R9999		ZXM2043	2CPX042456R9999	
		5	1195	1	ZX2044	2CPX042537R9999		ZXM2044	2CPX042457R9999	
		6	1445	1	ZX2045	2CPX042804R9999		ZXM2045	2CPX042826R9999	
12 x 10	360	1	195	1	ZX2052	2CPX042543R9999		ZXM2052	2CPX042463R9999	
		2	445	1	ZX2053	2CPX042544R9999		ZXM2053	2CPX042464R9999	
		3	695	1	ZX2054	2CPX042545R9999		ZXM2054	2CPX042465R9999	
		4	945	1	ZX2055	2CPX042546R9999		ZXM2055	2CPX042466R9999	
		5	1195	1	ZX2056	2CPX042547R9999		ZXM2056	2CPX042467R9999	
		6	1445	1	ZX2057	2CPX042805R9999		ZXM2057	2CPX042827R9999	
20 x 5	320	1	195	1	ZX2058	2CPX042548R9999		ZXM2058	2CPX042468R9999	
		2	445	1	ZX2059	2CPX042549R9999		ZXM2059	2CPX042469R9999	
		3	695	1	ZX2060	2CPX042550R9999		ZXM2060	2CPX042470R9999	
		4	945	1	ZX2061	2CPX042551R9999		ZXM2061	2CPX042471R9999	
		5	1195	1	ZX2062	2CPX042552R9999		ZXM2062	2CPX042472R9999	
		6	1445	1	ZX2063	2CPX042806R9999		ZXM2063	2CPX042828R9999	
30 x 5	440	1	195	1	ZX2070	2CPX042558R9999		ZXM2070	2CPX042478R9999	
		2	445	1	ZX2071	2CPX042559R9999		ZXM2071	2CPX042479R9999	
		3	695	1	ZX2072	2CPX042560R9999		ZXM2072	2CPX042480R9999	
		4	945	1	ZX2073	2CPX042561R9999		ZXM2073	2CPX042481R9999	
		5	1195	1	ZX2074	2CPX042562R9999		ZXM2074	2CPX042482R9999	
		6	1445	1	ZX2075	2CPX042807R9999		ZXM2075	2CPX042829R9999	
30 x 10	630	1	195	1	ZX2076	2CPX042563R9999		ZXM2076	2CPX042483R9999	
		2	445	1	ZX2077	2CPX042564R9999		ZXM2077	2CPX042484R9999	
		3	695	1	ZX2078	2CPX042565R9999		ZXM2078	2CPX042485R9999	
		4	945	1	ZX2079	2CPX042566R9999		ZXM2079	2CPX042486R9999	
		5	1195	1	ZX2080	2CPX042567R9999		ZXM2080	2CPX042487R9999	
		6	1445	1	ZX2081	2CPX042808R9999		ZXM2081	2CPX042830R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
Busbar system 60 mm, vertical, M(B)R...H

MR102H

- Unequipped for devices for the horizontal installation of mounting fuse sockets, see below
- For 3-pole busbars, see below
- 32 mm spacing between Cu busbar and cover
- With busbar holder type ZX146
- Rated current (I_n) max. 250 A
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		Cut-out height in	SU	EDF*1	WR*2	Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	1 x 134	24	■	■	120	MBR102H	2CPX041828R9999		MR102H	2CPX041412R9999	
3	450	1	250	1 x 295	36	■	■	200	MBR103H	2CPX041829R9999		MR103H	2CPX041413R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

ZX2506

- Using continuous busbars, it is possible to combine different module widths within a single cabinet (see information height GU)
- 3 Cu busbars are required per module

Cu busbar	I_n	Height		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	GU	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
12 x 5	100	2	178	1	ZX2500	2CPX042877R9999		ZXM2500	2CPX042867R9999	
		3	328	1	ZX2501	2CPX042878R9999		ZXM2501	2CPX042868R9999	
		4 (2 GU + 2 GU)	478	1	ZX2502	2CPX042879R9999		ZXM2502	2CPX042869R9999	
		5 (2 GU + 3 GU)	628	1	ZX2503	2CPX042880R9999		ZXM2503	2CPX042870R9999	
		6 (3 GU + 3 GU)	778	1	ZX2504	2CPX042881R9999		ZXM2504	2CPX042871R9999	
20x5	250	2	178	1	ZX2505	2CPX042882R9999		ZXM2505	2CPX042872R9999	
		3	328	1	ZX2506	2CPX042883R9999		ZXM2506	2CPX042873R9999	
		4 (2 GU + 2 GU)	478	1	ZX2507	2CPX042884R9999		ZXM2507	2CPX042874R9999	
		5 (2 GU + 3 GU)	628	1	ZX2508	2CPX042885R9999		ZXM2508	2CPX042875R9999	
		6 (3 GU + 3 GU)	778	1	ZX2509	2CPX042886R9999		ZXM2509	2CPX042876R9999	

ZE60

ZE61

ZE62

ZA4P10

Article	Pieces	Order details		Price
		Type	Order code	
Neozed mounting fuse socket E18, width 26 mm For push-in guard rings, 3-pole, with covers and labelling strips, with E18 thread, fuses max. 63 A	1	ZE60	2CPX061045R9999	
	10	ZE60P10	2CPX062400R9999	
Diazed mounting fuse socket E27, width 42 mm For push-in guard rings, 3-pole, with covers and labelling strips, with E27 thread, fuses max. 25 A	1	ZE61	2CPX061046R9999	
	10	ZE61P10	2CPX062401R9999	
Diazed mounting fuse socket E33, width 56 mm For push-in guard rings, 3-pole, with covers and labelling strips, with E33 thread, fuses max. 63 A	1	ZE62	2CPX061047R9999	
	10	ZE62P10	2CPX062402R9999	
Trim covers instead of mounting fuse sockets Colour similar to RAL 7035 to comply with the touch protection IPXXC	10	ZA4P10	2CPX062374R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
Size 00 fuse switch disconnectors, M(B)T...35+36+37(B)

MT337B

- Equipped with size 00 fuse switch disconnector 160 A, type ZH411, with trim covers
- With busbar system 320 A, 3-pole, M8 connection screws
- Rated current (I_n) max. 320 A
  Important: When assembling fuse switch disconnectors behind the lock system, consider the cabinet depth
- Leading edge device to the cover 37 mm
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures, except the MT135B module

Height		Width		With discon-nector	SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Size 00				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	1	24	■	■	200	-	-	-	MT135B	2CPX042451R9999	
		1	250	2	24	■	■	200	-	-	-	MT136B	2CPX041293R9999	
		2	500	4	48	■	■	200	-	-	-	MT236B	2CPX041294R9999	
		3	750	6	72	■	■	200	-	-	-	MT336B	2CPX041295R9999	
4	600	1	250	4	48	■	■	200	-	-	-	MT137B	2CPX041296R9999	
		2	500	8	96	■	■	200	-	-	-	MT237B	2CPX041297R9999	
		3	750	12	144		■	200	-	-	-	MT337B	2CPX041298R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MT337

- Unequipped module, prepared for size 00 fuse switch disconnector 160 A, of the following makes: ABB (ZH411, ZH412), without trim cover
- For busbar system 320 A, 3-pole
- Rated current (I_n) max. 320 A
  Important: When assembling fuse switch disconnectors behind the lock system, consider the cabinet depth
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures, except the MBT135 and MT135 modules

Height		Width		For discon-nectors	SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Size 00				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	1	24	■	■	200	MBT135	2CPX042452R9999		MT135	2CPX042450R9999	
		1	250	2	24	■	■	200	MBT136	2CPX041770R9999		MT136	2CPX041299R9999	
		2	500	4	48	■	■	200	MBT236	2CPX041771R9999		MT236	2CPX041300R9999	
		3	750	6	72	■	■	200	MBT336	2CPX041772R9999		MT336	2CPX041301R9999	
4	600	1	250	4	48	■	■	200	MBT137	2CPX041773R9999		MT137	2CPX041302R9999	
		2	500	8	96	■	■	200	MBT237	2CPX041774R9999		MT237	2CPX041303R9999	
		3	750	12	144		■	200	MBT337	2CPX041775R9999		MT337	2CPX041304R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

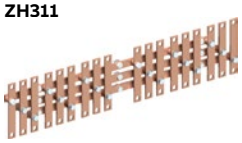
Modular distribution panel system CombiLine N

Accessories for size 00 fuse switch disconnector modules

ZH411

ZH412

ZH311



ZH312

ZH427

ZH430

ZX148

Article	To be used with module	Pieces	Order details		Price
			Type	Order code	
Size 00 fuse switch disconnector Rated current (I_n) max. 160 A, without trim cover					
with M8 connection screws	M(B)T135 - M(B)T337	1	ZH411	2CPX062947R9999	
with clip terminals up to 50 mm²	M(B)T135 - M(B)T337	1	ZH412	2CPX062948R9999	
Busbar system 320 A Cu busbars 20 x 5 mm, 3-pole single-level with M8 connection screws	M(B)T136	1	ZH214	2CPX060443R9999	
	M(B)T236	1	ZH211	2CPX060440R9999	
	M(B)T336	1	ZH311	2CPX060450R9999	
Busbar system 320 A Cu busbars 20 x 5 mm, 3-pole two-level with M8 connection screws	M(B)T137	1	ZH216	2CPX060445R9999	
	M(B)T137	5	ZH216P5	2CPX062418R9999	
	M(B)T237	1	ZH212	2CPX060441R9999	
	M(B)T337	1	ZH312	2CPX060451R9999	
Trim covers For fuse switch disconnectors, Colour similar to RAL 7035 to comply with the touch protection IPXXC					
Single trim cover	1 x M(B)T135*	1	ZH425	2CPX062952R9999	
Double trim cover	1 x M(B)T136 * 2 x M(B)T236 * 2 x M(B)T137 * 4 x M(B)T237 *	1	ZH426	2CPX062953R9999	
Triple trim cover	2 x M(B)T336 * 4 x M(B)T337 *	1	ZH427	2CPX062954R9999	
Trim covers, closed Instead of fuse switch disconnector, Colour similar to RAL 7035 to comply with the touch protection IPXXC					
Single trim cover	M(B)T135 - M(B)T337	1	ZH428	2CPX062955R9999	
Double trim cover	M(B)T236 - M(B)T337	1	ZH429	2CPX062956R9999	
Triple trim cover	M(B)T336 - M(B)T337	1	ZH430	2CPX062957R9999	
Insulating plate For unoccupied busbar ends for size 00 fuse switch disconnector	M(B)T135 - M(B)T337	1	ZX148	2CPX044018R9999	

*Number of pieces per fully equipped module

Subdistribution boards

Modular distribution panel system CombiLine N
Size 01 fuse switch disconnectors, M(B)T...42+43(B)

MT343B

- Equipped with size 01 fuse switch disconnector 250 A, type ZH431, with trim covers
- With busbar system 3-pole, M10 connection screws
- Rated current (I_n) max. 440 A, single-level
- Rated current (I_n) max. 630 A, double-level
  Important: When assembling fuse switch disconnectors behind the lock system, consider the cabinet depth
- Leading edge device to the cover 24 mm
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		With discon-nector	SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Size 1				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	1	36	■	■	200	-	-	-	MT142B	2CPX041305R9999	
		2	500	2	72	■	■	200	-	-	-	MT242B	2CPX041306R9999	
		3	750	3	108		■	225	-	-	-	MT342B	2CPX041307R9999	
5	750	1	250	2	60	■	■	200	-	-	-	MT143B	2CPX041308R9999	
		2	500	4	120		■	225	-	-	-	MT243B	2CPX041309R9999	
		3	750	6	180		■	225	-	-	-	MT343B	2CPX041310R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MT343

- Unequipped module, prepared for size 01 fuse switch disconnector 250 A, of the following makes: ABB (ZH431), without trim cover
- For busbar system 3-pole
- Rated current (I_n) max. 440 A, single-level
- Rated current (I_n) max. 630 A, double level
  Important: When assembling fuse switch disconnectors behind the lock system consider the cabinet depth
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		For discon-nectors	SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Size 1				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	1	36	■	■	200	MBT142	2CPX041776R9999		MT142	2CPX041311R9999	
		2	500	2	72	■	■	200	MBT242	2CPX041777R9999		MT242	2CPX041312R9999	
		3	750	3	108		■	225	MBT342	2CPX041778R9999		MT342	2CPX041313R9999	
5	750	1	250	2	60	■	■	200	MBT143	2CPX041779R9999		MT143	2CPX041314R9999	
		2	500	4	120		■	225	MBT243	2CPX041780R9999		MT243	2CPX041315R9999	
		3	750	6	180		■	225	MBT343	2CPX041781R9999		MT343	2CPX041316R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

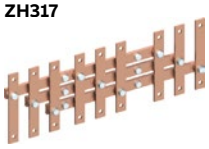
Subdistribution boards

Modular distribution panel system CombiLine N

Accessories for size 01 fuse switch disconnector modules

ZH431

ZH317



ZH318

ZH438

ZH440

ZX128

Article	Application	Pieces	Order details		Price
			Type	Order code	
Size 1 fuse switch disconnector Rated current (I_n) max. 250 A, without trim cover, with M10 connection screws	M(B)T142 - M(B) T343	1	ZH431	2CPX062958R9999	
Busbar system 440 A Cu busbars 30 x 5 mm, 3-pole single-level with M10 connection screws	M(B)T242	1	ZH217	2CPX060446R9999	
	M(B)T342	1	ZH317	2CPX060456R9999	
Busbar system 630 A Cu busbars 30 x 10 mm, 3-pole double-level with M10 connection screws	M(B)T243	1	ZH218	2CPX060447R9999	
	M(B)T343	1	ZH318	2CPX060457R9999	
Trim cover Single cover for fuse switch disconnectors, Colour similar to RAL 7035 to comply with the touch protection IPXXC	1 x M(B)T142 * 2 x M(B)T242 * 3 x M(B)T342 * 2 x M(B)T143 * 4 x M(B)T243 * 6 x M(B)T343 *	1	ZH438	2CPX062961R9999	
Trim cover, closed Single cover instead of fuse switch disconnector, Colour similar to RAL 7035, to comply with the touch protection IPXXC	M(B)T142 - M(B) T343	1	ZH440	2CPX062963R9999	
Insulating plate For unoccupied busbar ends for size 1 fuse switch disconnector	M(B)T142 - M(B) T343	1	ZX128	2CPX039128R9999	

*Number of pieces per fully equipped module

Subdistribution boards

Modular distribution panel system CombiLine N
Size 02 fuse switch disconnectors, M(B)T...44+45 (B)

MT345B

- Equipped with size 2 fuse switch disconnector 400 A, type ZH441, with trim covers
- With busbar system 3-pole, M10 connection screws
- Rated current (I_n) max. 440 A, single-level
- Rated current (I_n) max. 630 A, double-level
  Important: When assembling fuse switch disconnectors behind the lock system, consider the cabinet depth
- Leading edge device to the cover 43 mm
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		With discon-nector	SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	2				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	1	36	■	■	215	-	-	-	MT144B	2CPX041317R9999	
		2	500	2	72	■	■	215	-	-	-	MT244B	2CPX041318R9999	
		3	750	3	108		■	225	-	-	-	MT344B	2CPX041319R9999	
5	750	1	250	2	60	■	■	215	-	-	-	MT145B	2CPX041320R9999	
		2	500	4	120		■	225	-	-	-	MT245B	2CPX041321R9999	
		3	750	6	180		■	225	-	-	-	MT345B	2CPX041322R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MT345

- Unequipped module, prepared for size 2 fuse switch disconnector 400 A, of the following makes: ABB (ZH441), without trim cover
- For busbar system 3-pole
- Rated current (I_n) max. 440 A, single-level
- Rated current (I_n) max. 630 A, double-level
  Important: When assembling fuse switch disconnectors behind the lock system, consider the cabinet depth
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		For discon-nectors	SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	2				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	1	36	■	■	215	MBT144	2CPX041782R9999		MT144	2CPX041323R9999	
		2	500	2	72	■	■	215	MBT244	2CPX041783R9999		MT244	2CPX041324R9999	
		3	750	3	108		■	225	MBT344	2CPX041784R9999		MT344	2CPX041325R9999	
5	750	1	250	2	60	■	■	215	MBT145	2CPX041785R9999		MT145	2CPX041326R9999	
		2	500	4	120		■	225	MBT245	2CPX041786R9999		MT245	2CPX041327R9999	
		3	750	6	180		■	225	MBT345	2CPX041787R9999		MT345	2CPX041328R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

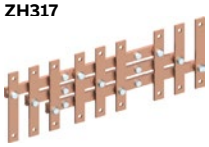
Subdistribution boards

Modular distribution panel system CombiLine N

Accessories for size 2 fuse switch disconnector modules

ZH441

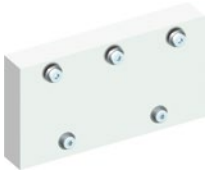
ZH317



ZH318

ZH448

ZH442



ZX129

Article	Application	Pieces	Order details		Price
			Type	Order code	
Size 2 fuse switch disconnector Rated current (I_n) max. 400 A, without trim cover, with M10 connection screws	M(B)T144 - M(B)T345	1	ZH441	2CPX062964R9999	
Busbar system 440 A Cu busbars 30 x 5 mm, 3-pole single-level with M10 connection screws	M(B)T244	1	ZH217	2CPX060446R9999	
	M(B)T344	1	ZH317	2CPX060456R9999	
Busbar system 630 A Cu busbars 30 x 10 mm, 3-pole double-level with M10 connection screws	M(B)T245	1	ZH218	2CPX060447R9999	
	M(B)T345	1	ZH318	2CPX060457R9999	
Trim covers For fuse switch disconnectors, Colour similar to RAL 7035 to comply with the touch protection IPXXC					
Single trim cover	1 x M(B)T144 * 2 x M(B)T145 *	1	ZH447	2CPX039842R9999	
Single trim cover	1 x M(B)T344 * 2 x M(B)T345 *	1	ZH448	2CPX062965R9999	
Double trim cover	1 x M(B)T244 * 1 x M(B)T344 * 2 x M(B)T245 * 2 x M(B)T345 *	1	ZH449	2CPX062966R9999	
Trim cover, closed Single cover instead of fuse switch disconnector, Colour similar to RAL 7035, to comply with the touch protection IPXXC	M(B)T144 - M(B)T345	1	ZH442	2CPX062939R9999	
Insulating plate For unoccupied busbar ends for size 2 fuse switch disconnector	M(B)T144 - M(B)T345	1	ZX129	2CPX039129R9999	

*Number of pieces per fully equipped module

Subdistribution boards

Modular distribution panel system CombiLine N

Busbar system 100 mm size 00 fuse switch disconnectors, M(B)D...52(B)

MD352B

- Equipped with size 00 fuse switch disconnectors 160 A, of the following brand: ABB
- Busbar centre spacing 100 mm
- For 3-pole horizontal busbars
- With busbar holder type ZX520
- Rated current (I_n) max. 850 A

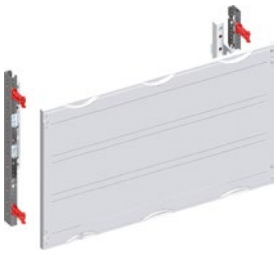
Important:

1. When assembling fuse switch disconnectors behind the lock system consider the cabinet depth
   Leading edge device to the cover 29 mm
2. When using a centre support rail or a horizontal cross member for direct connections, the possibilities to use a connection terminal are restricted (plan connection space, empty module)

- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures
- Busbars for this Module must be ordered separately
- planning this Modules, please consider at least 150 mm extra space for wiring-up / connecting cables

Height		Width		Configuration				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm		SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	3 x NH00	36	■	■	215	-	-	-	MD152B	2CPX042110R9999	
		2	500	8 x NH00	72	■	■	215	-	-	-	MD252B	2CPX042111R9999	
		3	750	12 x NH00	108		■	225	-	-	-	MD352B	2CPX042112R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

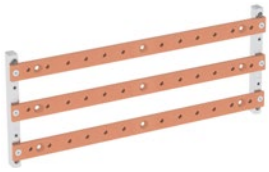


MBD352

- Unequipped module, prepared for size 00 fuse switch disconnector 160 A, of the following brand: ABB
- Busbar centre spacing 100 mm
- For 3-pole horizontal busbars
- With busbar holder type ZX520
- Cover without cut-out
- Rated current (I_n) max. 850 A
- Devices, see below
- **Important:** see remarks on top

Height		Width		Usable width				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	150	36	■	■	215	MBD152	2CPX042116R9999		MD152	2CPX042113R9999	
		2	500	300	72	■	■	215	MBD252	2CPX042117R9999		MD252	2CPX042114R9999	
		3	750	500	108		■	225	MBD352	2CPX042118R9999		MD352	2CPX042115R9999	

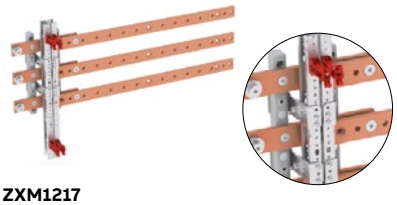
*1 Module for EDF mounting frame | *2 Module for WR mounting frame



ZXM1215

- Busbars for single cabinets
- With the WR mounting frame the busbars cannot be connected through from one module to the next
- With the EDF mounting frame (see information on the PW) defined combinations are possible within the cabinet
- Size 00 fuse switch disconnectors are directly mounted to Cu busbars prepared with captive nuts and to this end the busbar holders are fixed to the front position of the bracket
- 3 Cu busbars are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 10	630	1	184	1	ZX1210	2CPX042121R9999		ZXM1210	2CPX042230R9999	
		2	434	1	ZX1211	2CPX042122R9999		ZXM1211	2CPX042231R9999	
		3	684	1	ZX1212	2CPX042123R9999		ZXM1212	2CPX042232R9999	
40 x 10	850	1	184	1	ZX1213	2CPX042124R9999		ZXM1213	2CPX042233R9999	
		2	434	1	ZX1214	2CPX042125R9999		ZXM1214	2CPX042234R9999	
		3	684	1	ZX1215	2CPX042126R9999		ZXM1215	2CPX042235R9999	



ZXM1217

- Busbar connection sets for field-field connections
- **Important:** With the connection-sets concider the cabinet depth
- 3 Cu sets are required per connection
- With cabinet depth 215 mm connection-sets are not possible

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	A	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 10	630	230		1	ZX1216	2CPX042119R9999		ZXM1216	2CPX042236R9999	
40 x 10	850	230		1	ZX1217	2CPX042120R9999		ZXM1217	2CPX042237R9999	

ZX964

Article	Pieces	Type	Ord. no.	Price
Blanking panels for closing the reserve spaces 100 mm busbar center distance				
50 mm wide strips for closing NH00	1	ZX964	2CPX042238R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
Busbar system 185 mm for fuse switch disconnectors, M(B)D...21-300(B)

MD300B

- Equipped with InLine II switch disconnectors ZLBM, make: ABB
  Size 00 fuse switch disconnectors up to 160 A (NH00),
  Size 1 fuse switch disconnectors up to 250 A (NH1),
- Busbar centre spacing 185 mm
- For 3-pole horizontal busbars
- With busbar holder (ZX522)
- Rated current (I_n) max. 850 A
- **Important:** Plan connection space or empty module and when assembling fuse switch disconnectors behind the lock system consider the cabinet depth*
- distance disconnector to cover
  NH00 - 60 mm / NH1-3 - 65 mm
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		Configuration				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet*3		
GU	mm	PW	mm		SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
5	750	1	250	4 x NH00	60	-	■	275*	-	-	-	MD100B	2CPX042240R9999	
		2	500	8 x NH00	120	-	■	275*	-	-	-	MD200B	2CPX042241R9999	
		3	750	12 x NH00	180	-	■	275*	-	-	-	MD300B	2CPX042242R9999	
5	750	2	500	4 x NH1	120	-	■	275*	-	-	-	MD21B	2CPX042243R9999	
		3	750	6 x NH1	180	-	■	275*	-	-	-	MD31B	2CPX042244R9999	

*For double doors, a minimum cabinet depth of 325 mm is required | *1 Module for EDF mounting frame | *2 Module for WR mounting frame
*3 The module framework must be ordered separately | Not suitable for fire protection housing

MD300HB

- Equipped with InLine II switch disconnectors ZLBM, make: ABB
  Size 00 fuse switch disconnectors up to 160 A (NH00),
  Size 1 fuse switch disconnectors up to 250 A (NH1),
- Busbar centre spacing 185 mm
- For 3-pole horizontal busbars
- With busbar holder (ZX522)
- Rated current (In) max. 850 A
- **Important:** Plan connection space or empty module and when assembling fuse switch disconnectors behind the lock system consider the cabinet depth*
- distance disconnector to cover
- NH00 - 60 mm / NH1-3 - 65 mm
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		Configuration				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet*3		
GU	mm	PW	mm		SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
5	750	1	250	4 x NH00	60	-	■	350*	-	-	-	MD100HB	2CPX042245R9999	
		2	500	8 x NH00	120	-	■	350*	-	-	-	MD200HB	2CPX042246R9999	
		3	750	12 x NH00	180	-	■	350*	-	-	-	MD300HB	2CPX042247R9999	
5	750	2	250	4 x NH1	120	-	■	350*	-	-	-	MD21HB	2CPX042248R9999	
		3	750	6 x NH1	180	-	■	350*	-	-	-	MD31HB	2CPX042249R9999	

*For double doors, a minimum cabinet depth of 325 mm is required | *1 Module for EDF mounting frame | *2 Module for WR mounting frame
*3 The module framework must be ordered separately | Not suitable for fire protection housing

Subdistribution boards

Modular distribution panel system CombiLine N

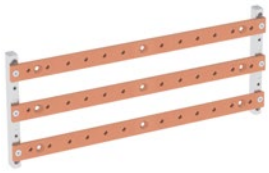
Busbar system 185 mm for fuse switch disconnectors, M(B)D...21-300(B)

MBD300

- Unequipped module, prepared for size 00- up to NH3 fuse switch disconnector 160 A - 630 A, of the following brand: ABB
- ZLBM, 275 mm Depth, ZHBM, 350 mm Depth
- Busbar centre spacing 185 mm
- For 3-pole horizontal busbars
- With busbar holder type ZX522
- Depth mounting breaket ZW481
- Cover without cut-out
- Rated current (I_n) max. 850 A
- Devices, see below / Katalogue ABB

Height		Width		Usable width				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm	SU	EDF*[1]	WR*[2]	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
5	750	1	250	199,5	60		■	275/350*	MBD100	2CPX042255R9999		MD100	2CPX042258R9999	
		2	500	399,5	120		■	275/350*	MBD200	2CPX042256R9999		MD200	2CPX042259R9999	
		3	750	649	180		■	275/350*	MBD300	2CPX042257R9999		MD300	2CPX042260R9999	

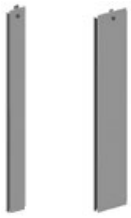
*For double doors, a minimum cabinet depth of 325 mm is required | *[1]Module for EDF mounting frame | *[2]Module for WR mounting frame



ZX1228

- Busbars for single cabinets
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- With captive nuts to connect fuse switch disconnectors
- From three panels on the captive nuts define the module sequence (see information on PW)
- 3 Cu busbars are required per module

Cu busbar	I_n	Width		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	A	PW	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 10	630	1	215	1	ZX1220	2CPX042267R9999		ZXM1220	2CPX042285R9999	
		2	465	1	ZX1221	2CPX042268R9999		ZXM1221	2CPX042286R9999	
		3	715	1	ZX1222	2CPX042269R9999		ZXM1222	2CPX042287R9999	
		4 (2FB+2FB)	965	1	ZX1223	2CPX042270R9999		ZXM1223	2CPX042288R9999	
		5 (3FB+2FB)	1215	1	ZX1224	2CPX042271R9999		ZXM1224	2CPX042289R9999	
		6 (3FB+3FB)	1465	1	ZX1225	2CPX042272R9999		ZXM1225	2CPX042290R9999	
40 x 10	850	1	215	1	ZX1226	2CPX042273R9999		ZXM1226	2CPX042291R9999	
		2	465	1	ZX1227	2CPX042274R9999		ZXM1227	2CPX042292R9999	
		3	715	1	ZX1228	2CPX042275R9999		ZXM1228	2CPX042293R9999	
		4 (2FB+2FB)	965	1	ZX1229	2CPX042276R9999		ZXM1229	2CPX042294R9999	
		5 (3FB+2FB)	1215	1	ZX1230	2CPX042277R9999		ZXM1230	2CPX042295R9999	
		6 (3FB+3FB)	1465	1	ZX1231	2CPX042278R9999		ZXM1231	2CPX042296R9999	



ZX960 **ZX961**

Article	Pieces	Type	Ord. no.	Price
Blanking panels for closing the reserve spaces 185 mm busbar center distance				
50 mm wide strips for closing NH00	1	ZX960	2CPX043180R9999	
100 mm wide strips for closing NH1-3	1	ZX961	2CPX043181R9999	

Subdistribution boards

Modular distribution panel system CombiLine N

Busbar system 185 mm for fuse switch disconnectors + EFM, M(B)D...21-300(B)

MD300EB

- Equipped with INLINE II fuse switch disconnectors ZHBM, Make: ABB , ZHBM+electronic fuse monitoring (EFM)
  Size 00- fuse switch disconnectors up to 160A
  Size 1- fuse switch disconnectors up to 250A
- Busbar centre spacing 185 mm
- For 3-pole horizontal busbars
- with busbar holder (ZX522)
- Rated current (In) max. 850 A
- **Important**: PLan conncetion space or empty module and when assembling fuse switch disconnectors behind the door locking system consider the cabinet depth
- leading edge device to cover
  NH00 - 60 mm / NH1-3 - 65 mm
- the mounting frame needs to be ordered separately
- Copper bars need to be ordered separately
- Not suiteble for fire protection enclosures

Height		Width		Config-uration				Mini-mum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm		SU	EDF*[1]	WR*[2]	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
6	900	1	250	4 x NH00	60	-	■	350 mm	-	-	-	MD100EB	2CPX042250R9999	
		2	500	8 x NH00	120	-	■	350 mm	-	-	-	MD200EB	2CPX042251R9999	
		3	750	12 x NH00	180	-	■	350 mm	-	-	-	MD300EB	2CPX042252R9999	
6	900	2	250	4 x NH1	120	-	■	350 mm	-	-	-	MD21EB	2CPX042253R9999	
		3	750	6 x NH1	180	-	■	350 mm	-	-	-	MD31EB	2CPX042254R9999	

*For double doors, a minimum cabinet depth of 325 mm is required | *[1]Module for EDF mounting frame | *[2]Module for WR mounting frame

ZE551M

ZE561M

ZE591M

ZE553M

ZE563M

Article	Width in mm	Fitting to Module....	Pieces	Type	Ord. no.	Price
ZLBM00	50	MD...(H)B, M(B)D...	1	ZE551M	2CPX042955R9999	
ZLBM1	100	MD...(H)B, M(B)D...	1	ZE561M	2CPX042956R9999	
ZLBM2	100	MD...(H)B, M(B)D...	1	ZE571M	2CPX042957R9999	
ZLBM3	100	MD...(H)B, M(B)D...	1	ZE581M	2CPX042958R9999	
ZLBM00-100	50	MD...(H)B, M(B)D...	1	ZE591M	2CPX042959R9999	
ZHBM00	50	MD...(H)B, M(B)D...	1	ZE552M	2CPX042960R9999	
ZHBM1	100	MD...(H)B, M(B)D...	1	ZE562M	2CPX042961R9999	
ZHBM2	100	MD...(H)B, M(B)D...	1	ZE572M	2CPX042962R9999	
ZHBM3	100	MD...(H)B, M(B)D...	1	ZE582M	2CPX042963R9999	
ZHBM+EFM00	50	MD...(H)EB, M(B)D...E	1	ZE553M	2CPX042964R9999	
ZHBM+EFM1	100	MD...(H)EB, M(B)D...E	1	ZE563M	2CPX042965R9999	
ZHBM+EFM2	100	MD...(H)EB, M(B)D...E	1	ZE573M	2CPX042966R9999	
ZHBM+EFM3	100	MD...(H)EB, M(B)D...E	1	ZE583M	2CPX042967R9999	

Subdistribution boards

Modular distribution panel system CombiLine N

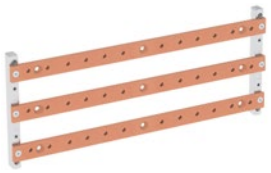
Busbar system 185 mm for fuse switch disconnectors + EFM, M(B)D...21-300(B)

MBD300E

- Unequipped module, prepared for size 00- up to NH3 fuse switch disconnector + EFM 160 A - 630 A, of the following brand: ABB
- ZHBM, 350 mm Depth
- Busbar centre spacing 185 mm
- For 3-pole horizontal busbars
- With busbar holder type ZX522
- Depth mounting breaket ZW481
- Cover without cut-out
- Rated current (In) max. 850 A
- Devices, see below / Katalogue ABB S

Height		Width		Usable width				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm	SU	EDF*[1]	WR*[2]	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
6	900	1	250	199,5	60	-	■	350 mm	MBD100E	2CPX042261R9999		MD100E	2CPX042264R9999	
		2	500	399,5	120	-	■	350 mm	MBD200E	2CPX042262R9999		MD200E	2CPX042265R9999	
		3	750	649	180	-	■	350 mm	MBD300E	2CPX042263R9999		MD300E	2CPX042266R9999	

*[1]Module for EDF mounting frame | *[2]Module for WR mounting frame

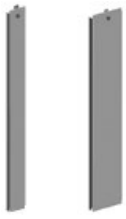


ZX1228

- Busbars for single cabinets
- Using continuous busbars, it is possible to combine different module widths within a single cabinet
- With captive nuts to connect fuse switch disconnectors
- From three panels on the captive nuts define the module sequence (see information on PW)
- 3 Cu busbars are required per module

Cu busbar	I_n	Width		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	A	PW	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 10	630	1	215	1	ZX1220	2CPX042267R9999		ZXM1220	2CPX042285R9999	
		2	465	1	ZX1221	2CPX042268R9999		ZXM1221	2CPX042286R9999	
		3	715	1	ZX1222	2CPX042269R9999		ZXM1222	2CPX042287R9999	
		4 (2FB+2FB)	965	1	ZX1223	2CPX042270R9999		ZXM1223	2CPX042288R9999	
		5 (3FB+2FB)	1215	1	ZX1224	2CPX042271R9999		ZXM1224	2CPX042289R9999	
		6 (3FB+3FB)	1465	1	ZX1225	2CPX042272R9999		ZXM1225	2CPX042290R9999	
40 x 10	850	1	215	1	ZX1226	2CPX042273R9999		ZXM1226	2CPX042291R9999	
		2	465	1	ZX1227	2CPX042274R9999		ZXM1227	2CPX042292R9999	
		3	715	1	ZX1228	2CPX042275R9999		ZXM1228	2CPX042293R9999	
		4 (2FB+2FB)	965	1	ZX1229	2CPX042276R9999		ZXM1229	2CPX042294R9999	
		5 (3FB+2FB)	1215	1	ZX1230	2CPX042277R9999		ZXM1230	2CPX042295R9999	
		6 (3FB+3FB)	1465	1	ZX1231	2CPX042278R9999		ZXM1231	2CPX042296R9999	

*For double doors, a minimum cabinet depth of 325 mm is required | *[1]Module for EDF mounting frame | *[2]Module for WR mounting frame



ZX962 **ZX963**

Article	Pieces	Type	Ord. no.	Price
Blanking panels for closing the reserve spaces 185 mm busbar center distance with fuse switch disconnectors + EFM				
50 mm wide strips for closing NH00	1	ZX962	2CPX042193R9999	
100 mm wide strips for closing NH1-3	1	ZX963	2CPX042194R9999	

Subdistribution boards

Modular distribution panel system CombiLine N,
Busbar system 185 mm for fuse switch disconnectors, M(B)L...5

ML35

- Unequipped for switch disconnector fuse sizes 00 up to 3, 160 A up to 630 A
- For the make: ABB SlimLine XR and Jean Müller Sasil
- Busbar centre spacing 185 mm
- For 3-pole horizontal busbars, see below
- With busbar holder (ZX523)
- Cover without cut-out
- Rated current (In) max. 850 A
- **Important:** Plan connection space or empty module and when assembling fuse switch disconnectors behind the lock system consider the cabinet depth
- Leading edge device to the cover 138 mm
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		Usable width				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
5	750	2	500	400	120		■	625	MBL25	2CPX041801R9999		ML25	2CPX041368R9999	
		3	750	600	180		■	625	MBL35	2CPX041802R9999		ML35	2CPX041369R9999	

*1Module for EDF mounting frame | *2Module for WR mounting frame

ZX1033

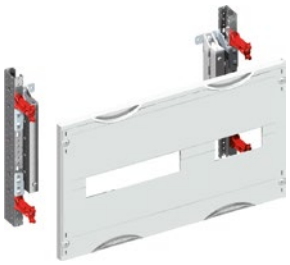
- Busbars for single cabinets
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- With locking pins to fix them to the busbars
- 3 Cu busbars are required per module

Cu busbar	I_n	Width		Pieces	Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm		Type	Ord. no.	Price	Type	Ord. no.	Price
40 x 10	850	2	496	1	ZX1032	2CPX041901R9999		ZXM1032	2CPX041511R9999	
		3	746	1	ZX1033	2CPX041902R9999		ZXM1033	2CPX041512R9999	
		4	996	1	ZX1034	2CPX041903R9999		ZXM1034	2CPX041513R9999	
		5	1246	1	ZX1035	2CPX041904R9999		ZXM1035	2CPX041514R9999	

Subdistribution boards

Modular distribution panel system CombiLine N

Busbar system modules 40 mm for S700 and S750, M(B)H



MH250

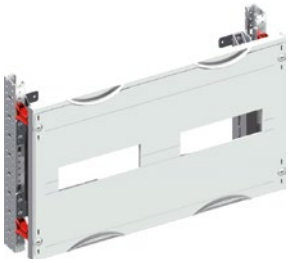
- Unequipped for selective main circuit breakers
- For ABB S700, 1 up to 4-pole (width per pole 35 mm)
- Busbar centre spacing 40 mm
- For 4-pole horizontal busbars, see below
- With busbar holder type ZB5
- 3 panels and more: additional centre support
- Covers with cut-out
- The remaining slot must be closed with covers
- The mounting frame must be ordered separately
- The MBH350 and MH350 modules are not suitable for fire protection enclosures

Height		Width		Usable width				From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm	SU	EDF*[1]	WR*[2]	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	105	24	■	■	200	MBH150	2CPX041792R9999		MH150	2CPX041337R9999	
		2	500	210/105	48	■	■	200	MBH250	2CPX041793R9999		MH250	2CPX041338R9999	
		3	750	315/210	72	■	■	200	MBH350	2CPX041794R9999		MH350	2CPX041339R9999	

*[1]Module for EDF mounting frame | *[2]Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N
Busbar system modules 40 mm for S700 and S750, M(B)H

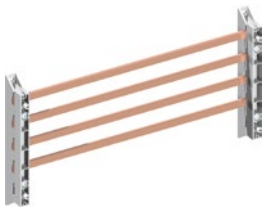


MH251

- Unequipped for selective main circuit breakers
- For ABB S750, 1 or 3-pole (width per pole 27 mm)
- 1 panel wide fully equipped modules are fed directly by the selective main circuit breaker in case of a maximum connection cross-section of 35 mm² / max. 100 A
- Busbar centre spacing 40 mm
- For 4-pole horizontal busbars, see below
- With busbar holder type ZB5
- 3 panels and more: additional centre support
- Covers with cut-out
- The remaining slot must be closed with covers
- The mounting frame must be ordered separately
- The MBH351 and MH350 modules are not suitable for fire protection enclosures

Height		Width		Usable width				From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm	SU	EDF*¹	WR*²	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	161	24	■	■	200	MBH151	2CPX042031R9999		MH151	2CPX042026R9999	
		2	500	161/161	48	■	■	200	MBH251	2CPX042032R9999		MH251	2CPX042027R9999	
		3	750	322/242	72	■	■	200	MBH351	2CPX042033R9999		MH351	2CPX042028R9999	

*¹Module for EDF mounting frame | *²Module for WR mounting frame



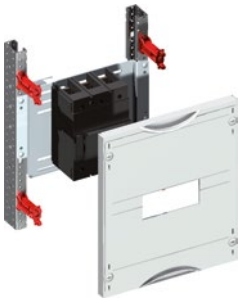
ZX2041

- Busbars within the module
- Not more than 5 Cu busbars are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
12 x 5	250	1	195	1	ZX2040	2CPX042533R9999		ZXM2040	2CPX042453R9999	
		2	445	1	ZX2041	2CPX042534R9999		ZXM2041	2CPX042454R9999	
		3	695	1	ZX2042	2CPX042535R9999		ZXM2042	2CPX042455R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
MCCB Tmax equipped with MA...ALSB



MA250ALSB

- Equipped with MCCBs from ABB, Tmax T1 to T5, 3-pole
- Fixed with lever operation
- With thermomagnetic tripping device
- Covers with cut-out
- Assembly to mounting cross member
- **Note:** When directly using a center support rail or a horizontal cross member, the cable connection can be realized with the help of terminals (FC-CUAL). This and further accessories must be ordered from ABB Stotz.
- The mounting frame must be ordered separately
- The MA100ALSB module is not suitable for fire protection enclosures

Height		Width		I_n	Device				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	one	Type	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	100	T1B160R100	24	■	■	120	-	-	-	MA100ALSB	2CPX041380R9999	
				160	T1N160R160	24	■	■	200	-	-	-	MA160ALSB	2CPX041381R9999	
				200	T3N250R200	24	■	■	200	-	-	-	MA200ALSB	2CPX041382R9999	
				250	T3N250R250	24	■	■	200	-	-	-	MA250ALSB	2CPX041383R9999	
3	450	2	500	400	T5N400R400	72	■	■	215	-	-	-	MA400ALSB	2CPX041384R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MA630ALSB

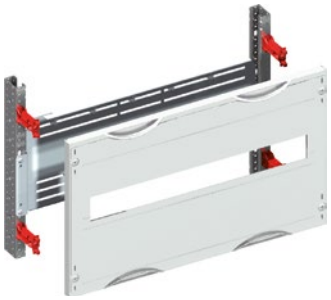
- Equipped with MCCBs from ABB, Tmax T5 and T6, 3-pole
- Fixed with lever operation
- With electronic tripping device PR221 DS-LI/I
- Covers with cut-out
- Assembly to mounting cross member
- **Note:** When directly using a center support rail or a horizontal cross member, the cable connection can be realized with the help of terminals (FC-CUAL). This and further accessories must be ordered from ABB Stotz.
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		I_n	Device				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	one	Type	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	2	500	630	T5N630R630	72		■	275	-	-	-	MA630ALSB	2CPX041385R9999	
4	600	2	500	800	T6N800R800	96		■	325	-	-	-	MA800ALSB	2CPX041386R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N
MCCB Tmax unequipped, M(B)A...T



MA290T

- Unequipped module, ABB, fixed,
  Tmax T1 / XT1, 3-/4-pole, (76.2 mm/101.2 mm)
  Tmax T2, 3-/4-pole, (90 mm/120 mm)
  Tmax T3-/XT3, 3-/4-pole, (105 mm/140 mm)
- Cover with cut-out, the remaining slot must be closed with covers
- With mounting cross member and M4 sliding nuts
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures, except the MBA190T and MA190T modules

Height		Width		Device	Cut-out Width	Usable width				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Type	mm	mm	SU	EDF *1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	T1-XT3	216	199	24	■	■	120*3	MBA190T	2CPX041643R9999		MA190T	2CPX041120R9999	
		2	500	T1-XT3	421	449	48	■	■	215	MBA290T	2CPX041644R9999		MA290T	2CPX041417R9999	
		3	750	T1-XT3	687	699	72		■	275	MBA390T	2CPX041645R9999		MA390T	2CPX041418R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame | *3 In compact distribution board only 1 x Tmax T1 lever operated and max. I_n up to 100 A

MA191T

- Unequipped module, ABB, fixed,
  Tmax XT2, 3- / 4-pole, (90 mm / 120 mm)
  Tmax XT4, 3- / 4-pole, (105 mm / 140 mm), (max. 250 A)
- Covers with cut-out
- With mounting cross member including slide nuts M4
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures excluding Module MBA191T and MA191T

Height		Width		Device					From cabinet depth	Flatpack unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Type	Pole	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	XT2	3pole	24	■	■	200	MBA191T	-	-	MA191T		
2	300	1	250	XT2	4pole	24	■	■	200	MBA194T	-	-	-		
3	450	1	250	XT4	3pole	36	■	■	200	MBA193T	-	-	MA191T		
3	450	1	250	XT4	4pole	36	■	■	200	MBA195T	-	-	-		

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MA291T

- Unequipped module, ABB, fixed,
  Tmax XT2, 3- / 4-pole, (90 mm / 120 mm)
  Tmax XT4, 3- / 4-pole, (105 mm / 140 mm), (max. 250 A)
- Covers with cut-out
- With mounting cross member including slide nuts M4
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		Device					From cabinet depth	Flatpack unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Type	Pole	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	2	500	XT2	3/4pole	48	■	■	215	MBA291T	-	-	MA291T		
2	300	3	750	XT2	3/4pole	72		■	260	MBA391T	-	-	MA391T		

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N
MCCB Tmax unequipped, M(B)A...T

MBA195T

- Unequipped module, ABB, fixed,
  Tmax XT2, 4-pole + 4-pole + RC Sel, (120 mm)
  Tmax XT4, 4-pole + 4-pole + RC Sel, (140 mm)
- Covers with cut-out
- With mounting cross member including slide nuts M4
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		Device					From cabinet depth	Flatpack unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Type	Pole	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	XT2	4pole RC Sel	36	■	■	200	MBA195T		-			
3	450	1	250	XT4	4pole RC Sel	36	■	■	200	MBA197T		-			

*1Module for EDF mounting frame | *2Module for WR mounting frame

MA292T

- Unequipped module, ABB, fixed
  Tmax T4, 3-/4-pole, (105 mm / 140 mm)
  Tmax T5, 3-/4-pole, (139.5 mm/186 mm)
- Covers with cut-out
- Mounting cross member including threaded fastening holes
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		Device					From cabinet depth	Flatpack unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Type	Pole	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	T4	3-pole	36	■	■	215	MBA192T	2CPX041646R9999		MA192T	2CPX041121R9999	
		2	500	T4	4-pole	72	■	■	215	MBA292T	2CPX041647R9999		MA292T	2CPX041122R9999	
		2	500	T5	3-/4-pole	72	■	■	215	MBA292T	2CPX041647R9999		MA292T	2CPX041122R9999	

*1Module for EDF mounting frame | *2Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N
Switch disconnector OT, equipped, MA...ALAB

MA160ALAB

- Equipped with switch disconnectors make ABB OT, 3-pole, for fuse links
- Covers with cut-out
- Assembly to DIN rails 35 x 15 mm
- The mounting frame must be ordered separately

Height		Width		I_n	Device				From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	one	Type	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	160	OT160G03K	24	■	■	200	-	-	-	MA160ALAB	2CPX041370R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MA630ALAB

- Equipped with switch disconnectors make ABB OT, 3-pole, for fuse links
- Covers with cut-out
- Assembly to mounting cross member
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures, except the MA200ALAB and MA250ALAB modules

Height		Width		I_n	Device				From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	one	Type	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	200	OT200E03P	24	■	■	200	-	-	-	MA200ALAB	2CPX041371R9999	
				250	OT250E03P	24	■	■	200	-	-	-	MA250ALAB	2CPX041372R9999	
3	450	2	500	400	OT400E03P	72	■	■	215	-	-	-	MA400ALAB	2CPX041373R9999	
				630	OT630E03P	72		■	275	-	-	-	MA630ALAB	2CPX041374R9999	
4	600	2	500	800	OT800E03P	72		■	325	-	-	-	MA800ALAB	2CPX041375R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N
Switch disconnector OT / S750DR unequipped, M(B)A...ALA

MA160ALA

- Unequipped for switch disconnector make ABB OT160G0...K or selective main circuit breaker make ABB S750DR
- 3- or 4-pole
- Covers without cut-out
- Assembly to DIN rails 35 x 15 mm
- The mounting frame must be ordered separately

Height		Width		Usable Width	SU	EDF*1	WR*2	From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm				mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	216	24	■	■	200	MBA160ALA	2CPX041803R9999		MA160ALA	2CPX041376R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MA250ALA

- Unequipped for switch disconnectors, makes ABB OT200E...P – OT630E...P
- 3- or 4-pole
- Covers without cut-out
- Assembly to mounting cross member
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures, except the MBA250ALA and MA250ALA modules

2	300	1	250	-	24	■	■	200	MBA250ALA	2CPX041804R9999		MA250ALA	2CPX041377R9999	
3	450	2	500	-	72		■	275	MBA630ALA	2CPX041805R9999		MA630ALA	2CPX041378R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MBA250ALO

- Unequipped for switch disconnectors, makes ABB OS
- Type OT160GD03PN3P from cabinet Depth 215 mm
- Type OT250GD03PN3P from cabinet Depth 225 mm
- Covers with cut-out
- Assembly to mounting cross member
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

3	450	1	250	250	36	■	■	215/225	MBA250ALO	2CPX042101R9999		-	-	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N

Universal switch modules, M(B)A...A / Cable connections MB(V)...

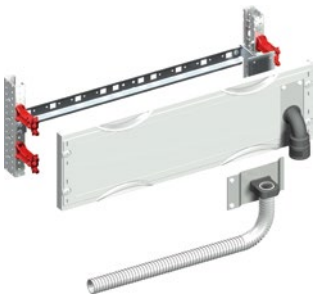
MA630A

MA800A

- Unequipped, universal use for various devices
- Cover without cut-out
- With deep-mounting brackets for stepless adjustment.
- Fastening of the devices with captive nuts M4, M5 and M6
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures, except the MBA250A and MA250A modules

Height		Width		Usable width	max. Usable depth to the Cover				From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	mm	mm	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
2	300	1	250	170	122	24	■	■	200	MBA250A	2CPX041807R9999		MA250A	2CPX041387R9999	
3	450	2	500	420	122	72	■	■	215	MBA630A	2CPX041808R9999		MA630A	2CPX041388R9999	
4	600	2	500	420	147	96		■	275	MBA800A	2CPX041806R9999		MA800A	2CPX041389R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame



MV281

- For the cable connection between module and switchgear cabinet door
- Covers with cut-out for the cable connection
- With DIN rail and connection sleeve
- With accessories to attach the sleeve to the module and to the switchgear cabinet door
- Consider the door hinge position
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		Sleeve diameter				Mini-mum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	∅	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
1	150	1	250	M20	12	■	■	225	MBV180	2CPX041815R9999		MV180	2CPX041396R9999	
		1	250	M32	12	■	■	225	MBV181	2CPX041816R9999		MV181	2CPX041397R9999	
		1	250	M40	12	■	■	225	MBV182	2CPX041817R9999		MV182	2CPX041398R9999	
		2	500	M32	12	■	■	225	MBV281	2CPX041818R9999		MV281	2CPX041399R9999	
		2	500	M40	12	■	■	225	MBV282	2CPX041819R9999		MV282	2CPX041400R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N

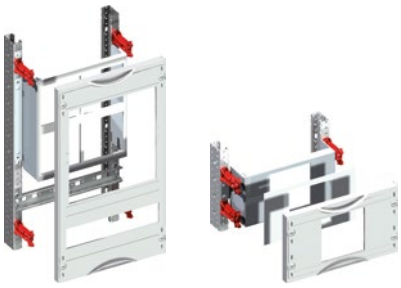
Measuring instruments / Switchgear cabinet lighting modules, M(B)U...

MU257

- Unequipped, prepared for four 96 x 96 mm instruments
- Horizontal instrument arrangement
- Covers with cut-out
- Assembly to mounting cross member
- The mounting frame must be ordered separately

Height		Width		Instru-ments				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Pcs.	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
1	150	2	500	4	24	■	■	225	MBU257	2CPX041809R9999		MU257	2CPX041390R9999	
		3	750	4	36	■	■	225	MBU357	2CPX041810R9999		MU357	2CPX041391R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame



MU158 **MU156**

- Unequipped, prepared for 1 and/or 4 instruments (96 x 96 mm)
- For heights of 450 mm plus additional DIN rail for DIN rail mounting devices, 12 SU
- Covers with cut-out
- Assembly to mounting cross member
- The mounting frame must be ordered separately

1	150	1	250	1	12	■	■	225	MBU156	2CPX042043R9999		MU156	2CPX042042R9999	
2	300	1	250	4	24	■	■	225	MBU157	2CPX041811R9999		MU157	2CPX041392R9999	
3	450	1	250	4	36	■	■	225	MBU158	2CPX041812R9999		MU158	2CPX041393R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MU270

- Equipped with switchgear cabinet lighting
- Cover with left-sided cut-out for DIN rail mounting devices, 7 SU for M(B)U270 and 8 SU for M(B)U370
- The mounting frame must be ordered separately

Height		Width		Lighting				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	W	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
1	150	2	500	8	24	■	■	200	MBU270	2CPX041813R9999		MU270	2CPX041394R9999	
		3	750	13	36	■	■	200	MBU370	2CPX041814R9999		MU370	2CPX041395R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N
Cable fastening rails, M(B)F...83+84

MF283

- With cable fastening rail to relieve the cable strain
- Including a cable fastening rail for cable clamps, see below
- Covers without cut-out
- For cabinet depths up to 275 mm
- Cable fastening rail steplessly depth-adjustable using deep-mounting bracket ZW59P2
- Usable depth from 87 up to 142 mm
- The mounting frame must be ordered separately

Height		Width					From cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
1	150	1	250	12	■	■	200	MBF183	2CPX041822R9999		MF183	2CPX041403R9999	
		2	500	24	■	■	200	MBF283	2CPX041823R9999		MF283	2CPX041404R9999	
		3	750	36	■	■	200	MBF383	2CPX041824R9999		MF383	2CPX041405R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

MF284

- With cable fastening rail to relieve the cable strain
- Including a cable fastening rail for cable clamps, see below
- Covers without cut-out
- For cabinet depths up to 425 mm
- Cable fastening rail steplessly depth-adjustable using deep-mounting bracket ZW79P2
- Usable depth from 122 up to 177 mm
- The mounting frame must be ordered separately

1	150	1	250	12	■	■	325	MBF184	2CPX041846R9999		MF184	2CPX041466R9999	
		2	500	24	■	■	325	MBF284	2CPX041847R9999		MF284	2CPX041467R9999	
		3	750	36	■	■	325	MBF384	2CPX041848R9999		MF384	2CPX041468R9999	

*1 Module for EDF mounting frame | *2 Module for WR mounting frame

ZK143

ZK1431P100

Article	Pieces	Order details Type	Order code	Price
Cable clamp For cable fastening rails				
22 to 28 mm	1	ZK143	2CPX060005R9999	
	10	ZK143P10	2CPX062728R9999	
40 - 46 mm	1	ZK144	2CPX060006R9999	
	10	ZK144P10	2CPX062729R9999	
from 64 to 70 mm	1	ZK145	2CPX060007R9999	
	10	ZK145P10	2CPX062730R9999	
Backing plates for cable clamps				
For ZK143	100	ZK1431P100	2CPX060251R9999	
For ZK144	100	ZK1441P100	2CPX060252R9999	
For ZK145	50	ZK1451P50	2CPX060253R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
Meter with 3-point-fastening and EDS meter

MZ160

MZ161

- For meters with 3-point-fastening to meter plate
- Only suitable for intermediate metering
- With top parts, top and bottom
- Partitions may be necessary, one level ZX70, for two levels ZX72, see below
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

Height		Width		Meter				Minimum cabinet depth	Flatpack Unmounted			Mounted Installed in the cabinet		
GU	mm	PW	mm	Pcs.	SU	EDF*1	WR*2	mm	Type	Ord. no.	Price	Type	Ord. no.	Price
3	450	1	250	1	36		■	225	MBZ160	2CPX041820R9999		MZ160	2CPX041401R9999	
5	750	1	250	2	60		■	225	MBZ161	2CPX041821R9999		MZ161	2CPX041402R9999	

*1Module for EDF mounting frame | *2Module for WR mounting frame

MZ162

MZ163

- For EDS meter
- Only suitable for intermediate metering
- For the insertion of the EDS assembly (integrated snapping and contact unit), see below
- With top parts, top and bottom
- Partitions ZX69 may be necessary, see below
- The mounting frame must be ordered separately
- Not suitable for fire protection enclosures

2	300	1	250	1	24		■	225	MBZ162	2CPX042034R9999		MZ162	2CPX042029R9999	
2	300	1	250	2	24		■	225	MBZ163	2CPX042035R9999		MZ163	2CPX042030R9999	

*1Module for EDF mounting frame *2 Module for WR mounting frame

Planning notes: Consider the cabinet depth, Spacing between meter plate and door for:
TwinLine-G, 225 mm, depth = 126.5 - 139 mm, TwinLine-L, depth mm = 141.5 - 154 mm, TwinLine-W, 350 mm depth = 168 - 180.5 mm
C-cabinets, 260 mm depth = 141.5 mm, W-, WS-, WSO-cabinets, 360 mm depth = 172 mm
TriLine®,, 325 mm depth = 148 mm, TriLine®, 425 mm depth = 198 mm
Important: Plan at least one module with a width of 250 mm above and below meter plate modules.

ZX70

VS659

Article	Height GU	OH	mm	Pieces	Type	Ord. no.	Price
Vertical partitions, plastic Not arc-resistant, sheathing against the next module, distribution board panel, meter panel; partition is inserted into the cover holder of the next module. Colour similar to RAL 7035	3	00	450	1	ZX69	2CPX039069R9999	
	4	0	600	1	ZX70	2CPX039070R9999	
	6	2	900	1	ZX72	2CPX039072R9999	
EDS assembly (integrated snapping and contact unit) with long feeder and outgoing cables For electronic domestic meters (EDS) With feeder cables 10 mm² L1, L2 and L3 Length 1000 mm without wire end sleeves With outgoing lines 10 mm² L1, L2 and L3 Length 1000 mm without wire end sleeves				1	VS659	2CPX039932R9999	

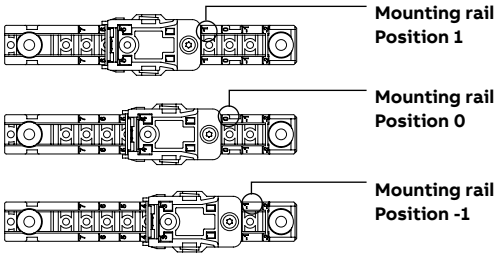
Subdistribution boards

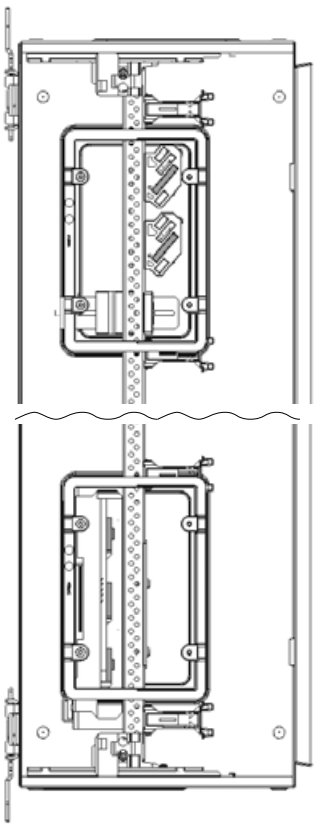
Modular distribution panel system CombiLine N

Module combinations for busbars TwinLine cabinet to cabinet connections

Busbars for connecting TwinLine cabinets may be connected in different assembly positions of the CombiLine modules.
Depending on the position of the busbar holder, some modules may be connected in front of or behind the mounting frame; e.g. if one N/PE busbar module is required on top of the cabinet and one busbar module at the bottom of the cabinet, the combination options for the different modules must be taken into account. The different configuration options for the installation positions (1 / 0 / -1) are presented on the next page.

Mounting rail
Top view

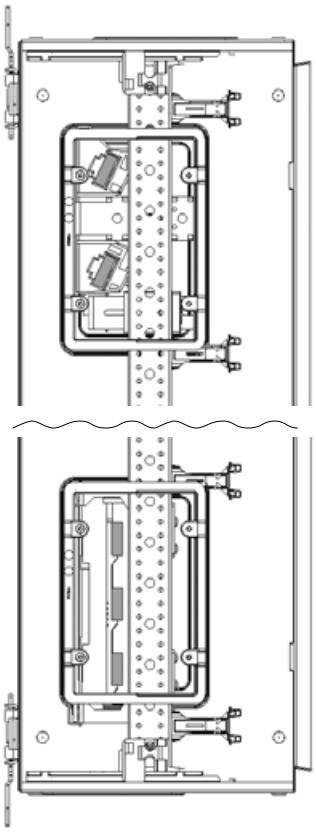




CombiLine module
M(B)N...74 on top

CombiLine module
M(B)S...27 bottom

Sample configuration on EDF mounting frame
On assembly position 1 top and bottom
in the TwinLine-L cabinet, depth 275 mm



CombiLine module
M(B)N...62 on top

CombiLine module
M(B)S...27 bottom

Sample configuration on WR mounting frame
On assembly position -1 top and bottom
in the TwinLine-L cabinet, depth 275 mm

Enclosures

Modular distribution panel system CombiLine N

Module combinations for busbars TwinLine cabinet to cabinet connections

Combination options on EDF mounting frame

	Module type on top	M(B)S...24			M(B)S...27			M(B)N...74 M(B)N...75			M(B)N...62 M(B)N...63			M(B)R...02		
Module type bottom	To be used with TwinLine	G	L	W	G	L	W	G	L	W	G	L	W	G	L	W
M(B) S...24	G	1 / 0 / -1			1 / 0 / -1			1 / 0						1		
	L		1 / 0 / -1			1 / 0 / -1			1						1	
	W			1 / 0 / -1			1 / 0 / -1			1						1
M(B) S...27	G	1 / 0 / -1			0 / -1			1 / 0						1		
	L		1 / 0 / -1			1 / 0 / -1			1 *						1	
	W			1 / 0 / -1			1 / 0 / -1			1						1
M(B) N...74 M(B) N...75	G	1 / 0			1 / 0			1 / 0						1		
	L		1			1			1						1	
	W			1			1			1						1
M(B) N...62 M(B) N...63	G															
	L															
	W															
M(B) R...02	G	1			1			1						1		
	L		1			1			1						1	
	W			1			1			1						1

* Mounting position of the sample configuration of the next page

Combination options on WR mounting frame

	Module type on top	M(B)S...24			M(B)S...27			M(B)N...74 M(B)N...75			M(B)N...62 M(B)N...63			M(B)R...02		
Module type bottom	To be used with TwinLine	G	L	W	G	L	W	G	L	W	G	L	W	G	L	W
M(B) S...24	G	-			-			-						-		
	L		-1			-1			-			-1			-	
	W			-1			-1			-			-1			-
M(B) S...27	G	-			-1			-						-		
	L		-1			-1			-			-1 *			-	
	W			-1			-1			-			-1			-
M(B) N...74 M(B) N...75	G	-			-			1 / 0						1		
	L		-			-			1			-			1	
	W			-			-			1			-			1
M(B) N...62 M(B) N...63	G															
	L		-1			-1			-			-1			-	
	W			-1			-1			-			-1			-
M(B) R...02	G	-			-			1						1		
	L		-			-			1			-			1	
	W			-			-			1			-			1

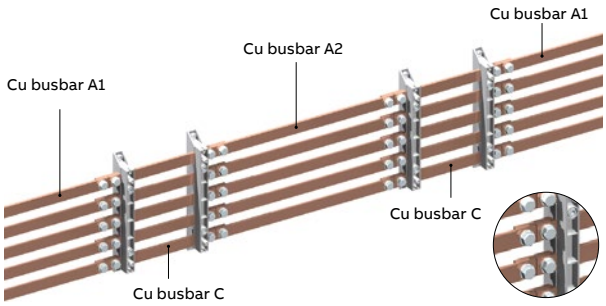
* Mounting position of the sample configuration of the next page

Legend for the tables

0 = installation position 0 is possible
1 = installation position 1 is possible
-1 = installation position -1 is possible
1/0 = installation positions 1 or 0 are possible
0/-1 = installation positions 0 or -1 are possible
1/0/-1 = installation positions 1 and 0 and -1 are possible

Enclosures

Modular distribution panel system CombiLine N
Busbars for the TwinLine cabinet connection for M(B)S…24

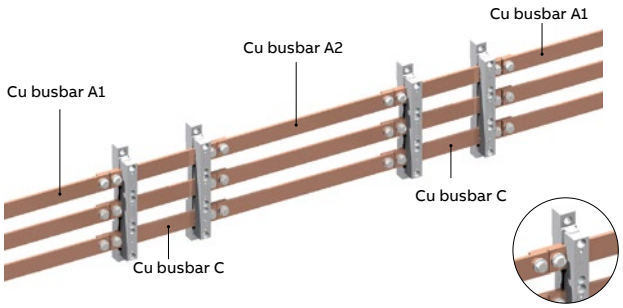


- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- Busbars for connecting cabinets (Cu busbar A1/A2) are supplied with Cu transport elements and fastening material attached to the connection side
- One connector (Cu busbar C) is required per busbar connection
  Important: the module combination options are to be considered for TwinLine cabinet to cabinet connections.
- Max. five Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TwinLine cabinet to cabinet connection to the right or left										
20 x 5	320	1	138 + 43	1	ZX2224	2CPX042630R9999		ZXM2224	2CPX042672R9999	
		2	388 + 43	1	ZX2225	2CPX042631R9999		ZXM2225	2CPX042673R9999	
		3	638 + 43	1	ZX2226	2CPX042632R9999		ZXM2226	2CPX042674R9999	
		4	888 + 43	1	ZX2227	2CPX042633R9999		ZXM2227	2CPX042675R9999	
		5	1138 + 43	1	ZX2228	2CPX042634R9999		ZXM2228	2CPX042676R9999	
		6	1388 + 43	1	ZX2229	2CPX042635R9999		ZXM2229	2CPX042677R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TwinLine cabinets										
20 x 5	320	1	43 + 95 + 43	1	ZX2324	2CPX042714R9999		ZXM2324	2CPX042750R9999	
		2	43 + 345 + 43	1	ZX2325	2CPX042715R9999		ZXM2325	2CPX042751R9999	
		3	43 + 595 + 43	1	ZX2326	2CPX042716R9999		ZXM2326	2CPX042752R9999	
		4	43 + 845 + 43	1	ZX2327	2CPX042717R9999		ZXM2327	2CPX042753R9999	
		5	43 + 1095 + 43	1	ZX2328	2CPX042718R9999		ZXM2328	2CPX042754R9999	
		6	43 + 1345 + 43	1	ZX2329	2CPX042719R9999		ZXM2329	2CPX042755R9999	
Cu busbar C, connectors for the TwinLine cabinet to cabinet connection to the right or left										
20 x 5	320	-	208	1	ZX2405	2CPX042787R9999				

Subdistribution boards

Modular distribution panel system CombiLine N
Busbars for the TwinLine cabinet connection for M(B)S…27



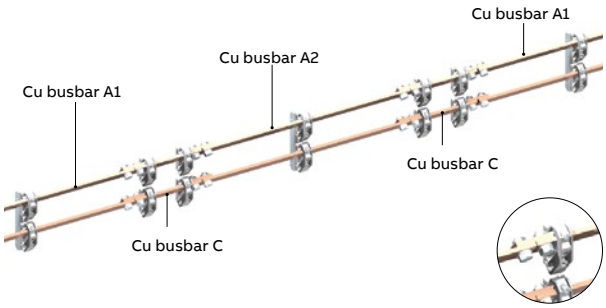
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- Busbars for connecting cabinets (Cu busbar A1/A2) are supplied with Cu transport elements and fastening material attached to the connection side
- One connector (Cu busbar C) is required per busbar connection
- **Important:** the module combination options are to be considered for TwinLine cabinet to cabinet connections.
- Three Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TwinLine cabinet to cabinet connection to the right or left										
30 x 5	440	1	138 + 43	1	ZX2236	2CPX042642R9999		ZXM2236	2CPX042684R9999	
		2	388 + 43	1	ZX2237	2CPX042643R9999		ZXM2237	2CPX042685R9999	
		3	638 + 43	1	ZX2238	2CPX042644R9999		ZXM2238	2CPX042686R9999	
		4	888 + 43	1	ZX2239	2CPX042645R9999		ZXM2239	2CPX042687R9999	
		5	1138 + 43	1	ZX2240	2CPX042646R9999		ZXM2240	2CPX042688R9999	
		6	1388 + 43	1	ZX2241	2CPX042647R9999		ZXM2241	2CPX042689R9999	
30 x 10	630	1	138 + 43	1	ZX2248	2CPX042654R9999		ZXM2248	2CPX042696R9999	
		2	388 + 43	1	ZX2249	2CPX042655R9999		ZXM2249	2CPX042697R9999	
		3	638 + 43	1	ZX2250	2CPX042656R9999		ZXM2250	2CPX042698R9999	
		4	888 + 43	1	ZX2251	2CPX042657R9999		ZXM2251	2CPX042699R9999	
		5	1138 + 43	1	ZX2252	2CPX042658R9999		ZXM2252	2CPX042700R9999	
		6	1388 + 43	1	ZX2253	2CPX042659R9999		ZXM2253	2CPX042701R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TwinLine cabinets										
30 x 5	440	1	43 + 95 + 43	1	ZX2336	2CPX042726R9999		ZXM2336	2CPX042762R9999	
		2	43 + 345 + 43	1	ZX2337	2CPX042727R9999		ZXM2337	2CPX042763R9999	
		3	43 + 595 + 43	1	ZX2338	2CPX042728R9999		ZXM2338	2CPX042764R9999	
		4	43 + 845 + 43	1	ZX2339	2CPX042729R9999		ZXM2339	2CPX042765R9999	
		5	43 + 1095 + 43	1	ZX2340	2CPX042730R9999		ZXM2340	2CPX042766R9999	
		6	43 + 1345 + 43	1	ZX2341	2CPX042731R9999		ZXM2341	2CPX042767R9999	
30 x 10	630	1	43 + 95 + 43	1	ZX2348	2CPX042738R9999		ZXM2348	2CPX042774R9999	
		2	43 + 345 + 43	1	ZX2349	2CPX042739R9999		ZXM2349	2CPX042775R9999	
		3	43 + 595 + 43	1	ZX2350	2CPX042740R9999		ZXM2350	2CPX042776R9999	
		4	43 + 845 + 43	1	ZX2351	2CPX042741R9999		ZXM2351	2CPX042777R9999	
		5	43 + 1095 + 43	1	ZX2352	2CPX042742R9999		ZXM2352	2CPX042778R9999	
		6	43 + 1345 + 43	1	ZX2353	2CPX042743R9999		ZXM2353	2CPX042779R9999	
Cu busbar C, connectors for the TwinLine cabinet to cabinet connection to the right or left										
30 x 5	440		208	1	ZX2407	2CPX042789R9999		-	-	-
30 x 10	630		208	1	ZX2408	2CPX042790R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N

Busbars for the TwinLine cabinet connection for M(B)N…74+75



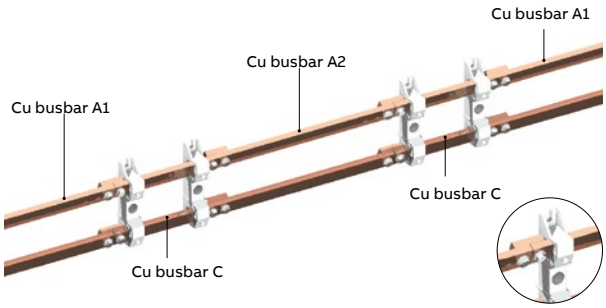
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- Busbars for connecting cabinets (Cu busbar A1/A2) are supplied with Cu transport elements and fastening material attached to the connection side
- One connector (Cu busbar C) is required per busbar connection
- **Important:** the module combination options are to be considered for TwinLine cabinet to cabinet connections.
- Two Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TwinLine cabinet to cabinet connection to the right or left										
20 x 5	320	1	200 + 43	1	ZX2230	2CPX042636R9999		ZXM2230	2CPX042678R9999	
		2	450 + 43	1	ZX2231	2CPX042637R9999		ZXM2231	2CPX042679R9999	
		3	700 + 43	1	ZX2232	2CPX042638R9999		ZXM2232	2CPX042680R9999	
		4	950 + 43	1	ZX2233	2CPX042639R9999		ZXM2233	2CPX042681R9999	
		5	1200 + 43	1	ZX2234	2CPX042640R9999		ZXM2234	2CPX042682R9999	
		6	1450 + 43	1	ZX2235	2CPX042641R9999		ZXM2235	2CPX042683R9999	
30 x 5	440	1	200 + 43	1	ZX2242	2CPX042648R9999		ZXM2242	2CPX042690R9999	
		2	450 + 43	1	ZX2243	2CPX042649R9999		ZXM2243	2CPX042691R9999	
		3	700 + 43	1	ZX2244	2CPX042650R9999		ZXM2244	2CPX042692R9999	
		4	950 + 43	1	ZX2245	2CPX042651R9999		ZXM2245	2CPX042693R9999	
		5	1200 + 43	1	ZX2246	2CPX042652R9999		ZXM2246	2CPX042694R9999	
		6	1450 + 43	1	ZX2247	2CPX042653R9999		ZXM2247	2CPX042695R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TwinLine cabinets										
20 x 5	320	1	43 + 154 + 43	1	ZX2330	2CPX042720R9999		ZXM2330	2CPX042756R9999	
		2	43 + 404 + 43	1	ZX2331	2CPX042721R9999		ZXM2331	2CPX042757R9999	
		3	43 + 654 + 43	1	ZX2332	2CPX042722R9999		ZXM2332	2CPX042758R9999	
		4	43 + 904 + 43	1	ZX2333	2CPX042723R9999		ZXM2333	2CPX042759R9999	
		5	43 + 1154 + 43	1	ZX2334	2CPX042724R9999		ZXM2334	2CPX042760R9999	
		6	43 + 1404 + 43	1	ZX2335	2CPX042725R9999		ZXM2335	2CPX042761R9999	
30 x 5	440	1	43 + 154 + 43	1	ZX2342	2CPX042732R9999		ZXM2342	2CPX042768R9999	
		2	43 + 404 + 43	1	ZX2343	2CPX042733R9999		ZXM2343	2CPX042769R9999	
		3	43 + 654 + 43	1	ZX2344	2CPX042734R9999		ZXM2344	2CPX042770R9999	
		4	43 + 904 + 43	1	ZX2345	2CPX042735R9999		ZXM2345	2CPX042771R9999	
		5	43 + 1154 + 43	1	ZX2346	2CPX042736R9999		ZXM2346	2CPX042772R9999	
		6	43 + 1404 + 43	1	ZX2347	2CPX042737R9999		ZXM2347	2CPX042773R9999	
Cu busbar C, connectors for the TwinLine cabinet to cabinet connection to the right or left										
20 x 5	320	-	149	1	ZX2404	2CPX042786R9999		-	-	-
30 x 5	440	-	149	1	ZX2406	2CPX042788R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N

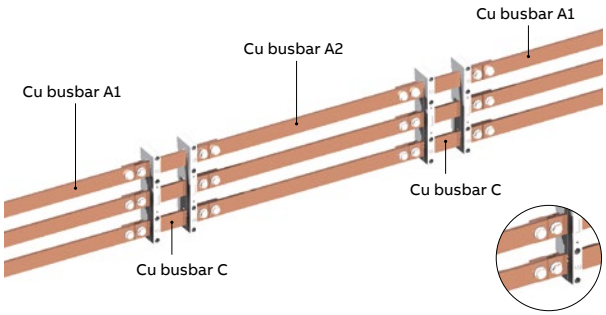
Busbars for the TwinLine cabinet connection for M(B)N....62+63



Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TwinLine cabinet to cabinet connection to the right or left										
30 x 10	630	1	149 + 43	1	ZX2254	2CPX042660R9999		ZXM2254	2CPX042702R9999	
		2	399 + 43	1	ZX2255	2CPX042661R9999		ZXM2255	2CPX042703R9999	
		3	649 + 43	1	ZX2256	2CPX042662R9999		ZXM2256	2CPX042704R9999	
		4	899 + 43	1	ZX2257	2CPX042663R9999		ZXM2257	2CPX042705R9999	
		5	1149 + 43	1	ZX2258	2CPX042664R9999		ZXM2258	2CPX042706R9999	
		6	1399 + 43	1	ZX2259	2CPX042665R9999		ZXM2259	2CPX042707R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TwinLine cabinets										
30 x 10	630	1	43 + 95 + 43	1	ZX2348	2CPX042738R9999		ZXM2348	2CPX042774R9999	
		2	43 + 345 + 43	1	ZX2349	2CPX042739R9999		ZXM2349	2CPX042775R9999	
		3	43 + 595 + 43	1	ZX2350	2CPX042740R9999		ZXM2350	2CPX042776R9999	
		4	43 + 845 + 43	1	ZX2351	2CPX042741R9999		ZXM2351	2CPX042777R9999	
		5	43 + 1095 + 43	1	ZX2352	2CPX042742R9999		ZXM2352	2CPX042778R9999	
		6	43 + 1345 + 43	1	ZX2353	2CPX042743R9999		ZXM2353	2CPX042779R9999	
Cu busbar C, connectors for the TwinLine cabinet to cabinet connection to the right or left										
30 x 10	630		208	1	ZX2408	2CPX042790R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N, Busbars for the TwinLine cabinet connection in the module M(B)R…02



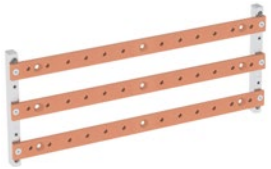
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- Busbars for connecting cabinets (Cu busbar A1/A2) are supplied with Cu transport elements and fastening material attached to the connection side
- One connector (Cu busbar C) is required per busbar connection
  Important: For equipped MR...02B modules the external mounting fuse sockets, might not be necessary for:
  MR102B in case of a connection on the left, 1 piece,
  MR202B in case of a connection on the left, 1 piece,
  MR302B in case of a connection on the left or on the right, 2 pieces respectively that will have to be replaced by empty space covers ZA4P10 in the cover
- **Important:** the module combination options are to be considered for TwinLine cabinet to cabinet connections.
- Three Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TwinLine cabinet to cabinet connection to the right or left										
20 x 5	320	1	200 + 43	1	ZX2230	2CPX042636R9999		ZXM2230	2CPX042678R9999	
		2	450 + 43	1	ZX2231	2CPX042637R9999		ZXM2231	2CPX042679R9999	
		3	700 + 43	1	ZX2232	2CPX042638R9999		ZXM2232	2CPX042680R9999	
		4	950 + 43	1	ZX2233	2CPX042639R9999		ZXM2233	2CPX042681R9999	
		5	1200 + 43	1	ZX2234	2CPX042640R9999		ZXM2234	2CPX042682R9999	
		6	1450 + 43	1	ZX2235	2CPX042641R9999		ZXM2235	2CPX042683R9999	
30 x 5	440	1	200 + 43	1	ZX2242	2CPX042648R9999		ZXM2242	2CPX042690R9999	
		2	450 + 43	1	ZX2243	2CPX042649R9999		ZXM2243	2CPX042691R9999	
		3	700 + 43	1	ZX2244	2CPX042650R9999		ZXM2244	2CPX042692R9999	
		4	950 + 43	1	ZX2245	2CPX042651R9999		ZXM2245	2CPX042693R9999	
		5	1200 + 43	1	ZX2246	2CPX042652R9999		ZXM2246	2CPX042694R9999	
		6	1450 + 43	1	ZX2247	2CPX042653R9999		ZXM2247	2CPX042695R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TwinLine cabinets										
20 x 5	320	1	43 + 154 + 43	1	ZX2330	2CPX042720R9999		ZXM2330	2CPX042756R9999	
		2	43 + 404 + 43	1	ZX2331	2CPX042721R9999		ZXM2331	2CPX042757R9999	
		3	43 + 654 + 43	1	ZX2332	2CPX042722R9999		ZXM2332	2CPX042758R9999	
		4	43 + 904 + 43	1	ZX2333	2CPX042723R9999		ZXM2333	2CPX042759R9999	
		5	43 + 1154 + 43	1	ZX2334	2CPX042724R9999		ZXM2334	2CPX042760R9999	
		6	43 + 1404 + 43	1	ZX2335	2CPX042725R9999		ZXM2335	2CPX042761R9999	
30 x 5	440	1	43 + 154 + 43	1	ZX2342	2CPX042732R9999		ZXM2342	2CPX042768R9999	
		2	43 + 404 + 43	1	ZX2343	2CPX042733R9999		ZXM2343	2CPX042769R9999	
		3	43 + 654 + 43	1	ZX2344	2CPX042734R9999		ZXM2344	2CPX042770R9999	
		4	43 + 904 + 43	1	ZX2345	2CPX042735R9999		ZXM2345	2CPX042771R9999	
		5	43 + 1154 + 43	1	ZX2346	2CPX042736R9999		ZXM2346	2CPX042772R9999	
		6	43 + 1404 + 43	1	ZX2347	2CPX042737R9999		ZXM2347	2CPX042773R9999	
Cu busbar C, connectors for the TwinLine cabinet to cabinet connection to the right or left										
20 x 5	320	-	149	1	ZX2404	2CPX042786R9999		-	-	-
30 x 5	440	-	149	1	ZX2406	2CPX042788R9999		-	-	-

Subdistribution boards

Busbars for the TwinLine cabinet

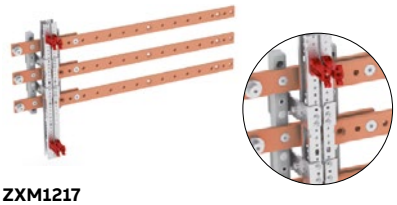
Busbar system 100 mm for size 00 fuse switch disconnectors, M(B)D...52(B)



ZXM1215

- Busbars for single cabinets
- With the WR mounting frame the busbars cannot be connected through from one module to the next
- With the EDF mounting frame (see information on the PW) defined combinations are possible within the cabinet
- Size 00 fuse switch disconnectors are directly mounted to Cu busbars prepared with captive nuts and to this end the busbar holders are fixed to the front position of the bracket
- 3 Cu busbars are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 10	630	1	184	1	ZX1210	2CPX042121R9999		ZXM1210	2CPX042230R9999	
		2	434	1	ZX1211	2CPX042122R9999		ZXM1211	2CPX042231R9999	
		3	684	1	ZX1212	2CPX042123R9999		ZXM1212	2CPX042232R9999	
40 x 10	850	1	184	1	ZX1213	2CPX042124R9999		ZXM1213	2CPX042233R9999	
		2	434	1	ZX1214	2CPX042125R9999		ZXM1214	2CPX042234R9999	
		3	684	1	ZX1215	2CPX042126R9999		ZXM1215	2CPX042235R9999	



ZXM1217

- Busbar connection sets for field-field connections
- **Important:** With the connection-sets concider the cabinet depth
- 3 Cu sets are required per connection
- With cabinet depth 215 mm connection-sets are not possible

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	A	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 10	630	230		1	ZX1216	2CPX042119R9999		ZXM1216	2CPX042236R9999	
40 x 10	850	230		1	ZX1217	2CPX042120R9999		ZXM1217	2CPX042237R9999	

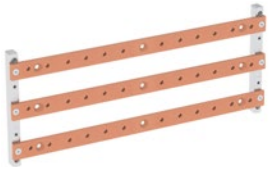
ZX964

Article	Pieces	Type	Ord. no.	Price
Blanking panels for closing the reserve spaces 100 mm busbar center distance				
50 mm wide strips for closing NH00	1	ZX964	2CPX042238R9999	

Subdistribution boards

Busbars for the TwinLine cabinet

Busbar system 185 mm for fuse switch disconnectors, M(B)D...21-300(B)



ZX1228

- Busbars for single cabinets
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- With captive nuts to connect fuse switch disconnectors
- From three panels on the captive nuts define the module sequence (see information on PW)
- 3 Cu busbars are required per module

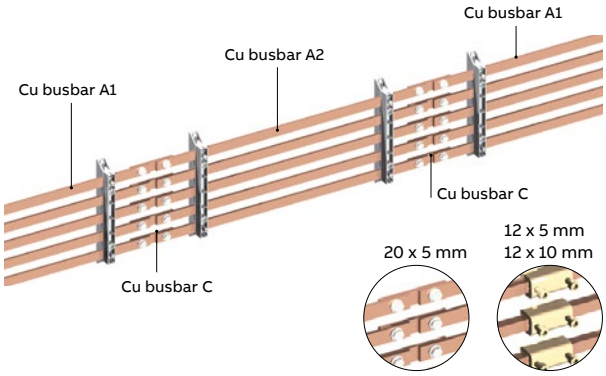
Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 10	630	1	215	1	ZX1220	2CPX042267R9999		ZXM1220	2CPX042285R9999	
		2	465	1	ZX1221	2CPX042268R9999		ZXM1221	2CPX042286R9999	
		3	715	1	ZX1222	2CPX042269R9999		ZXM1222	2CPX042287R9999	
		4 (2FB+2FB)	965	1	ZX1223	2CPX042270R9999		ZXM1223	2CPX042288R9999	
		5 (3FB+2FB)	1215	1	ZX1224	2CPX042271R9999		ZXM1224	2CPX042289R9999	
		6 (3FB+3FB)	1465	1	ZX1225	2CPX042272R9999		ZXM1225	2CPX042290R9999	
40 x 10	850	1	215	1	ZX1226	2CPX042273R9999		ZXM1226	2CPX042291R9999	
		2	465	1	ZX1227	2CPX042274R9999		ZXM1227	2CPX042292R9999	
		3	715	1	ZX1228	2CPX042275R9999		ZXM1228	2CPX042293R9999	
		4 (2FB+2FB)	965	1	ZX1229	2CPX042276R9999		ZXM1229	2CPX042294R9999	
		5 (3FB+2FB)	1215	1	ZX1230	2CPX042277R9999		ZXM1230	2CPX042295R9999	
		6 (3FB+3FB)	1465	1	ZX1231	2CPX042278R9999		ZXM1231	2CPX042296R9999	

*For double doors, a minimum cabinet depth of 325 mm is required | *1Module for EDF mounting frame | *2Module for WR mounting frame

Subdistribution boards

Modular distribution panel system CombiLine N

Busbars for the TriLine® cabinet connection in the module M(B)S...24



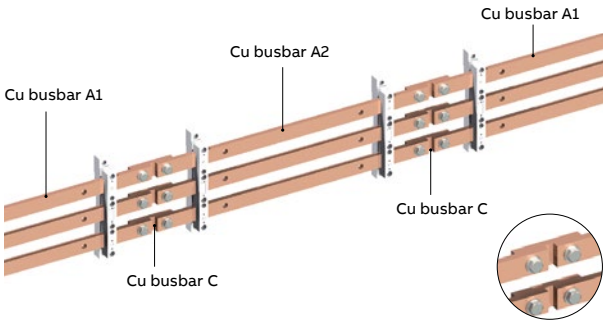
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector for Cu 12 x 5 mm and 12 x 10 mm including connection terminals
- Busbar connector for Cu 20 x 5 mm including captive nuts and fastening screws
- Max. five Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250	1	298	1	ZX1040	2CPX041906R9999		ZXM1040	2CPX041516R9999	
		2	548	1	ZX1041	2CPX041907R9999		ZXM1041	2CPX041517R9999	
		3	798	1	ZX1042	2CPX041908R9999		ZXM1042	2CPX041518R9999	
		4	1048	1	ZX1043	2CPX041909R9999		ZXM1043	2CPX041519R9999	
		5	1298	1	ZX1044	2CPX041910R9999		ZXM1044	2CPX041520R9999	
12 x 10	360	1	298	1	ZX1046	2CPX041912R9999		ZXM1046	2CPX041522R9999	
		2	548	1	ZX1047	2CPX041913R9999		ZXM1047	2CPX041523R9999	
		3	798	1	ZX1048	2CPX041914R9999		ZXM1048	2CPX041524R9999	
		4	1048	1	ZX1049	2CPX041915R9999		ZXM1049	2CPX041525R9999	
		5	1298	1	ZX1050	2CPX041916R9999		ZXM1050	2CPX041526R9999	
20 x 5	320	1	298	1	ZX1052	2CPX041918R9999		ZXM1052	2CPX041528R9999	
		2	548	1	ZX1053	2CPX041919R9999		ZXM1053	2CPX041529R9999	
		3	798	1	ZX1054	2CPX041920R9999		ZXM1054	2CPX041530R9999	
		4	1048	1	ZX1055	2CPX041921R9999		ZXM1055	2CPX041531R9999	
		5	1298	1	ZX1056	2CPX041922R9999		ZXM1056	2CPX041532R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
12 x 5	250	1	350	1	ZX1080	2CPX041942R9999		ZXM1080	2CPX041552R9999	
		2	600	1	ZX1081	2CPX041943R9999		ZXM1081	2CPX041553R9999	
		3	850	1	ZX1082	2CPX041944R9999		ZXM1082	2CPX041554R9999	
		4	1100	1	ZX1083	2CPX041945R9999		ZXM1083	2CPX041555R9999	
		5	1350	1	ZX1084	2CPX041946R9999		ZXM1084	2CPX041556R9999	
12 x 10	360	1	350	1	ZX1086	2CPX041948R9999		ZXM1086	2CPX041558R9999	
		2	600	1	ZX1087	2CPX041949R9999		ZXM1087	2CPX041559R9999	
		3	850	1	ZX1088	2CPX041950R9999		ZXM1088	2CPX041560R9999	
		4	1100	1	ZX1089	2CPX041951R9999		ZXM1089	2CPX041561R9999	
		5	1350	1	ZX1090	2CPX041952R9999		ZXM1090	2CPX041562R9999	
20 x 5	320	1	350	1	ZX1092	2CPX041954R9999		ZXM1092	2CPX041564R9999	
		2	600	1	ZX1093	2CPX041955R9999		ZXM1093	2CPX041565R9999	
		3	850	1	ZX1094	2CPX041956R9999		ZXM1094	2CPX041566R9999	
		4	1100	1	ZX1095	2CPX041957R9999		ZXM1095	2CPX041567R9999	
		5	1350	1	ZX1096	2CPX041958R9999		ZXM1096	2CPX041568R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250		44	1	ZX1181	2CPX042021R9999		-	-	-
12 x 10	360		44	1	ZX1181	2CPX042021R9999		-	-	-
20 x 5	320		94	1	ZX1182	2CPX042022R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N

Busbars for the TriLine® cabinet connection in the module M(B)S... 27



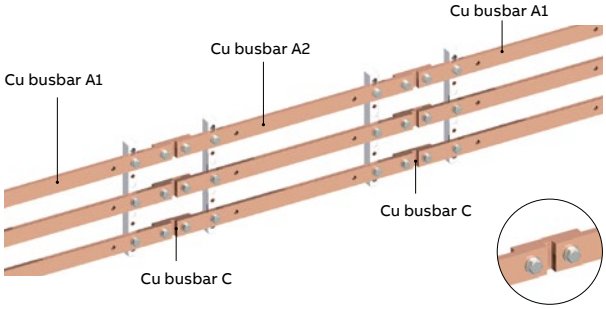
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector including captive nuts and fastening material
- Three Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TriLine cabinet to cabinet connection to the right or left										
30 x 5	440	1	298	1	ZX1058	2CPX041924R9999		ZXM1058	2CPX041534R9999	
		2	548	1	ZX1059	2CPX041925R9999		ZXM1059	2CPX041535R9999	
		3	798	1	ZX1060	2CPX041926R9999		ZXM1060	2CPX041536R9999	
		4	1048	1	ZX1061	2CPX041927R9999		ZXM1061	2CPX041537R9999	
		5	1298	1	ZX1062	2CPX041928R9999		ZXM1062	2CPX041538R9999	
30 x 10	630	1	298	1	ZX1064	2CPX041930R9999		ZXM1064	2CPX041540R9999	
		2	548	1	ZX1065	2CPX041931R9999		ZXM1065	2CPX041541R9999	
		3	798	1	ZX1066	2CPX041932R9999		ZXM1066	2CPX041542R9999	
		4	1048	1	ZX1067	2CPX041933R9999		ZXM1067	2CPX041543R9999	
		5	1298	1	ZX1068	2CPX041934R9999		ZXM1068	2CPX041544R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
30 x 5	440	1	350	1	ZX1098	2CPX041960R9999		ZXM1098	2CPX041570R9999	
		2	600	1	ZX1099	2CPX041961R9999		ZXM1099	2CPX041571R9999	
		3	850	1	ZX1100	2CPX041962R9999		ZXM1100	2CPX041572R9999	
		4	1100	1	ZX1101	2CPX041963R9999		ZXM1101	2CPX041573R9999	
		5	1350	1	ZX1102	2CPX041964R9999		ZXM1102	2CPX041574R9999	
30 x 10	630	1	350	1	ZX1104	2CPX041966R9999		ZXM1104	2CPX041576R9999	
		2	600	1	ZX1105	2CPX041967R9999		ZXM1105	2CPX041577R9999	
		3	850	1	ZX1106	2CPX041968R9999		ZXM1106	2CPX041578R9999	
		4	1100	1	ZX1107	2CPX041969R9999		ZXM1107	2CPX041579R9999	
		5	1350	1	ZX1108	2CPX041970R9999		ZXM1108	2CPX041580R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
30 x 5	250		94	1	ZX1183	2CPX042023R9999		-	-	-
30 x 10	360		94	1	ZX1184	2CPX042024R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N

Busbars for the TriLine® cabinet connection in the module M(B)S...31



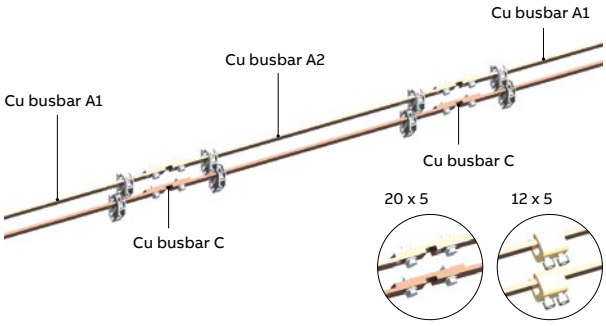
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector including captive nuts
- and fastening material
- Three Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TriLine cabinet to cabinet connection to the right or left										
40 x 10	850	1	298	1	ZX1070	2CPX041936R9999		ZXM1070	2CPX041546R9999	
		2	548	1	ZX1071	2CPX041937R9999		ZXM1071	2CPX041547R9999	
		3	767	1	ZX1072	2CPX041938R9999		ZXM1072	2CPX041548R9999	
		4	1048	1	ZX1073	2CPX041939R9999		ZXM1073	2CPX041549R9999	
		5	1298	1	ZX1074	2CPX041940R9999		ZXM1074	2CPX041550R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
40 x 10	850	1	350	1	ZX1110	2CPX041972R9999		ZXM1110	2CPX041582R9999	
		2	600	1	ZX1111	2CPX041973R9999		ZXM1111	2CPX041583R9999	
		3	850	1	ZX1112	2CPX041974R9999		ZXM1112	2CPX041584R9999	
		4	1100	1	ZX1113	2CPX041975R9999		ZXM1113	2CPX041585R9999	
		5	1350	1	ZX1114	2CPX041976R9999		ZXM1114	2CPX041586R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
40 x 10	850		94	1	ZX1185	2CPX042025R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N

Busbars for the TriLine® cabinet connection in the module M(B)N...69

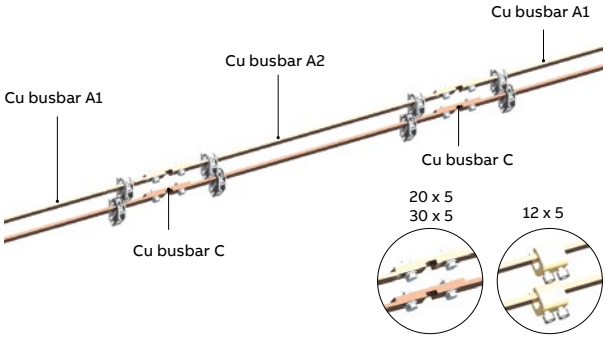


- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector including captive nuts and fastening material
- Two Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250	1	277	1	ZX2094	2CPX042578R9999		ZXM2094	2CPX042498R9999	
		2	527	1	ZX2095	2CPX042579R9999		ZXM2095	2CPX042499R9999	
		3	777	1	ZX2096	2CPX042580R9999		ZXM2096	2CPX042500R9999	
		4	1027	1	ZX2097	2CPX042581R9999		ZXM2097	2CPX042501R9999	
		5	1277	1	ZX2098	2CPX042582R9999		ZXM2098	2CPX042502R9999	
20 x 5	320	1	277	1	ZX2112	2CPX042593R9999		ZXM2112	2CPX042513R9999	
		2	527	1	ZX2113	2CPX042594R9999		ZXM2113	2CPX042514R9999	
		3	777	1	ZX2114	2CPX042595R9999		ZXM2114	2CPX042515R9999	
		4	1027	1	ZX2115	2CPX042596R9999		ZXM2115	2CPX042516R9999	
		5	1277	1	ZX2116	2CPX042597R9999		ZXM2116	2CPX042517R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
12 x 5	250	1	350	1	ZX1080	2CPX041942R9999		ZXM1080	2CPX041552R9999	
		2	600	1	ZX1081	2CPX041943R9999		ZXM1081	2CPX041553R9999	
		3	850	1	ZX1082	2CPX041944R9999		ZXM1082	2CPX041554R9999	
		4	1100	1	ZX1083	2CPX041945R9999		ZXM1083	2CPX041555R9999	
		5	1350	1	ZX1084	2CPX041946R9999		ZXM1084	2CPX041556R9999	
20 x 5	320	1	350	1	ZX1092	2CPX041954R9999		ZXM1092	2CPX041564R9999	
		2	600	1	ZX1093	2CPX041955R9999		ZXM1093	2CPX041565R9999	
		3	850	1	ZX1094	2CPX041956R9999		ZXM1094	2CPX041566R9999	
		4	1100	1	ZX1095	2CPX041957R9999		ZXM1095	2CPX041567R9999	
		5	1350	1	ZX1096	2CPX041958R9999		ZXM1096	2CPX041568R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250		94	1	ZX1181	2CPX042021R9999		-	-	-
20 x 5	320		94	1	ZX1182	2CPX042022R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N, Busbars for the TriLine® cabinet connection in the module M(B)N...74+75

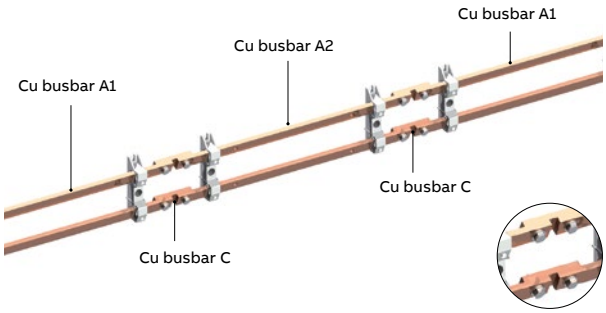


- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector including captive nuts and fastening material
- Two Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250	1	298	1	ZX1040	2CPX041906R9999		ZXM1040	2CPX041516R9999	
		2	548	1	ZX1041	2CPX041907R9999		ZXM1041	2CPX041517R9999	
		3	798	1	ZX1042	2CPX041908R9999		ZXM1042	2CPX041518R9999	
		4	1048	1	ZX1043	2CPX041909R9999		ZXM1043	2CPX041519R9999	
		5	1298	1	ZX1044	2CPX041910R9999		ZXM1044	2CPX041520R9999	
20 x 5	320	1	298	1	ZX1052	2CPX041918R9999		ZXM1052	2CPX041528R9999	
		2	548	1	ZX1053	2CPX041919R9999		ZXM1053	2CPX041529R9999	
		3	798	1	ZX1054	2CPX041920R9999		ZXM1054	2CPX041530R9999	
		4	1048	1	ZX1055	2CPX041921R9999		ZXM1055	2CPX041531R9999	
		5	1298	1	ZX1056	2CPX041922R9999		ZXM1056	2CPX041532R9999	
30 x 5	440	1	298	1	ZX1058	2CPX041924R9999		ZXM1058	2CPX041534R9999	
		2	548	1	ZX1059	2CPX041925R9999		ZXM1059	2CPX041535R9999	
		3	798	1	ZX1060	2CPX041926R9999		ZXM1060	2CPX041536R9999	
		4	1048	1	ZX1061	2CPX041927R9999		ZXM1061	2CPX041537R9999	
		5	1298	1	ZX1062	2CPX041928R9999		ZXM1062	2CPX041538R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
12 x 5	250	1	350	1	ZX1080	2CPX041942R9999		ZXM1080	2CPX041552R9999	
		2	600	1	ZX1081	2CPX041943R9999		ZXM1081	2CPX041553R9999	
		3	850	1	ZX1082	2CPX041944R9999		ZXM1082	2CPX041554R9999	
		4	1100	1	ZX1083	2CPX041945R9999		ZXM1083	2CPX041555R9999	
		5	1350	1	ZX1084	2CPX041946R9999		ZXM1084	2CPX041556R9999	
20 x 5	320	1	350	1	ZX1092	2CPX041954R9999		ZXM1092	2CPX041564R9999	
		2	600	1	ZX1093	2CPX041955R9999		ZXM1093	2CPX041565R9999	
		3	850	1	ZX1094	2CPX041956R9999		ZXM1094	2CPX041566R9999	
		4	1100	1	ZX1095	2CPX041957R9999		ZXM1095	2CPX041567R9999	
		5	1350	1	ZX1096	2CPX041958R9999		ZXM1096	2CPX041568R9999	
30 x 5	440	1	350	1	ZX1098	2CPX041960R9999		ZXM1098	2CPX041570R9999	
		2	600	1	ZX1099	2CPX041961R9999		ZXM1099	2CPX041571R9999	
		3	850	1	ZX1100	2CPX041962R9999		ZXM1100	2CPX041572R9999	
		4	1100	1	ZX1101	2CPX041963R9999		ZXM1101	2CPX041573R9999	
		5	1350	1	ZX1102	2CPX041964R9999		ZXM1102	2CPX041574R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250		44	1	ZX1181	2CPX042021R9999		-	-	-
20 x 5	320		94	1	ZX1182	2CPX042022R9999		-	-	-
30 x 5	440		94	1	ZX1183	2CPX042023R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N, Busbars for the TriLine® cabinet connection in the module M(B)N...62+63

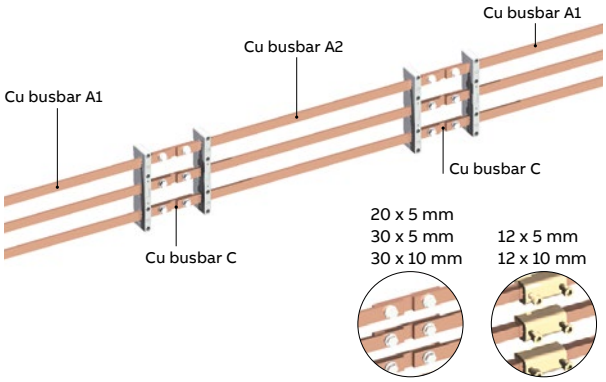


- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector including captive nuts and fastening material
- Two Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TriLine cabinet to cabinet connection to the right or left										
30 x 10	630	1	253	1	ZX2130	2CPX042608R9999		ZXM2130	2CPX042528R9999	
		2	503	1	ZX2131	2CPX042609R9999		ZXM2131	2CPX042529R9999	
		3	753	1	ZX2132	2CPX042610R9999		ZXM2132	2CPX042530R9999	
		4	1003	1	ZX2133	2CPX042611R9999		ZXM2133	2CPX042531R9999	
		5	1253	1	ZX2134	2CPX042612R9999		ZXM2134	2CPX042532R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
30 x 10	630	1	350	1	ZX1104	2CPX041966R9999		ZXM1104	2CPX041576R9999	
		2	600	1	ZX1105	2CPX041967R9999		ZXM1105	2CPX041577R9999	
		3	850	1	ZX1106	2CPX041968R9999		ZXM1106	2CPX041578R9999	
		4	1100	1	ZX1107	2CPX041969R9999		ZXM1107	2CPX041579R9999	
		5	1350	1	ZX1108	2CPX041970R9999		ZXM1108	2CPX041580R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
30 x 10	360		94	1	ZX1184	2CPX042024R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N, Busbars for the TriLine® cabinet connection in the module M(B)R...03



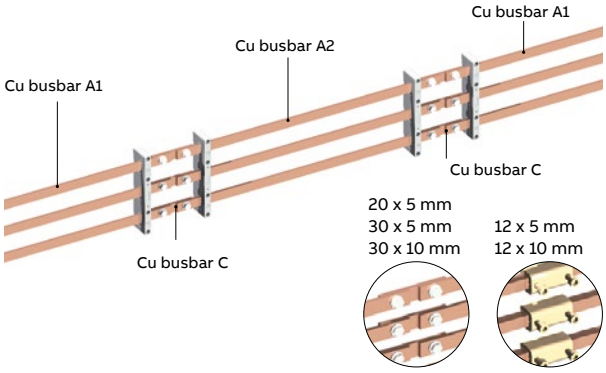
- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector for Cu 12 x 5 mm and 12 x 10 mm including connection terminals
- Busbar connector for Cu 20 x 5 mm including captive nuts and fastening screws
- Three Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250	1	272	1	ZX2088	2CPX042573R9999		ZXM2088	2CPX042493R9999	
		2	522	1	ZX2089	2CPX042574R9999		ZXM2089	2CPX042494R9999	
		3	772	1	ZX2090	2CPX042575R9999		ZXM2090	2CPX042495R9999	
		4	1022	1	ZX2091	2CPX042576R9999		ZXM2091	2CPX042496R9999	
		5	1272	1	ZX2092	2CPX042577R9999		ZXM2092	2CPX042497R9999	
12 x 10	360	1	272	1	ZX2100	2CPX042583R9999		ZXM2100	2CPX042503R9999	
		2	522	1	ZX2101	2CPX042584R9999		ZXM2101	2CPX042504R9999	
		3	772	1	ZX2102	2CPX042585R9999		ZXM2102	2CPX042505R9999	
		4	1022	1	ZX2103	2CPX042586R9999		ZXM2103	2CPX042506R9999	
		5	1272	1	ZX2104	2CPX042587R9999		ZXM2104	2CPX042507R9999	
20 x 5	320	1	272	1	ZX2106	2CPX042588R9999		ZXM2106	2CPX042508R9999	
		2	522	1	ZX2107	2CPX042589R9999		ZXM2107	2CPX042509R9999	
		3	772	1	ZX2108	2CPX042590R9999		ZXM2108	2CPX042510R9999	
		4	1022	1	ZX2109	2CPX042591R9999		ZXM2109	2CPX042511R9999	
		5	1272	1	ZX2110	2CPX042592R9999		ZXM2110	2CPX042512R9999	
30 x 5	440	1	272	1	ZX2118	2CPX042598R9999		ZXM2118	2CPX042518R9999	
		2	522	1	ZX2119	2CPX042599R9999		ZXM2119	2CPX042519R9999	
		3	772	1	ZX2120	2CPX042600R9999		ZXM2120	2CPX042520R9999	
		4	1022	1	ZX2121	2CPX042601R9999		ZXM2121	2CPX042521R9999	
		5	1272	1	ZX2122	2CPX042602R9999		ZXM2122	2CPX042522R9999	
30 x 10	630	1	272	1	ZX2124	2CPX042603R9999		ZXM2124	2CPX042523R9999	
		2	522	1	ZX2125	2CPX042604R9999		ZXM2125	2CPX042524R9999	
		3	772	1	ZX2126	2CPX042605R9999		ZXM2126	2CPX042525R9999	
		4	1022	1	ZX2127	2CPX042606R9999		ZXM2127	2CPX042526R9999	
		5	1272	1	ZX2128	2CPX042607R9999		ZXM2128	2CPX042527R9999	

> A2, busbars for the connection of TriLine cabinets on the right and left side, see next page

Subdistribution boards

Modular distribution panel system CombiLine N, Busbars for the TriLine® cabinet connection in the module M(B)R...03

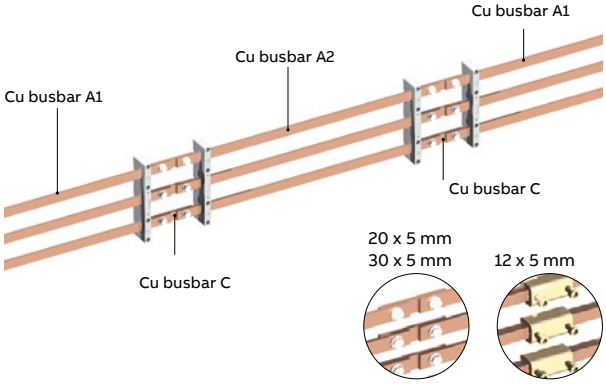


- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector for Cu 12 x 5 mm and 12 x 10 mm including connection terminals
- Busbar connector for Cu 20 x 5 mm including captive nuts and fastening screws
- Three Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
12 x 5	250	1	350	1	ZX1080	2CPX041942R9999		ZXM1080	2CPX041552R9999	
		2	600	1	ZX1081	2CPX041943R9999		ZXM1081	2CPX041553R9999	
		3	850	1	ZX1082	2CPX041944R9999		ZXM1082	2CPX041554R9999	
		4	1100	1	ZX1083	2CPX041945R9999		ZXM1083	2CPX041555R9999	
		5	1350	1	ZX1084	2CPX041946R9999		ZXM1084	2CPX041556R9999	
12 x 10	360	1	350	1	ZX1086	2CPX041948R9999		ZXM1086	2CPX041558R9999	
		2	600	1	ZX1087	2CPX041949R9999		ZXM1087	2CPX041559R9999	
		3	850	1	ZX1088	2CPX041950R9999		ZXM1088	2CPX041560R9999	
		4	1100	1	ZX1089	2CPX041951R9999		ZXM1089	2CPX041561R9999	
		5	1350	1	ZX1090	2CPX041952R9999		ZXM1090	2CPX041562R9999	
20 x 5	320	1	350	1	ZX1092	2CPX041954R9999		ZXM1092	2CPX041564R9999	
		2	600	1	ZX1093	2CPX041955R9999		ZXM1093	2CPX041565R9999	
		3	850	1	ZX1094	2CPX041956R9999		ZXM1094	2CPX041566R9999	
		4	1100	1	ZX1095	2CPX041957R9999		ZXM1095	2CPX041567R9999	
		5	1350	1	ZX1096	2CPX041958R9999		ZXM1096	2CPX041568R9999	
30 x 5	440	1	350	1	ZX1098	2CPX041960R9999		ZXM1098	2CPX041570R9999	
		2	600	1	ZX1099	2CPX041961R9999		ZXM1099	2CPX041571R9999	
		3	850	1	ZX1100	2CPX041962R9999		ZXM1100	2CPX041572R9999	
		4	1100	1	ZX1101	2CPX041963R9999		ZXM1101	2CPX041573R9999	
		5	1350	1	ZX1102	2CPX041964R9999		ZXM1102	2CPX041574R9999	
30 x 10	630	1	350	1	ZX1104	2CPX041966R9999		ZXM1104	2CPX041576R9999	
		2	600	1	ZX1105	2CPX041967R9999		ZXM1105	2CPX041577R9999	
		3	850	1	ZX1106	2CPX041968R9999		ZXM1106	2CPX041578R9999	
		4	1100	1	ZX1107	2CPX041969R9999		ZXM1107	2CPX041579R9999	
		5	1350	1	ZX1108	2CPX041970R9999		ZXM1108	2CPX041580R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250		44	1	ZX1181	2CPX042021R9999		-	-	-
12 x 10	360		44	1	ZX1181	2CPX042021R9999		-	-	-
20 x 5	320		94	1	ZX1182	2CPX042022R9999		-	-	-
30 x 5	440		94	1	ZX1183	2CPX042023R9999		-	-	-
30 x 10	630		94	1	ZX1184	2CPX042024R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N, Busbars for the TriLine® cabinet connection in the module M(B)R...02(B)

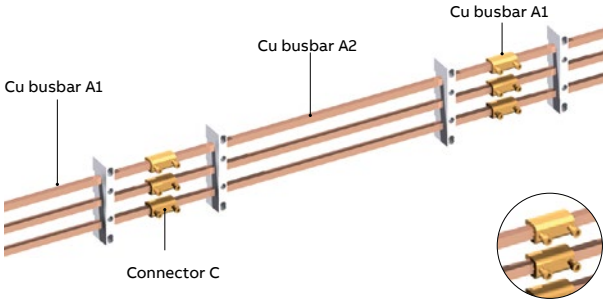


- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector for Cu 12 x 5 mm and 12 x 10 mm including connection terminals
- Busbar connector for Cu 20 x 5 mm including captive nuts and fastening screws
- Three Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250	1	298	1	ZX1040	2CPX041906R9999		ZXM1040	2CPX041516R9999	
		2	548	1	ZX1041	2CPX041907R9999		ZXM1041	2CPX041517R9999	
		3	798	1	ZX1042	2CPX041908R9999		ZXM1042	2CPX041518R9999	
		4	1048	1	ZX1043	2CPX041909R9999		ZXM1043	2CPX041519R9999	
		5	1298	1	ZX1044	2CPX041910R9999		ZXM1044	2CPX041520R9999	
20 x 5	320	1	298	1	ZX1052	2CPX041918R9999		ZXM1052	2CPX041528R9999	
		2	548	1	ZX1053	2CPX041919R9999		ZXM1053	2CPX041529R9999	
		3	798	1	ZX1054	2CPX041920R9999		ZXM1054	2CPX041530R9999	
		4	1048	1	ZX1055	2CPX041921R9999		ZXM1055	2CPX041531R9999	
		5	1298	1	ZX1056	2CPX041922R9999		ZXM1056	2CPX041532R9999	
30 x 5	440	1	298	1	ZX1058	2CPX041924R9999		ZXM1058	2CPX041534R9999	
		2	548	1	ZX1059	2CPX041925R9999		ZXM1059	2CPX041535R9999	
		3	798	1	ZX1060	2CPX041926R9999		ZXM1060	2CPX041536R9999	
		4	1048	1	ZX1061	2CPX041927R9999		ZXM1061	2CPX041537R9999	
		5	1298	1	ZX1062	2CPX041928R9999		ZXM1062	2CPX041538R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
12 x 5	250	1	350	1	ZX1080	2CPX041942R9999		ZXM1080	2CPX041552R9999	
		2	600	1	ZX1081	2CPX041943R9999		ZXM1081	2CPX041553R9999	
		3	850	1	ZX1082	2CPX041944R9999		ZXM1082	2CPX041554R9999	
		4	1100	1	ZX1083	2CPX041945R9999		ZXM1083	2CPX041555R9999	
		5	1350	1	ZX1084	2CPX041946R9999		ZXM1084	2CPX041556R9999	
20 x 5	320	1	350	1	ZX1092	2CPX041954R9999		ZXM1092	2CPX041564R9999	
		2	600	1	ZX1093	2CPX041955R9999		ZXM1093	2CPX041565R9999	
		3	850	1	ZX1094	2CPX041956R9999		ZXM1094	2CPX041566R9999	
		4	1100	1	ZX1095	2CPX041957R9999		ZXM1095	2CPX041567R9999	
		5	1350	1	ZX1096	2CPX041958R9999		ZXM1096	2CPX041568R9999	
30 x 5	440	1	350	1	ZX1098	2CPX041960R9999		ZXM1098	2CPX041570R9999	
		2	600	1	ZX1099	2CPX041961R9999		ZXM1099	2CPX041571R9999	
		3	850	1	ZX1100	2CPX041962R9999		ZXM1100	2CPX041572R9999	
		4	1100	1	ZX1101	2CPX041963R9999		ZXM1101	2CPX041573R9999	
		5	1350	1	ZX1102	2CPX041964R9999		ZXM1102	2CPX041574R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250		44	1	ZX1181	2CPX042021R9999		-	-	-
20 x 5	320		94	1	ZX1182	2CPX042022R9999		-	-	-
30 x 5	440		94	1	ZX1183	2CPX042023R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N, Busbars for the TriLine® cabinet connection for M(B)T...50+51(B)

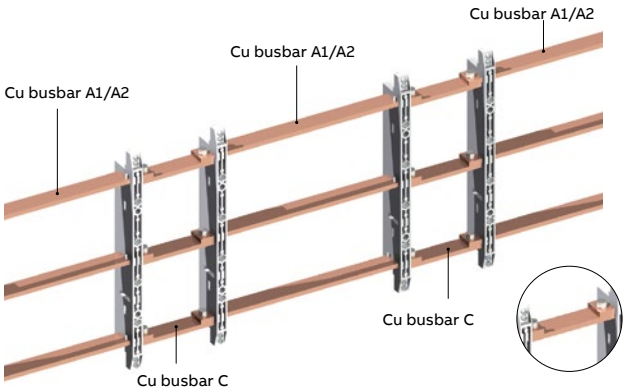


- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector including connection terminals
- Three Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250	2	548	1	ZX1041	2CPX041907R9999		ZXM1041	2CPX041517R9999	
		3	798	1	ZX1042	2CPX041908R9999		ZXM1042	2CPX041518R9999	
		4	1048	1	ZX1043	2CPX041909R9999		ZXM1043	2CPX041519R9999	
		5	1298	1	ZX1044	2CPX041910R9999		ZXM1044	2CPX041520R9999	
12 x 10	360	2	548	1	ZX1047	2CPX041913R9999		ZXM1047	2CPX041523R9999	
		3	798	1	ZX1048	2CPX041914R9999		ZXM1048	2CPX041524R9999	
		4	1048	1	ZX1049	2CPX041915R9999		ZXM1049	2CPX041525R9999	
		5	1298	1	ZX1050	2CPX041916R9999		ZXM1050	2CPX041526R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
12 x 5	250	2	600	1	ZX1081	2CPX041943R9999		ZXM1081	2CPX041553R9999	
		3	850	1	ZX1082	2CPX041944R9999		ZXM1082	2CPX041554R9999	
		4	1100	1	ZX1083	2CPX041945R9999		ZXM1083	2CPX041555R9999	
		5	1350	1	ZX1084	2CPX041946R9999		ZXM1084	2CPX041556R9999	
12 x 10	360	2	600	1	ZX1087	2CPX041949R9999		ZXM1087	2CPX041559R9999	
		3	850	1	ZX1088	2CPX041950R9999		ZXM1088	2CPX041560R9999	
		4	1100	1	ZX1089	2CPX041951R9999		ZXM1089	2CPX041561R9999	
		5	1350	1	ZX1090	2CPX041952R9999		ZXM1090	2CPX041562R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
12 x 5	250		44	1	ZX1181	2CPX042021R9999		-	-	-
12 x 10	360		44	1	ZX1181	2CPX042021R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N
Busbars for the TriLine® cabinet connection for M(B)L...5

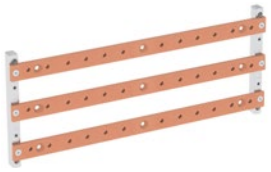


- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector including captive nuts and fastening material
- Three Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1/A2, busbars for the TriLine cabinet to cabinet connection to the right or left										
40 x 10	850	2	496	1	ZX1032	2CPX041901R9999		ZXM1032	2CPX041511R9999	
		3	746	1	ZX1033	2CPX041902R9999		ZXM1033	2CPX041512R9999	
		4	996	1	ZX1034	2CPX041903R9999		ZXM1034	2CPX041513R9999	
		5	1246	1	ZX1035	2CPX041904R9999		ZXM1035	2CPX041514R9999	
Cu busbar A1/A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
40 x 10	850	2	496	1	ZX1032	2CPX041901R9999		ZXM1032	2CPX041511R9999	
		3	746	1	ZX1033	2CPX041902R9999		ZXM1033	2CPX041512R9999	
		4	996	1	ZX1034	2CPX041903R9999		ZXM1034	2CPX041513R9999	
		5	1246	1	ZX1035	2CPX041904R9999		ZXM1035	2CPX041514R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
40 x 10	850		165	1	ZX1186	2CPX042887R9999		-	-	-

Subdistribution boards

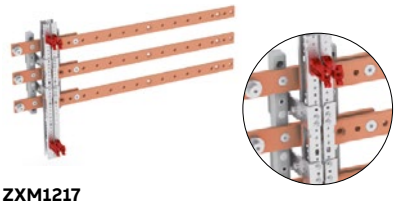
Modular distribution panel system CombiLine N
Busbars for the TriLine® cabinet connection for M(B)D...52(B)



ZXM1215

- Busbars for single cabinets
- With the WR mounting frame the busbars cannot be connected through from one module to the next
- With the EDF mounting frame (see information on the PW) defined combinations are possible within the cabinet
- Size 00 fuse switch disconnectors are directly mounted to Cu busbars prepared with captive nuts and to this end the busbar holders are fixed to the front position of the bracket
- 3 Cu busbars are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 10	630	1	184	1	ZX1210	2CPX042121R9999		ZXM1210	2CPX042230R9999	
		2	434	1	ZX1211	2CPX042122R9999		ZXM1211	2CPX042231R9999	
		3	684	1	ZX1212	2CPX042123R9999		ZXM1212	2CPX042232R9999	
40 x 10	850	1	184	1	ZX1213	2CPX042124R9999		ZXM1213	2CPX042233R9999	
		2	434	1	ZX1214	2CPX042125R9999		ZXM1214	2CPX042234R9999	
		3	684	1	ZX1215	2CPX042126R9999		ZXM1215	2CPX042235R9999	



ZXM1217

- Busbar connection sets for field-field connections
- **Important:** With the connection-sets concider the cabinet depth
- 3 Cu sets are required per connection
- With cabinet depth 215 mm connection-sets are not possible

Cabinet-cabinet connection in TriLine

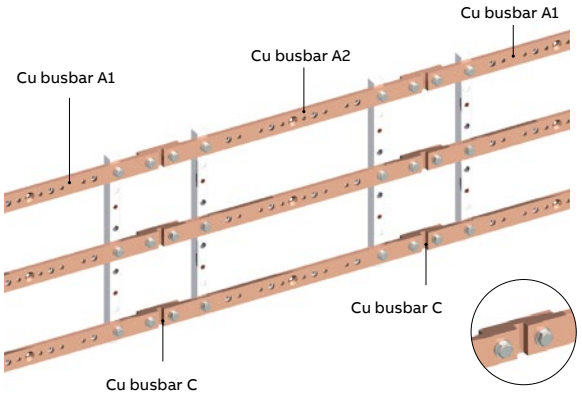
Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	A	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 10	630	230		1	ZX2216	2CPX042119R9999		ZXM2216	2CPX042918R9999	
40 x 10	850	230		1	ZX2217	2CPX042120R9999		ZXM2217	2CPX042919R9999	

Cabinet-cabinet connection in System pro E power

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	A	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
30 x 10	630	230		1	ZX2218	2CPX042119R9999		ZXM2218	2CPX042920R9999	
40 x 10	850	230		1	ZX2219	2CPX042120R9999		ZXM2219	2CPX042921R9999	

Subdistribution boards

Modular distribution panel system CombiLine N, Busbars for the TriLine® and System pro E power cabinet connection for M(B)D...21-300(B)

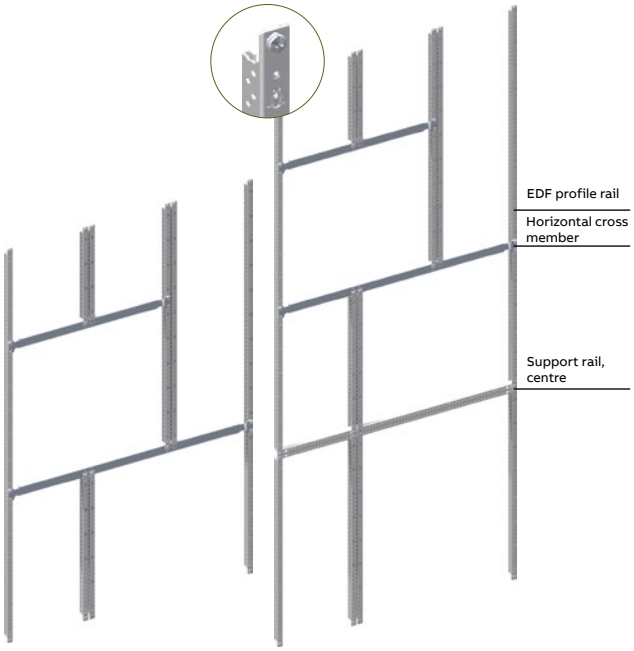


- Using continuous busbars, it is possible to combine different module widths within a single cabinet.
- To assemble size 00 fuse switch disconnectors, the busbars A1 and A2 are equipped with captive nuts
- One connector is required per busbar connection for the cabinet connection
- The busbar connection is realized outside the module
- Busbar connector including captive nuts and fastening material
- Three Cu busbars A1/A2 and C are required per module

Cu busbar	I_n	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
mm	one	PW	mm	Pieces	Type	Ord. no.	Price	Type	Ord. no.	Price
Cu busbar A1, busbars for the TriLine cabinet to cabinet connection to the right or left										
30 x 10	630	1	274	1	ZX2520	2CPX042968R9999		ZXM2520	2CPX043316R9999	
		2	524	1	ZX2521	2CPX042969R9999		ZXM2521	2CPX043317R9999	
		3	774	1	ZX2522	2CPX042970R9999		ZXM2522	2CPX043318R9999	
		4 (2PW+2PW)	1024	1	ZX2523	2CPX042971R9999		ZXM2523	2CPX043319R9999	
		5 (3PW+2PW)	1274	1	ZX2524	2CPX042972R9999		ZXM2524	2CPX043320R9999	
40 x 10	850	1	274	1	ZX2525	2CPX042973R9999		ZXM2525	2CPX043321R9999	
		2	524	1	ZX2526	2CPX042974R9999		ZXM2526	2CPX043322R9999	
		3	774	1	ZX2527	2CPX042975R9999		ZXM2527	2CPX043323R9999	
		4 (2PW+2PW)	1024	1	ZX2528	2CPX042976R9999		ZXM2528	2CPX043324R9999	
		5 (3PW+2PW)	1274	1	ZX2529	2CPX042977R9999		ZXM2529	2CPX043325R9999	
Cu busbar A2, busbars for the cabinet to cabinet connection right and left of TriLine cabinets										
30 x 10	630	1	333	1	ZX2530	2CPX042978R9999		ZXM2530	2CPX043326R9999	
		2	583	1	ZX2531	2CPX042979R9999		ZXM2531	2CPX043327R9999	
		3	833	1	ZX2532	2CPX042980R9999		ZXM2532	2CPX043328R9999	
		4 (2PW+2PW)	1083	1	ZX2533	2CPX042981R9999		ZXM2533	2CPX043329R9999	
		5 (3PW+2PW)	1333	1	ZX2534	2CPX042982R9999		ZXM2534	2CPX043330R9999	
40 x 10	850	1	333	1	ZX2535	2CPX042983R9999		ZXM2535	2CPX043331R9999	
		2	583	1	ZX2536	2CPX042984R9999		ZXM2536	2CPX043332R9999	
		3	833	1	ZX2537	2CPX042985R9999		ZXM2537	2CPX043333R9999	
		4 (2PW+2PW)	1083	1	ZX2538	2CPX042986R9999		ZXM2538	2CPX043334R9999	
		5 (3PW+2PW)	1333	1	ZX2539	2CPX042987R9999		ZXM2539	2CPX043335R9999	
Cu busbar C, connectors for the TriLine cabinet to cabinet connection to the right or left										
30 x 10	630		94	1	ZX2540	2CPX042988R9999		-	-	-
40 x 10	850		94	1	ZX2541	2CPX042989R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N
EDF mounting frame parts



Wall-mounting cabinet **Floor-standing cabinet**

Installation options with variable EDF mounting frame using horizontal cross members
The vertical EDF profile rails are prepared for the installation of modules. A horizontal cross member will be required to connect different panel widths.
The TwinLine wall-mounting cabinets are prepared for an assembly with EDF mounting frame parts. For the TwinLine floor-standing cabinet a center support rail and EDF-adapters are required
(see chapter TwinLine).

EDM9

- Vertical EDF profile
- Incl. fastening screws
- For mounting modules up to 400 A*

	Height			Flatpack Unmounted			Mounted Installed in the cabinet		
Description	**GU**	**mm**	**Pieces**	**Type**	**Ord. no.**	**Price**	**Type**	**Ord. no.**	**Price**
Vertical EDF profile rail	1	150	1	ED7	2CPX041865R9999		EDM7	2CPX041455R9999	
			20	ED7P20	2CPX041866R9999				
	2	300	1	ED8	2CPX039208R9999		EDM8	2CPX041456R9999	
			20	ED8P20	2CPX062311R9999				
	3	450	1	ED9	2CPX039209R9999		EDM9	2CPX041457R9999	
			20	ED9P20	2CPX062312R9999				
	4	600	1	ED10	2CPX039210R9999		EDM10	2CPX041458R9999	
			20	ED10P20	2CPX062313R9999				
	5	750	1	ED11	2CPX039211R9999		EDM11	2CPX041459R9999	
			20	ED11P20	2CPX062314R9999				
	6	900	1	ED12	2CPX039212R9999		EDM12	2CPX041460R9999	
			20	ED12P20	2CPX062315R9999				
	7	1050	1	ED13	2CPX039213R9999		EDM13	2CPX041461R9999	
			20	ED13P20	2CPX062316R9999				
	8	1200	1	ED14	2CPX039214R9999		EDM14	2CPX041462R9999	
			20	ED14P20	2CPX062317R9999				
	9	1350	1	ED15	2CPX039215R9999		EDM15	2CPX041463R9999	
			20	ED15P20	2CPX062318R9999		-	-	-
Vertical EDF profile rail For holding touch guard covers in case of a free installation	12	1800	1	ED18	2CPX039216R9999		-	-	-
			20	ED18P20	2CPX062325R9999		-	-	-
	14	2100	1	ED20	2CPX039218R9999		-	-	-

* The values given refer only to the DIN EN 60439-1 (VDE 0660 500) standard

Subdistribution boards

Modular distribution panel system CombiLine N
EDF mounting frame parts

ED112

- Horizontal cross member for the panel separation to the top **and** bottom
- Incl. fastening screws

	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
Description	**PW**	**mm**	**Pieces**	**Type**	**Ord. no.**	**Price**	**Type**	**Ord. no.**	**Price**
Horizontal cross member	2	500	1	ED112P10	2CPX068572R9999		EDM112	2CPX041464R9999	
	3	750	1	ED113P10	2CPX068573R9999		EDM113	2CPX041465R9999	

ED122

- Horizontal cross member for the panel separation to the top **or** bottom
- Incl. fastening screws

	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
Description	**PW**	**mm**	**Pieces**	**Type**	**Ord. no.**	**Price**	**Type**	**Ord. no.**	**Price**
Horizontal cross member	2	500	1	ED122P10	2CPX042847R9999		EDM122	2CPX042845R9999	
	3	750	1	ED123P10	2CPX042848R9999		EDM123	2CPX042846R9999	

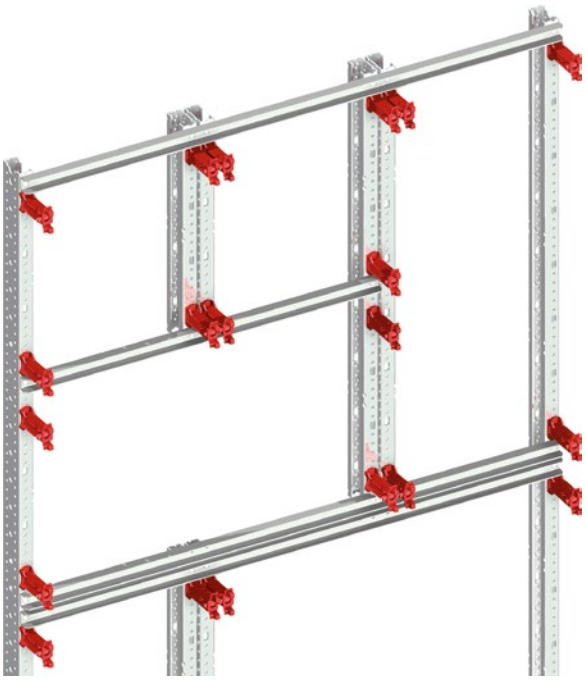
ED403

- EDF profile rails to stabilize DIN rails with each other
- For 3-panel wide modules always included in the scope of delivery

	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
Description	**GU**	**mm**	**Pieces**	**Type**	**Ord. no.**	**Price**	**Type**	**Ord. no.**	**Price**
For rail mounting device modules 125 mm rail spacing	2	152	1	ED402	2CPX042615R9999		-	-	-
	3	276	1	ED403	2CPX042616R9999		-	-	-
	4	401	1	ED404	2CPX042617R9999		-	-	-
	5	527	1	ED405	2CPX042618R9999		-	-	-
For rail mounting device modules 150 mm rail spacing	2	177	1	ED412	2CPX042619R9999		-	-	-
	3	327	1	ED413	2CPX042620R9999		-	-	-
	4	477	1	ED414	2CPX042621R9999		-	-	-
	5	627	1	ED415	2CPX042622R9999		-	-	-

Subdistribution boards

Modular distribution panel system CombiLine N
WR mounting frame parts



Installation options with variable WR mounting frame using horizontal cross members

The vertical WR profile rails are prepared for the installation of modules. A horizontal cross member will be required to connect different panel widths. The WR mounting frame is used for the TwinLine floor-standing cabinet. For an assembly in the TwinLine wall-mounting cabinet, the EDF adapters of the mounting frame holder are removed.

- WR mounting frame, complete
- Vertical WR profile rail with horizontal cross member
- For mounting modules up to 850 A*

WRM281

	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
Description	**PW**	**mm**	**Pieces**	**Type**	**Ord. no.**	**Price**	**Type**	**Ord. no.**	**Price**
WR mounting frame For all floor-standing and switchgear cabinets from depths of 225 mm Height 12 GU, 1800 mm	1	250	1	WR181	2CPX042858R9999		WRM181	2CPX042849R9999	
	2	500	1	WR281	2CPX042859R9999		WRM281	2CPX042850R9999	
	3	750	1	WR381	2CPX042860R9999		WRM381	2CPX042851R9999	
	4	1000	1	WR481	2CPX042861R9999		WRM481	2CPX042852R9999	
WR mounting frame For switchgear cabinets from depths of 325 mm Height 14 GU, 2100 mm	1	250	1	WR1101	2CPX042862R9999		WRM1101	2CPX042853R9999	
	2	500	1	WR2101	2CPX042863R9999		WRM2101	2CPX042854R9999	
	3	750	1	WR3101	2CPX042864R9999		WRM3101	2CPX042855R9999	
	4	1000	1	WR4101	2CPX042865R9999		WRM4101	2CPX042856R9999	

* The values given refer only to the DIN EN 60439-1 (VDE 0660 500) standard

Subdistribution boards

Modular distribution panel system CombiLine N
WR mounting frame parts

ZW213

- Vertical WR profile rail
- To compensate the height when using horizontal cross members

	Height			Flatpack Unmounted			Mounted Installed in the cabinet		
Description	**GU**	**mm**	**Pieces**	**Type**	**Ord. no.**	**Price**	**Type**	**Ord. no.**	**Price**
Vertical WR profile rail	1	150	1	ZW367	2CPX041850R9999		ZWM367	2CPX041432R9999	
	2	300	1	ZW368	2CPX041851R9999		ZWM368	2CPX041433R9999	
	3	450	1	ZW369	2CPX041852R9999		ZWM369	2CPX041434R9999	
	4	600	1	ZW370	2CPX041853R9999		ZWM370	2CPX041435R9999	
	5	750	1	ZW371	2CPX041854R9999		ZWM371	2CPX041436R9999	
	6	900	1	ZW372	2CPX041855R9999		ZWM372	2CPX041437R9999	
	7	1050	1	ZW373	2CPX041856R9999		ZWM373	2CPX041438R9999	
	8	1200	1	ZW374	2CPX041857R9999		ZWM374	2CPX041439R9999	
	9	1350	1	ZW375	2CPX041858R9999		ZWM375	2CPX041440R9999	
	10	1500	1	ZW376	2CPX041859R9999		ZWM376	2CPX041441R9999	
	11	1650	1	ZW377	2CPX041860R9999		ZWM377	2CPX041442R9999	
	12	1800	1	ZW213	2CPX060141R9999		ZWM213	2CPX041430R9999	
			10	ZW213P10	2CPX062641R9999		-	-	-
			300	ZW213P300	2CPX062714R9999		-	-	-
	13	1950	1	ZW378	2CPX041861R9999		ZWM378	2CPX041443R9999	
	14	2100	1	ZW214	2CPX060142R9999		ZWM214	2CPX041431R9999	
			10	ZW214P10	2CPX062642R9999		-	-	-

ZW165

- Horizontal cross member for the panel separation
- Incl. fastening screws
- Two cross members are required when subdividing panels upwards and downwards

	Width			Flatpack Unmounted			Mounted Installed in the cabinet		
Description	**PW**	**mm**	**Pieces**	**Type**	**Ord. no.**	**Price**	**Type**	**Ord. no.**	**Price**
Horizontal cross member	1	250	1	ZW164	2CPX042866R9999		ZWM164	2CPX042857R9999	
			10	ZW164P10	2CPX062710R9999				
	2	500	1	ZW165	2CPX041862R9999		ZWM165	2CPX041444R9999	
			10	ZW165P10	2CPX062711R9999				
	3	750	1	ZW166	2CPX041863R9999		ZWM166	2CPX041445R9999	
			10	ZW166P10	2CPX062712R9999				
	4	1000	1	ZW167	2CPX041864R9999		ZWM167	2CPX041446R9999	
			10	ZW167P10	2CPX062713R9999				

ZW209

- As horizontal cross member in the WR mounting frame

Horizontal WR cross member	1	186	1	ZW209	2CPX039207R9999		ZWM209	2CPX042097R9999	
	2	436	1	ZW210	2CPX060138R9999		ZWM210	2CPX042098R9999	
	3	686	1	ZW211	2CPX060139R9999		ZWM211	2CPX042099R9999	
	4	936	1	ZW212	2CPX060140R9999		ZWM212	2CPX042100R9999	

Subdistribution boards

Modular distribution panel system CombiLine N

Plastic partitions

ZX69

Article	Height GU	Height OH	Pieces	Order details Type	Order details Order code	Price
Partitions vertical, plastic Not arc-resistant, sheathing against the next module, distribution board panel, meter panel; partition is inserted into the cover holder of the next module. Colour similar to RAL 7035.	3	00	1	ZX69	2CPX039069R9999	
	4	0	1	ZX70	2CPX039070R9999	
	5	1	1	ZX71	2CPX039071R9999	
	6	2	1	ZX72	2CPX039072R9999	
	7	3	1	ZX73	2CPX039073R9999	
	8	4	1	ZX74	2CPX039074R9999	
	9	5	1	ZX75	2CPX039075R9999	

ZX86

Article	Width PW	Width mm	Pieces	Order details Type	Order details Order code	Price
Horizontal partitions, plastic Not arc-resistant, sheathing against the next module, distribution board panel, meter panel; partition is inserted into the cover holder of the next module. Colour similar to RAL 7035.	1	250	1	ZX86	2CPX039086R9999	
	2	500	1	ZX87	2CPX039087R9999	

Subdistribution boards

Modular distribution panel system CombiLine N

Sheet steel partitions

ZX820

Article	Height GU	Height OH	Pieces	Order details Type	Order details Order code	Price
For TwinLine-G cabinets						
Vertical partitions, sheet steel Not arc-resistant, sheathing against the next module, distribution board panel, meter panel; partition is riveted to the WR/EDF profile; the partition is prepared for the fixing position 0* .	3	00	1	ZX810	2CPX010675R9999	
	4	0	1	ZX811	2CPX010676R9999	
	5	1	1	ZX812	2CPX010677R9999	
	6	2	1	ZX813	2CPX010678R9999	
	7	3	1	ZX814	2CPX010679R9999	
	8	4	1	ZX815	2CPX010680R9999	
	9	5	1	ZX816	2CPX010681R9999	
	12	8	1	ZX817	2CPX010682R9999	
For TwinLine-L cabinets						
Vertical partitions, sheet steel Not arc-resistant, sheathing against the next module, distribution board panel, meter panel; partition is riveted to the WR/EDF profile; the partition is prepared for the fixing position 0* .	3	00	1	ZX820	2CPX010683R9999	
	4	0	1	ZX821	2CPX010684R9999	
	5	1	1	ZX822	2CPX010685R9999	
	6	2	1	ZX823	2CPX010686R9999	
	7	3	1	ZX824	2CPX010687R9999	
	8	4	1	ZX825	2CPX010688R9999	
	9	5	1	ZX826	2CPX010689R9999	
	12	8	1	ZX827	2CPX010690R9999	
For TwinLine-W cabinets						
Vertical partitions, sheet steel Not arc-resistant, sheathing against the next module, distribution board panel, meter panel; partition is riveted to the WR/EDF profile; the partition is prepared for the fixing position 0* .	3	00	1	ZX830	2CPX010691R9999	
	4	0	1	ZX831	2CPX010692R9999	
	5	1	1	ZX832	2CPX010693R9999	
	6	2	1	ZX833	2CPX010694R9999	
	7	3	1	ZX834	2CPX010695R9999	
	8	4	1	ZX835	2CPX010696R9999	
	9	5	1	ZX836	2CPX010697R9999	
	12	8	1	ZX837	2CPX010698R9999	

ZX840

Article	Width PW	Width mm	Pieces	Order details Type	Order details Order code	Price
For TwinLine-G, TwinLine-L and TwinLine-W-cabinets						
Horizontal partitions, sheet steel Not arc-resistant, sheathing against the next module, distribution board panel, meter panel; Using an additional holder rail, the partition is screwed onto the WR/EDF profile; the partition is prepared for the fixing position 0*	1	250	1	ZX840	2CPX010699R9999	
	2	500	1	ZX841	2CPX010700R9999	
	3	750	1	ZX842	2CPX010701R9999	

* See cross sections in the Technical Specifications, chapter TwinLine

Subdistribution boards

Modular distribution panel system CombiLine N

Sheet steel partitions for EDF mounting frame

ZX469

Article	Height GU	Height OH	Pieces	Order details Type	Order details Order code	Price
For U, A, B and HS cabinets						
Vertical partitions, sheet steel Not arc-resistant, sheathing against the next module, distribution board panel, meter panel Partition is riveted to the EDF mounting frame	3	00	1	ZX469	2CPX039541R9999	
	4	0	1	ZX470	2CPX039542R9999	
	5	1	1	ZX471	2CPX039543R9999	
	6	2	1	ZX472	2CPX039544R9999	
	7	3	1	ZX473	2CPX039545R9999	
	8	4	1	ZX474	2CPX039546R9999	
	9	5	1	ZX475	2CPX039547R9999	
For H cabinets						
Vertical partitions, sheet steel Not arc-resistant, sheathing against the next module, distribution board panel against distribution board panel Partition is riveted to the EDF mounting frame	3	00	1	ZX479	2CPX039549R9999	
	4	0	1	ZX480	2CPX039550R9999	
	5	1	1	ZX481	2CPX039551R9999	
	6	2	1	ZX482	2CPX039552R9999	
	7	3	1	ZX483	2CPX039553R9999	
	8	4	1	ZX484	2CPX039554R9999	
	9	5	1	ZX485	2CPX039555R9999	

ZX502

Article	Width PW	Width mm	Pieces	Order details Type	Order details Order code	Price
For U, A, B, HS And FS cabinets						
Horizontal sheet steel partitions Not arc-resistant, when used together with the EDF mounting frame, it is inserted between the cover holders	1	250	1	ZX502	2CPX039567R9999	
	2	500	1	ZX503	2CPX039568R9999	
For H cabinets						
Horizontal sheet steel partitions Not arc-resistant, when used together with the EDF mounting frame, it is inserted between the cover holders	1	250	1	ZX497	2CPX039563R9999	
	2	500	1	ZX498	2CPX039564R9999	

Subdistribution boards

Modular distribution panel system CombiLine N

Sheet steel partitions for WR mounting frame

RZ151

Article	Height GU	Height OH	Depth mm	Pieces	Order details Type	Order details Order code	Price
For TriLine® cabinets							
Vertical partitions, sheet steel Not arc-resistant, WR mounting frame against WR mounting frame Partition is riveted to the WR mounting frame	12	8	425	1	RZ151	2CPX046561R9999	
	14	10	425	1	RZ155	2CPX046565R9999	
	12	8	625	1	RZ152	2CPX046562R9999	
	14	10	625	1	RZ156	2CPX046566R9999	

RZ161

Article	Width PW	Width mm	Depth mm	Pieces	Order details Type	Order details Order code	Price
For C series cabinets							
Horizontal sheet steel partitions Not arc-resistant with additional fastening profile for an assembly to the WR mounting frame	1	250	425	1	RZ161	2CPX046571R9999	
	2	500	425	1	RZ162	2CPX046572R9999	
	3	750	425	1	RZ163	2CPX046573R9999	
	1	250	625	1	RZ164	2CPX046574R9999	
	2	500	625	1	RZ165	2CPX046575R9999	
	3	750	625	1	RZ166	2CPX046576R9999	

Subdistribution boards

Modular distribution panel system CombiLine N

General accessories

ZX66P4

ED44P10

ED45P10

ED59P10

ED42P10

ED43P10

ED47

ZA1P5

ZA122

Article	Pieces	Order details		Price
		Type	Order code	
Device support connector For the connection of EDF and WR mounting frames	4	ZX66P4	2CPX062562R9999	
	50	ZX66P50	2CPX068614R9999	
Wire holder For routing of wires, installation depth 28.5 mm, to be inserted into the DIN rail from the rear.	10	ED44P10	2CPX062335R9999	
	50	ED44P50	2CPX062308R9999	
	1000	ED44P1000	2CPX062703R9999	
Wire holder For routing of wires or for holding a plastic tube Ø 38 mm, installation depth 55 mm, to be inserted into the DIN rail from the rear	10	ED45P10	2CPX062336R9999	
	50	ED45P50	2CPX062310R9999	
	1000	ED45P1000	2CPX062704R9999	
DIN rail adapter For ED44 or ED45. Snap onto the DIN rail from the front	10	ED59P10	2CPX062339R9999	
Console for wire holder ED44 or ED45 To be inserted into the DIN rail from the rear.	10	ED42P10	2CPX062333R9999	
Console for wire holder ED44 or ED45 Snap onto the DIN rail from the front.	10	ED43P10	2CPX062334R9999	
Cover For visual screening of wiring routed in the wire holders ED44 and ED45, 1 m long.	1	ED47	2CPX039309R9999	
Slot covers For 12 space units, break-off type, colour RAL 7035	5	ZA1P5	2CPX062384R9999	
	50	ZA1P50	2CPX062378R9999	
By the metre Colour RAL 7035	1	ZA2	2CPX038231R9999	
	20	ZA2P20	2CPX062379R9999	
Cleaner for covers Spray dispenser, 500 ml	1	ZA122	2CPX038293R9999	

Subdistribution boards

Modular distribution panel system CombiLine N

General accessories

ZA8

Article	Pieces	Order details		Price
		Type	Order code	
Labelling strips				
20 mm, self-adhesive, 1 panel wide	1	ZA8	2CPX060200R9999	
	5	ZA8P5	2CPX062598R9999	
	40	ZA8P40		
20 mm, self-adhesive, 2 panel wide	1	ZA9	2CPX060201R9999	
	5	ZA9P5	2CPX062599R9999	
	50	ZA9P50		
20 mm, self-adhesive, 3 panel wide	1	ZA7	2CPX060004R9999	
	5	ZA7P5	2CPX062597R9999	
20 mm, self-adhesive, by the metre	1	ZA10	2CPX038241R9999	
	10	ZA10P10	2CPX062706R9999	
20 mm, self-adhesive with additional transparent film, by the metre	1	ZA11	2CPX038230R9999	
	10	ZA11P10	2CPX062707R9999	
16 mm, self-adhesive, by the metre	1	ZA12	2CPX038242R9999	
	10	ZA12P10	2CPX062708R9999	

ZA71

Labelling system for busbars L1, L2, L3, N, PE, 1 sheet = 120 different stickers	1	ZA71	2CPX038458R9999	

ZA27

Labelling system Self-adhesive, for labelling by hand or by machine, consisting of: 1 sheet with 10 strips	1	ZA27	2CPX038495R9999	

ZA73

Labelling system For distribution board panels up to 6 GU	1	ZA73	2CPX038497R9999	

ZA74

Labelling system For distribution board panels up to 9 GU	1	ZA74	2CPX038498R9999	

ZA78

Labelling system For 8 x 12 SU	1	ZA78	2CPX031569R9999	

ZA79

Legend for 72 devices SU	1	ZA79	2CPX031570R9999	

Subdistribution boards

Modular distribution panel system CombiLine N
Connection terminals for Cu busbars

ZK79

ZK81

ZK150

ZK178

ZK87

ZK157

ZK154

ZK156

ZK83

ZK152

ZK891P4

ZK86

ZK302

ZK75

Article	Cu busbars Dimensions in mm	Connection Cross section in mm²	Pieces	Order details Type	Order code	Price
Connection terminals To snap onto Cu busbars with holding spring	5	1.5 - 16	1	ZK79	2CPX064879R9999	
			4	ZK79P4	2CPX062421R9999	
			5	ZK79P5	2CPX062631R9999	
			50	ZK79P50	2CPX062429R9999	
	5	4 - 35	1	ZK81	2CPX064881R9999	
			4	ZK81P4	2CPX062422R9999	
			5	ZK81P5	2CPX062632R9999	
			50	ZK81P50	2CPX062431R9999	
	5	2.5 - 50	1	ZK150	2CPX064860R9999	
			4	ZK150P4	2CPX062427R9999	
			5	ZK150P5	2CPX062633R9999	
			50	ZK150P50	2CPX062432R9999	
	5	16 - 70	1	ZK178	2CPX064978R9999	
			50	ZK178P50	2CPX062622R9999	
	5	16 - 120	1	ZK157	2CPX064867R9999	
			50	ZK157P50	2CPX062437R9999	
	10	1.5 - 16	1	ZK87	2CPX064887R9999	
			4	ZK87P4	2CPX062424R9999	
			50	ZK87P50	2CPX062430R9999	
	10	16 - 70	1	ZK156	2CPX064866R9999	
			50	ZK156P50	2CPX062438R9999	
	10	16 - 120	1	ZK154	2CPX064864R9999	
			50	ZK154P50	2CPX062435R9999	
Connection terminals with insertion element For an assembly from the front	12 x 5	16 - 95	1	ZK83	2CPX064883R9999	
	12 x 10	16 - 70	4	ZK83P4	2CPX062423R9999	
			5	ZK83P5	2CPX062655R9999	
			50	ZK83P50	2CPX062433R9999	
	30 x 5 30 x 10	50 - 120 50 - 120	1	ZK152	2CPX064862R9999	
			20	ZK152P20	2CPX062444R9999	
Frame terminals to be slid onto the Cu busbars	12 x 5 12 x 10	16 - 150 16 - 150	4	ZK891P4	2CPX062626R9999	
	12 x 5 12 x 10	35 - 185 35 - 120	1	ZK86	2CPX064886R9999	
			20	ZK86P20	2CPX062434R9999	
On bar terminal For an assembly to the Cu busbar	5 / 10	10 - 95	1	ZK302	2CPX062645R9999	
			20	ZK302P20	2CPX062648R9999	
	5 / 10	16 - 150	1	ZK303	2CPX062646R9999	
			20	ZK303P20	2CPX062649R9999	
	5 / 10	35 - 240	1	ZK304	2CPX062647R9999	
			20	ZK304P20	2CPX062650R9999	
Phase busbar connection terminal for the connection with insulator cap		25	1	ZK75	2CPX038220R9999	

> For the technical specifications of connection terminals, see Chapter Busbar systems

Subdistribution boards

Distribution panel system – System parts

DIN rails and accessories

ED1

ED51

ZX21

ZX371

ZK90P2

ZX372P2

Article	To be used for...	Pieces	Order details Type	Order code	Price
DIN rail 35 x 15 mm Width rail 1; for the assembly to the mounting frame For EDF and WR mounting frame, with special hole grid pattern for wire holder ED44/ED45					
1 panel wide, length 244 mm	M(B)K...12 / M(B)G1... M(B)G41.../ M(B)A160ALA	1	ED1	2CPX039381R9999	
		30	ED1P30	2CPX062319R9999	
2 panel wide, length 494 mm	M(B)U270 M(B)G2... / M(B)G42...	1	ED2	2CPX039382R9999	
		30	ED2P30	2CPX062320R9999	
3 panel wide, length 744 mm	M(B)U370 M(B)G3... / M(B)G43...	1	ED3	2CPX039383R9999	
		30	ED3P30	2CPX062321R9999	
4 panel wide, length 994 mm	–	1	ED4	2CPX039384R9999	
		30	ED4P30		
By the metre, length 2000 mm	_	1	ED6	2CPX039386R9999	
		10	ED6P10	2CPX062705R9999	
DIN rail 35 x 15 mm Width rail 2; for the assembly between the mounting frame					
1 panel wide, length 188 mm	M(B)V1.../ M(B)K1... M(B)N1...	1	ED51	2CPX039251R9999	
		30	ED51P30	2CPX062322R9999	
2 panel wide, length 438 mm	M(B)V2.../ M(B)K2... M(B)K...13 / M(B)C2...HS M(B)N2...	1	ED52	2CPX039252R9999	
		30	ED52P30	2CPX062323R9999	
3 panel wide, length 688 mm	M(B)K3... M(B)C3..HS / M(B)N3...	1	ED53	2CPX039253R9999	
		30	ED53P30	2CPX062324R9999	
4 panel wide, length 938 mm	-	1	ED54	2CPX039254R9999	
DiN rail 35 x 15 mm For terminal modules, vertical, length 591 mm, module height 600 mm/4 GU	M(B)K...14	1	ED74	2CPX042185R9999	
DIN rail 35 x 7.5 mm For the assembly to the mounting frame					
1 panel wide, length 244 mm	M(B)K1...K	1	ZX21	2CPX039021R9999	
		30	ZX21P30	2CPX062554R9999	
2 panel wide, length 494 mm	M(B)K2...K	1	ZX22	2CPX039022R9999	
		30	ZX22P30	2CPX062555R9999	
DIN rail 35 x 7.5 mm For the assembly between the mounting frame					
1 panel wide, length 188 mm	M(B)K1...K	1	ZX371	2CPX068076R9999	
2 panel wide, length 438 mm	-	1	ZX389	2CPX068190R9999	
Insulator For DIN rails 35 x 7.5 mm and 35 x 15 mm with fastening material	M(B)K...K	2	ZK90P2	2CPX062426R9999	
		100	ZK90P100	2CPX068613R9999	
Mounting bracket For ZK90P2	M(B)K1...K	2	ZX372P2	2CPX062544R9999	

Schematic diagram of the width rail for the EDF or WR mounting frame

Width rail 1
for the assembly to the mounting frame

Width rail 2
For the assembly between the mounting frame

Subdistribution boards

Distribution panel system – System parts

Width rails for the EDF or WR mounting frame

ZW223

ZW228

ZW233

ZW248

ZK143

Article	Pieces	Order details		Price
		Type	Order code	
Aluminium profile, profile no. 1 25 x 14 mm, fastening hole Ø 6.2 mm				
Width rail 1; assembly to the mounting frame				
1 panel wide, length 244 mm	1	ZW11	2CPX039411R9999	
2 panel wide, length 494 mm	1	ZW12	2CPX039412R9999	
3 panel wide, length 744 mm	1	ZW13	2CPX039413R9999	
4 panel wide, length 994 mm	1	ZW14	2CPX039414R9999	
Width rail 2; assembly between the mounting frame				
1 panel wide, length 186 mm	1	ZW223	2CPX060323R9999	
2 panel wide, length 436 mm	1	ZW224	2CPX060324R9999	
3 panel wide, length 686 mm	1	ZW225	2CPX060325R9999	
Aluminium profile, profile no. 2 25 x 20 mm, fastening hole Ø 6.2 mm				
Width rail 1; assembly to the mounting frame				
3 panel wide, length 744 mm	1	ZW216	2CPX060144R9999	
4 panel wide, length 994 mm	1	ZW217	2CPX060145R9999	
Width rail 2; assembly between the mounting frame				
1 panel wide, length 186 mm	1	ZW228	2CPX060328R9999	
2 panel wide, length 436 mm	1	ZW229	2CPX060329R9999	
3 panel wide, length 686 mm	1	ZW230	2CPX060330R9999	
4 panel wide, length 936 mm	1	ZW231	2CPX060331R9999	
Aluminium profile, profile no. 3 32 x 25 mm, fastening hole Ø 8.2 mm				
Width rail 1; assembly to the mounting frame				
1 panel wide, length 244 mm	1	ZW16	2CPX039416R9999	
2 panel wide, length 494 mm	1	ZW17	2CPX039417R9999	
3 panel wide, length 744 mm	1	ZW18	2CPX039418R9999	
4 panel wide, length 994 mm	1	ZW19	2CPX039419R9999	
Width rail 2; assembly between the mounting frame				
1 panel wide, length 186 mm	1	ZW233	2CPX060333R9999	
2 panel wide, length 436 mm	1	ZW234	2CPX060334R9999	
3 panel wide, length 686 mm	1	ZW235	2CPX060335R9999	
4 panel wide, length 936 mm	1	ZW236	2CPX060336R9999	
Cable fastening rail, profile no. 10 35 x 19 mm, galvanised sheet steel, fastening hole Ø 6.2 mm				
Width rail 1; assembly to the mounting frame				
1 panel wide, length 244 mm	1	ZW219	2CPX060198R9999	
2 panel wide, length 494 mm	1	ZW220	2CPX060146R9999	
3 panel wide, length 744 mm	1	ZW221	2CPX060147R9999	
4 panel wide, length 994 mm	1	ZW222	2CPX060148R9999	
Width rail 2; assembly between the mounting frame				
1 panel wide, length 186 mm	1	ZW248	2CPX060199R9999	
2 panel wide, length 436 mm	1	ZW249	2CPX060349R9999	
3 panel wide, length 686 mm	1	ZW250	2CPX060350R9999	
4 panel wide, length 936 mm	1	ZW251	2CPX060351R9999	
Cable fastening clamp for cable fastening rail, no. 10				
From 22 to 28 mm	10	ZK143P10	2CPX062728R9999	
From 40 to 46 mm	10	ZK144P10	2CPX062729R9999	
From 64 to 70 mm	10	ZK145P10	2CPX062730R9999	

Subdistribution boards

Distribution panel system – System parts

Profile rails and mounting brackets

ZW395

ZW396

ZX343

ZX334

ZW480

ZW481

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Cross member 3 panel wide* Busbar holder fixed position	M(B)T350(B) / M(B)T351(B) M(B)H350(B) / M(B)H351(B) M(B)R302(B)	1	ZW395	2CPX041136R9999	
Cross member 3 panel wide* Busbar holder position may be changed if necessary	M(B)R303 M(B)S324 M(B)S327	1	ZW396	2CPX041137R9999	
Mounting bracket					
For the busbar modules S700 and S750 For the EDF and WR mounting frame	M(B)H...50	1	ZX343	2CPX064152R9999	
For cable connection modules To lower DIN rails For the EDF and WR mounting frame	M(B)V...80 M(B)V...81	1	ZX334	2CPX064166R9999	
Adjustable Mounting bracket For the busbar module devices 100mm 3 level adjustment for the EDF and WR mounting frame	M(B)D...52(B)	1 4	ZW480 ZW480P4	2CPX042239R9999 2CPX042198R9999	
For the busbar module devices 185mm 2 level adjustment for WR mounting frame	M(B)D...21-300(B)	1 4	ZW481 ZW481P4	2CPX042195R9999 2CPX042197R9999	

Subdistribution boards

Distribution panel system – System parts

Profile rails and mounting brackets

ZW482

ZX321LR

ZW389LR

ZX342

ZW349

ZW64

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Cover bracket for modules of INLINE II with EFM module with devices 185mm for WR mounting frame	M(B)D...21-300(B)	2	ZW482	2CPX042196R9999	
For the busbar module 45° inclined For the EDF and WR mounting frame	M(B)S...28	1	ZX321LR	2CPX064160R9999	
For the busbar modules 40/60 mm When using ZB5/ZX151 For the WR mounting frame	M(B)S...24 M(B)S...27	1	ZW389LR	2CPX062635R9999	
For the busbar holder ZX520 For the WR mounting frame	-	1	ZX342	2CPX062661R9999	
For the busbar module device 185 mm For the WR mounting frame	ML100 - ML300 ML218 - ML33B	1	ZW349	2CPX067951R9999	
		10	ZW349P10	2CPX062485R9999	
For fastening horizontal profiles to the WR frame with fastening material	WR...8 WR...10	1	ZW64	2CPX039464R9999	
		40	ZW64P40	2CPX062475R9999	

Subdistribution boards

Distribution panel system – System parts

Deep-mounting bracket for the EDF and WR mounting frame

ZW39P2

ZW59P2

ZW79P2

ZW259P2

ED33P2

ZW60P2

ZW142P2

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Deep-mounting bracket*, adjustable range 42 mm The installation depth between the deep-mounting bracket and the cover is 83-125 mm*2 For the EDF and WR profile Stepless assembly ⧈⏚	M(B)K106 to M(B)K310 M(B)K112 to M(B)U314	2	ZW39P2	2CPX062681R9999	
		100	ZW39P100	2CPX062715R9999	
Deep-mounting bracket*, adjustable range 71 mm The installation depth between the deep-mounting bracket and the cover is 106-153 mm*2 For the EDF and WR profile Stepless assembly ⧈⏚	M(B)K107 to M(B)K310 M(B)M111 to M(B)M315 M(B)F183 to M(B)F383	2	ZW59P2	2CPX062660R9999	
		100	ZW59P100	2CPX062716R9999	
Deep-mounting bracket*, adjustable range 107 mm The installation depth between the deep-mounting bracket and the cover is 142-190 mm*2 For the EDF and WR profile Stepless assembly ⧈⏚	M(B)F184 to M(B)F384	2	ZW79P2	2CPX062688R9999	
		100	ZW79P100	2CPX062717R9999	
Deep-mounting bracket*, adjustable range 64 mm The installation depth between the deep-mounting bracket and the cover is 99-147 mm*2 For connecting Cu busbars For the EDF and WR profile Stepless assembly ⧈⏚	M(B)T250 to M(B)T351	2	ZW259P2	2CPX062679R9999	
Deep-mounting bracket, adjustable range 62 mm The installation depth between the deep-mounting bracket and the cover is 77-139 mm*2 For the EDF profile Stepless assembly ⏚	Distribution board panels with mounting plate	2	ED33P2	2CPX062305R9999	
		100	ED33P100	2CPX062307R9999	
Deep-mounting bracket, adjustable range 60 mm The installation depth between the deep-mounting bracket and the cover is 119-179 mm*2 For the WR profile For depth adjustment in 15 mm steps ⏚	Free extension	2	ZW60P2	2CPX062454R9999	
		100	ZW60P100	2CPX062476R9999	
Deep-mounting bracket, adjustable range 88 mm The installation depth between the deep-mounting bracket and the cover is 128-216 mm*2 For the WR profile Stepless assembly ⏚	M(B)L100 up to M(B)L300 M(B)S131 up to M(B)S331	2	ZW142P2	2CPX062463R9999	
		40	ZW142P40	2CPX062477R9999	

*2 When using cover holder ED138 with a hight of 52.5 mm

Subdistribution boards

Mounting cross members for busbar modules / universal application

ZW253

ZW252

ZW255

ZW256

ZW399

ZW384

ZW403LR

ZX322

ZX333

ZW386

ZW390P2

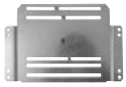
ZW322

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Mounting cross members for busbar modules					
For busbar modules Devices 40 mm	M(B)T350 / M(B)T351	1	ZW253	2CPX062680R9999	
For the busbar module 60 mm For the busbar holders ZX151 as additional support	M(B)S327	1	ZW252	2CPX062664R9999	
For the busbar module device 60 mm For the busbar holders ZX146 as additional support	M(B)R302(B)	1	ZW255	2CPX064151R9999	
For the busbar module device 60 mm For the busbar holders ZX146 as additional support	M(B)R303(B)	1	ZW256	2CPX062678R9999	
For the busbar module device 60 mm For the busbar holder ZX146 For the EDF and WR mounting frame	M(B)R...H	1	ZW399	2CPX062972R9999	
For the busbar modules 40/60 mm For busbar holder type ZX151 For the EDF mounting frame	M(B)S...24 M(B)S...27	1	ZW384	2CPX062748R9999	
For the busbar module device 60 mm For the busbar holder ZX146, recessed, For the WR mounting frame	M(B)R...03	1	ZW403LR	2CPX062974R9999	
Mounting cross members For the busbar holder ZX518					
For the busbar module 45° inclined 1 panel wide	M(B)S128	1	ZX322	2CPX064159R9999	
For the busbar module 45° inclined 2 panel wide	M(B)S228	1	ZX333	2CPX064163R9999	
For the N/PE busbar module For the busbar holder engaged	M(B)N...69	1	ZW386	2CPX062749R9999	
For the N/PE busbar module For additional support	M(B)N274, M(B)N275 M(B)N374, M(B)N375	2	ZW390P2	2CPX062486R9999	
Mounting cross member For terminal modules					
195 mm	M(B)K112-114	1	ZW322		
435 mm	M(B)K212-214	1	ZW323		
685 mm	M(B)K312-314	1	ZW324		

Subdistribution boards

Distribution panel system – System parts

Mounting cross members for MCCBs and switch disconnectors



ED160

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Mounting cross members MCCB Make: ABB, series: Tmax T, Tmax XT including sliding nuts M4					
1 panel wide Tmax T1/XT1, Tmax T2, Tmax T3/XT3 Usable width 199 mm	MA100ALSB - MA250ALSB M(B)A190T	1	ED160	2CPX068773R9999	
2 panel wide Tmax T1/XT1,Tmax T2, Tmax T3/XT3 Usable width 449 mm	M(B)A290T	1	ED260	2CPX062977R9999	
3 panel wide Tmax T1/XT1, Tmax T2, Tmax T3/XT3 Usable width 699 mm	M(B)A390T	1	ED360	2CPX062978R9999	
1 panel wide Tmax XT2 Usable width 199 mm	M(B)A191T	1	ED170	2CPX068388R9999	
2 panel wide Tmax XT2 Usable width 449 mm	M(B)A291T	1	ED270	2CPX068390R9999	
3 panel wide Tmax XT2 Usable width 699 mm	M(B)A391T	1	ED370	2CPX068391R9999	
1 panel wide Tmax XT4 Usable width 199 mm	M(B)A193T	1	ED171	2CPX068389R9999	

ED166

1 panel wide Tmax T4, 3 pole	M(B)A192T	1	ED166	2CPX064155R9999	

ED167

2 panel wide Tmax T4, 4 pole, Tmax T5, 3 and 4 pole	M(B)A292T	1	ED167	2CPX064156R9999	
Mounting cross member for switch disconnector					
1 panel wide For OT200E03P and OT250E03P	MA200ALAB - MA250ALAB MA250ALA	1	ED162	2CPX068807R9999	

ED162

ED163

2 panel wide For OT400E03P and OT630E03P	MA400ALAB - MA630ALAB MA630ALA	1	ED163	2CPX068808R9999	
Universal mounting cross member with Fastening screws and captive nuts M4, M5, M6 (2 pcs. are required per switch) Usable width/depth					
For switch up to 250 A, 1 panel wide 170 mm/135 mm	M(B)A250A	1	ED155	2CPX067963R9999	
For switch up to 630 A, 2 panel wide 420 mm/153 mm	M(B)A630A MA400ALSB - MA630ALSB	1	ED158	2CPX067969R9999	
For switch up to 800 A, 2 panel wide 420 mm/161 mm	M(B)A800A	1	ED173	2CPX067998R9999	

ED155

ED173

Subdistribution boards

Distribution panel system – System parts

Mounting cross member for disconnectors

ZX31

ZX34

ZW162

ZH235

ZH238

ZW159

ZW160

ZH418

ZX35

ZX297P10

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Mounting cross member for disconnectors With fastening screws and captive nuts for:					
1/2 disconnector size 00 1 panel wide	M(B)T135(B) M(B)T136(B) M(B)T137(B)	1	ZX31	2CPX039031R9999	
		10	ZX31P10	2CPX062480R9999	
4 disconnectors size 00 2 panel wide	M(B)T236(B) M(B)T237(B)	1	ZX34	2CPX039034R9999	
		10	ZX34P10	2CPX062481R9999	
6 disconnectors size 00 3 panel wide	M(B)T336(B) M(B)T337(B)	1	ZW162	2CPX039458R9999	
1 disconnector size 1 1 panel wide	M(B)T142(B) M(B)T143(B)	1	ZH235	2CPX039841R9999	
1 disconnector size 2 1 panel wide	M(B)T144(B) M(B)T145(B)	1	ZH238	2CPX039837R9999	
2 disconnectors size 1 or size 2 2 panel wide	M(B)T242(B) M(B)T243(B) M(B)T244(B) M(B)T245(B)	1	ZW159	2CPX039455R9999	
3 disconnectors size 1 or size 2 3 panel wide	M(B)T345(B) M(B)T343(B) M(B)T344(B) M(B)T345(B)	1	ZW160	2CPX039456R9999	
Mounting cross member for disconnectors For size 00 disconnectors for an assembly to the DIN rail	-	1	ZH418	2CPX062968R9999	
Mounting cross member for telecommunication devices Without fastening screws or captive nuts	1MK...A	1	ZX35	2CPX060638R9999	
Captive nuts For cross members and telecommunication devices					
M4	ED160 - ED360 ED170 - ED370 ED171 / ZX35	10	ZX299P10	2CPX060639R9999	
M6	ZX31 / ZX34 / ZW162	10	ZX297P10	2CPX062541R9999	
M8	ZH235 / ZH238 ZW159 / ZW160	10	ZX298P10	2CPX062542R9999	

Subdistribution boards

Distribution panel system – System parts

Mounting plates for recessed and top fitted assemblies

ZW365

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Mounting plates for the assembly between the mounting frame For recessed mounting with deep-mounting bracket H x W					
1 panel wide					
1 GU, 116 x 188 mm	M(B)M111	1	ZW365	2CPX068073R9999	
2 GU, 266 x 188 mm	M(B)M112	1	ZW338	2CPX067938R9999	
3 GU, 416 x 188 mm	M(B)M113	1	ZW341	2CPX067941R9999	
4 GU, 566 x 188 mm	M(B)M114	1	ZW344	2CPX067944R9999	
5 GU, 716 x 188 mm	M(B)M115	1	ZW362	2CPX068070R9999	
2 panel wide					
1 GU, 116 x 438 mm	M(B)M211	1	ZW336	2CPX067936R9999	
2 GU, 266 x 438 mm	M(B)M212	1	ZW339	2CPX067939R9999	
3 GU,416 x 438 mm	M(B)M213	1	ZW342	2CPX067942R9999	
4 GU, 566 x 438 mm	M(B)M214	1	ZW345	2CPX067945R9999	
5 GU, 716 x 438 mm	M(B)M215	1	ZW363	2CPX068071R9999	
3 panel wide					
1 GU, 116 x 688 mm	M(B)M311	1	ZW337	2CPX067937R9999	
2 GU, 266 x 688 mm	M(B)M312	1	ZW340	2CPX067940R9999	
3 GU, 416 x 688 mm	M(B)M313	1	ZW343	2CPX067943R9999	
4 GU, 566 x 688 mm	M(B)M314	1	ZW346	2CPX067946R9999	
5 GU, 716 x 688 mm	M(B)M315	1	ZW364	2CPX068072R9999	

ZX605

Mounting plates **For the assembly to the mounting frame** For top fitted assemblies in compact distribution boards without deep-mounting bracket					
1 panel wide 2 GU, 266 x 200 mm	M(B)M112K	1	ZX605	2CPX067776R9999	
1 panel wide 3 GU, 416 x 200 mm	M(B)M113K	1	ZX606	2CPX067777R9999	
1 panel wide 4 GU, 566 x 200 mm	M(B)M114K	1	ZX607	2CPX064154R9999	

Subdistribution boards

Distribution panel system – System parts

Mounting frame/meter plates/switchgear cabinet lighting

ZX382

ZX381

ZX379

ZX380

ZX390

ZX24

ZX304

ZX305

ZX574

ZX378P20

ZE220

ZE221

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Mounting frame for measurement instruments 96 x 96 mm					
1 panel wide	M(B)U156	1	ZX382	2CPX068186R9999	
	M(B)U157 M(B)U158	1	ZX381	2CPX068086R9999	
2 panel wide	M(B)U257	1	ZX379	2CPX068084R9999	
3 panel wide	M(B)U357	1	ZX380	2CPX068085R9999	
Mounting frame for switch disconnectors make ABB SlimLine					
2 panel wide	M(B)L25	1	ZX390	2CPX068560R9999	
3 panel wide	M(B)L35	1	ZX391	2CPX068561R9999	
Cable protection sleeve					
Set M 20	M(B)V180	1	ZX24	2CPX068538R9999	
Set M 32	M(B)V181, M(B)V281	1	ZX25	2CPX068539R9999	
Set M 40	M(B)V182, M(B)V282	1	ZX26	2CPX068540R9999	
Meter plates for WR profile					
1 panel wide, height 450 mm, For one meter, without top part	M(B)Z160	1	ZX304	2CPX060294R9999	
1 panel wide, height 750 mm, For two meters, without top part	M(B)Z161	1	ZX305	2CPX060295R9999	
Top part for meter plates incl. fastening material 1 panel	M(B)Z160 M(B)Z161	1	ZX574	2CPX068781R9999	
Spacer for meter plate	M(B)Z160 M(B)Z161	20	ZX378P20	2CPX062547R9999	
Switchgear cabinet lighting					
8 watts	M(B)U270	1	ZE220	2CPX068058R9999	
13 watts	M(B)U370	1	ZE221	2CPX068059R9999	

Subdistribution boards

Distribution panel system – System parts

Busbars by the metre

ZX400

ZX406

ZX403

ZX365

ZX409

ZX362

ZX412

ZX415

Article	Pieces	Order details		Price
		Type	Order code	
Rated current 250 A Dimensions 12 x 5 mm				
1 m	1	ZX400	2CPX061400R9999	
2 m	1	ZX401	2CPX061401R9999	
3 m	1	ZX402	2CPX061402R9999	
4 m	1	ZX350	2CPX061350R9999	
Rated current 320 A Dimensions 20 x 5 mm				
1 m	1	ZX406	2CPX061406R9999	
2 m	1	ZX407	2CPX061407R9999	
3 m	1	ZX408	2CPX061408R9999	
4 m	1	ZX351	2CPX061351R9999	
Rated current 360 A Dimensions 12 x 10 mm				
1 m	1	ZX403	2CPX061403R9999	
2 m	1	ZX404	2CPX061404R9999	
3 m	1	ZX405	2CPX061405R9999	
4 m	1	ZX354	2CPX061354R9999	
Rated current 390 A Cu busbars 25 x 5 mm				
1 m	1	ZX365	2CPX061365R9999	
2 m	1	ZX366	2CPX061366R9999	
3 m	1	ZX367	2CPX061367R9999	
4 m	1	ZX352	2CPX061352R9999	
Rated current 440 A Cu busbars 30 x 5 mm				
1 m	1	ZX409	2CPX061409R9999	
2 m	1	ZX410	2CPX061410R9999	
3 m	1	ZX411	2CPX061411R9999	
4 m	1	ZX353	2CPX061353R9999	
Rated current 500 A Cu busbars 20 x 10 mm				
1 m	1	ZX362	2CPX061362R9999	
2 m	1	ZX363	2CPX061363R9999	
3 m	1	ZX364	2CPX061364R9999	
4 m	1	ZX355	2CPX061355R9999	
Rated current 630 A Cu busbars 30 x 10 mm				
1 m	1	ZX412	2CPX061412R9999	
2 m	1	ZX413	2CPX061413R9999	
3 m	1	ZX414	2CPX061414R9999	
4 m	1	ZX356	2CPX061356R9999	
Rated current 850 A Cu busbars 40 x 10 mm				
1 m	1	ZX415	2CPX061415R9999	
2 m	1	ZX416	2CPX061416R9999	
3 m	1	ZX417	2CPX061417R9999	
4 m	1	ZX357	2CPX061357R9999	

Subdistribution boards

Distribution panel system – System parts

Busbar holders and accessories

ZB5

ZX147

ZX146

ZX172

ZX157

ZX151

ZX158

ZX520

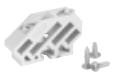
ZX523

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Busbar holder 5-pole Busbar centre spacing 40 mm For Cu busbars 12 x 5 mm, 12 x 10 mm and 20 x 5 mm	M(B)H...50 M(B)S...24	1	ZB5	2CPX038459R9999	
		10	ZB5P10	2CPX062556R9999	
Busbar holder 1-pole Busbar centre spacing 60 mm For Cu busbars 12 x 5 mm up to 30 x 10 mm For connecting to ZX146	-	1	ZX147	2CPX044011R9999	
		10	ZX147P10	2CPX062719R9999	
Busbar holder 3-pole Busbar centre spacing 60 mm For Cu busbars 12 x 5 mm up to 30 x 10 mm	M(B)R...02(B) M(B)R...H M(B)R...03	1	ZX146	2CPX044010R9999	
		10	ZX146P10	2CPX062718R9999	
End cover For busbar holders ZX146 / ZB5	M(B)H...50 M(B)R...02(B) M(B)S...24	1	ZX172	2CPX060232R9999	
		10	ZX172P10	2CPX062724R9999	
N/PE busbar holders For Cu busbars 12 x 5 mm up to 30 x 5 mm and 12 x 10 mm up to 20 x 10 mm For series connection to ZX151	-	1	ZX157	2CPX044009R9999	
		10	ZX157P10	2CPX062722R9999	
Busbar holder 3-pole Busbar centre spacing 60 mm For Cu busbars 12 x 5 mm up to 30 x 10 mm	M(B)S...27	1	ZX151	2CPX044006R9999	
		10	ZX151P10	2CPX062721R9999	
End cover For busbar holder type ZX151	-	1	ZX158	2CPX060208R9999	
		10	ZX158P10	2CPX062723R9999	
Busbar holder 3-pole					
Busbar centre spacing 60 mm/100 mm For Cu busbars 30 x 10 mm up to 60 x 10 mm	M(B)L...52(B) M(B)S...31	1	ZX520	2CPX067861R9999	
		10	ZX520P10	2CPX062552R9999	
Busbar centre spacing 100 mm/185 mm For Cu busbars 30 x 10 mm up to 100 x 10 mm	M(B)L...00(B) ML...B	1	ZX522	2CPX067909R9999	
		10	ZX522P10	2CPX062553R9999	
Busbar holder 3/4 pole Busbar centre spacing 185 mm For Cu busbars 40 x 10 mm	M(B)L25 M(B)L35	1	ZX523	2CPX068553R9999	

Subdistribution boards

Distribution panel system – System parts

Busbar holders and accessories



ZX518

ZX519

ZX149

ZB19

ZX50

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
N/PE busbar holders For Cu busbars 12 x 5 mm, 20 x 5 mm 30 x 5 mm	M(B)N...69 M(B)N...74 M(B)N...75 M(B)S...28	1	ZX518	2CPX067805R9999	
		10	ZX518P10	2CPX062551R9999	
End cover For busbar holders ZX518	M(B)N...74 M(B)N...75	1	ZX519	2CPX062687R9999	
		10	ZX519P10	2CPX062686R9999	
N/PE busbar holders For Cu busbars 12 x 5 mm up to 30 x 10 mm	M(B)N...62 M(B)N...63	1	ZX149	2CPX044019R9999	
		10	ZX149P10	2CPX062720R9999	
Snap-on cover profile For Cu busbars 12 x 5 mm and 12 x 10 mm 1 m long	-	1	ZB19	2CPX038187R9999	
	-	10	ZB19P10	2CPX062709R9999	
Support insulators with spanner flats Diameter x Length					
30 x 30 mm, thread, both sides M6 Key width: 30 mm	-	1	ZX50	2CPX039050R9999	
		20	ZX50P20	2CPX062725R9999	
30 x 30 mm, thread, both sides M8 Key width: 30 mm	-	1	ZX51	2CPX039051R9999	
		20	ZX51P20	2CPX062726R9999	
40 x 40 mm, thread, both sides M10 Key width: 40 mm	-	1	ZX52	2CPX039052R9999	
		20	ZX52P20	2CPX062560R9999	
50 x 60 mm, thread, both sides M12 Key width: 50 mm	-	1	ZX53	2CPX039053R9999	
		20	ZX53P20	2CPX062559R9999	
40 x 50 mm, thread, one side M12 Male thread: M12 x 65 mm	-	1	ZX54	2CPX039054R9999	
		20	ZX54P20	2CPX062727R9999	

Subdistribution boards

Distribution panel system – System parts

Fastening material

ZW62

ZX256P10

ZX230P10

ZB61P10

ZW99

Article	Pieces	Order details		Price
		Type	Order code	
Insertion nut for WR profile Set M 8	1	ZW62	2CPX039462R9999	
	50	ZW62P50	2CPX062479R9999	
Insertion nut for profile rails, profile no. 1 and 2 L x W x D (mm)				
20 x 11 x 4, M5	10	ZX256P10	2CPX062515R9999	
20 x 14 x 4, M5	10	ZX248P10	2CPX062509R9999	
20 x 14 x 4, M6	10	ZX249P10	2CPX062510R9999	
20 x 14 x 4, M8	10	ZX250P10	2CPX062511R9999	
Sliding nut for profile rails, profile no. 1 and 2 L x W x D (mm)				
20 x 20 x 4, M3	10	ZX226P10	2CPX062494R9999	
20 x 20 x 4, M4	10	ZX227P10	2CPX062495R9999	
20 x 20 x 4, M5	10	ZX228P10	2CPX062496R9999	
20 x 20 x 4, M6	10	ZX229P10	2CPX062497R9999	
20 x 20 x 4, M8	10	ZX230P10	2CPX062498R9999	
Sliding nut for profile rails, for profile no. 3 L x W x D (mm)				
25 x 25 x 8, M5	10	ZX235P10	2CPX062639R9999	
25 x 25 x 6, M6	10	ZX231P10	2CPX062499R9999	
25 x 25 x 8, M8	10	ZX232P10	2CPX062500R9999	
25 x 25 x 8, M10	10	ZX233P10	2CPX062501R9999	
25 x 25 x 8, M12	10	ZX234P10	2CPX062502R9999	
Spacers, plastic For raised or recessed mounting of DIN rails, incl. screws				
10 mm long	10	ZB61P10	2CPX062393R9999	
length: 15 mm	10	ZB62P10	2CPX062394R9999	
length: 20 mm	10	ZB63P10	2CPX062395R9999	
length: 25 mm	10	ZB64P10	2CPX062396R9999	
length: 30 mm	10	ZB65P10	2CPX062397R9999	
length: 40 mm	10	ZB67P10	2CPX062398R9999	
length: 50 mm	10	ZB69P10	2CPX062399R9999	
By the metre, length 1 m	10	ZB70	2CPX038570R9999	
Vibration damper For vibration-free installation of mounting plates and devices				
M 6 male thread and M 6 female thread	1	ZW98	2CPX060124R9999	
M10 female thread	1	ZW99	2CPX060125R9999	

Subdistribution boards

Distribution panel system – System parts

Fastening material

ZB21P4

ZB36P20

ZB37P20

ZB22P20

ZB32P4

ZB27P20

ZX273P4

ZX910P10

ZX260P10

ZX263P10

ZX258P10

ZX270P10

ZX283P10

Article	Pieces	Order details		Price
		Type	Order code	
Cross recess pan head screw Pozidriv PZ2, M5 x 8 mm	4	ZB21P4	2CPX062663R9999	
	20	ZB21P20	2CPX068585R9999	
Philipps cross recess pan head screw with slotted hexalobular drive Pozidriv PZ2, M5 x 12 mm	20	ZB36P20	2CPX062390R9999	
Hexalobular socket and slotted pan head screw* M5 x 12 mm / Torx T25	20	ZB37P20	2CPX060202R9999	
Slotted cheese head screw M5 x 20 mm	20	ZB22P20	2CPX068586R9999	
Cross recess pan head screw with slotted hexalobular drive Torx T25				
M 4.8 x 9.5 mm	4	ZB32P4	2CPX064149R9999	
	20	ZB32P20	2CPX062651R9999	
	500	ZB32P500	2CPX062652R9999	
M 4.8 x 11.5 mm	20	ZB27P20	2CPX062588R9999	
	500	ZB27P500	2CPX062689R9999	
M 4.8 x 32 mm	4	ZX273P4	2CPX064153R9999	
Hexalobular socket pan head screw*				
M6 x 20 mm / Torx T30	10	ZX910P10	2CPX060203R9999	
M6 x 30 mm / Torx T30	10	ZX912P10	2CPX060204R9999	
M6 x 45 mm / Torx T30	10	ZX915P10	2CPX060205R9999	
Hexagon socket head cap screw				
M 5 x 10 mm	10	ZX260P10	2CPX062517R9999	
M6 x 20 mm	10	ZX261P10	2CPX062518R9999	
M6 x 30 mm	20	ZX257P20	2CPX068588R9999	
M6 x 45 mm	20	ZX259P20	2CPX068589R9999	
Hexagon socket head cap screw				
M8 x 16 mm	10	ZX263P10	2CPX062520R9999	
M8 x 20 mm	10	ZX264P10	2CPX062521R9999	
M8 x 30 mm	10	ZX265P10	2CPX062522R9999	
Hexagon socket head cap screw and captive spring lock washer M6 x 12 mm	10	ZX258P10	2CPX062516R9999	
Hexagon socket head cap screw, self-tapping For hole-diameter 5.5 mm M6 x 20	10	ZX270P10	2CPX062527R9999	
Washer 6 mm	10	ZX283P10	2CPX060281R9999	

Subdistribution boards

Distribution panel system – System parts

Covers for rail mounting devices, 125 mm DIN rail spacing

AS11

AS12

AS13

AS14

AS15

AS21

AS22

AS23

Article	Pieces	Order details		Price
		Type	Order code	
Covers 1 panel wide with 90° press and turn closure Height x width				
150 x 250 mm without slot	1	AG11	2CPX062801R9999	
150 x 250 mm with slot	1	AS11	2CPX062802R9999	
300 x 250 mm without slot	1	AG12	2CPX062803R9999	
300 x 250 mm with slot	1	AS12	2CPX062804R9999	
450 x 250 mm without slot	1	AG13	2CPX062805R9999	
450 x 250 mm with slot	1	AS13	2CPX062806R9999	
600 x 250 mm without slot	1	AG14	2CPX062807R9999	
600 x 250 mm with slot	1	AS14	2CPX062808R9999	
750 x 250 mm without slot	1	AG15	2CPX062809R9999	
750 x 250 mm with slot	1	AS15	2CPX062810R9999	
Covers 2 panel wide with 90° press and turn closure height x width				
150 x 500 mm without slot	1	AG21	2CPX062811R9999	
150 x 500 mm with slot	1	AS21	2CPX062812R9999	
300 x 500 mm without slot	1	AG22	2CPX062813R9999	
300 x 500 mm with slot	1	AS22	2CPX062814R9999	
450 x 500 mm without slot	1	AG23	2CPX062815R9999	
450 x 500 mm with slot	1	AS23	2CPX062816R9999	

Subdistribution boards

Distribution panel system – System parts

Covers for rail mounting devices, 125 mm DIN rail spacing

AS24

AS25

AS31

AS32

AS33

AS34

AS35

Article	Pieces	Order details		Price
		Type	Order code	
Covers 2 panel wide with 90° press and turn closure Height x width				
600 x 500 mm without slot	1	AG24	2CPX062817R9999	
600 x 500 mm with slot	1	AS24	2CPX062818R9999	
750 x 500 mm without slot	1	AG25	2CPX062819R9999	
750 x 500 mm with slot	1	AS25	2CPX062820R9999	
Covers 3 panel wide with 90° press and turn closure height x width				
150 x 750 mm without slot	1	AG31	2CPX062821R9999	
150 x 750 mm with slot	1	AS31	2CPX062822R9999	
300 x 750 mm without slot	1	AG32	2CPX062823R9999	
300 x 750 mm with slot	1	AS32	2CPX062824R9999	
450 x 750 mm without slot	1	AG33	2CPX062825R9999	
450 x 750 mm with slot	1	AS33	2CPX062826R9999	
600 x 750 mm without slot	1	AG34	2CPX062827R9999	
600 x 750 mm with slot	1	AS34	2CPX062828R9999	
750 x 750 mm without slot	1	AG35	2CPX062829R9999	
750 x 750 mm with slot	1	AS35	2CPX062830R9999	

Subdistribution boards

Distribution panel system – System parts

Covers for rail mounting devices, 150 mm DIN rail spacing

AH1

AS11

AS212

AS213

AS214

AS215

AH2

AS21

AS222

AS223

Article	Pieces	Order details		Price
		Type	Order code	
Covers 1 panel wide with 90° press and turn closure Height x width				
75 x 250 mm without slot	1	AH1	2CPX070387R9999	
150 x 250 mm without slot	1	AG11	2CPX062801R9999	
150 x 250 mm with slot	1	AS11	2CPX062802R9999	
300 x 250 mm without slot	1	AG212	2CPX062831R9999	
300 x 250 mm with slot	1	AS212	2CPX062832R9999	
450 x 250 mm without slot	1	AG213	2CPX062833R9999	
450 x 250 mm with slot	1	AS213	2CPX062834R9999	
600 x 250 mm without slot	1	AG214	2CPX062835R9999	
600 x 250 mm with slot	1	AS214	2CPX062836R9999	
750 x 250 mm without slot	1	AG215	2CPX062837R9999	
750 x 250 mm with slot	1	AS215	2CPX062838R9999	
Covers 2 panel wide with 90° press and turn closure height x width				
75 x 500 mm without slot	1	AH2	2CPX070388R9999	
150 x 500 mm without slot	1	AG21	2CPX062811R9999	
150 x 500 mm with slot	1	AS21	2CPX062812R9999	
300 x 500 mm without slot	1	AG222	2CPX062839R9999	
300 x 500 mm with slot	1	AS222	2CPX062840R9999	
450 x 500 mm without slot	1	AG223	2CPX062841R9999	
450 x 500 mm with slot	1	AS223	2CPX062842R9999	

Subdistribution boards

Distribution panel system – System parts

Covers for rail mounting devices, 150 mm DIN rail spacing

AS224

AS225

AS31

AS232

AS233

AS234

AS235

Article	Pieces	Order details		Price
		Type	Order code	
Covers 2 panel wide with 90° press and turn closure Height x width				
600 x 500 mm without slot	1	AG224	2CPX062843R9999	
600 x 500 mm with slot	1	AS224	2CPX062844R9999	
750 x 500 mm without slot	1	AG225	2CPX062845R9999	
750 x 500 mm with slot	1	AS225	2CPX062846R9999	
Covers 3 panel wide with 90° press and turn closure height x width				
150 x 750 mm without slot	1	AG31	2CPX062821R9999	
150 x 750 mm with slot	1	AS31	2CPX062822R9999	
300 x 750 mm without slot	1	AG232	2CPX062847R9999	
300 x 750 mm with slot	1	AS232	2CPX062848R9999	
450 x 750 mm without slot	1	AG233	2CPX062849R9999	
450 x 750 mm with slot	1	AS233	2CPX062850R9999	
600 x 750 mm without slot	1	AG234	2CPX062851R9999	
600 x 750 mm with slot	1	AS234	2CPX062852R9999	
750 x 750 mm without slot	1	AG235	2CPX062853R9999	
750 x 750 mm with slot	1	AS235	2CPX062854R9999	

Subdistribution boards

Distribution panel system – System parts

Covers 1 panel wide with cut-out

AG71

AG65

AG73

AG72

AG173

AG161

AG174

AG200

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Covers 1 panel wide with press and turn closure Height x width					
300 x 250 mm, with cut-out For 1 fuse switch disconnectors size 00	M(B)T135(B)	1	AG71	2CPX062873R9999	
300 x 250 mm, with cut-out For 2 fuse switch disconnectors size 00	M(B)T136(B)	1	AG65	2CPX062870R9999	
600 x 250 mm, with cut-out For 4 fuse switch disconnectors size 00	M(B)T137(B)	1	AG73	2CPX062875R9999	
450 x 250 mm, with cut-out For 1 fuse switch disconnectors size 1	M(B)T142(B)	1	AG72	2CPX062874R9999	
750 x 250 mm, with cut-out For 2 fuse switch disconnectors size 1	M(B)T143(B)	1	AG173	2CPX062899R9999	
450 x 250 mm, with cut-out For 1 fuse switch disconnector size 2	M(B)T144(B)	1	AG161	2CPX062887R9999	
750 x 250 mm, with cut-out For 2 fuse switch disconnector size 2	M(B)T145(B)	1	AG174	2CPX062900R9999	
300 x 250 mm, with cut-out					
For OT switch OT160M3	MA160ALAB	1	AG200	2CPX062931R9999	
For OT switch OT200E03P, OT250E03P	MA200ALAB MA250ALAB	1	AG201	2CPX062932R9999	

Subdistribution boards

Distribution panel system – System parts

Covers 1 panel wide with cut-out

AG205

AG206

AG207

AG1304

AG127

AG175

AG160

AG121

AG131

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Covers 1 panel wide with press and turn closure Height x width					
300 x 250 mm, with cut-out For MCCB Tmax T1, T2, T3, XT1, XT3	M(B)A190T	1	AG205	2CPX062936R9999	
300 x 250 mm, with cut-out					
300 x 250 mm, with cut-out For MCCB Tmax XT2	M(B)A191T	1	AG206	2CPX062855R9999	
450 x 250 mm, with cut-out					
450 x 250 mm, with cut-out For MCCB Tmax XT4	M(B)A193T	1	AG207	2CPX062856R9999	
450 x 250 mm, with cut-out For MCCB Tmax T4	M(B)A192T	1	AG1304	2CPX064157R9999	
300 x 250 mm, with cut-out					
For S700	M(B)H150	1	AG127	2CPX062986R9999	
for S750	M(B)H151	1	AG128	2CPX062989R9999	
150 x 250 mm, with cut-out for flexible conduit connector	M(B)V180 M(B)V181 M(B)V182	1	AG175	2CPX062901R9999	
300 x 250 mm, with cut-out For mounting fuse socket 5 x 3 x D02	M(B)R102(B)	1	AG160	2CPX062886R9999	
300 x 250 mm, with cut-out For mounting fuse socket Space for horizontal devices 134 mm	M(B)R102H	1	AG121	2CPX062969R9999	
450 x 250 mm, with cut-out For mounting fuse socket Space for horizontal devices 295 mm	M(B)R103H	1	AG131	2CPX062970R9999	

Subdistribution boards

Distribution panel system – System parts

Covers 1 panel wide with cut-out / with window

AG132

AG164

AG165

AG240

AG243

AG246

AG12S

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Covers, 1 panel wide, with 90° press and turn closure Height x width					
150 x 250 mm, with cut-out For measurement instruments, 96 x 96 mm	M(B)U156	1	AG132	2CPX062992R9999	
300 x 250 mm, with cut-out For measurement instruments, 96 x 96 mm	M(B)U157	1	AG164	2CPX062890R9999	
450 x 250 mm, with cut-out For measurement instruments, 96 x 96 mm	M(B)U158	1	AG165	2CPX062891R9999	
450 x 250 mm, with cut-out For 3 fuse switch disconnectors size 00 100 mm busbar centre spacing	MD152B	1	AG240	2CPX042127R9999	
750 x 250 mm, with cut-out For 3 fuse switch disconnectors size 00 185 mm busbar centre spacing	MD100B	1	AG243	2CPX042187R9999	
900 x 250 mm, with cut-out For 3 fuse switch disconnectors size 00 + EFM 185 mm busbar centre spacing	MBD100E	1	AG246	2CPX042190R9999	
Covers with window 1 panel wide with press and turn closure					
300 x 250 mm, with window	-	1	AG12S	2CPX062228R9999	
450 x 250 mm, with window	-	1	AG13S	2CPX062230R9999	
600 x 250 mm, with window	-	1	AG14S	2CPX062232R9999	

Subdistribution boards

Distribution panel system – System parts

Covers 2 panel wide with cut-out

AG75

AG79

AG82

AG83

AG92

AG66

AG259

AG1404

AG227

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Covers, 2 panel wide, with 90° press and turn closure Height x width					
300 x 500 mm, with cut-out For 4 fuse switch disconnectors size 00	M(B)T236(B) M(B)T250(B)	1	AG75	2CPX062876R9999	
600 x 500 mm, with cut-out For 8 fuse switch disconnectors size 00	M(B)T237(B)	1	AG79	2CPX062877R9999	
450 x 500 mm, with cut-out For 2 fuse switch disconnectors size 1	M(B)T242(B) M(B)T251(B)	1	AG82	2CPX062878R9999	
750 x 500 mm, with cut-out For 4 fuse switch disconnectors size 1	M(B)T243(B)	1	AG83	2CPX062879R9999	
450 x 500 mm, with cut-out For 2 fuse switch disconnector size 2	M(B)T244(B)	1	AG92	2CPX062884R9999	
750 x 500 mm, with cut-out For 4 fuse switch disconnector size 2	M(B)T245(B)	1	AG66	2CPX062871R9999	
300 x 500 mm, with cut-out For MCCB Tmax T1, T2, T3, XT1, XT3	M(B)A290T	1	AG259	2CPX062979R9999	
450 x 500 mm, with cut-out					
For MCCB Tmax T4/T5, 3 and 4 pole	M(B)A292T	1	AG1404	2CPX064158R9999	
For MCCB Tmax T5	MA400ALSB MA630ALSB	1	AG198	2CPX062929R9999	
300 x 500 mm, with cut-out					
For S700	M(B)H250	1	AG227	2CPX062987R9999	
for S750	M(B)H251	1	AG228	2CPX062990R9999	

Subdistribution boards

Distribution panel system – System parts

Covers 2 panel wide with cut-out

AG176

AG172

AG162

AG241

AG244

AG182

AG181

AG247

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Covers, 2 panel wide, with 90° press and turn closure Height x width					
150 x 500 mm, with cut-out for flexible conduit connector	M(B)V281 M(B)V282	1	AG176	2CPX062902R9999	
300 x 500 mm, with cut-out For mounting fuse socket 14 x 3 x D02	M(B)R202(B)	1	AG172	2CPX062898R9999	
150 x 500 mm, with cut-out For measurement instruments, 96 x 96 mm	M(B)U257	1	AG162	2CPX062888R9999	
450 x 500 mm, with cut-out For 8 fuse switch disconnectors size 00, 100 mm busbar centre spacing	MD252B	1	AG241	2CPX042128R9999	
750 x 500 mm, with cut-out For 8 fuse switch disconnectors size 00 185 mm busbar centre spacing	MD200B	1	AG244	2CPX042188R9999	
750 x 500 mm, with cut-out For 1 fuse switch disconnector sizes 1 to 3, ZE56 - ZE58	-	1	AG182	2CPX062908R9999	
750 x 500 mm, with cut-out For 3 fuse switch disconnector sizes 1 to 3, ZE56 - ZE58	-	1	AG181	2CPX062907R9999	
900 x 500 mm, with cut-out For 8 fuse switch disconnectors size 00 + EFM 185 mm busbar centre spacing	MBD200E	1	AG247	2CPX042191R9999	

Subdistribution boards

Distribution panel system – System parts

Covers 2 panel wide with cut-out

AG179

AG22S

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Covers, 2 panel wide, with 90° press and turn closure Height x width					
750 x 500 mm, with cut-out For 8 fuse switch disconnectors size 00 185 mm busbar centre spacing	MD21B MD22B	1	AG244	2CPX042188R9999	
Covers with window, 2 panel wide, with 90° press and turn closure					
300 x 500 mm, with window	-	1	AG22S	2CPX062229R9999	
450 x 500 mm, with window	-	1	AG23S	2CPX062231R9999	
600 x 500 mm, with window	-	1	AG24S	2CPX062233R9999	

Subdistribution boards

Distribution panel system – System parts

Covers 3 panel wide with cut-out

AG84

AG85

AG90

AG91

AG93

AG67

AG359

AG327

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Covers with cut-out, 3 panel wide with press and turn closure Height x width					
300 x 750 mm, with cut-out For 6 fuse switch disconnectors size 00	M(B)T336(B) M(B)T350(B)	1	AG84	2CPX062880R9999	
600 x 750 mm, with cut-out For 12 fuse switch disconnectors size 00	M(B)T337(B)	1	AG85	2CPX062881R9999	
450 x 750 mm, with cut-out For 3 fuse switch disconnectors size 1	M(B)T342B M(B)T351(B)	1	AG90	2CPX062882R9999	
750 x 750 mm, with cut-out For 6 fuse switch disconnectors size 1	M(B)T343(B)	1	AG91	2CPX062883R9999	
450 x 750 mm, with cut-out For 3 fuse switch disconnectors size 2	M(B)T344(B)	1	AG93	2CPX062885R9999	
750 x 750 mm, with cut-out For 6 fuse switch disconnectors size 2	M(B)T345(B)	1	AG67	2CPX062872R9999	
300 x 750 mm, with cut-out For MCCB Tmax T1, T2, T3, XT1, XT3	M(B)A390T	1	AG359	2CPX062980R9999	
300 x 750 mm, with cut-out					
For S700	M(B)H350	1	AG327	2CPX062988R9999	
for S750	M(B)H351	1	AG328	2CPX062991R9999	

Subdistribution boards

Distribution panel system – System parts

Covers 3 panel wide with cut-out

AG321

AG163

AG242

AG245

AG248

AG184

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Covers with cut-out, 3 panel wide, with 90° press and turn closure Height x width					
300 x 750 mm, with cut-out For mounting fuse socket 24 x 3 x D02	M(B)R302(B)	1	AG321	2CPX062971R9999	
150 x 750 mm, with cut-out For measurement instruments, 96 x 96 mm	M(B)U357	1	AG163	2CPX062889R9999	
450 x 750 mm, with cut-out For 12 fuse switch disconnectors, 100 mm busbar centre spacing	MD352B	1	AG242	2CPX042129R9999	
750 x 750 mm, with cut-out For 12 fuse switch disconnectors size 00, 185 mm busbar centre spacing	MD300B	1	AG245	2CPX042189R9999	
900 x 750 mm, with cut-out For 12 fuse switch disconnectors size 00 + EFM, 185 mm busbar centre spacing	MBD300E	1	AG248	2CPX042192R9999	
750 x 750 mm, with cut-out For 6 fuse switch disconnectors, ZE56 - ZE58	-	1	AG184	2CPX062910R9999	
750 x 750 mm, with cut-out For switch disconnector fuse, ABB SlimLine XR Cut-out 600 mm, width	-	1	AG180	2CPX062906R9999	

Subdistribution boards

Distribution panel system – System parts

Cover parts

	Article	To be used for...	Pieces	Order details Type	Order code	Price
ED137P4	Cover holder 45 mm high For fastening on EDF mounting frame profiles, or for fastening a partition. For DIN rails 35 x 7.5 mm use only this cover holder.	M(B)R...03	4	ED137P4	2CPX062600R9999	
			40	ED137P40	2CPX062601R9999	
ED138P4	Cover holder 52.5 mm high For fastening (insert, turn) on EDF or WR mounting frame profiles, or for fastening a partition. For DIN rails 35 x 15 mm use only this cover holder.	All modules	4	ED138P4	2CPX062630R9999	
			12	ED138P12	2CPX062602R9999	
			40	ED138P40	2CPX062603R9999	
			1600	ED138P1600	2CPX062702R9999	
ED139P4	Cover holder 88 mm high For fastening (insert, turn) on EDF or WR mounting frame profiles, or for fastening a partition; Use when installing devices with greater depths or in conjunction with busbar systems		4	ED139P4	2CPX062604R9999	
			40	ED139P40		
ED135P4	Spacer Used to extend the cover holder by 25 mm	M(B)R...03	4	ED135P4	2CPX062610R9999	
			40	ED135P40		
ED110	Cover holder (left/right)		1	ED110	2CPX039320R9999	
ED58P10	DIN rail adapter For the cover holder ED138 and ED139 Snap onto the DIN rail from the front.		10	ED58P10	2CPX062338R9999	
ED50P12	90° press and turn closure	All covers	12	ED50P12	2CPX062337R9999	
ED136P4	Screw insert Metric thread. For attaching cover plates made of Macrolon, sheet metal or aluminium onto the standard EDF cover holders.		4	ED136P4	2CPX062611R9999	
ED41P4	90° press and turn closure For attaching cover plates made of Macrolon, sheet metal or aluminium onto the standard cover holders.		4	ED41P4	2CPX062332R9999	
ZB35P5	Sealing nipple For retrofitting in standard panel covers (drill 6 mm hole)		5	ZB35P5	2CPX062392R9999	

Subdistribution boards

Distribution panel system – System parts

Raising frame/ Terminal safety covers

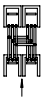
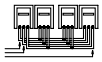
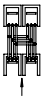
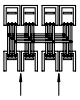
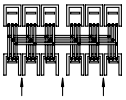
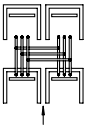
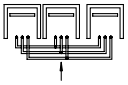
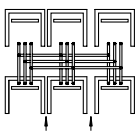
ED212

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Raising frame for covers For panels with cover holders 52.5 mm (ED138.), plastic frame to advance the cover by 25 or 35 mm External dimensions in mm					
1 panel wide					
300 x 250	AG12	1	ED212	2CPX062782R9999	
450 x 250	AG13	1	ED213	2CPX062783R9999	
600 x 250	AG14	1	ED214	2CPX062784R9999	
750 x 250	AG15	1	ED215	2CPX062785R9999	
2 panel wide					
300 x 500	AG22	1	ED222	2CPX062787R9999	
450 x 500	AG23	1	ED223	2CPX062788R9999	
600 x 500	AG24	1	ED224	2CPX062789R9999	
750 x 500	AG25	1	ED225	2CPX062790R9999	
3 panel wide					
300 x 750	AG32	1	ED232	2CPX062792R9999	
450 x 750	AG33	1	ED233	2CPX062793R9999	
600 x 750	AG34	1	ED234	2CPX062794R9999	
750 x 750	AG35	1	ED235	2CPX062795R9999	
Order separately per frame: To raise by 25 mm, 1 x ED135P4 To raise by 35 mm, 1 x ED139P4					

Subdistribution boards

Distribution panel system – System parts

Busbar systems for fuse switch disconnector modules

	Size..	I_n	CU busbar in mm	Connection	No. of disconnectors	Type ...	Pieces	Order details		Price
								Type	Order code	
	Busbar systems with feeder cable, 35 mm², length 500 mm									
 **ZH55**	Size 00	320 A	20 x 5 mm	M8	4	-	1	ZH55	2CPX038559R9999	
	Busbar systems without feeder cables									
ZH214	Size 00	320 A	20 x 5	M8	2	MT136B	1	ZH214	2CPX060443R9999	
 **ZH211**	Size 00	320 A	20 x 5	M8	4	MT236B	1	ZH211	2CPX060440R9999	
ZH311	Size 00	320 A	20 x 5	M8	6	MT336B	1	ZH311	2CPX060450R9999	
 **ZH216**	Size 00	320 A	20 x 5	M8	4	MT137B	1	ZH216	2CPX060445R9999	
	Size 00	320 A	20 x 5	M8	4	-	5	ZH216P5	2CPX062418R9999	
 **ZH212**	Size 00	320 A	20 x 5	M8	8	MT237B	1	ZH212	2CPX060441R9999	
 **ZH312**	Size 00	320 A	20 x 5	M8	12	MT337B	1	ZH312	2CPX060451R9999	
ZH217	Sizes 1 and 2	440 A	30 x 5	M10	2	MT242B MT244B	1	ZH217	2CPX060446R9999	
 **ZH218**	Sizes 1 and 2	630 A	30 x 10	M10	4	MT243B MT245B	1	ZH218	2CPX060447R9999	
 **ZH317**	Sizes 1 and 2	440 A	30 x 5	M10	3	MT342B MT344B	1	ZH317	2CPX060456R9999	
 **ZH318**	Sizes 1 and 2	630 A	30 x 10	M10	6	MT343B MT345B	1	ZH318	2CPX060457R9999	

> Important note: For a single row of disconnectors use 3 straight or three angled cable lugs, and for a double row of disconnectors, use 3 angled cable lugs for the connection of incoming lines.

Subdistribution boards

Distribution panel system – System parts

Trim covers and insulating plates for fuse switch disconnectors

ZH425

ZH426

ZH427

ZH428

ZH439

ZH440

ZH447

ZH449

ZH442

ZX148

ZH53

Article	To be used for...	Pieces	Order details		Price
			Type	Order code	
Size 00 fuse switch disconnector					
Single trim cover	MT135B	1	ZH425	2CPX062952R9999	
Double trim cover	MT136B MT137B MT236B MT237B MT250B	1	ZH426	2CPX062953R9999	
Triple trim cover	MT336B MT337B MT350B	1	ZH427	2CPX062954R9999	
Single trim cover, closed	-	1	ZH428	2CPX062955R9999	
Double trim cover, closed	-	1	ZH429	2CPX062956R9999	
Triple trim cover, closed	-	1	ZH430	2CPX062957R9999	
Size 1 fuse switch disconnector					
Single trim cover	MT...42B MT...43B MT...51B	1	ZH438	2CPX062961R9999	
Double trim cover	-	1	ZH439	2CPX062962R9999	
Single trim cover, closed	-	1	ZH440	2CPX062963R9999	
Size 2 fuse switch disconnector					
Single trim cover For modules 1 panel wide	MT144B MT145B	1	ZH447	2CPX039842R9999	
Single trim cover For modules 3 panel wide	MT344B MT345B	1	ZH448	2CPX062965R9999	
Double trim cover	MT244B MT245B MT344B MT345B	1	ZH449	2CPX062966R9999	
Single trim cover, closed	-	1	ZH442	2CPX062939R9999	
Insulating plate for unoccupied busbar ends for					
Fuse switch disconnectors incl. fastening material					
Size 00	-	1	ZX148	2CPX044018R9999	
1	-	1	ZX128	2CPX039128R9999	
2	-	1	ZX129	2CPX039129R9999	
N/PE rails for fastening behind the cross members for					
Size 00 fuse switch disconnector Cu 20 x 4 mm, incl. fastening material	-	1	ZH53	2CPX038557R9999	
Size 1 fuse switch disconnector Cu 20 x 4 mm, incl. fastening material	-	1	ZH54	2CPX038558R9999	

Subdistribution boards

Distribution panel system – System parts

Fuse switch disconnectors

	Article	To be used for...	Pieces	Order details		Price
				Type	Order code	
	Fuse switch disconnectors for mounting with EDF and WR mounting frames on disconnector cross members					
 ZH411	**Size 00 fuse switch disconnector** 160 A, with M8 screw connection without trim cover	MT135B MT...36B MT...37B	1	ZH411	2CPX062947R9999	
 ZH412	**Size 00 fuse switch disconnector** 160 A, with clip terminals up to 50 mm² without trim cover	-	1	ZH412	2CPX062948R9999	
 ZH431	**Size 1 fuse switch disconnector** 250 A, with M10 screw connection without trim cover	MT...42B MT...43B	1	ZH431	2CPX062958R9999	
 ZH441	**Size 2 fuse switch disconnector** 400 A, with M10 screw connection without trim cover	MT...44B MT...45B	1	ZH441	2CPX062964R9999	
	Fuse switch disconnectors for mounting with EDF mounting frames on busbar systems, Cu 12 x 5 mm or Cu 12 x 10 mm, busbar spacing 40 mm					
 ZH414	**Size 00 fuse switch disconnector** 160 A, with clip terminals up to 50 mm² without trim cover	ED...TA	1	ZH414	2CPX062950R9999	
 ZH415	**Size 00 fuse switch disconnector** 160 A, with triple terminals up to 10 mm² without trim cover	-	1	ZH415	2CPX062951R9999	

Subdistribution boards

Distribution panel system – System parts

Mounting fuse sockets

ZE60

ZE61

ZE62

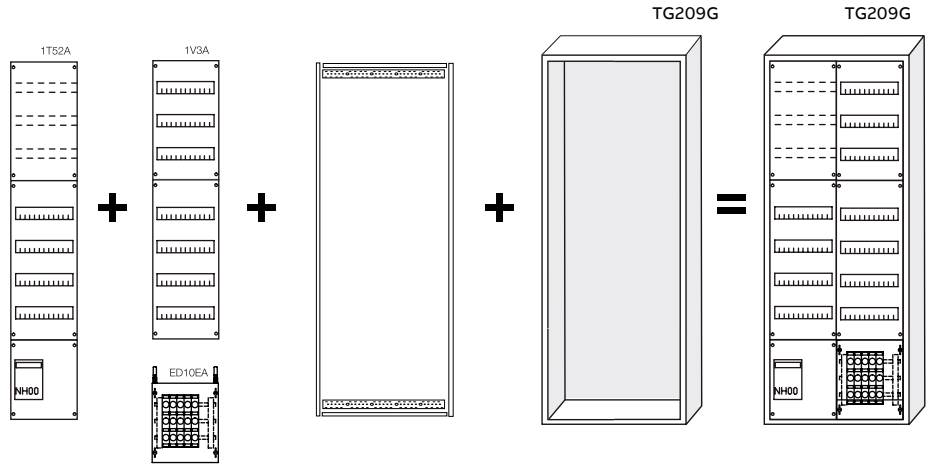
ZA4P10

Article	Pieces	Order details		Price
		Type	Order code	
Neozed mounting fuse socket E18, width 26 mm For push-in guard rings, 3-pole, with covers and labelling strips, with E18 thread, fuses max. 63 A	1	ZE60	2CPX061045R9999	
	10	ZE60P10	2CPX062400R9999	
Diazed mounting fuse socket E27, width 42 mm For push-in guard rings, 3-pole, with covers and labelling strips, with E27 thread, fuses max. 25 A	1	ZE61	2CPX061046R9999	
	10	ZE61P10	2CPX062401R9999	
Diazed mounting fuse socket E33, width 56 mm For push-in guard rings, 3-pole, with covers and labelling strips, with E33 thread, fuses max. 63 A	1	ZE62	2CPX061047R9999	
	10	ZE62P10	2CPX062402R9999	
Trim covers instead of mounting fuse sockets Colour similar to RAL 7035 to comply with the touch protection IPXXC Usable width from 16 up to 34 mm	10	ZA4P10	2CPX062374R9999	

Subdistribution boards

Distribution panel system with distribution board panels / combination sets.
Options for wall-mounting and floor-standing cabinets

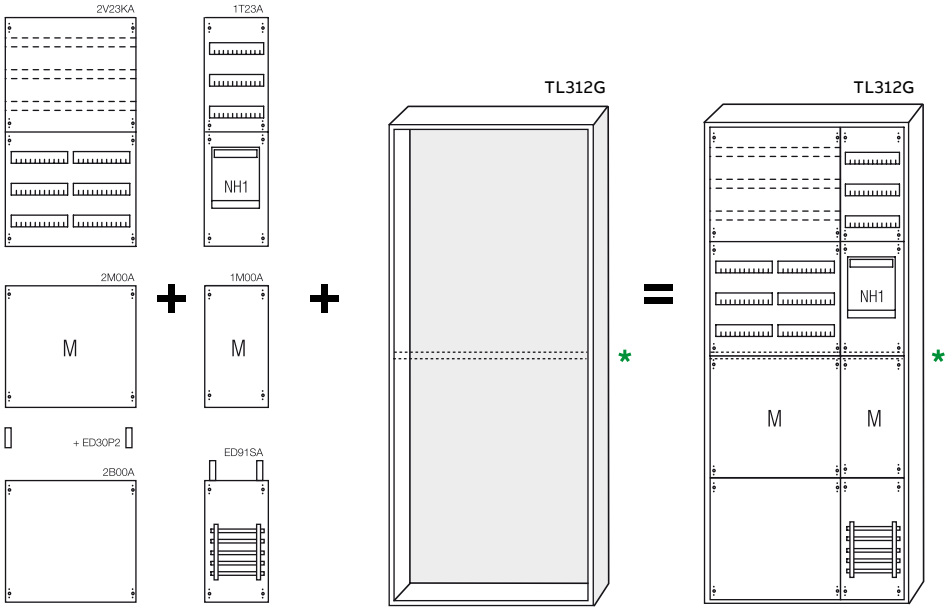
Wall-mounting cabinets U, A, B and W, TwinLine-G, TwinLine-L and TwinLine-W
Example: Configuration with distribution panels/combination sets in TwinLine-G wall-mounting cabinet



Distribution board panel
+ Distribution board panel and combination set
+ EDF installation set
+ empty cabinet
= wall mounted distribution board and combination set

Supply format
EDF installation set, distribution board panels, combination sets (preassembled on EDF profile in the factory) and empty cabinet each supplied as individually packaged units.

TwinLine-H and TwinLine G, L, W switchgear cabinets TriLine® / SF fire protection enclosures
Example: Configuration with distribution panels/combination sets in TwinLine-L wall-mounting cabinet



+ Module-to-module connection ED30P2

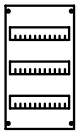
Distribution board panels
+ combination sets
+ panel connectors
+ empty cabinet
= floor-standing distribution board

Supply format
distribution board panels, combination sets (preassembled on EDF profile in the factory), panel connectors and empty cabinet each supplied as individually packaged units.

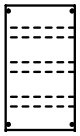
***** The EDF mounting frame must not exceed a total height of 1,350 mm (OH 5). This is why, for design reasons, floor-standing cabinets (prepared for EDF mounting frame) come with a centre support rail installed. This centre rail can be repositioned up or down in grid steps of 150 mm.

Subdistribution boards

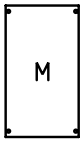
Distribution panel system with distribution board panels
Equipping of distribution panels



Panels for DIN rail mounting devices
Configuration: DIN rail 35 x 15 mm for device installation and with special square holes for the wiring system. DIN rail spacing 125 mm. Plastic covers. Slots for DIN rail mounting devices according to DIN 43880 for 12 devices (216 mm) per panel width.



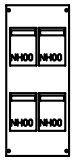
Panels for DIN rail mounting terminals
Configuration: DIN rail 35 x 15 mm for DIN rail mounting terminals, with special square holes for the wiring system. DIN rail spacing 125 mm. Plastic covers. Use ZK90P2 insulating pieces in order to fit DIN rails with double insulation. Use the deep-mounting brackets ED33P2 in order to fit the DIN rails in a recessed position.



Panels with mounting plates
Configuration: ST1203 surface sendzimir-galvanised 2 mm sheet steel mounting plate. The mounting plate is mounted to deep-mounting brackets allowing stepless depth adjustment. Maximum space between the mounting plate and cover is 143 mm (consider cabinet depth), plastic covers.

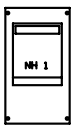
Panels with mounting cross members for drill-free mounting of devices
Configuration: Per 150 mm one mounting plate is mounted to deep-mounting brackets and its depth is steplessly adjustable. Maximum installation depth between mounting plate and cover is 143 mm (consider cabinet depth), plastic covers.

Panels as touch guard (or for custom assembly)
Configuration: Empty panel without installation parts, plastic covers (closed covers)

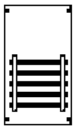


Panels for fuse switch disconnectors size 00 (160 A)*
Configuration: Cross member for disconnector mounting, Universal mounting with sliding nuts for adapting to different fastening positions (M6 threads), plastic covers. Covers with cut-outs for fuse switch disconnectors tailored to match trim dimensions (without disconnector)

*Not suitable for fire protection enclosures



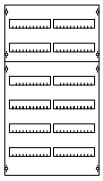
Panels for fuse switch disconnectors size 1 (250 A)*
Configuration: Cross member for disconnector mounting, Universal mounting with sliding nuts for adapting to different fastening positions (M8 threads), plastic covers. Covers with cut-outs for fuse switch disconnectors tailored to match trim dimensions (without disconnector)



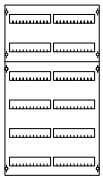
Panels with busbars
Configuration: 5 pole busbar system
Cu 12 x 5 mm, busbar spacing 40 mm, plastic cover (closed covers)

Enclosures

Distribution panel system – Distribution panels
DIN rail mounting devices



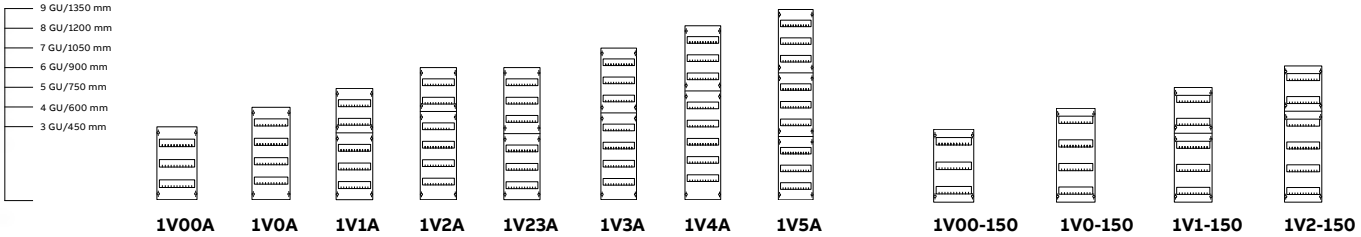
2V2A



2V2-150

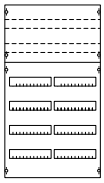
- Extension with DIN rails 35 x 15 mm
- Distribution board panels or panel combinations must have the same height (Grid Units) as the cabinets in which they are to be installed.
- In floor-standing or switchgear cabinets, two panels or panel combinations must be installed above one another.
- Without N/PE Quick-terminals
- The EDF profile rails are included in the scope of delivery

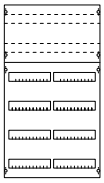
Height			Width			Cover distribution (mm)			Minimum cabinet depth of (mm)	Order details		
OH	GU	mm	PW	mm	SU	top	centre	bottom		Type	Order code	Price
125 mm DIN rail spacing												
00	3	450	1	250	36	450	-	-	120	1V00A	2CPX037580R9999	
			2	500	72	450	-	-	120	2V00A	2CPX037581R9999	
0	4	600	1	250	48	600	-	-	120	1V0A	2CPX037591R9999	
			2	500	96	600	-	-	120	2V0A	2CPX037592R9999	
1	5	750	1	250	60	300	-	450	120	1V1A	2CPX037610R9999	
			2	500	120	300	-	450	120	2V1A	2CPX037611R9999	
2	6	900	1	250	72	300	-	600	120	1V2A	2CPX037622R9999	
			2	500	144	300	-	600	120	2V2A	2CPX037623R9999	
2	6	900	1	250	72	450	-	450	120	1V23A	2CPX037634R9999	
			2	500	144	450	-	450	120	2V23A	2CPX037635R9999	
3	7	1050	1	250	84	450	-	600	120	1V3A	2CPX037639R9999	
			2	500	168	450	-	600	120	2V3A	2CPX037640R9999	
4	8	1200	1	250	96	450	-	750	120	1V4A	2CPX037651R9999	
			2	500	192	450	-	750	120	2V4A	2CPX037652R9999	
5	9	1350	1	250	108	450	450	450	120	1V5A	2CPX037665R9999	
			2	500	216	450	450	450	120	2V5A	2CPX037666R9999	
150 mm DIN rail spacing												
00	3	450	1	250	36	450	-	-	120	1V00-150	2CPX077800R9999	
			2	500	72	450	-	-	120	2V00-150	2CPX077801R9999	
0	4	600	1	250	48	600	-	-	120	1V0-150	2CPX077802R9999	
			2	500	96	600	-	-	120	2V0-150	2CPX077803R9999	
1	5	750	1	250	60	300	-	450	120	1V1-150	2CPX077804R9999	
			2	500	120	300	-	450	120	2V1-150	2CPX077805R9999	
2	6	900	1	250	72	300	-	600	120	1V2-150	2CPX077808R9999	
			2	500	144	300	-	600	120	2V2-150	2CPX077809R9999	



Enclosures

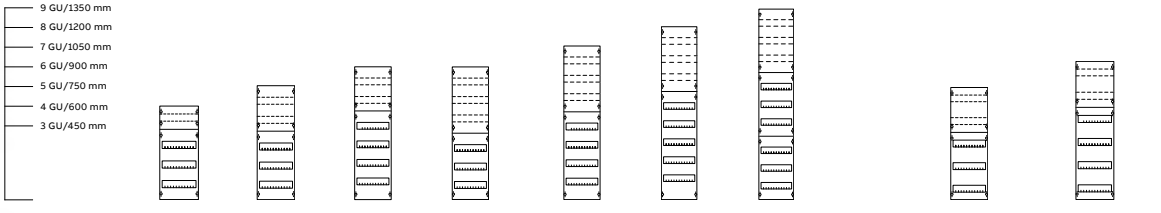
Distribution panel system – Distribution panels
DIN rail mounting devices with terminals


2V2KA


2V2K-150

- DIN rails fixed for terminals using ZK90P2 insulator
- DIN rails for terminals and for rail mounting devices 35 x 15 mm
- Distribution board panels or panel combinations must have the same height (Grid Units) as the cabinets in which they are to be installed.
- In floor-standing or switchgear cabinets, two panels or panel combinations must be installed above one another.
- Without N/PE Quick-terminals
- The EDF profile rails are included in the scope of delivery

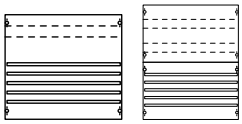
Height			Width			Cover distribution (mm)			Minimum cabinet depth of (mm)	Order details		
OH	GU	mm	PW	mm	SU	top	centre	bottom		Type	Order code	Price
125 mm DIN rail spacing												
0	4	600	1	250	48	150	-	450	120	1V0KA	2CPX037593R9999	
			2	500	96	150	-	450	120	2V0KA	2CPX037594R9999	
1	5	750	1	250	60	300	-	450	120	1V1KA	2CPX037612R9999	
			2	500	120	300	-	450	120	2V1KA	2CPX037613R9999	
2	6	900	1	250	72	300	-	600	120	1V2KA	2CPX037624R9999	
			2	500	144	300	-	600	120	2V2KA	2CPX037625R9999	
2	6	900	1	250	72	450	-	450	120	1V23KA	2CPX037637R9999	
			2	500	144	450	-	450	120	2V23KA	2CPX037638R9999	
3	7	1050	1	250	84	450	-	600	120	1V3KA	2CPX037641R9999	
			2	500	168	450	-	600	120	2V3KA	2CPX037642R9999	
4	8	1200	1	250	96	450	-	750	120	1V4KA	2CPX037653R9999	
			2	500	192	450	-	750	120	2V4KA	2CPX037654R9999	
5	9	1350	1	250	108	450	450	450	120	1V5KA	2CPX037667R9999	
			2	500	216	450	450	450	120	2V5KA	2CPX037668R9999	
150 mm DIN rail spacing												
1	5	750	1	250	60	300	-	450	120	1V1K-150	2CPX077806R9999	
			2	500	120	300	-	450	120	2V1K-150	2CPX077807R9999	
2	6	900	1	250	72	300	-	600	120	1V2K-150	2CPX077810R9999	
			2	500	144	300	-	600	120	2V2K-150	2CPX077811R9999	



1V0KA 1V1KA 1V2KA 1V23KA 1V3KA 1V4KA 1V5KA 1V1K-150 1V2K-150

Enclosures

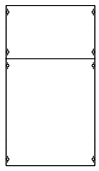
Distribution panel system – Distribution panels
Busbars 40 mm with terminals and touch guard



2V002A **2V02A**

- Busbar centre spacing 40 mm
- With 5 pole busbars 12 x 5 mm
- With busbar holder type ZB5
- Rated current (I_n) max. 360 A
- Distribution board panels or panel combinations must have the same height (Grid Units) as the cabinets in which they are to be installed
- In floor-standing or switchgear cabinets, two panels or panel combinations must be installed above one another
- The EDF profile rails are included in the scope of delivery

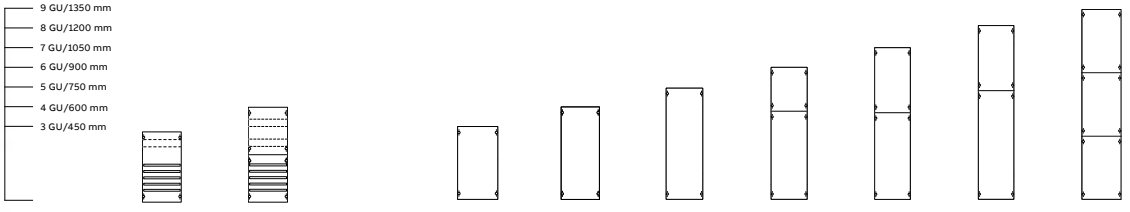
Height			Width			Cover distribution (mm)			Minimum cabinet depth of (mm)	Order details		
OH	GU	mm	PW	mm	SU	top	centre	bottom		Type	Order code	Price
00	3	450	1	250	36	450	-	-	120	1V002A	2CPX037590R9999	
			2	500	72	450	-	-	120	2V002A	2CPX037609R9999	
0	4	600	1	250	48	300	-	300	120	1V02A	2CPX037606R9999	
			2	500	96	300	-	300	120	2V02A	2CPX037607R9999	



2B2A

- Distribution board panels or panel combinations must have the same height (Grid Units) as the cabinets in which they are to be installed
- In floor-standing or switchgear cabinets, two panels or panel combinations must be installed above one another
- The EDF profile rails are included in the scope of delivery

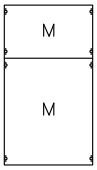
00	3	450	1	250	36	450	-	-	120	1B00A	2CPX037585R9999	
			2	500	72	450	-	-	120	2B00A	2CPX037586R9999	
0	4	600	1	250	48	600	-	-	120	1B0A	2CPX037601R9999	
			2	500	96	600	-	-	120	2B0A	2CPX037602R9999	
1	5	750	1	250	60	750	-	-	120	1B1A	2CPX037620R9999	
			2	500	120	750	-	-	120	2B1A	2CPX037621R9999	
2	6	900	1	250	72	300	-	600	120	1B2A	2CPX037632R9999	
			2	500	144	300	-	600	120	2B2A	2CPX037633R9999	
3	7	1050	1	250	84	450	-	600	120	1B3A	2CPX037649R9999	
			2	500	168	450	-	600	120	2B3A	2CPX037650R9999	
4	8	1200	1	250	96	450	-	750	120	1B4A	2CPX037661R9999	
			2	500	192	450	-	750	120	2B4A	2CPX037662R9999	
5	9	1350	1	250	108	450	450	450	120	1B5A	2CPX037675R9999	
			2	500	216	450	450	450	120	2B5A	2CPX037676R9999	



1V002A **1V02A** **1B00A** **1B0A** **1B1A** **1B2A** **1B3A** **1B4A** **1B5A**

Enclosures

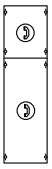
Distribution panel system – Distribution panels
Mounting plates and communications technology



2M2A

- Mounting plates are steplessly depth-adjustable using deep-mounting bracket ZW59P2
- Distribution board panels or panel combinations must have the same height (Grid Units) as the cabinets in which they are to be installed
- In floor-standing or switchgear cabinets, two panels or panel combinations must be installed above one another
- The EDF profile rails are included in the scope of delivery

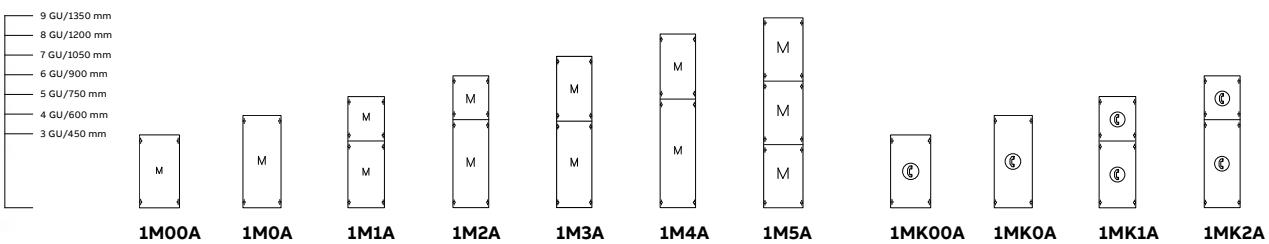
Height			Width			Cover distribution (mm)			Minimum cabinet depth of (mm)	Order details		
OH	GU	mm	PW	mm	SU	top	centre	bottom		Type	Order code	Price
00	3	450	1	250	36	450	-	-	120	1M00A	2CPX037582R9999	
			2	500	72	450	-	-	120	2M00A	2CPX037583R9999	
0	4	600	1	250	48	600	-	-	120	1M0A	2CPX037595R9999	
			2	500	96	600	-	-	120	2M0A	2CPX037596R9999	
1	5	750	1	250	60	300	-	450	120	1M1A	2CPX037614R9999	
			2	500	120	300	-	450	120	2M1A	2CPX037615R9999	
2	6	900	1	250	72	300	-	600	120	1M2A	2CPX037626R9999	
			2	500	144	300	-	600	120	2M2A	2CPX037627R9999	
3	7	1050	1	250	84	450	-	600	120	1M3A	2CPX037643R9999	
			2	500	168	450	-	600	120	2M3A	2CPX037644R9999	
4	8	1200	1	250	96	450	-	750	120	1M4A	2CPX037655R9999	
			2	500	192	450	-	750	120	2M4A	2CPX037656R9999	
5	9	1350	1	250	108	450	450	450	120	1M5A	2CPX037669R9999	
			2	500	216	450	450	450	120	2M5A	2CPX037670R9999	



1MK2A

- Mounting cross members are steplessly depth-adjustable using deep-mounting bracket ED33
- For drill-free mounting using M4 captive nuts
- Distribution board panels or panel combinations must have the same height (Grid Units) as the cabinets in which they are to be installed
- In floor-standing or switchgear cabinets, two panels or panel combinations must be installed above one another
- The EDF profile rails are included in the scope of delivery

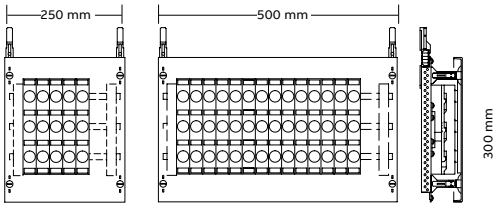
00	3	450	1	250	36	450	-	-	120	1MK00A	2CPX037179R9999	
0	4	600	1	250	48	600	-	-	120	1MK0A	2CPX037180R9999	
1	5	750	1	250	60	300	-	450	120	1MK1A	2CPX037181R9999	
2	6	900	1	250	72	300	-	600	120	1MK2A	2CPX037182R9999	



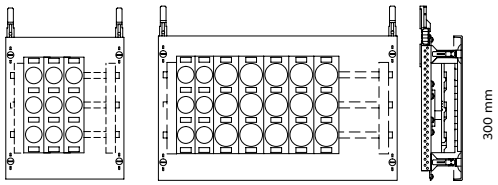
Enclosures

Distribution panel system – Combination sets

Busbar system 40 / 60 mm for devices



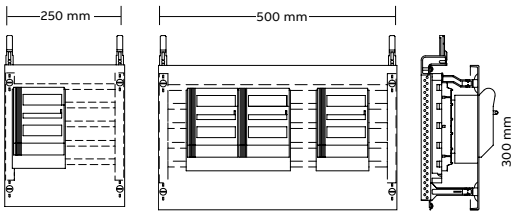
ED10EA **ED20EA**



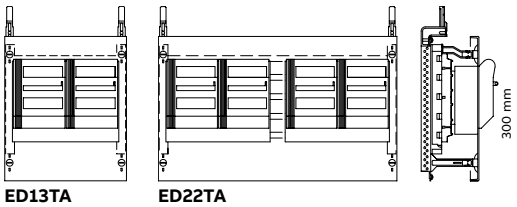
ED11EA **ED21EA**

- With 3-pole mounting fuse sockets
- Busbar centre spacing 60 mm
- With 3 pole busbars 12 x 5 mm
- With busbar holder type ZB5
- Rated current (I_n) max. 250 A
- Combination sets can only be used together with distribution board panels

Height			Width			Devices			Order details		
OH	GU	mm	PW	mm	SU	Design	Number of	Minimum cabinet depth of (mm)	Type	Order code	Price
0	2	300	1	250	24	D02 (ZE60)	5	200	ED10EA	2CPX037800R9999	
			2	500	48	D02 (ZE60)	14	200	ED20EA	2CPX037804R9999	
0	2	300	1	250	24	Diazed E27 (ZE61)	3	200	ED11EA	2CPX037801R9999	
			2	500	48	Diazed E27 (ZE61) / Diazed E33N (ZE62)	2 / 5	200	ED21EA	2CPX037805R9999	



ED12TA **ED21TA**



ED13TA **ED22TA**

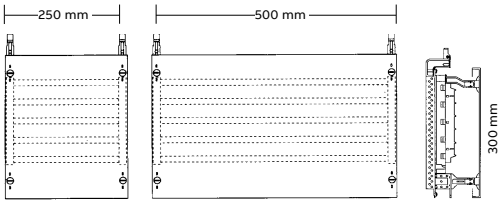
- With 3-pole fuse switch disconnector
- Busbar centre spacing 40 mm
- With 3 pole busbars 12 x 5 mm
- With busbar holder type ZB5
- Rated current (I_n) max. 360 A
- Combination sets can only be used together with distribution board panels

0	2	300	1	250	24	Size 00 (ZH414)	1	200	ED12TA	2CPX037802R9999	
			2	500	48	Size 00 (ZH414)	3	200	ED21TA	2CPX037806R9999	
0	2	300	1	250	24	Size 00 (ZH414)	2	200	ED13TA	2CPX037803R9999	
			2	500	48	Size 00 (ZH414)	4	200	ED22TA	2CPX037807R9999	

Subdistribution boards

Distribution panel system – Combination sets

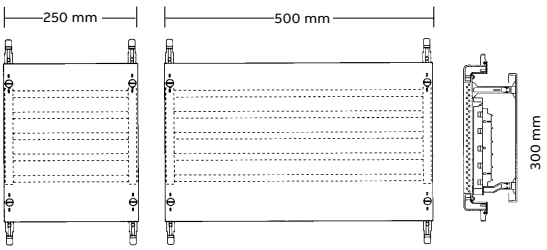
Busbar system



ED61SA **ED62SA**

- Busbar centre spacing 40 mm
- With 5 pole busbars 12 x 5 mm
- With busbar holder type ZB5
- Rated current (I_n) max. 360 A
- Combination sets are inserted to the top or bottom of a distribution board panel and attached to the other side of the cabinet

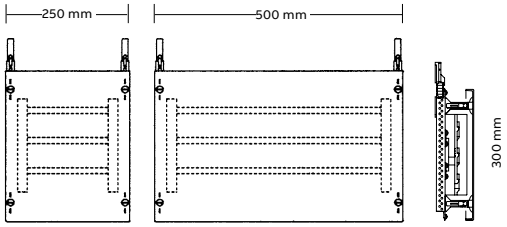
Height			Width				Order details		
OH	GU	mm	PW	mm	SU	Minimum cabinet depth	Type	Order code	Price
0	2	300	1	250	24	200	ED61SA	2CPX037810R9999	
			2	500	48	200	ED62SA	2CPX037811R9999	



ED71SA **ED72SA**

- Busbar centre spacing 40 mm
- With 5 pole busbars 12 x 5 mm
- With busbar holder type ZB5
- Rated current (I_n) max. 360 A
- Combination sets are inserted to the top or bottom of a distribution board panel and thus intended to be inserted in between

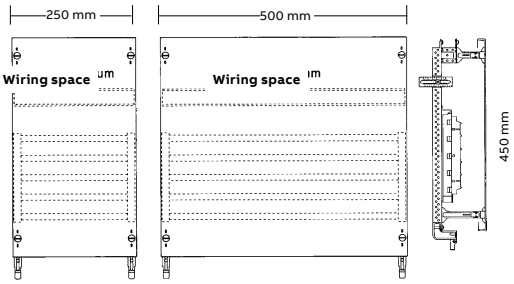
0	2	300	1	250	24	200	ED71SA	2CPX037812R9999	
			2	500	48	200	ED72SA	2CPX037813R9999	



ED55A **ED56A**

- Busbar centre spacing 60 mm
- With 3 pole busbars 12 x 5 mm
- With busbar holder type ZB5
- Rated current (I_n) max. 360 A
- Combination sets are inserted to the top or bottom of a distribution board panel and attached to the other side of the cabinet

0	2	300	1	250	24	200	ED55A	2CPX037808R9999	
			2	500	48	200	ED56A	2CPX037809R9999	



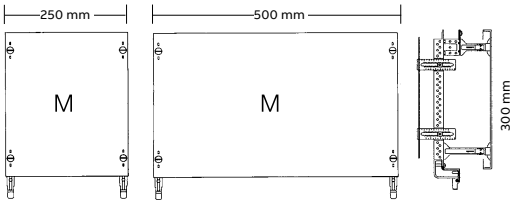
ED91SA **ED92SA**

- With additional rail for terminals
- Busbar centre spacing 60 mm
- With 3 pole busbars 12 x 5 mm
- With busbar holder type ZB5
- Rated current (I_n) max. 360 A
- Combination sets are inserted to the top or bottom of a distribution board panel and attached to the other side of the cabinet

0	3	450	1	250	36	200	ED91SA	2CPX037816R9999	
			2	500	72	200	ED92SA	2CPX037817R9999	

Subdistribution boards

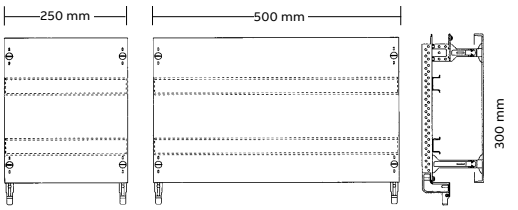
Distribution panel system – Combination sets
Mounting plates, terminals and MCCBs Tmax



ED61MA **ED62MA**

- Mounting plates are steplessly depth-adjustable using deep-mounting bracket ZW59P2
- Combination sets are inserted to the top or bottom of a distribution board panel and attached to the other side of the cabinet
- The installation depth between the deep-mounting bracket and the cover is up to 178 mm

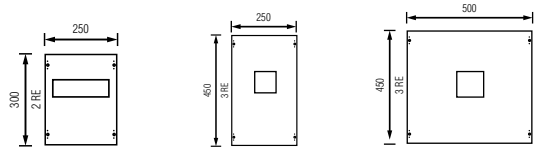
Height			Width			From	Order details		
OH	GU	mm	PW	mm	SU	Cabinet depth	Type	Order code	Price
0	2	300	1	250	24	200	ED61MA	2CPX037820R9999	
			2	500	48	200	ED62MA	2CPX037821R9999	



ED61KA **ED62KA**

- With horizontal DIN rails 35 x 7.5 mm
- DIN rails fixed using ZK90P2 insulator
- Stepped supply formats
- 150 mm DIN rail spacing (adjustment possible, if required)
- For double insulated installations
- Combination sets are inserted to the top or bottom of a distribution board panel and thus intended to be inserted in between

0	2	300	1	250	24	200	ED61KA	2CPX037822R9999	
			2	500	48	200	ED62KA	2CPX037823R9999	
0	3	450	1	250	36	200	ED91KA	2CPX037824R9999	
			2	500	72	200	ED92KA	2CPX037825R9999	



ED250T3 **ED320T4** **ED630T5**

- For MCCBs ABB Tmax
- ED250T3 Tmax T1/XT1, 2 x 3 pole, 1 x 4 pole, Tmax T2, 2 x 3 pole, 1 x 4 pole, Tmax T3/XT3, 1 x 3 pole, 1 x 4 pole, in the compact distribution board only 1 x Tmax T1, lever operated, max. I_n up to 100 A
- ED320T4 , Tmax, T4, 3 pole
- ED630T5 , Tmax, T4, 4 pole and Tmax, T5, 3 and 4 pole combination sets can only be used together with distribution board panels

0	2	300	1	250	24	200	ED250T3	2CPX037826R9999	
0	3	450	1	250	36	200	ED320T4	2CPX037827R9999	
			2	500	72	200	ED630T5	2CPX037828R9999	

Subdistribution boards

Distribution panel system – Distribution panels / Combination sets

General accessories

ED30P2

ED31P2

ED32P2

Article	Pieces	Order details		Price
		Type	Order code	
Panel connector for EDF profile For any combination of distribution board panels or of EDF profile rails mounting plate panels, up to a maximum height of 9 grid units	2	ED30P2	2CPX062302R9999	
Lowering connector for EDF profile For compensating recessed mounting levels, with busbar or mounting plate panels, up to a maximum height of 9 grid units	2	ED31P2	2CPX062303R9999	
Lowering bracket for EDF profile To compensate the level difference between the front and rear fixing points	2	ED32P2	2CPX062304R9999	

ZK300

Article	Pieces	Order details		Price
		Type	Order code	
N/PE busbar system for distribution board panels Cu 12 x 5 mm, max. connection 95 mm²				
1 panel wide	1	ZK300	2CPX038551R9999	
2 panel wide	1	ZK301	2CPX038552R9999	

ZK113B

ZK113G

Article	Number of terminals 1.5 - 4 mm²	Number of terminals 2.5 - 25 mm²	External dimensions H x W x D in mm	Pieces	Order details		Price
					Type	Order code	
N Quick-terminals For Quick carrier	5	0	23 x 32 x 21	1	ZK50B	2CPX062750R9999	
	5	1	32 x 32 x 31	1	ZK51B	2CPX062751R9999	
	8	2	32 x 49 x 31	1	ZK82B	2CPX062752R9999	
	11	3	32 x 65 x 31	1	ZK113B	2CPX062753R9999	
	14	4	32 x 82 x 31	1	ZK144B	2CPX062754R9999	
	17	5	32 x 98 x 31	1	ZK175B	2CPX062755R9999	
	20	6	32 x 115 x 31	1	ZK206B	2CPX062756R9999	
PE Quick-terminals For quick carriers	5	1	32 x 32 x 31	1	ZK51G	2CPX062757R9999	
	8	2	32 x 49 x 31	1	ZK82G	2CPX062758R9999	
	11	3	32 x 65 x 31	1	ZK113G	2CPX062759R9999	
	14	4	32 x 82 x 31	1	ZK144G	2CPX062760R9999	
	17	5	32 x 98 x 31	1	ZK175G	2CPX062761R9999	
	20	6	32 x 115 x 31	1	ZK206G	2CPX062762R9999	

ZK10P10

Connecting bridges For Quick-terminals				10	ZK10P10	2CPX062763R9999	

ZK14

Quick carrier For distribution board panels Usable width for Quick-terminals 214 mm				1	ZK14	2CPX064983R9999	

ZK15

Adapter for ZK50B Engaging the ZK50B N Quick-terminal in the adapter ZK15, leads to ZK50BT to be laterally fastened UK5... , A3 or to the DIN rail				1	ZK15	2CPX064984R9999	

ZX66P4

ED44P10

ED45P10

ED59P10

ED42P10

ED43P10

ED47

ZA1P5

ZA122

Article	Pieces	Order details		Price
		Type	Order code	
Device support connector For the connection of EDF and WR mounting frames	4	ZX66P4	2CPX062562R9999	
	50	ZX66P50	2CPX068614R9999	
Wire holder For routing of wires, installation depth 28.5 mm, to be inserted into the DIN rail from the rear.	10	ED44P10	2CPX062335R9999	
	50	ED44P50	2CPX062308R9999	
	1000	ED44P1000	2CPX062703R9999	
Wire holder For routing of wires or for holding a plastic tube ∅ 38 mm, installation depth 55 mm, to be inserted into the DIN rail from the rear	10	ED45P10	2CPX062336R9999	
	50	ED45P50	2CPX062310R9999	
	1000	ED45P1000	2CPX062704R9999	
DIN rail adapter For ED44 or ED45. Snap onto the DIN rail from the front	10	ED59P10	2CPX062339R9999	
Console for wire holder ED44 or ED45 To be inserted into the DIN rail from the rear.	10	ED42P10	2CPX062333R9999	
Console for wire holder ED44 or ED45 Snap onto the DIN rail from the front.	10	ED43P10	2CPX062334R9999	
Cover For visual screening of wiring routed in the wire holders ED44 and ED45, 1 m long.	1	ED47	2CPX039309R9999	
Slot covers For 12 space units, break-off type, colour RAL 7035	5	ZA1P5	2CPX062384R9999	
	50	ZA1P50	2CPX062378R9999	
By the metre Colour RAL 7035	1	ZA2	2CPX038231R9999	
	20	ZA2P20	2CPX062379R9999	
Cleaner for covers Spray dispenser, 500 ml	1	ZA122	2CPX038293R9999	

Subdistribution boards

Distribution panel system – Distribution panels / Combination sets

General accessories

ZA8

Article	Pieces	Order details		Price
		Type	Order code	
Labelling strips				
20 mm, self-adhesive, 1 panel wide	1	ZA8	2CPX060200R9999	
	5	ZA8P5	2CPX062598R9999	
	40	ZA8P40		
20 mm, self-adhesive, 2 panel wide	1	ZA9	2CPX060201R9999	
	5	ZA9P5	2CPX062599R9999	
	50	ZA9P50		
20 mm, self-adhesive, 3 panel wide	1	ZA7	2CPX060004R9999	
	5	ZA7P5	2CPX062597R9999	
20 mm, self-adhesive, by the metre	1	ZA10	2CPX038241R9999	
	10	ZA10P10	2CPX062706R9999	
20 mm, self-adhesive with additional transparent film, by the metre	1	ZA11	2CPX038230R9999	
	10	ZA11P10	2CPX062707R9999	
16 mm, self-adhesive, by the metre	1	ZA12	2CPX038242R9999	
	10	ZA12P10	2CPX062708R9999	

ZA71

Labelling system for busbars L1, L2, L3, N, PE, 1 sheet = 120 different stickers	1	ZA71	2CPX038458R9999	

ZA27

Labelling system Self-adhesive, for labelling by hand or by machine, consisting of: 1 sheet with 10 strips	1	ZA27	2CPX038495R9999	

ZA73

Labelling system For distribution board panels up to 6 GU	1	ZA73	2CPX038497R9999	

ZA74

Labelling system For distribution board panels up to 9 GU	1	ZA74	2CPX038498R9999	

ZA78

Labelling system For 8 x 12 SU	1	ZA78	2CPX031569R9999	

ZA79

Legend for 72 devices SU	1	ZA79	2CPX031570R9999	

Subdistribution boards

The new flatpack and monobloc solution for wall-mounting and floor-standing cabinets

With the new TwinLine S system, ABB offers a tailored and proven concept of flatpack and monobloc wall-mounting and floor-standing cabinets.

This comprehensive product range includes two cabinet types TwinLine-G (depth of 225 mm) and TwinLine-L (depth of 275 mm) and provides a solution for every application. All cabinets are designed according to IEC 61439. The modular system is simple in planning, quick in assembly and safe in application.

A wide range of flange types provides the right solution for every application. All flanges are suited for all flange openings and knockouts of the complete TwinLine series. The flanges can be attached without the need of tools thanks to the handy push and lock technology.

All TwinLine cabinets can be connected side-by-side with connection set. All side walls are easily removable. Connection box can be stacked on top of floor standing cabinets. The plinth concept provides a safe transport in the workshop and on-site. The standard heights of 50 mm and 100 mm can be stacked and combined in order to fulfil installation needs. TwinLine offers unrestricted access during operation, expansion, maintenance and functional monitoring. With its 180-degree door opening and the door locking system, with the possibility to switch the door hinges from right to left it guarantees excellent flexibility.

The removable frame as standard gives the possibility to remove all covers in one handling and provides a quick assembly. With its wide range of the new modular distribution panel system, called CombiLine S, ABB offers the right solution for every application. The internal configuration system fits in all TwinLine S 55 cabinets. CombiLine S provides a time-saving installation due to hook-in technology and a simple closure system for covers with the ¼ turn quick-lock. With its new mounting concept for the CombiLine S system, TwinLine provides more flexibility and access for installation and wiring. There is also the option to have moun-ting plates in full cabinet size that can be adjusted in depth.

Product benefits

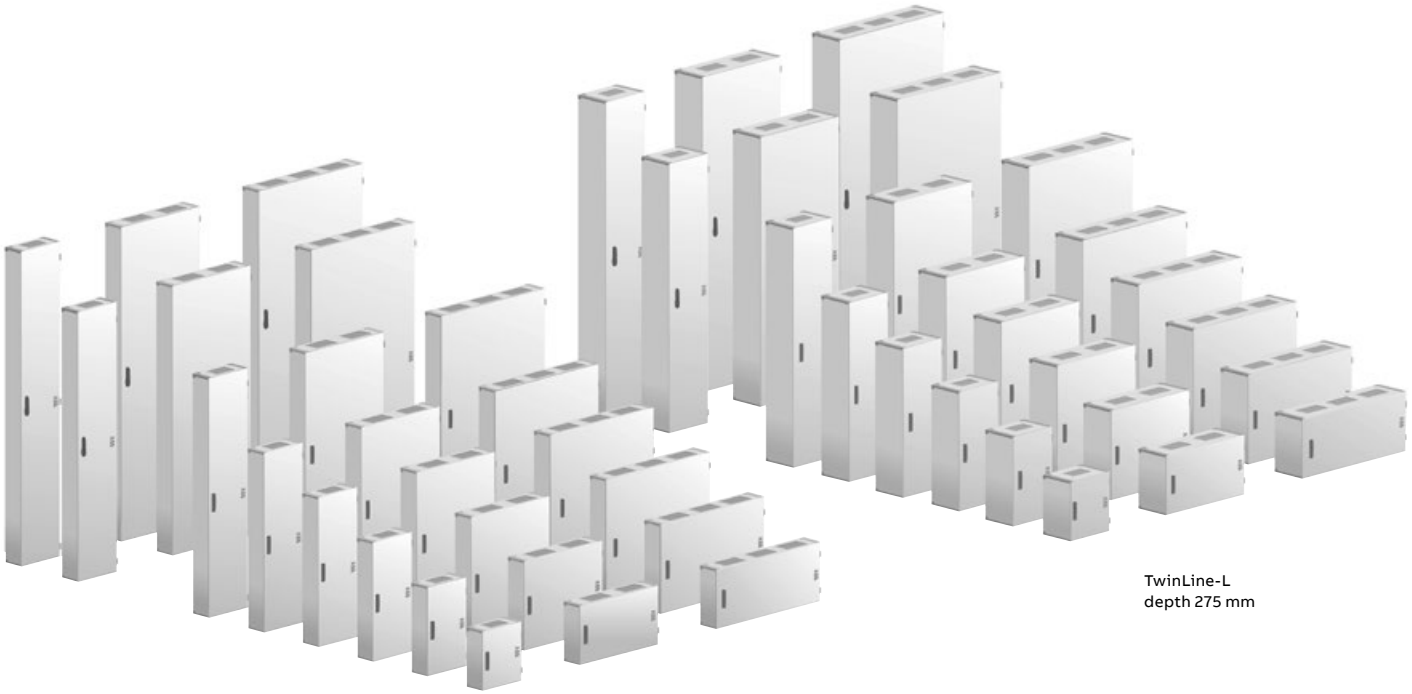
- Innovative flange technology
- Significantly more usable area for cable entry
- All flanges are compatible with all flange openings and knockouts within the entire TwinLine system
- Side walls can be easily removed
- Flexible internal configuration with CombiLine S modules
- Optimal accessibility and ease of installation thanks to 180 degree door opening angle
- Time-saving plinth assembly and safe transport
- Simplified accessories concept for reduced inventory levels
- Speedy and concise planning as well as calculations with the PDC software

Subdistribution boards

TwinLine S 43

The complete cabinet system in all sizes

Simple in planning, Quick in assembly, Safe in application



TwinLine-L
depth 275 mm

TwinLine-G
depth 225 mm

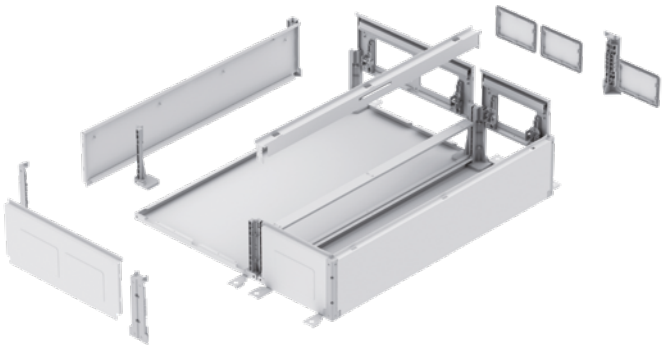
Cabinet type		TwinLine-G			TwinLine-L		
Degree of protection		up to IP43			up to IP43		
Protection class		.			.		
Depth		225			275		
Width		300	600	800	300	600	800
Height	400	■	■	■	■	■	■
	600	■	■	■	■	■	■
	800	■	■	■	■	■	■
	1000	■	■	■	■	■	■
	1200	■	■	■	■	■	■
	1400	■	■	■	■	■	■
	1600	■	■	■	■	■	■
	1800	■	■	■	■	■	■
	2000	■	■	■	■	■	■

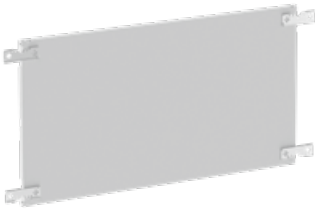
> Dimensions in mm

Subdistribution boards

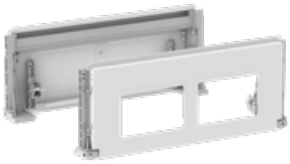
TwinLine S 43

System overview



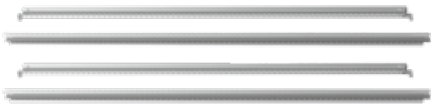


Rear wall



Top and bottom plate

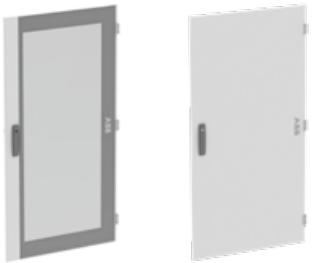
Side walls



Installation set for removable frame

Uprights for side-by-side positioning of cabinets

Internal cable container



Transparent or sheet steel doors

Flanges

Plinth

Subdistribution boards

TwinLine S 43

Product benefits

The complete cabinet system in all sizes
The fully comprehensive product range of modular wall-mounting and floor-standing cabinets includes the types TwinLine-G (depth of 225 mm) and TwinLine-L (depth of 275 mm) and provides a solution for every application. All cabinets are designed according to IEC 61439. The modular system is simple in planning, quick in assembly and safe in application.

Innovative cable entry
A wide range of flange types provides the right solution for every application. All flanges are suited for all flange openings and knockouts of the complete TwinLine cabinets. The flanges can be attached without the need of tools thanks to the handy push and lock technology.

Simple connection in series of all cabinets
All TwinLine cabinets can be connected in both, horizontally and vertically directions. Uprights for side-by-side positioning and connection sets for stacking the cabinets can be easily installed.

Time-saving plinth installation and safe transport
The new plinth concept provides a safe transport in the workshop and on-site. The plinth contains knockouts and has the possibility to install wiring ducts for cable support. The standard heights of 50 mm and 100 mm can be stacked and combined in order to fulfil installation needs.

Optimal accessibility and ease of installation
TwinLine offers unrestricted access during operation, expansion, maintenance and functional monitoring. With its 180-degree door opening and the door locking system, with the possibility to switch the door hinges from right to left it guarantees excellent flexibility.

Removable frame for CombiLine S covers
With its wide range of the new modular distribution panel system, called CombiLine S, ABB offers the right solution for every application. The removable frame as standard gives the possibility to remove all covers in one handling and provides a quick assembly.

Flexibility in the assembling of internal configuration
With its new mounting concept for the CombiLine S system, TwinLine provides more flexibility and access for installation and wiring also outside of the cabinet. There is also the option to have continuous mounting plates that can be adjusted in depth.

The right internal configuration for every type of application
The wide range of the internal configuration system CombiLine S fits in all TwinLine S 43 cabinets. CombiLine S provides a time-saving installation due to hook-in technology and a simple closure system for covers with the ¼ turn quick-lock.

Subdistribution boards

TwinLine S 43

Innovative cable entry

The usable cable entry area is one of largest cable entries available on the market. A wide range of flange types provides the right solution for every application. All flanges are suited for all flange openings and knockouts of the complete TwinLine cabinets. The flanges can be attached without the need of tools thanks to the handy push and lock technology.

- All flanges are compatible with all flange openings and knockouts within the entire TwinLine system
- Wide range of new flanges
- Tool-free flange installation thanks to push and lock technology

Membrane flange
- 2-component flange with integrated seal, material: plastic
- Tool-free installation thanks to push and lock technology
- Optimal cable entry by a combination of hard and soft components
- Additional fixing and centring

Flange for M screw fittings
- 2-component flange with integrated seal, material: plastic
- Tool-free installation thanks to push and lock technology
- With two different hole patterns

Flange with cable sleeves
- 2-component flange with integrated seal, material: plastic
- Tool-free installation thanks to push and lock technology

Closing flange
- 2-component flange with integrated seal, material: plastic
- Tool-free installation thanks to push and lock technology
- Can be used as closing flange or for customization, e.g. for cable sleeves or screw fittings

Closing flange
- With foam seal around perimeter, material: sheet steel 2 mm
- Continuous protective earth connection via flange fastener
- Can be used as closing flange or for customization, e.g. for cable sleeves or screw fittings

Subdistribution boards

TwinLine S 43

Technical specifications

Technical specifications	
Standards / regulations	IEC 61439 -1/-2/-3*
Protection class	I, earthed, in combination with CAEC6
Degree of protection	IP43 Without door IP30
Mechanical impact strength	IK 08 for the cabinet enclosure
	IK 07 in the area of the flange knockouts
	IK 07 for transparent doors
	IK 08 for sheet steel doors
Conditions of installation	Indoor installation
	Ambient air temperature max. + 40°C
	Ambient air temperature min. - 5°C
	Operating temperature max. + 55°C
	Storage temperature max. + 55°C
	Storage temperature min. - 40°C

* Powerloss determinated by calculation with the method of IEC 60890 in accordance with IEC 61439-1 par. 10.10.4

Product features	
Housing and door	Sheet steel, RAL 7035, powder-coated
	Door opening angle: 180 degrees
	Doors with espagnolette closure
	Doors for wall-mounting cabinets: with latch plate and 3 mm double bit pin
	Doors for floor-standing cabinets: with swivel handle and 3 mm double bit pin
Assembly options	Prepared to be fitted with CombiLine S modules and mounting plates
Forms of delivery	Build-up cabinets out of sets

Subdistribution boards

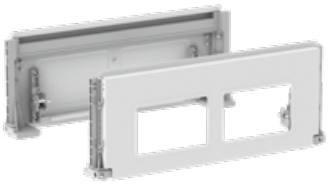
TwinLine S 43 Rear walls

ESBN0612

Article	Height in mm	Order details		Price	Pcs.
		Type	Order code		
Rear walls With external mounting brackets					
Width 300 mm	400	ESBN0304	2CPX078100R9999		1
	600	ESBN0306	2CPX078101R9999		1
	800	ESBN0308	2CPX078102R9999		1
	1000	ESBN0310	2CPX078103R9999		1
	1200	ESBN0312	2CPX078104R9999		1
	1400	ESBN0314	2CPX078105R9999		1
	1600	ESBN0316	2CPX078106R9999		1
	1800	ESBN0318	2CPX078107R9999		1
	2000	ESBN0320	2CPX078108R9999		1
Width 600 mm	400	ESBN0604	2CPX078109R9999		1
	600	ESBN0606	2CPX078110R9999		1
	800	ESBN0608	2CPX078111R9999		1
	1000	ESBN0610	2CPX078112R9999		1
	1200	ESBN0612	2CPX078113R9999		1
	1400	ESBN0614	2CPX078114R9999		1
	1600	ESBN0616	2CPX078115R9999		1
	1800	ESBN0618	2CPX078116R9999		1
	2000	ESBN0620	2CPX078117R9999		1
Width 800 mm	400	ESBN0804	2CPX078118R9999		1
	600	ESBN0808	2CPX078120R9999		1
	800	ESBN0808	2CPX078120R9999		1
	1000	ESBN0810	2CPX078121R9999		1
	1200	ESBN0812	2CPX078122R9999		1
	1400	ESBN0814	2CPX078123R9999		1
	1600	ESBN0816	2CPX078124R9999		1
	1800	ESBN0818	2CPX078125R9999		1
	2000	ESBN0820	2CPX078126R9999		1

Subdistribution boards

TwinLine S 43 Top and bottom plate



ESPL0600

ESCL0600

Article	Width in mm	Order details		Price	Pcs.
		Type	Order code		
Top and bottom plates					
Type 1: One plate, all flanges open One plate, all flanges closed with knockouts					
Depth 225 mm	300	ESPG0300	2CPX078145R9999		2
	600	ESPG0600	2CPX078146R9999		2
	800	ESPG0800	2CPX078147R9999		2
Depth 275 mm	300	ESPL0300	2CPX078148R9999		2
	600	ESPL0600	2CPX078149R9999		2
	800	ESPL0800	2CPX078150R9999		2
Type 2: Both plates, all flanges closed with knockouts					
Depth 225 mm	600	ESCG0600	2CPX078373R9999		2
	800	ESCG0800	2CPX078374R9999		2
Depth 275 mm	600	ESCL0600	2CPX078375R9999		2
	800	ESCL0800	2CPX078376R9999		2

Subdistribution boards

TwinLine S 43 Side walls / uprights for side-by-side positioning of cabinets

ESSL0012

ESUL0012

Article	Height in mm	Order details		Price	Pcs.
		Type	Order code		
Side walls					
Depth 225 mm	400	ESSG0004	2CPX078127R9999		2
	600	ESSG0006	2CPX078128R9999		2
	800	ESSG0008	2CPX078129R9999		2
	1000	ESSG0010	2CPX078130R9999		2
	1200	ESSG0012	2CPX078131R9999		2
	1400	ESSG0014	2CPX078132R9999		2
	1600	ESSG0016	2CPX078133R9999		2
	1800	ESSG0018	2CPX078134R9999		2
	2000	ESSG0020	2CPX078135R9999		2
Depth 275 mm	400	ESSL0004	2CPX078136R9999		2
	600	ESSL0006	2CPX078137R9999		2
	800	ESSL0008	2CPX078138R9999		2
	1000	ESSL0010	2CPX078139R9999		2
	1200	ESSL0012	2CPX078140R9999		2
	1400	ESSL0014	2CPX078141R9999		2
	1600	ESSL0016	2CPX078142R9999		2
	1800	ESSL0018	2CPX078143R9999		2
	2000	ESSL0020	2CPX078144R9999		2
Uprights for side-by-side positioning of cabinets					
Depth 225 mm	400	ESUG0004	2CPX078223R9999		1
	600	ESUG0006	2CPX078224R9999		1
	800	ESUG0008	2CPX078225R9999		1
	1000	ESUG0010	2CPX078226R9999		1
	1200	ESUG0012	2CPX078227R9999		1
	1400	ESUG0014	2CPX078228R9999		1
	1600	ESUG0016	2CPX078229R9999		1
	1800	ESUG0018	2CPX078230R9999		1
	2000	ESUG0020	2CPX078231R9999		1
Depth 275 mm	400	ESUL0004	2CPX078232R9999		1
	600	ESUL0006	2CPX078233R9999		1
	800	ESUL0008	2CPX078234R9999		1
	1000	ESUL0010	2CPX078235R9999		1
	1200	ESUL0012	2CPX078236R9999		1
	1400	ESUL0014	2CPX078237R9999		1
	1600	ESUL0016	2CPX078238R9999		1
	1800	ESUL0018	2CPX078239R9999		1
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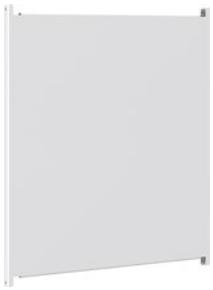
Subdistribution boards

TwinLine S 43 Installation set / internal cable container / mounting plates

ESIN0012

ESAI0212



TZM304

Article	Height in mm	Width in mm	Order details		Price	Pcs.
			Type	Order code		
Installation set with removable frame						
For internal configuration in 300 mm, 600 mm, 800 mm wide cabinets	400		ESIN0004	2CPX078420R9999		1
	600		ESIN0006	2CPX078421R9999		1
	800		ESIN0008	2CPX078422R9999		1
	1000		ESIN0010	2CPX078423R9999		1
	1200		ESIN0012	2CPX078424R9999		1
	1400		ESIN0014	2CPX078425R9999		1
	1600		ESIN0016	2CPX078426R9999		1
	1800		ESIN0018	2CPX078427R9999		1
	2000		ESIN0020	2CPX078428R9999		1
Internal cable container						
With hinged internal blind cover For 800 mm wide cabinets	600		ESAI0206	2CPX078215R9999		1
	800		ESAI0208	2CPX078216R9999		1
	1000		ESAI0210	2CPX078217R9999		1
	1200		ESAI0212	2CPX078218R9999		1
	1400		ESAI0214	2CPX078219R9999		1
	1600		ESAI0216	2CPX078220R9999		1
	1800		ESAI0218	2CPX078221R9999		1
	2000		ESAI0220	2CPX078222R9999		1
Mounting plates						
Sheet steel 2 mm, galvanised	600	600	TZM204	2CPX010598R9999		1
		800	TZM304	2CPX010605R9999		1
	1200	600	TZM208	2CPX010602R9999		1
		800	TZM308	2CPX010609R9999		1
	1800	600	TZM2012	2CPX010941R9999		1
		800	TZM312	2CPX010942R9999		1

Subdistribution boards

TwinLine S 43 Sheet steel doors

ESAS0612

ESAS0618

Article	Height in mm	Order details		Price	Pcs.
		Type	Order code		
Doors for wall-mounting cabinets, with latch plate and double bit 3 mm **Doors for floor-standing cabinets,** with swivel handle and double bit 3 mm					
Width 300 mm	400	ESAS0304	2CPX078151R9999		1
	600	ESAS0306	2CPX078152R9999		1
	800	ESAS0308	2CPX078153R9999		1
	1000	ESAS0310	2CPX078154R9999		1
	1200	ESAS0312	2CPX078155R9999		1
	1400	ESAS0314	2CPX078156R9999		1
	1600	ESAS0316	2CPX078157R9999		1
	1800	ESAS0318	2CPX078158R9999		1
	2000	ESAS0320	2CPX078159R9999		1
Width 600 mm	400	ESAS0604	2CPX078160R9999		1
	600	ESAS0606	2CPX078161R9999		1
	800	ESAS0608	2CPX078162R9999		1
	1000	ESAS0610	2CPX078163R9999		1
	1200	ESAS0612	2CPX078164R9999		1
	1400	ESAS0614	2CPX078165R9999		1
	1600	ESAS0616	2CPX078166R9999		1
	1800	ESAS0618	2CPX078167R9999		1
	2000	ESAS0620	2CPX078168R9999		1
Width 800 mm	400	ESAS0804	2CPX078169R9999		1
	600	ESAS0806	2CPX078170R9999		1
	800	ESAS0808	2CPX078171R9999		1
	1000	ESAS0810	2CPX078172R9999		1
	1200	ESAS0810	2CPX078172R9999		1
	1400	ESAS0814	2CPX078174R9999		1
	1600	ESAS0816	2CPX078175R9999		1
	1800	ESAS0818	2CPX078176R9999		1
	2000	ESAS0820	2CPX078177R9999		1

Subdistribution boards

TwinLine S 43 Transparent doors

ESAT0612

ESAT2618

Article	Height in mm	Order details		Price	Pcs.
		Type	Order code		
Doors for wall-mounting cabinets, with latch plate and double bit 3 mm **Doors for floor-standing cabinets,** with swivel handle and double bit 3 mm					
Width 600 mm	600	ESAT0606	2CPX078178R9999		1
	800	ESAT0608	2CPX078179R9999		1
	1000	ESAT0610	2CPX078180R9999		1
	1200	ESAT0612	2CPX078181R9999		1
	1400	ESAT0614	2CPX078182R9999		1
	1600	ESAT0616	2CPX078183R9999		1
	1800	ESAT0618	2CPX078184R9999		1
	2000	ESAT0620	2CPX078185R9999		1
Width 800 mm	600	ESAT0806	2CPX078186R9999		1
	800	ESAT0808	2CPX078187R9999		1
	1000	ESAT0810	2CPX078188R9999		1
	1200	ESAT0812	2CPX078189R9999		1
	1400	ESAT0814	2CPX078190R9999		1
	1600	ESAT0816	2CPX078191R9999		1
	1800	ESAT0818	2CPX078192R9999		1
	2000	ESAT0820	2CPX078193R9999		1
Width 800 mm For 800 mm wide cabinet With internal cable container	600	ESAT2606	2CPX078194R9999		1
	800	ESAT2608	2CPX078195R9999		1
	1000	ESAT2610	2CPX078196R9999		1
	1200	ESAT2612	2CPX078197R9999		1
	1400	ESAT2614	2CPX078198R9999		1
	1600	ESAT2616	2CPX078199R9999		1
	1800	ESAT2618	2CPX078200R9999		1
	2000	ESAT2620	2CPX078201R9999		1

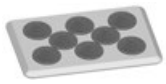
Subdistribution boards

TwinLine S 43 Flanges

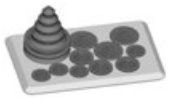
TZ101

TZ102

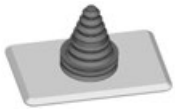
TZ103



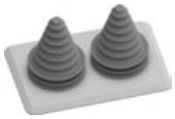
TZ110



TZ111



TZ112



TZ104

TZ105

TZ107

TZ106

Article	Order details		Price	Pcs.
	Type	Order code		
Membrane flange				
Material: plastic				
For cable sections 2 x 6 - 32.5 mm, 2 x 6 - 25 mm, 4 x 6 - 19 mm, 10 x 6 - 15 mm, 2 x 6 - 12 mm, 31 x 6 - 11 mm, 1 x 6 - 7 mm	TZ101	2CPX010450R9999		1
	TZ101P10	2CPX010451R9999		10
	TZ101P100	2CPX010826R9999		100
Flanges for M screw fittings				
Material: plastic				
1 x M 63 / M 50, 2 x M 32 / M 20, 5 x M 25, 5 x M 20	TZ102	2CPX010452R9999		1
	TZ102P10	2CPX010453R9999		10
4 x M20 / M25, 18 x M20	TZ103	2CPX010454R9999		1
	TZ103P10	2CPX010455R9999		10
Flanges with cable sleeves				
Material: plastic				
Flanges with 8 cable sleeves For cable sections 8 x 13 - 34 mm	TZ110	2CPX010850R9999		1
Flanges with 11 cable sleeves For cable sections 1 x 14 - 54 mm, 3 x 13 - 34 mm, 3 x 13 - 26.5 mm, 4 x 5 - 21 mm	TZ111	2CPX010851R9999		1
Flange with 1 cable sleeve For cable sections 1 x 14 - 68 mm	TZ112	2CPX010852R9999		1
Flange with 2 cable sleeves For cable sections 2 x 14 - 68 mm	TZ104	2CPX010456R9999		1
Flange with 3 cable sleeves For cable sections 3 x 14 - 54 mm	TZ105	2CPX010457R9999		1
Closing flanges				
Material: plastic	TZ107	2CPX010460R9999		1
	TZ107P10	2CPX010461R9999		10
Material: sheet steel	TZ106	2CPX010458R9999		1
	TZ106P10	2CPX010459R9999		10

Subdistribution boards

TwinLine S 43 Plinth

ESAG0605

ESAL0610

Article	Width mm	Order details		Price	Pcs.
		Type	Order code		
Plinth, height 50 mm, color RAL 7012					
Depth 225 mm	300	ESAG0305	2CPX078202R9999		1
	600	ESAG0605	2CPX078204R9999		1
	800	ESAG0805	2CPX078206R9999		1
Depth 275 mm	300	ESAL0305	2CPX078208R9999		1
	600	ESAL0605	2CPX078210R9999		1
	800	ESAL0805	2CPX078212R9999		1
Plinth, height 100 mm, color RAL 7012					
Depth 225 mm Side knockouts 1 x M 32 / M 50 or 80 x 80 mm	300	ESAG0310	2CPX078203R9999		1
	600	ESAG0610	2CPX078205R9999		1
	800	ESAG0810	2CPX078207R9999		1
Depth 275 mm Side knockouts 1 x M 32 / M 50 or 80 x 80 mm	300	ESAL0310	2CPX078209R9999		1
	600	ESAL0610	2CPX078211R9999		1
	800	ESAL0810	2CPX078213R9999		1

Subdistribution boards

TwinLine S 43 Lock replacement parts

ESAC1001

ESAC1002

ESAC1003

ESAC1004

ESAC1005

ESAC1006

ESAC1007

ESAC1008

ESAC1009

ESAC1010

ESAC1011

ESAC1013

TZ517

TZ518

ZH130

ZH132

ZH134

ZH137

Article	Order details		Price	Pcs.
	Type	Order code		
Swivel handle and operating pins				
Swivel handle with double bit 3 mm*[1]	ESAC1001	2CPX010900R9999		1
Double bit 3 mm*[1]	ESAC1002	2CPX010901R9999		1
Double bit 5 mm	ESAC1003	2CPX010902R9999		1
Triangular 7 mm	ESAC1004	2CPX010903R9999		1
Triangular 8 mm	ESAC1005	2CPX010904R9999		1
Square 6 mm	ESAC1006	2CPX010905R9999		1
Square 7 mm	ESAC1007	2CPX010906R9999		1
Square 8 mm	ESAC1008	2CPX010907R9999		1
EK333 and key	ESAC1009	2CPX010908R9999		1
FIST type insert (FIAT)	ESAC1010	2CPX010909R9999		1
FIAT key	ESAC1013	2CPX010912R9999		1
Ronis 455 and key	ESAC1011	2CPX010910R9999		1
Ronis 405 and key	ESAC1012	2CPX010911R9999		1
Latch plates and operating pins				
For operating pin 3 mm (standard)*[2] and 5 mm	TZ517	2CPX010926R9999		1
For triangular and square operating pin	TZ518	2CPX010927R9999		1
Double bit 3 mm*[2]	ZH130	2CPX060490R9999		1
Double bit 5 mm	ZH131	2CPX060491R9999		1
Triangular 7 mm	ZH132	2CPX060492R9999		1
Triangular 8 mm	ZH133	2CPX060493R9999		1
Square 6 mm	ZH134	2CPX060494R9999		1
Square 7 mm	ZH135	2CPX060495R9999		1
Square 8 mm	ZH136	2CPX060496R9999		1
Daimler-Benz	ZH137	2CPX060497R9999		1

*[1] In scope of delivery of doors for floor-standing cabinets
*[2] In scope of delivery of doors for wall-mounting cabinets

Subdistribution boards

TwinLine S 43 Lock replacement parts

ZH91

ZH160

ZH157

ZH162

ZH165

ESAC2004

ESAC2008

TZ511

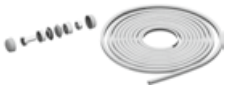
TZ501

Article	Order details		Price	Pcs.
	Type	Order code		
Universal key Double bit 3 mm/5 mm Triangular 8 mm, square 6 mm/8 mm	ZH91	2CPX066091R9999		1
Double bit 3 mm*	ZH160	2CPX060660R9999		1
Double bit 5 mm	ZH161	2CPX060661R9999		1
Triangular 7 mm	ZH157	2CPX060657R9999		1
Triangular 8 mm	ZH158	2CPX060658R9999		1
Square 6 mm	ZH162	2CPX060662R9999		1
Square 7 mm	ZH163	2CPX060663R9999		1
Square 8 mm	ZH164	2CPX060664R9999		1
Daimler-Benz	ZH165	2CPX060665R9999		1
Espagnolette closure*				
Closure for door height 400 mm	ESAC2004	2CPX010913R9999		1
Espagnolette closure height 600 mm	ESAC2006	2CPX010914R9999		1
Espagnolette closure height 800 mm	ESAC2008	2CPX010915R9999		1
Espagnolette closure height 1000 mm	ESAC2010	2CPX010916R9999		1
Espagnolette closure height 1200 mm	ESAC2012	2CPX010917R9999		1
Espagnolette closure height 1400 mm	ESAC2014	2CPX010918R9999		1
Espagnolette closure height 1600 mm	ESAC2016	2CPX010919R9999		1
Espagnolette closure height 1800 mm	ESAC2018	2CPX010920R9999		1
Espagnolette closure height 2000 mm	ESAC2020	2CPX010921R9999		1
Espagnolette guide*	TZ511	2CPX010495R9999		1
Shoe* For espagnolette closure	TZ501	2CPX010485R9999		1

*Accessory included in the scope of delivery

Subdistribution boards

TwinLine S 43 General accessories

	Article	Order details		Price	Pcs.
		Type	Order code		
ESAC3001P2	Mounting brackets 2 pcs* To mount the cabinet to the wall, to connect the plinth with the back of the cabinet or to connect cabinets in the back when using ESAC3002	ESAC3001P2	2CPX078410R9999		2
ESAC3003P4	Transport lugs 4 pcs	ESAC3003P4	2CPX078412R9999		4
ESAC3004P2	Lifting reinforcement for side-by-side structures 2 pcs For transporting side-by-side structures	ESAC3004P2	2CPX078413R9999		2
TZ637	Door hinge: 180 degree*	TZ637	2CPX078414R9999		1
TZ628P10	Closing plugs for hinge cutout	TZ628P10	2CPX010854R9999		1
 ESAC3002	Connection set for stacking cabinets	ESAC3002	2CPX078411R9999		1
TZ626	Protective frame for stacking cabinets	TZ626	2CPX010778R9999		1
TZ601	Mounting rails* For mounting frame holder	TZ601	2CPX010779R9999		1
TZ604	Mounting frame holder centre* For internal and external cable container	TZ604	2CPX010782R9999		1
TZ605	Mounting frame holder* left or right	TZ605	2CPX010783R9999		1

*Accessory included in the scope of delivery

ZL8

ZA16

ZA116

ZA6

ZA5

ZA123

Article	Order details		Price	Pcs.
	Type	Order code		
Door earthing set 10 mm²	ZL8	2CPX038001R9999		1
Spray paint can Colour RAL 7035, 150 ml	ZA16	2CPX038235R9999		1
Touch-up applicator Colour RAL 7035, 12 ml	ZA116	2CPX039042R9999		1
Document holder DIN A4 Self-adhesive with transparent sleeve	ZA6	2CPX038227R9999		1
	ZA6P10	2CPX062380R9999		10
Self-adhesive with transparent sleeve and reinforced back	ZA61P10	2CPX062375R9999		10
Document holder DIN A4 Self-adhesive	ZA13	2CPX038233R9999		1
	ZA13P10	2CPX062381R9999		10
Document holder DIN A5 Self-adhesive	ZA5	2CPX038228R9999		1
	ZA5P10	2CPX062382R9999		10
Document holder support plate				
For document holder ZA13. to screw on to the door strengthening profiles	ZA123	2CPX038471R9999		1
For document holder ZA5. to screw on to the door strengthening profiles	ZA125	2CPX038472R9999		1

The complete cabinet system ...

With the new TwinLine S 55 system, ABB offers a tailored and future-proof concept of welded wall-mounting and floor-standing cabinets.

This fully comprehensive product range includes two cabinet types TwinLine-G (depth of 225 mm) and TwinLine-L (depth of 275 mm) and provides a solution for every application. The system guarantees high flexibility due to removable side walls.

All cabinets are designed according to IEC 61439. The modular system is simple in planning, quick in assembly and safe in application. Highlights such as the innovative flange technology, optimal accessibility, ease of cabinet connection, the modular plinth concept and a flexible assembly of the new internal configuration, guarantee a modern energy distribution.

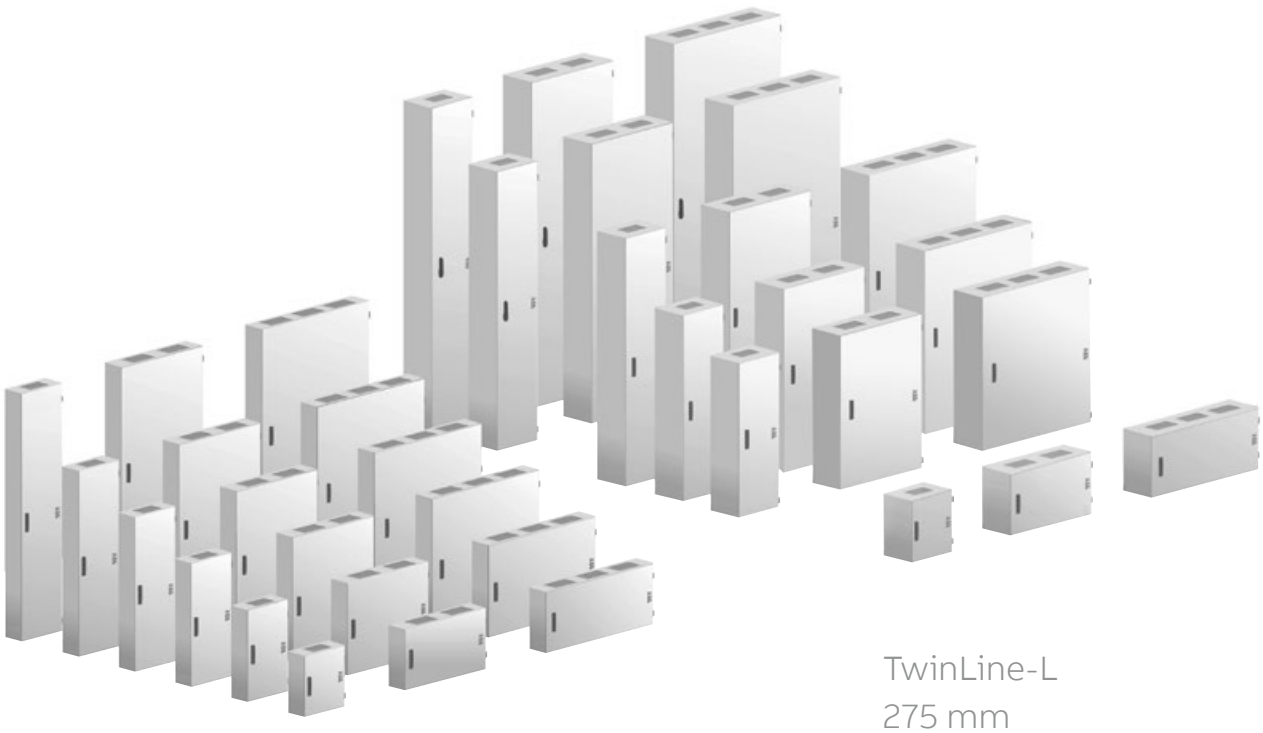
… in every size

Simple in planning
Quick in assembly
Safe in application

Degree of protection		**up to IP55**			**up to IP55**		
Protection class		⏚			⏚		
Depth		**225**	**225**	**225**	**275**	**275**	**275**
Width		**300**	**600**	**800**	**300**	**600**	**800**
Height	400	●	●	●	●	●	●
	600	●	●	●	○	○	○
	800	●	●	●	○	○	○
	1000	●	●	●	○	○	○
	1200	●	●	●	●	●	●
	1400	●	●	●	●	●	●
	1600	○	○	○	●	●	●
	1800	○	○	○	●	●	●
	2000	○	○	○	●	●	●

> Dimensions in mm

● = available ○ = not available



TwinLine-L
275 mm

TwinLine-G
225 mm

Product benefits

Innovative cable entry and ease of installation

See page 8

01

A wide range of flange types provides the right solution for every application. All flanges are suited for all flange openings and knockouts of the complete TwinLine cabinets. The flanges can be attached without the need of tools thanks to the handy push and lock technology. TwinLine offers unrestricted access during operation, expansion, maintenance and functional monitoring. With its 180-degree door opening and the door locking system, with the possibility to switch the door hinges from right to left it guarantees excellent flexibility.

Simple connection in series of all cabinets

See page 12

02

All TwinLine cabinets can be connected horizontally, floor-standing enclosures can also be connected in vertical directions. Connection sets for side-by-side positioning and stacking the cabinets can be easily installed.

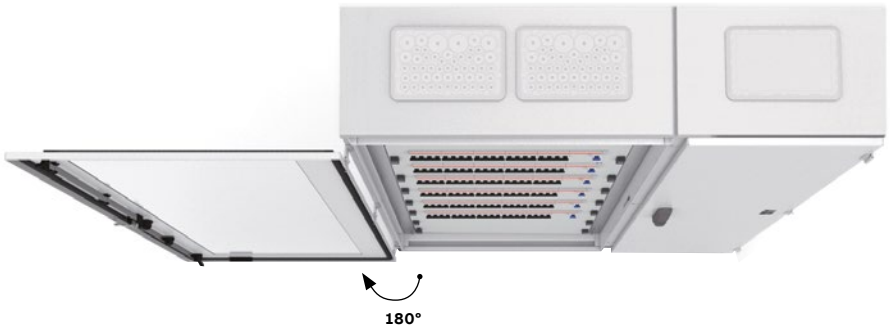
Time-saving plinth assembly and safe transport

See page 13

03

The new plinth concept provides a safe transport in the workshop and on-site. The plinth contains knockouts and has the possibility to install wiring ducts for cable support. The standard heights of 50 mm and 100 mm can be stacked and combined in order to fulfil installation needs.

01



02

03

The right internal configuration for every type of application

See page 13

—
04

The wide range of the internal configuration system CombiLine S fits in all TwinLine S 55 cabinets. CombiLine S provides a time-saving installation due to hook-in technology and a simple closure system for covers with the ¼ turn quick-lock.

Removable frame for CombiLine S covers

See page 14

—
05

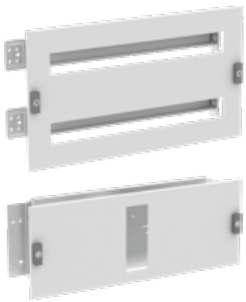
With its wide range of the new modular distribution panel system, called CombiLine S, ABB offers the right solution for every application. The removable frame as standard gives the possibility to remove all covers in one handling and provides a quick assembly.

Flexibility in the assembling of internal configuration

See page 15

—
06

With its new mounting concept for the CombiLine S system, TwinLine provides more flexibility and access for installation and wiring also outside of the cabinet. There is also the option to have mounting plates that can be adjusted in depth.



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04

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05

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06

Innovative cable entry

The usable cable entry area is one of largest cable entries available on the market. A wide range of flange types provides the right solution for every application.

All flanges are suited for all flange openings and knockouts of the complete TwinLine cabinets. The flanges can be attached without the need of tools thanks to the handy push and lock technology.

- All flanges are compatible with all flange openings and
- Knockouts within the entire TwinLine system
- Wide range of flanges
- Tool-free flange installation thanks to push and lock technology

—
01
Membrane flange
– 2-component flange with integrated seal, material: plastic
– Tool-free installation thanks to push and lock technology
– Optimal cable entry by a combination of hard and soft components Additional fixing and centring

—
02
Flange for M screw fittings
– 2-component flange with integrated seal, material: plastic
– Tool-free installation thanks to push and lock technology
– With two different hole patterns

—
03
Flange with cable sleeves
– 2-component flange with integrated seal, material: plastic
– Tool-free installation thanks to push and lock technology

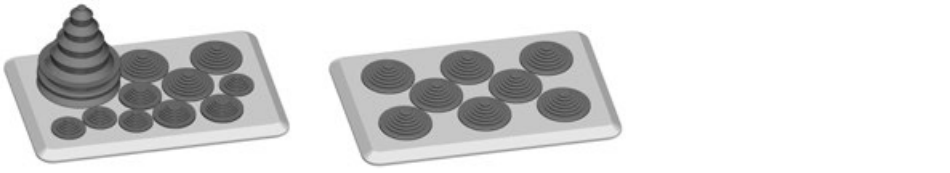
—
04
Closing flange - plastic
– 2-component flange with integrated seal, material: plastic
– Tool-free installation thanks to push and lock technology
– Can be used as closing flange or for customization, e.g. for cable sleeves or screw fittings

—
05
Closing flange - sheet steel
– With foam seal around perimeter, material: sheet steel 2 mm
– Continuous protective earth connection via flange fastener
– Can be used as closing flange or for customization, e.g. for cable sleeves or screw fittings

— 01

— 02

— 03



— 04

— 05

Time-saving plinth assembly and safe transport

The innovate cabinet plinth literally forms the foundation of the TwinLine floor-standing cabinets while providing the perfect answer to the requests from the field for greater ease of installation.

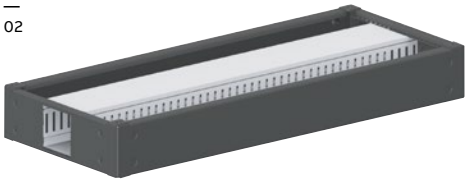
The plinth consists of four parts: the already connected corner with side parts and the front and back trim covers. Removing the front and back trim covers makes transport more secure. You want to connect a cabinet in series? Not a problem with this cabinet plinth, since cable ducts and M-screw fittings can be fed through knock-outs in the side parts. To ease cross wiring it is also possible to integrate cable ducts. The plinths are available in heights of 50 and 100 mm and can be stacked or combined.

Plinth with 50 and 100 mm height
- Innovative cabinet plinth for easy installation
- Up to three plinths can be “stacked” on top of each other (no additional accessories needed)
- The plinths of 50 and 100 mm height can be combined

Plinth with 100 mm height
- Optimal feed-through of cables using the side knockouts for cable ducts or cable screw fittings
- Quick cable duct installation in the plinth

—
01

—
02



—
03

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01
Easy and
safe transport

—
02
Plinth with
cable fastening duct

—
03
Time-saving
plinth assembly

Flexibility in assembly

This series of cabinets also offers impressive accessibility with their 180-degree door opening angle. The removable frame for covers enables optimum access during operation, maintenance and function monitoring.

- The door opening angle is 180 degrees for both, individual cabinets and cabinets connected in series
- The innovative locking system is easy to install and allows you to quickly modify the door hinge
- Removable frame as standard makes it possible to remove all covers in one handling
- Significantly reduced installation time

01

Doors with 180 degree opening angle
TwinLine offers unrestricted access during operation, expansion, maintenance and functional monitoring. With its 180 degree door opening and the door locking system, with the possibility to switch the door hinges from right to left it guarantees excellent flexibility.

02

Removable frame for CombiLine S covers
With its wide range of the new modular distribution panel system, called CombiLine S, ABB offers the right solution for every application. The removable frame as standard gives the possibility to remove all covers in one handling and provides a quick assembly.

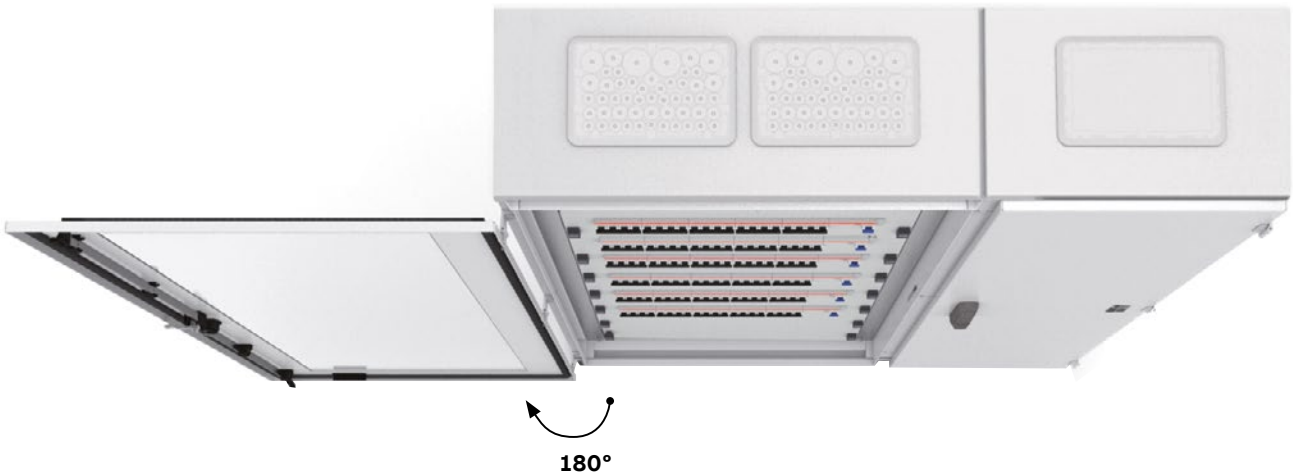
Flexibility in the assembly of the internal configuration. With its new mounting concept for the CombiLine S system TwinLine provides more flexibility and access for installation and wiring.

03

Depending on the customers requirements there are two options to install and wire the internal configuration:
- Outside of the cabinet to have access from all sides
- Placed horizontally on two trestles to do the assembling and wiring inside the cabinet

There is also the option to have mounting plates in full cabinet size that can be adjusted in depth.

01



— 02

— 03

— 03

System overview

— 01
Sidewalls

— 02
Installation set
for removable frame

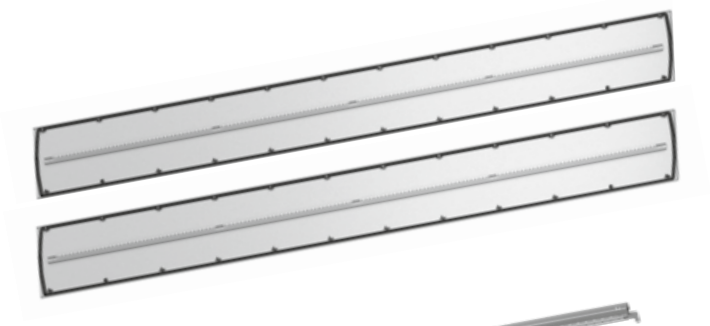
— 03
Internal
cable container

— 04
Transparent or
sheet steel doors

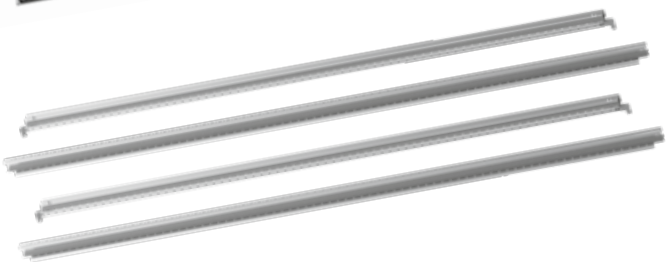
— 05
Flanges

— 06
Plinth

— 01



— 02



— 03

— 04

— 05

— 06

Technical specifications and product features

Technical specifications for TwinLine S 55	
Standards / requirements	IEC 61439 -1/-2/-3*
Protection class	I, earthed, in combination with CAEC6
Degree of protection	IP55
	Without door IP30
Mechanical impact	Strength IK 08 for the cabinet enclosure
	IK 07 in the area of the flange knockouts
	IK 07 for transparent doors
	IK 08 for sheet steel doors
Conditions of installation	Indoor installation
	Ambient air temperature max. + 40°C
	Ambient air temperature min. - 5°C
	Operating temperature max. + 55°C
	Storage temperature max. + 55°C
	Storage temperature min. - 40°C

Product features	
Housing and door	Sheet steel, RAL 7035, powder-coated
	Door opening angle: 180 degrees
	Doors with espagnolette closure
	Doors for wall-mounting cabinets: with latch plate and 3 mm double bit pin
	Doors for floor-standing cabinets: with swivel handle and 3 mm double bit pin
Assembly options	Prepared to be fitted with CombiLine S modules and mounting plates
Forms of delivery	Build-up cabinets out of sets

* Powerloss determinated by calculation with the method of IEC 60890 in accordance with IEC 61439-1 par. 10.10.4
The required values of the powerloss capacity are specified in tables from page 27.

Subdistribution boards

Wall-mounting and floor-standing cabinets
Cabinet depth 225 mm

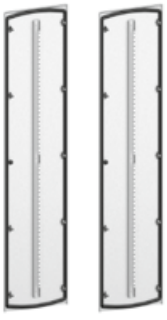
External Dimensions	Enclosure without side wall			Corresponding side wall		
H x W x D	Type	Art. No	Price	Type	Art. No	Price
400 x 300 x 225	ESWG0304	2CPX078560R9999		ESFG0004	2CPX078596R9999	
600 x 300 x 225	ESWG0306	2CPX078561R9999		ESFG0006	2CPX078597R9999	
800 x 300 x 225	ESWG0308	2CPX078562R9999		ESFG0008	2CPX078598R9999	
1000 x 300 x 225	ESWG0310	2CPX078563R9999		ESFG0010	2CPX078599R9999	
1200 x 300 x 225	ESWG0312	2CPX078564R9999		ESFG0012	2CPX078601R9999	
1400 x 300 x 225	ESWG0314	2CPX078565R9999		ESFG0014	2CPX078602R9999	
400 x 600 x 225	ESWG0604	2CPX078566R9999		ESFG0004	2CPX078596R9999	
600 x 600 x 225	ESWG0606	2CPX078567R9999		ESFG0006	2CPX078597R9999	
800 x 600 x 225	ESWG0608	2CPX078568R9999		ESFG0008	2CPX078598R9999	
1000 x 600 x 225	ESWG0610	2CPX078569R9999		ESFG0010	2CPX078599R9999	
1200 x 600 x 225	ESWG0612	2CPX078570R9999		ESFG0012	2CPX078601R9999	
1400 x 600 x 225	ESWG0614	2CPX078571R9999		ESFG0014	2CPX078602R9999	
400 x 800 x 225	ESWG0804	2CPX078572R9999		ESFG0004	2CPX078596R9999	
600 x 800 x 225	ESWG0806	2CPX078573R9999		ESFG0006	2CPX078597R9999	
800 x 800 x 225	ESWG0808	2CPX078574R9999		ESFG0008	2CPX078598R9999	
1000 x 800 x 225	ESWG0810	2CPX078575R9999		ESFG0010	2CPX078599R9999	
1200 x 800 x 225	ESWG0812	2CPX078576R9999		ESFG0012	2CPX078601R9999	
1400 x 800 x 225	ESWG0814	2CPX078577R9999		ESFG0014	2CPX078602R9999	

> Dimensions in mm

ESWL0804

ESFL0004

ESWG0608



ESFG0008

Subdistribution boards

Wall-mounting and floor-standing cabinets
Cabinet depth 275 mm

External Dimensions	Enclosure without side wall			Corresponding side wall		
H x W x D	**Type**	**Art. No**	**Price**	**Type**	**Art. No**	**Price**
400 x 300 x 275	ESWL0304	2CPX078578R9999		ESFL0004	2CPX078603R9999	
1200 x 300 x 275	ESWL0312	2CPX078579R9999		ESFL0012	2CPX078604R9999	
1400 x 300 x 275	ESWL0314	2CPX078580R9999		ESFL0014	2CPX078605R9999	
1600 x 300 x 275	ESWL0316	2CPX078581R9999		ESFL0016	2CPX078606R9999	
1800 x 300 x 275	ESWL0318	2CPX078582R9999		ESFL0018	2CPX078607R9999	
2000 x 300 x 275	ESWL0320	2CPX078583R9999		ESFL0020	2CPX078608R9999	
400 x 600 x 275	ESWL0604	2CPX078584R9999		ESFL0004	2CPX078603R9999	
1200 x 600 x 275	ESWL0612	2CPX078585R9999		ESFL0012	2CPX078604R9999	
1400 x 600 x 275	ESWL0614	2CPX078586R9999		ESFL0014	2CPX078605R9999	
1600 x 600 x 275	ESWL0616	2CPX078587R9999		ESFL0016	2CPX078606R9999	
1800 x 600 x 275	ESWL0618	2CPX078588R9999		ESFL0018	2CPX078607R9999	
2000 x 600 x 275	ESWL0620	2CPX078589R9999		ESFL0020	2CPX078608R9999	
400 x 800 x 275	ESWL0804	2CPX078590R9999		ESFL0004	2CPX078603R9999	
1200 x 800 x 275	ESWL0812	2CPX078591R9999		ESFL0012	2CPX078604R9999	
1400 x 800 x 275	ESWL0814	2CPX078592R9999		ESFL0014	2CPX078605R9999	
1600 x 800 x 275	ESWL0816	2CPX078593R9999		ESFL0016	2CPX078606R9999	
1800 x 800 x 275	ESWL0818	2CPX078594R9999		ESFL0018	2CPX078607R9999	
2000 x 800 x 275	ESWL0820	2CPX078595R9999		ESFL0020	2CPX078608R9999	

> Dimensions in mm

ESWL0816 ESFL0016

ESWL0820 ESFL0020

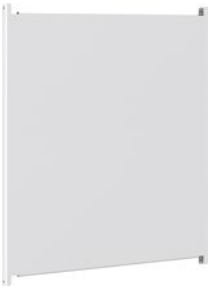
Subdistribution boards

Installation set / internal cable container / mounting plates

ESIN0012

ESAN0012

ESAI0212



TZM304

Article	Height mm	Width mm	Pcs.	Type	Ord. no.	Price
Installation set with removable frame						
For internal configuration in 300 mm, 600 mm, 800 mm wide cabinets. Rear profile (from ESIN…) for assembling the CombiLine S distribution panel, for example in the external cable container. The installation set is needed to assemble the CombiLine S distribution panel. It consists of two rear profiles (ESAN…). The removable frame consists of two front profiles needed to assemble the covers.	400		1	ESIN0004	2CPX078420R9999	
	600		1	ESIN0006	2CPX078421R9999	
	800		1	ESIN0008	2CPX078422R9999	
	1000		1	ESIN0010	2CPX078423R9999	
	1200		1	ESIN0012	2CPX078424R9999	
	1400		1	ESIN0014	2CPX078425R9999	
	1600		1	ESIN0016	2CPX078426R9999	
	1800		1	ESIN0018	2CPX078427R9999	
	2000		1	ESIN0020	2CPX078428R9999	
Installation profile						
Rear profile (from ESIN…) for assembling the CombiLine S distribution panel, for example in the external cable container	400		1	ESAN0004	2CPX078486R9999	
	600		1	ESAN0006	2CPX078487R9999	
	800		1	ESAN0008	2CPX078488R9999	
	1000		1	ESAN0010	2CPX078489R9999	
	1200		1	ESAN0012	2CPX078490R9999	
	1400		1	ESAN0014	2CPX078491R9999	
	1600		1	ESAN0016	2CPX078492R9999	
	1800		1	ESAN0018	2CPX078493R9999	
	2000		1	ESAN0020	2CPX078494R9999	
Internal cable container						
With hinged internal blind cover For 800 mm wide cabinets	600		1	ESAI0206	2CPX078215R9999	
	800		1	ESAI0208	2CPX078216R9999	
	1000		1	ESAI0210	2CPX078217R9999	
	1200		1	ESAI0212	2CPX078218R9999	
	1400		1	ESAI0214	2CPX078219R9999	
	1600		1	ESAI0216	2CPX078220R9999	
	1800		1	ESAI0218	2CPX078221R9999	
	2000		1	ESAI0220	2CPX078222R9999	
Mounting plates						
Sheet steel 2 mm, galvanised	600	600	1	TZM204	2CPX010598R9999	
		800	1	TZM304	2CPX010605R9999	
	1200	600	1	TZM208	2CPX010602R9999	
		800	1	TZM308	2CPX010609R9999	
	1800	600	1	TZM212	2CPX010941R9999	
		800	1	TZM312	2CPX010942R9999	

Subdistribution boards

Sheet steel doors

ESAS0612

ESAS0618

Article	Height mm	Pcs.	Type	Ord. no.	Price
Doors for wall-mounting cabinets, with latch plate and double bit 3 mm **Doors for floor-standing cabinets,** with swivel handle and double bit 3 mm					
Width 300 mm	400	1	ESAS0304	2CPX078151R9999	
	600	1	ESAS0306	2CPX078152R9999	
	800	1	ESAS0308	2CPX078153R9999	
	1000	1	ESAS0310	2CPX078154R9999	
	1200	1	ESAS0312	2CPX078155R9999	
	1400	1	ESAS0314	2CPX078156R9999	
	1600	1	ESAS0316	2CPX078157R9999	
	1800	1	ESAS0318	2CPX078158R9999	
	2000	1	ESAS0320	2CPX078159R9999	
Width 600 mm	400	1	ESAS0604	2CPX078160R9999	
	600	1	ESAS0606	2CPX078161R9999	
	800	1	ESAS0608	2CPX078162R9999	
	1000	1	ESAS0610	2CPX078163R9999	
	1200	1	ESAS0612	2CPX078164R9999	
	1400	1	ESAS0614	2CPX078165R9999	
	1600	1	ESAS0616	2CPX078166R9999	
	1800	1	ESAS0618	2CPX078167R9999	
	2000	1	ESAS0620	2CPX078168R9999	
Width 800 mm	400	1	ESAS0804	2CPX078169R9999	
	600	1	ESAS0806	2CPX078170R9999	
	800	1	ESAS0808	2CPX078171R9999	
	1000	1	ESAS0810	2CPX078172R9999	
	1200	1	ESAS0810	2CPX078172R9999	
	1400	1	ESAS0814	2CPX078174R9999	
	1600	1	ESAS0816	2CPX078175R9999	
	1800	1	ESAS0818	2CPX078176R9999	
	2000	1	ESAS0820	2CPX078177R9999	

Subdistribution boards

Transparent doors

ESAT0612

ESAT2618

Article	Height mm	Pcs.	Type	Ord. no.	Price
Doors for wall-mounting cabinets, with latch plate and double bit 3 mm **Doors for floor-standing cabinets,** with swivel handle and double bit 3 mm					
Width 600 mm	600	1	ESAT0606	2CPX078178R9999	
	800	1	ESAT0608	2CPX078179R9999	
	1000	1	ESAT0610	2CPX078180R9999	
	1200	1	ESAT0612	2CPX078181R9999	
	1400	1	ESAT0614	2CPX078182R9999	
	1600	1	ESAT0616	2CPX078183R9999	
	1800	1	ESAT0618	2CPX078184R9999	
	2000	1	ESAT0620	2CPX078185R9999	
Width 800 mm	600	1	ESAT0806	2CPX078186R9999	
	800	1	ESAT0808	2CPX078187R9999	
	1000	1	ESAT0810	2CPX078188R9999	
	1200	1	ESAT0812	2CPX078189R9999	
	1400	1	ESAT0814	2CPX078190R9999	
	1600	1	ESAT0816	2CPX078191R9999	
	1800	1	ESAT0818	2CPX078192R9999	
	2000	1	ESAT0820	2CPX078193R9999	
Width 800 mm For 800 mm wide cabinet With internal cable container	600	1	ESAT2606	2CPX078194R9999	
	800	1	ESAT2608	2CPX078195R9999	
	1000	1	ESAT2610	2CPX078196R9999	
	1200	1	ESAT2612	2CPX078197R9999	
	1400	1	ESAT2614	2CPX078198R9999	
	1600	1	ESAT2616	2CPX078199R9999	
	1800	1	ESAT2618	2CPX078200R9999	
	2000	1	ESAT2620	2CPX078201R9999	

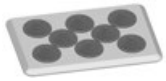
Subdistribution boards

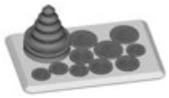
Flanges

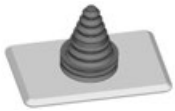
TZ101

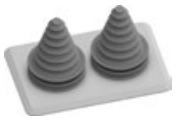
TZ102

TZ103


TZ110


TZ111


TZ112


TZ104

TZ105

TZ107

TZ106

Article	Pcs.	Type	Ord. no.	Price
Membrane flange Material: plastic For cable sections 2 x 6 - 32.5 mm, 2 x 6 - 25 mm, 4 x 6 - 19 mm, 10 x 6 -15 mm, 2 x 6 -12 mm, 31 x 6 - 11 mm, 1 x 6 - 7 mm	1	TZ101	2CPX010450R9999	
	10	TZ101P10	2CPX010451R9999	
	100	TZ101P100	2CPX010826R9999	
Flanges for M screw fittings Material: plastic				
1 x M 63 / M 50, 2 x M 32 / M 20, 5 x M 25, 5 x M 20	1	TZ102	2CPX010452R9999	
	10	TZ102P10	2CPX010453R9999	
4 x M20 / M25, 18 x M20	1	TZ103	2CPX010454R9999	
	10	TZ103P10	2CPX010455R9999	
Flanges with cable sleeves Material: plastic				
Flanges with 8 cable sleeves For cable sections 8 x 13 - 34 mm	1	TZ110	2CPX010850R9999	
	10	TZ110P10	2CPX010934R9999	
Flanges with 11 cable sleeves For cable sections 1 x 14 - 54 mm, 3 x 13 - 34 mm, 3 x 13 - 26.5 mm, 4 x 5 - 21 mm	1	TZ111	2CPX010851R9999	
	10	TZ111P10	2CPX010935R9999	
Flange with 1 cable sleeve For cable sections 1 x 14 - 68 mm	1	TZ112	2CPX010852R9999	
Flange with 2 cable sleeves For cable sections 2 x 14 - 68 mm	1	TZ104	2CPX010456R9999	
	10	TZ104P10	2CPX010932R9999	
Flange with 3 cable sleeves For cable sections 3 x 14 - 54 mm	1	TZ105	2CPX010457R9999	
	10	TZ105P10	2CPX010933R9999	
Closing flanges				
Material: plastic	1	TZ107	2CPX010460R9999	
	10	TZ107P10	2CPX010461R9999	
Material: sheet steel	1	TZ106	2CPX010458R9999	
	10	TZ106P10	2CPX010459R9999	

Subdistribution boards

Plinth

ESAG0605

ESAL0610

Article	Width mm	Pcs.	Type	Ord. no.	Price
Plinth, height 50 mm, color RAL 7012					
Depth 225 mm	300	1	ESAG0305	2CPX078202R9999	
	600	1	ESAG0605	2CPX078204R9999	
	800	1	ESAG0805	2CPX078206R9999	
Depth 275 mm	300	1	ESAL0305	2CPX078208R9999	
	600	1	ESAL0605	2CPX078210R9999	
	800	1	ESAL0805	2CPX078212R9999	
Plinth, height 100 mm, color RAL 7012					
Depth 225 mm Side knockouts 1 x M 32 / M 50 or 80 x 80 mm	300	1	ESAG0310	2CPX078203R9999	
	600	1	ESAG0610	2CPX078205R9999	
	800	1	ESAG0810	2CPX078207R9999	
Depth 275 mm Side knockouts 1 x M 32 / M 50 or 80 x 80 mm	300	1	ESAL0310	2CPX078209R9999	
	600	1	ESAL0610	2CPX078211R9999	
	800	1	ESAL0810	2CPX078213R9999	

Subdistribution boards

Lock replacement parts

ESAC1001

ESAC1002

ESAC1003

ESAC1004

ESAC1005

ESAC1006

ESAC1007

ESAC1008

ESAC1009

ESAC1010

ESAC1011

ESAC1013

TZ517

TZ518

ZH130

ZH132

ZH134

ZH137

Article	Pcs.	Type	Ord. no.	Price
Swivel handle and operating pins				
Swivel handle with double bit 3 mm*	1	ESAC1001	2CPX010900R9999	
Double bit 3 mm*	1	ESAC1002	2CPX010901R9999	
Double bit 5 mm	1	ESAC1003	2CPX010902R9999	
Triangular 7 mm	1	ESAC1004	2CPX010903R9999	
Triangular 8 mm	1	ESAC1005	2CPX010904R9999	
Square 6 mm	1	ESAC1006	2CPX010905R9999	
Square 7 mm	1	ESAC1007	2CPX010906R9999	
Square 8 mm	1	ESAC1008	2CPX010907R9999	
EK333 and key	1	ESAC1009	2CPX010908R9999	
FIST type insert (FIAT)	1	ESAC1010	2CPX010909R9999	
FIAT key	1	ESAC1013	2CPX010912R9999	
Ronis 455 and key	1	ESAC1011	2CPX010910R9999	
Ronis 405 and key	1	ESAC1012	2CPX010911R9999	

Latch plates and operating pins				
For operating pin 3 mm (standard)* and 5 mm	1	TZ517	2CPX010926R9999	
For triangular and square operating pin	1	TZ518	2CPX010927R9999	
Double bit 3 mm*	1	ZH130	2CPX060490R9999	
Double bit 5 mm	1	ZH131	2CPX060491R9999	
Triangular 7 mm	1	ZH132	2CPX060492R9999	
Triangular 8 mm	1	ZH133	2CPX060493R9999	
Square 6 mm	1	ZH134	2CPX060494R9999	
Square 7 mm	1	ZH135	2CPX060495R9999	
Square 8 mm	1	ZH136	2CPX060496R9999	
Daimler-Benz	1	ZH137	2CPX060497R9999	

* Accessory included in the scope of delivery

Subdistribution boards

Lock replacement parts

ZH91

ZH160

ZH157

ZH162

ZH165

ESAC2004

ESAC2008

TZ511

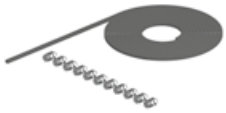
TZ501

Article	Pcs.	Type	Ord. no.	Price
Universal key Double bit 3 mm/5 mm Triangular 8 mm, square 6 mm/8 mm	1	ZH91	2CPX066091R9999	
Double bit 3 mm*	1	ZH160	2CPX060660R9999	
Double bit 5 mm	1	ZH161	2CPX060661R9999	
Triangular 7 mm	1	ZH157	2CPX060657R9999	
Triangular 8 mm	1	ZH158	2CPX060658R9999	
Square 6 mm	1	ZH162	2CPX060662R9999	
Square 7 mm	1	ZH163	2CPX060663R9999	
Square 8 mm	1	ZH164	2CPX060664R9999	
Daimler-Benz	1	ZH165	2CPX060665R9999	
Espagnolette closure*				
Closure for door height 400 mm	1	ESAC2004	2CPX010913R9999	
Espagnolette closure height 600 mm	1	ESAC2006	2CPX010914R9999	
Espagnolette closure height 800 mm	1	ESAC2008	2CPX010915R9999	
Espagnolette closure height 1000 mm	1	ESAC2010	2CPX010916R9999	
Espagnolette closure height 1200 mm	1	ESAC2012	2CPX010917R9999	
Espagnolette closure height 1400 mm	1	ESAC2014	2CPX010918R9999	
Espagnolette closure height 1600 mm	1	ESAC2016	2CPX010919R9999	
Espagnolette closure height 1800 mm	1	ESAC2018	2CPX010920R9999	
Espagnolette closure height 2000 mm	1	ESAC2020	2CPX010921R9999	
Espagnolette guide*	1	TZ511	2CPX010495R9999	
Shoe* **For espagnolette closure**	1	TZ501	2CPX010485R9999	

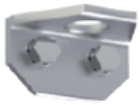
*Accessory included in the scope of delivery

Subdistribution boards

General accessories



ESAC3005



ESAC3006P2

TZ637

TZ628P10

TZ626

TZ601

TZ604

TZ605

Article	Pcs.	Type	Ord. no.	Price
Connection set for side-by-side structuring of cabinets		ESAC3005	2CPX078415R9999	
Lifting reinforcement for side-by-side structures 2 pcs		ESAC3006P2	2CPX078416R9999	
Door hinge: 180 degree* Colour: RAL7035	1	TZ637	2CPX078414R9999	
Closing plugs for hinge cutout	1	TZ628P10	2CPX010854R9999	
Protective frame for stacking cabinets	1	TZ626	2CPX010778R9999	
Mounting rails For mounting frame holder				
For TwinLine-G	1	TZ601	2CPX010779R9999	
	10	TZ601P10	2CPX010814R9999	
	100	TZ601P100	2CPX010815R9999	
For TwinLine-L	1	TZ602	2CPX010780R9999	
	10	TZ602P10	2CPX010816R9999	
	100	TZ602P100	2CPX010817R9999	
Mounting frame holder centre* For internal and external cable container	1	TZ604	2CPX010782R9999	
Mounting frame holder* left or right	1	TZ605	2CPX010783R9999	

*Accessory included in the scope of delivery

Subdistribution boards

General accessories

ZW125P4

TZ615P4

ZL8

CAEC6

ZA16

ZA116

ZA6

ZA5

ZA123

Article	Pcs.	Type	Ord. no.	Price
External mounting bracket* For securing cabinets to the wall	4	ZW125P4	2CPX062461R9999	
Transport lugs	4	TZ615P4	2CPX010510R9999	
Door earthing set 10 mm²	1	ZL8	2CPX038001R9999	
Earthing set Connection between interior fitting and structure	1	CAEC6		
Spray paint can Colour RAL 7035, 150 ml	1	ZA16	2CPX038235R9999	
Touch-up applicator Colour RAL 7035, 12 ml	1	ZA116	2CPX039042R9999	
Document holder DIN A4 Self-adhesive with transparent sleeve and reinforced back	1	ZA6	2CPX038227R9999	
	10	ZA6P10	2CPX062380R9999	
Self-adhesive with transparent sleeve	10	ZA61P10	2CPX062375R9999	
Document holder DIN A4 Self-adhesive	1	ZA13	2CPX038233R9999	
	10	ZA13P10	2CPX062381R9999	
Document holder DIN A5 Self-adhesive	1	ZA5	2CPX038228R9999	
	10	ZA5P10	2CPX062382R9999	
Document holder support plate				
For document holder ZA13, to screw on to the door strengthening profiles	1	ZA123	2CPX038471R9999	
For document holder ZA5, to screw on to the door strengthening profiles	1	ZA125	2CPX038472R9999	

*Accessory included in the scope of delivery

ZA1P5

ZA8

ESAC3007

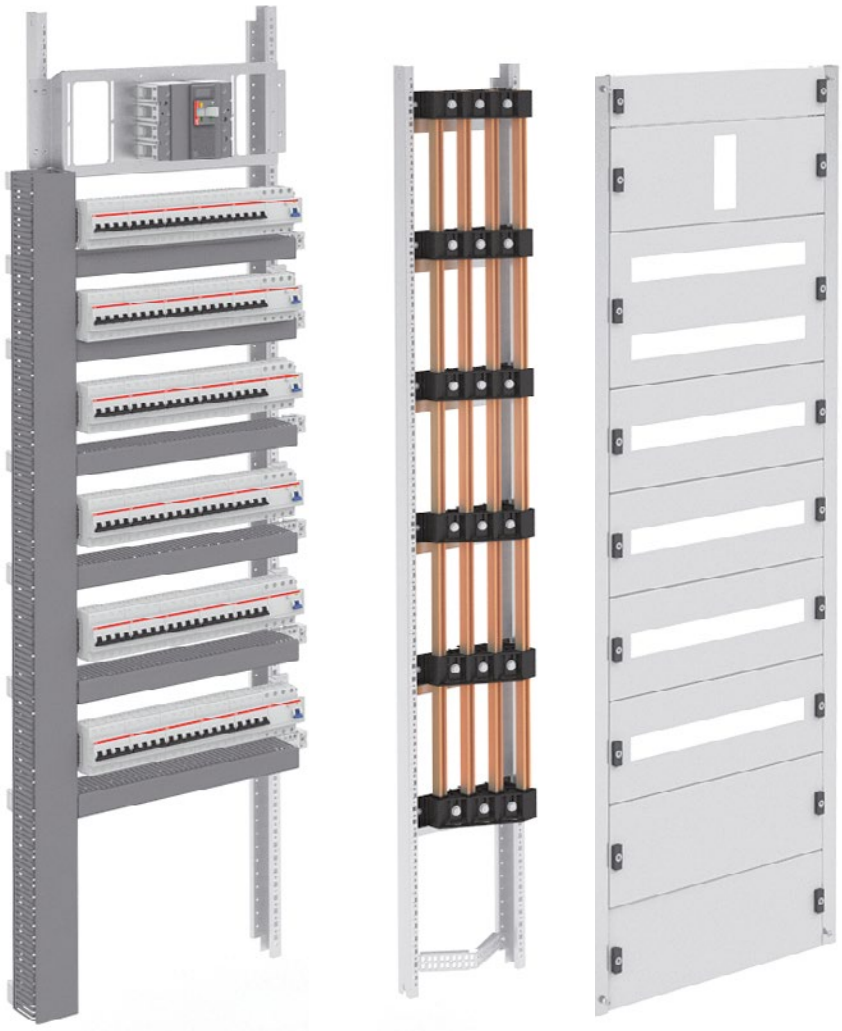
Article	Pcs.	Type	Ord. no.	Price
Slot covers For 12 space units, break-off type, colour RAL 7035	5	ZA1P5	2CPX062384R9999	
	50	ZA1P50	2CPX062378R9999	
By the metre Colour RAL 7035	1	ZA2	2CPX038231R9999	
	20	ZA2P20	2CPX062379R9999	
Labelling strips				
20 mm, self-adhesive, 1 panel wide	1	ZA8	2CPX060200R9999	
	5	ZA8P5	2CPX062598R9999	
	40	ZA8P40	2CPX062731R9999	
20 mm, self-adhesive, 2 panel wide	1	ZA9	2CPX060201R9999	
	5	ZA9P5	2CPX062599R9999	
	50	ZA9P50	2CPX062732R9999	
20 mm, self-adhesive, 3 panel wide	1	ZA7	2CPX060004R9999	
	5	ZA7P5	2CPX062597R9999	
20 mm, self-adhesive, by the metre	1	ZA10	2CPX038241R9999	
	10	ZA10P10	2CPX062706R9999	
20 mm, self-adhesive with additional transparent film, by the metre	1	ZA11	2CPX038230R9999	
	10	ZA11P10	2CPX062707R9999	
16 mm, self-adhesive, by the metre	1	ZA12	2CPX038242R9999	
	10	ZA12P10	2CPX062708R9999	
Hinge frame For fixing the removable frame	1	ESAC3007	2CPX078556R9999	

System pro E combi

CombiLine S distribution panel system

—

Simple in planning
Quick in assembly
Safe in application



The highly sophisticated quick mounting system from ABB makes the completion of modular cabinets with distribution panels an effortless process. Simple, quick and safe – these are the three attributes of this system that speak for themselves.

TwinLine makes internal configuration fun, with a modular system of wall-mounting and floor-standing cabinets for the modular CombiLine S distribution panel system. The wide range of the CombiLine S offers the right solution for every application. One internal configuration System for all cabinets.

All of the individual parts required for assembling are packed separately and supplied in the form of a set.

The benefits: These sets allow you to take a flexible approach towards stock keeping, and avoid a time-consuming search for system parts such as brackets, screws or fastening elements. The instructions supplied with the system make assembly a child's play. Quick and clear planning and calculation become perfect with planning software.

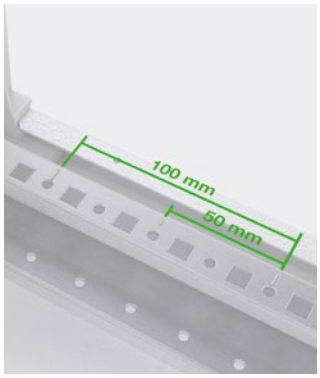
Subdistribution boards

CombiLine S distribution panel system

Product benefits

One internal configuration system for all cabinets
All internal configuration and the busbar system for the cable containers up to 400 A fits in both cabinet dephts. The internal configuration up to 800 A and the busbar system behind the device area also fits in a 275 mm cabinet depht.

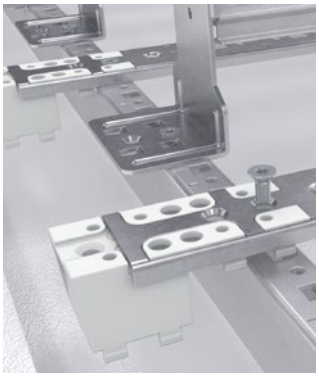
Flexible in assembling
With its new mounting concept CombiLine S provides more flexibility and access for installation and wiring. Placed horizontally on two trestles, the assembly and wiring is very comfortable. An other option is to swing-out the whole internal configuration to have access from all sides.

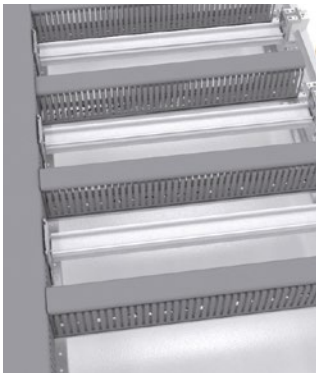


Assembly of internal configuration
CombiLine S provide a time-saving installation due the hook-in technology. This quick assembly limits the numbers of screws. Markers in 50 mm grid are on the mounting profiles for simple positioning.

Easy handling of covers
Time-saving fixation and adjustment as well as the simple closure system with 1/4 turn quick-lock provides easy handling of the covers and standard earth connection. When using devices in the covers a safe earth connection is guaranteed through 6 mm² cable with ring shoes on both sides. Optimal accessibility give the hinge set with 90 degree opening angle.

Optimal accessibility and ease of installation
The removable frame as standard gives the possibility to remove all covers in one handling and provides a quick access.





Wiring system
One support for different dimensions of wiring ducts; to have the same level for horizontal and vertical usage. An additional profile for stabilization of wiring duct and for mounting wire holders is available.

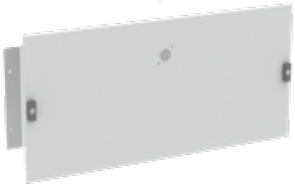
Form of internal separation up to form 2b
For the busbar sytem behind the device area is a horizontal transparent partition available. To separate the busbar system in external cable container it is possible to use a vertical separation.

Subdistribution boards

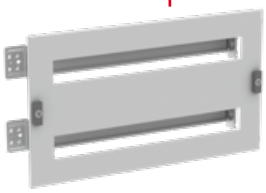
CombiLine S distribution panel system

The right module for ervery type of Application

Tmax breakers

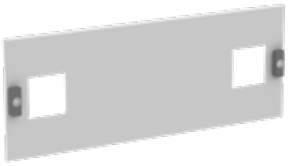


OT breakers



DIN rail components

Standard covers

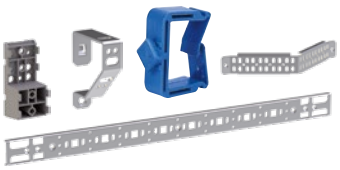


Covers for measuring instruments

Mounting plates

Internal form of separation form 2b

Busbar systems



Accessories

Subdistribution boards

CombiLine S distribution panel system Technical specifications

Technical specifications	
Standards / regulations	IEC 61439 -1/-2/-3
Protection class	I, earthed
Degree of protection	IPXXC

Electrical characteristics	
Rated impulse withstand voltage (U_{imp})	6 kV
Overvoltage category	III
Pollution degree	3
Rated current (I_n)	up to 800 A
Rated peak withstand current (I_{pk})	up to 67 kA
Rated short-time withstand current (I_{cw}) 1.0 sec.	up to 32 kA
Rated frequency (f)	50 - 60 Hz
Rated insulation voltage (U_i)	1000 V
Rated operational voltage (U_e)	690 V

Subdistribution boards

CombiLine S for moulded case circuit breaker Tmax, horizontal

CHCC1511

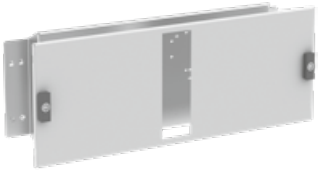
CHDC1511

Tmax breaker horizontal 3-/4-pole

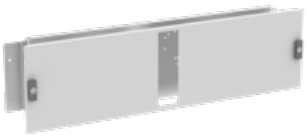
- Unequipped set for ABB Tmax as an incomer or outgoing breaker
- For fixed version with lever operation and front terminals
- Sheet steel cover with cut-out for 3*-/4-pole breaker
- Cover with 1/4 turn quick-lock

		For device					Order details			
Width mm	Height mm	I_n max A	Type	Numbers of breakers	Numbers of poles	Minimum cabinet depth	Type	Order code	Price	Pcs.
600	150	160	Tmax XT1	1	3/4	225	CHCA1511	2CPX078241R9999		1
	200	160	Tmax XT2	1	3/4	225	CHCB1511	2CPX078242R9999		1
	200	250	Tmax XT3	1	3/4	225	CHCC1511	2CPX078243R9999		1
	200	250	Tmax XT4	1	3/4	225	CHCD1511	2CPX078244R9999		1
	200	320	Tmax T4	1	3/4	225	CHCE1511	2CPX078245R9999		1
	300	630	Tmax T5	1	3/4	275	CHCF1511	2CPX078246R9999		1
	400	800	Tmax T6	1	3/4	275	CHCG1511	2CPX078247R9999		1
800	150	160	Tmax XT1	1	3/4	225	CHDA1511	2CPX078248R9999		1
	200	160	Tmax XT2	1	3/4	225	CHDB1511	2CPX078249R9999		1
	200	250	Tmax XT3	1	3/4	225	CHDC1511	2CPX078250R9999		1
	200	250	Tmax XT4	1	3/4	225	CHDD1511	2CPX078251R9999		1
	200	320	Tmax T4	1	3/4	225	CHDE1511	2CPX078252R9999		1
	300	630	Tmax T5	1	3/4	275	CHDF1511	2CPX078253R9999		1
	400	800	Tmax T6	1	3/4	275	CHDG1511	2CPX078254R9999		1

* For 3 poles breakers please order accessory flange codes: AD3305 XT1 3P Flange for plate-mounting - AD3306 XT2 3P Flange for plate-mounting - AD3307 XT3 3P Flange for plate-mounting - AD3308 XT4 3P Flange for plate-mounting.



CHCC1611



CHDC1611

Tmax breaker horizontal 4-pole + RC sel.

Unequipped set for ABB Tmax as an incomer or outgoing breaker

- For fixed version with lever operation and front terminals
- Sheet steel cover with cut-out for 4-pole breaker and RC Sel.
- Cover with 1/4 turn quick-lock

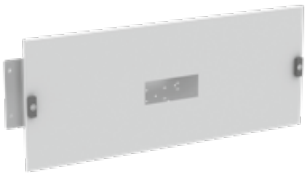
		For device					Order details			
Width mm	Height mm	I_n max A	Type	Numbers of breakers	Numbers of poles	Minimum cabinet depth	Type	Order code	Price	Pcs.
600	200	160	Tmax XT1	1	4 + RC sel.	225	CHCA1611	2CPX078255R9999		1
	200	160	Tmax XT2	1	4 + RC sel.	225	CHCB1611	2CPX078256R9999		1
	200	250	Tmax XT3	1	4 + RC sel.	225	CHCC1611	2CPX078257R9999		1
	200	250	Tmax XT4	1	4 + RC sel.	225	CHCD1611	2CPX078258R9999		1
	200	320	Tmax T4	1	4 + RC sel.	225	CHCE1611	2CPX078259R9999		1
	300	630	Tmax T5	1	4 + RC sel.	275	CHCF1611	2CPX078260R9999		1
800	200	160	Tmax XT1	1	4 + RC sel.	225	CHDA1611	2CPX078261R9999		1
	200	160	Tmax XT2	1	4 + RC sel.	225	CHDB1611	2CPX078262R9999		1
	200	250	Tmax XT3	1	4 + RC sel.	225	CHDC1611	2CPX078263R9999		1
	200	250	Tmax XT4	1	4 + RC sel.	225	CHDD1611	2CPX078264R9999		1
	200	320	Tmax T4	1	4 + RC sel.	225	CHDE1611	2CPX078265R9999		1
	300	630	Tmax T5	1	4 + RC sel.	275	CHDF1611	2CPX078266R9999		1

Subdistribution boards

CombiLine S for moulded case circuit breaker Tmax, vertical

CVAC1511

CVCC1511



DVDC1511

Tmax breaker vertical 3-/4-pole

- Unequipped set for ABB Tmax as an incomer or outgoing breaker
- For fixed version with lever operation and front terminals
- Sheet steel cover with cut-out for 3*-/4-pole breaker
- Cover with 1/4 turn quick-lock

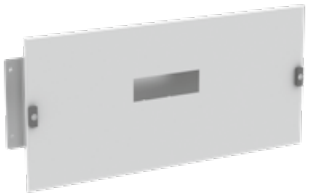
		For device					Order details			
Width mm	Height mm	I_n max A	Type	Numbers of breakers	Numbers of poles	Minimum cabinet depth	Type	Order code	Price	Pcs.
300	300	160	Tmax XT1	1	3/4	225	CVAA1511	2CPX078267R9999		1
	300	250	Tmax XT2	1	3/4	225	CVAB1511	2CPX078268R9999		1
	300	250	Tmax XT3	1	3/4	225	CVAC1511	2CPX078269R9999		1
	300	250	Tmax XT4	1	3/4	225	CVAD1511	2CPX078270R9999		1
	350	320	Tmax T4	1	3/4	225	CVAH1511	2CPX078271R9999		1
	350	630	Tmax T5	1	3/4	275	CVAH1511	2CPX078271R9999		1
600	300	160	Tmax XT1	1	3/4	225	CVCA1511	2CPX078272R9999		1
	300	160	Tmax XT2	1	3/4	225	CVCB1511	2CPX078273R9999		1
	300	250	Tmax XT3	1	3/4	225	CVCC1511	2CPX078274R9999		1
	300	250	Tmax XT4	1	3/4	225	CVCD1511	2CPX078275R9999		1
	350	320	Tmax T4	1	3/4	225	CVCH1511	2CPX078276R9999		1
	350	630	Tmax T5	1	3/4	275	CVCH1511	2CPX078276R9999		1
	450	800	Tmax T6	1	3/4	275	CVCG1511	2CPX078277R9999		1
800	300	160	Tmax XT1	1	3/4	225	CVDA1511	2CPX078278R9999		1
	300	160	Tmax XT2	1	3/4	225	CVDB1511	2CPX078279R9999		1
	300	250	Tmax XT3	1	3/4	225	CVDC1511	2CPX078280R9999		1
	300	250	Tmax XT4	1	3/4	225	CVDD1511	2CPX078281R9999		1
	350	320	Tmax T4	1	3/4	225	CVDH1511	2CPX078282R9999		1
	350	630	Tmax T5	1	3/4	275	CVDH1511	2CPX078282R9999		1
	450	800	Tmax T6	1	3/4	275	CVDG1511	2CPX078283R9999		1

* For 3 poles breakers please order accessory flange codes: AD3305 XT1 3P Flange for plate-mounting - AD3306 XT2 3P Flange for plate-mounting - AD3307 XT3 3P Flange for plate-mounting - AD3308 XT4 3P Flange for plate-mounting.

Subdistribution boards

CombiLine S for moulded case circuit breaker Tmax, vertical

CVAC1611

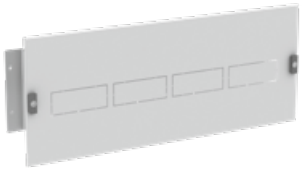


DVDC1611

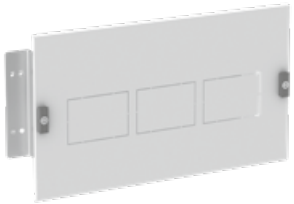
Tmax breaker vertical 4-pole + RC sel.

- Unequipped set for ABB Tmax as an incomer or outgoing breaker
- For fixed version with lever operation and front terminals
- Sheet steel cover with cut-out for 4-pole breaker and RC Sel.
- Cover with 1/4 turn quick-lock

		For device					Order details			
Width mm	Height mm	I_n max A	Type	Numbers of breakers	Numbers of poles	Minimum cabinet depth	Type	Order code	Price	Pcs.
300	300	160	Tmax XT1	1	4 + RC sel.	225	CVAA1611	2CPX078284R9999		1
	350	250	Tmax XT2	1	4 + RC sel.	225	CVAB1611	2CPX078285R9999		1
	350	250	Tmax XT3	1	4 + RC sel.	225	CVAC1611	2CPX078286R9999		1
	350	250	Tmax XT4	1	4 + RC sel.	225	CVAD1611	2CPX078287R9999		1
	450	320	Tmax T4	1	4 + RC sel.	225	CVAE1611	2CPX078288R9999		1
	450	630	Tmax T5	1	4 + RC sel.	275	CVAF1611	2CPX078289R9999		1
600	300	160	Tmax XT1	1	4 + RC sel.	225	CVCA1611	2CPX078290R9999		1
	350	160	Tmax XT2	1	4 + RC sel.	225	CVCB1611	2CPX078291R9999		1
	350	250	Tmax XT3	1	4 + RC sel.	225	CVCC1611	2CPX078292R9999		1
	350	250	Tmax XT4	1	4 + RC sel.	225	CVCD1611	2CPX078293R9999		1
	450	320	Tmax T4	1	4 + RC sel.	225	CVCE1611	2CPX078294R9999		1
	450	630	Tmax T5	1	4 + RC sel.	275	CVCF1611	2CPX078295R9999		1
800	300	160	Tmax XT1	1	4 + RC sel.	225	CVDA1611	2CPX078296R9999		1
	350	160	Tmax XT2	1	4 + RC sel.	225	CVDB1611	2CPX078297R9999		1
	350	250	Tmax XT3	1	4 + RC sel.	225	CVDC1611	2CPX078298R9999		1
	350	250	Tmax XT4	1	4 + RC sel.	225	CVDD1611	2CPX078299R9999		1
	450	320	Tmax T4	1	4 + RC sel.	225	CVDE1611	2CPX078300R9999		1
	450	630	Tmax T5	1	4 + RC sel.	275	CVDF1611	2CPX078301R9999		1



CVDC4511



CVCB3511

Tmax breaker vertical side-by-side

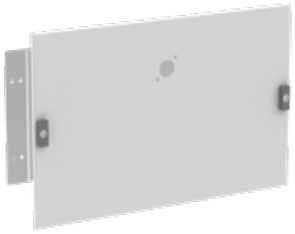
- Unequipped set for ABB Tmax as an incomer or outgoing breaker
- For fixed version with lever operation and front terminals
- Sheet steel cover with knock-out for 3*-/4-pole breaker side by side
- Cover with 1/4 turn quick-lock

		For device					Order details			
Width mm	**Height mm**	**I_n max A**	**Type**	**Numbers of breakers**	**Numbers of poles**	**Minimum cabinet depth**	**Type**	**Order code**	**Price**	**Pcs.**
600	300	250	Tmax XT1	3	3/4	225	CVCA3511	2CPX078398R9999		1
	300	250	Tmax XT2	3	3/4	225	CVCB3511	2CPX078399R9999		1
	300	250	Tmax XT3	3	3/4	225	CVCC3511	2CPX078400R9999		1
	300	250	Tmax XT4	3	3/4	225	CVCD3511	2CPX078401R9999		1
800	300	250	Tmax XT1	4	3/4	225	CVDA4511	2CPX078402R9999		1
	300	250	Tmax XT2	4	3/4	225	CVDB4511	2CPX078403R9999		1
	300	250	Tmax XT3	4	3/4	225	CVDC4511	2CPX078404R9999		1
	300	250	Tmax XT4	4	3/4	225	CVDD4511	2CPX078405R9999		1

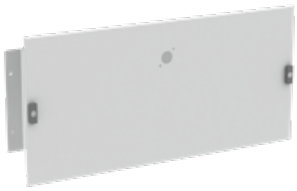
* For 3 poles breakers please order accessory flange codes: AD3305 XT1 3P Flange for plate-mounting - AD3306 XT2 3P Flange for plate-mounting - AD3307 XT3 3P Flange for plate-mounting - AD3308 XT4 3P Flange for plate-mounting.

Subdistribution boards

CombiLine S for switch disconnector OT, horizontal



CHCQ1513



CHDQ1513

OT switch disconnector horizontal

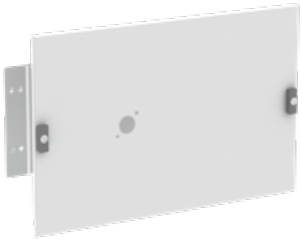
- Unequipped set for ABB OT...E03/04P as an incomer or outgoing switch
- Sheet steel cover with cut out for rotary handle in top of the center
- Cover fixed with one 1/4 turn quick-lock
- Important: in case of using switch disconnectors OT630 and OT800 it is not possible to use busbar system behind the mounting plate

		For device					Order details			
Width mm	Height mm	I_n max A	Type	Numbers of breakers	Numbers of poles	Minimum cabinet depth	Type	Order code	Price	Pcs.
600	350	400	OT200, OT250, OT315, OT400	1	3/4	225	CHCQ1513	2CPX078302R9999		1
	500	800	OT630, OT800	1	3/4	275	CHCR1513	2CPX078377R9999		1
800	350	400	OT200, OT250, OT315, OT400	1	3/4	225	CHDQ1513	2CPX078303R9999		1
	500	800	OT630, OT800	1	3/4	275	CHDR1513	2CPX078378R9999		1

Subdistribution boards

CombiLine S for switch disconnector OT, vertical

CVAP1513



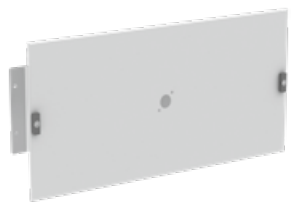
CVDQ1513

OT switch disconnector vertical left

- Unequipped set for ABB OT...E03/04P as an incomer or outgoing switch
- Sheet steel cover with cut out for rotary handle on the left side
- Cover fixed with one 1/4 turn quick-lock
- Important: in case of using switch disconnectors OT630 and OT800 it is not possible to use busbar system behind the mounting plate

		For device					Order details			
Width mm	Height mm	I_n max A	Type	Numbers of breakers	Numbers of poles	Minimum cabinet depth	Type	Order code	Price	Pcs.
300	350	250	OT200, OT250	1	3/4	225	CVAP1513	2CPX078304R9999		1
600	350	400	OT200, OT250, OT315, OT400	1	3/4	225	CVCQ1513	2CPX078305R9999		1
	500	800	OT630, OT800	1	3/4	275	CVCR1513	2CPX078379R9999		1
800	350	400	OT200, OT250, OT315, OT400	1	3/4	225	CVDQ1513	2CPX078306R9999		1
	500	800	OT630, OT800	1	3/4	275	CVDR1513	2CPX078380R9999		1

CVAP1514



CVDQ1514

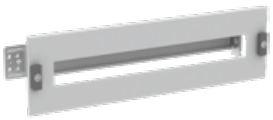
OT switch disconnector vertical center

- Unequipped set for ABB OT...E12/22P as an incomer or outgoing switch vertical
- Sheet steel cover with cut out for rotary handle in the center
- Cover fixed with 1/4 turn quick-lock
- Important: in case of using switch disconnectors OT630 and OT800 it is not possible to use busbar system behind the mounting plate

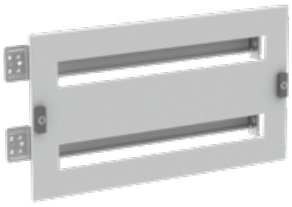
		For device					Order details			
Width mm	Height mm	I_n max A	Type	Numbers of breakers	Numbers of poles	Minimum cabinet depth	Type	Order code	Price	Pcs.
300	350	250	OT200, OT250	1	3/4	225	CVAP1514	2CPX078307R9999		1
600	350	400	OT200, OT250, OT315, OT400	1	3/4	225	CVCQ1514	2CPX078308R9999		1
	500	800	OT630, OT800	1	3/4	275	CVCR1514	2CPX078381R9999		1
800	350	400	OT200, OT250, OT315, OT400	1	3/4	225	CVDQ1514	2CPX078309R9999		1
	500	800	OT630, OT800	1	3/4	275	CVDR1514	2CPX078382R9999		1

Subdistribution boards

CombiLine S for DIN rail components



CKDB1615

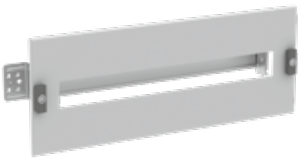


CKDB2630

DIN rail distance 150 mm for S200

- Unequipped set for DIN rail components
- Din rail distance 150 mm
- System pro M S200, switch OT160 (front level)
- DIN rail is fixed on a mounting bracket
- The material is aluminium
- On the back-side it is possible to use Unifix L
- Cover with 1/4 turn quick-lock

		Additional information					Order details			
Width mm	Height mm	I_n max A	Space units (SU)	Din rail distance	Numbers of rows	Minimum cabinet depth	Type	Order code	Price	Pcs.
600	150	160	24	150	1	225	CKDB1615	2CPX078318R9999		1
800	150	160	36	150	1	225	CKDB1815	2CPX078319R9999		1
600	300	160	48	150	2	225	CKDB2630	2CPX078406R9999		1
800	300	160	72	150	2	225	CKDB2830	2CPX078407R9999		1

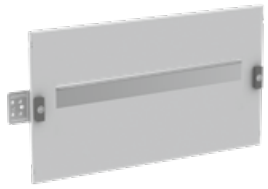


CKDB1620

DIN rail distance 200 mm for S200, Tmax

- Unequipped set for DIN rail components
- Din rail distance 200 mm
- System pro M S200, switch OT160 (front level)
- Tmax, XT1, XT3 breaker 3+4 pole version (back level)
- DIN rail is fixed on a mounting bracket
- The material is aluminium
- On the back-side it is possible to use Unifix L,
- A depth adapter enables the same depth of MCCB and DIN rail components S200
- Cover is with DIN cut-out

		Additional information					Order details			
Width mm	Height mm	I_n max A	Space units (SU)	Din rail distance	Numbers of rows	Minimum cabinet depth	Type	Order code	Price	Pcs.
300	200	250	12	200	1	225	CKDC1320	2CPX078320R9999		1
600	200	250	24	200	1	225	CKDC1620	2CPX078321R9999		1
800	200	250	36	200	1	225	CKDC1820	2CPX078322R9999		1

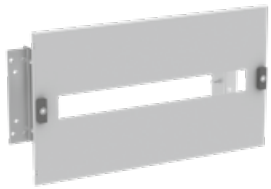


CKDR1630

DIN rail for Tmax 4 pole + RC sel.

- Unequipped set for Tmax breaker, XT1, XT3 4 pole with RC sel.
- DIN rail is fixed on a mounting bracket
- The material is aluminium
- On the back-side it is possible to use Unifix L,
- A depth adapter enables the same depth of MCCB and DIN rail components S200
- Cover is with DIN cut-out
- Cover fixed with 1/4 turn quick-lock

		Additional information					Order details			
Width mm	Height mm	I_n max A	Space units (SU)	Din rail distance	Numbers of rows	Minimum cabinet depth	Type	Order code	Price	Pcs.
600	300	250	24	300	1	225	CKDR1630	2CPX078383R9999		1
800	300	250	36	300	1	225	CKDR1830	2CPX078384R9999		1

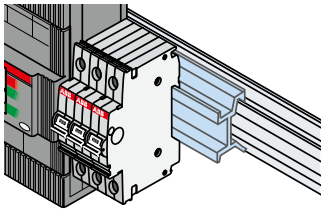


CKDU1630

DIN rail for Unifix H

- Unequipped set for System Unifix H
- The System Unifix H can be fixed on supports
- Cover is with DIN cut-out
- Cover fixed with one 1/4 turn quick-lock

		Additional information					Order details			
Width mm	Height mm	I_n max A	Space units (SU)	Din rail distance	Numbers of rows	Minimum cabinet depth	Type	Order code	Price	Pcs.
600	300	250	24	300	1	225	CKDU1630	2CPX078385R9999		1
800	300	250	36	300	1	225	CKDU1830	2CPX078386R9999		1



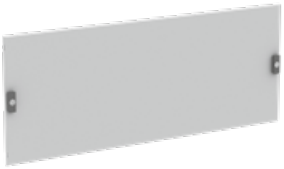
Article	Width in mm	Order details		Price	Pcs.
		Type	Order code		
Depth adapters Enables the depth of miniature circuit-breakers to be adapted to that of moulded-case circuit-breakers mounted on the same DIN rail. Depth adapters for Tmax XT1-XT3	600	AP6000			1

Subdistribution boards

CombiLine S covers closed

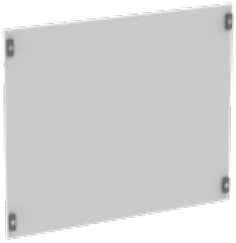
CACP3030

CACP6030



CACP8030

CACP6060

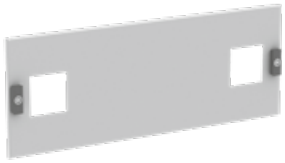


CACP8060

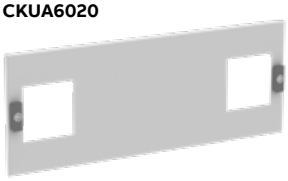
Article	Height in mm	Order details		Price	Pcs.
		Type	Order code		
Cover closed Material sheet steel. With one 1/4 turn quick-lock per side					
Width 300 mm	50	CACP3005	2CPX078340R9999		1
	100	CACP3010	2CPX078341R9999		1
	150	CACP3015	2CPX078342R9999		1
	200	CACP3020	2CPX078343R9999		1
	250	CACP3025	2CPX078344R9999		1
	300	CACP3030	2CPX078345R9999		1
	400	CACP3040	2CPX078346R9999		1
Width 600 mm	50	CACP6005	2CPX078350R9999		1
	100	CACP6010	2CPX078351R9999		1
	150	CACP6015	2CPX078352R9999		1
	200	CACP6020	2CPX078353R9999		1
	250	CACP6025	2CPX078354R9999		1
	300	CACP6030	2CPX078355R9999		1
	400	CACP6040	2CPX078356R9999		1
Width 800 mm	50	CACP8005	2CPX078360R9999		1
	100	CACP8010	2CPX078361R9999		1
	150	CACP8015	2CPX078362R9999		1
	200	CACP8020	2CPX078363R9999		1
	250	CACP8025	2CPX078364R9999		1
	300	CACP8030	2CPX078365R9999		1
	400	CACP8040	2CPX078366R9999		1
Cover closed Material sheet steel. With two 1/4 turn quick-lock per side					
Width 300 mm	500	CACP3050	2CPX078347R9999		1
	600	CACP3060	2CPX078348R9999		1
	800	CACP3080	2CPX078349R9999		1
Width 600 mm	500	CACP6050	2CPX078357R9999		1
	600	CACP6060	2CPX078358R9999		1
	800	CACP6080	2CPX078359R9999		1
Width 800 mm	500	CACP8050	2CPX078367R9999		1
	600	CACP8060	2CPX078368R9999		1
	800	CACP8080	2CPX078369R9999		1

Subdistribution boards

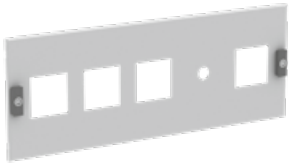
CombiLine S covers for measuring instruments



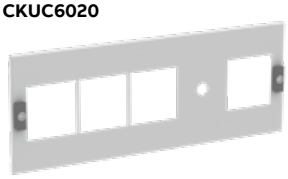
CKUA6020



CKUB6020



CKUC6020



CKUD6020

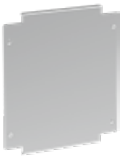
CAE06

CAHCP10

Article	Width in mm	Order details		Price	Pcs.
		Type	Order code		
Covers for universal measuring instruments					
For 2 measuring instrument 72 x 72 mm Cover fixed with one 1/4 turn screws on every side Material sheet steel Height 200 mm	600	CKUA6020	2CPX078310R9999		1
	800	CKUA8020	2CPX078311R9999		1
For 2 measuring instrument 96 x 96 mm Cover fixed with one 1/4 turn screws on every side Material sheet steel Height 200 mm	600	CKUB6020	2CPX078312R9999		1
	800	CKUB8020	2CPX078313R9999		1
For 4 universal measuring instruments 72 x 72 mm Cover fixed with one 1/4 turn screws on every side Material sheet steel Height 200 mm	600	CKUC6020	2CPX078314R9999		1
	800	CKUC8020	2CPX078315R9999		1
For 4 universal measuring instruments 96 x 96 mm Cover fixed with one 1/4 turn screws on every side Material sheet steel Height 200 mm	600	CKUD6020	2CPX078316R9999		1
	800	CKUD8020	2CPX078317R9999		1
Cover earthing set Connection between cover and structure, when using devices in the cover Cable diameter 6 mm²		CAEC6	2CPX078462R9999		1
Hinge set for covers Opening angle 90° Per cover are 2 pcs. required		CAHCP10	2CPX078485R9999		1

Subdistribution boards

CombiLine S mounting plates



CAMF3030

CAMF6030

CAMF8030

- Mounting plate is for fixed mounted on profile
- Distance between mounting plate and cover is 110 mm
- Material sheet steel

		Usable space			Order details			
Width mm	Height mm	Height mm	Width mm	Minimum cabinet depth	Type	Order code	Price	Pcs.
300	300	295	216	225	CAMF3030	2CPX078323R9999		1
600	150	145	432	225	CAMF6015	2CPX078324R9999		1
	200	195	432	225	CAMF6020	2CPX078325R9999		1
	250	245	432	225	CAMF6025	2CPX078326R9999		1
	300	295	432	225	CAMF6030	2CPX078327R9999		1
	400	395	432	225	CAMF6040	2CPX078328R9999		1
	500	495	432	225	CAMF6050	2CPX078329R9999		1
	600	595	432	225	CAMF6060	2CPX078330R9999		1
	800	795	432	225	CAMF6080	2CPX078331R9999		1
800	150	145	648	225	CAMF8015	2CPX078332R9999		1
	200	195	648	225	CAMF8020	2CPX078333R9999		1
	250	245	648	225	CAMF8025	2CPX078334R9999		1
	300	295	648	225	CAMF8030	2CPX078335R9999		1
	400	395	648	225	CAMF8040	2CPX078336R9999		1
	500	495	648	225	CAMF8050	2CPX078337R9999		1
	600	595	648	225	CAMF8060	2CPX078338R9999		1
	800	795	648	225	CAMF8080	2CPX078339R9999		1

Subdistribution boards

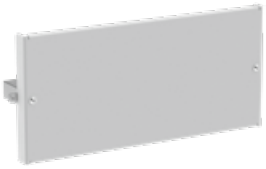
Form 2 B TwinLine S 55

CKFV8060W

Article	Depth mm	Height mm	Order details		Price	Pcs.
			Type	Order code		
Set to separate the busbars in external cable container to the device area Mounting position vertical Material transparent plastic	225	600	CKFV8060W	2CPX078636R9999		1
		800	CKFV8080W	2CPX078637R9999		1
		1000	CKFV8100W	2CPX078638R9999		1
		1200	CKFV8120W	2CPX078639R9999		1
		1400	CKFV8140W	2CPX078640R9999		1
	275	1200	CKFV9120W	2CPX078647R9999		1
		1400	CKFV9140W	2CPX078648R9999		1
		1600	CKFV9160W	2CPX078649R9999		1
		1800	CKFV9180W	2CPX078650R9999		1
		2000	CKFV9200W	2CPX078651R9999		1

Subdistribution boards

CombiLine S internal form of separation Form 2b



CKFH1620

- Set to separate the busbar behind device area
- Touch protection in front of the busbar system
- Mounting position horizontal
- Material is transparent plastic

Width mm	Height mm	Order details		Price	Pcs.
		Type	Order code		
600	200	CKFH1620	2CPX078463R9999		1
800	200	CKFH1820	2CPX078464R9999		1

CKFH2620

- Set to separate the busbar behind device area
- Touch protection in front of the busbar system and in addition top or bottom
- Mounting position horizontal
- Material is transparent plastic

Width mm	Height mm	Order details		Price	Pcs.
		Type	Order code		
600	200	CKFH2620	2CPX078465R9999		1
800	200	CKFH2820	2CPX078466R9999		1

CKFH3620

- Set to separate the busbar behind device area
- Touch protection behind the busbar system
- Mounting position horizontal
- Material is transparent plastic

Width mm	Height mm	Order details		Price	Pcs.
		Type	Order code		
600	200	CKFH3620	2CPX078467R9999		1
800	200	CKFH3820	2CPX078468R9999		1

Subdistribution boards

Form 2b for TwinLine S 43

CKFV8060

Article	Depth mm	Height mm	Order details		Price	Pcs.
			Type	Order code		
Set to separate the busbars in external cable container to the device area Mounting position vertical Material transparent plastic	225	600	CKFV8060	2CPX078469R9999		1
		800	CKFV8080	2CPX078470R9999		1
		1000	CKFV8100	2CPX078471R9999		1
		1200	CKFV8120	2CPX078472R9999		1
		1400	CKFV8140	2CPX078473R9999		1
		1600	CKFV8160	2CPX078474R9999		1
		1800	CKFV8180	2CPX078475R9999		1
		2000	CKFV8200	2CPX078476R9999		1
	275	600	CKFV9060	2CPX078477R9999		1
		800	CKFV9080	2CPX078478R9999		1
		1000	CKFV9100	2CPX078479R9999		1
		1200	CKFV9120	2CPX078480R9999		1
		1400	CKFV9140	2CPX078481R9999		1
		1600	CKFV9160	2CPX078482R9999		1
		1800	CKFV9180	2CPX078483R9999		1
		2000	CKFV9200	2CPX078484R9999		1

Subdistribution boards

CombiLine S busbar system

CKBS1161

CKBS1231

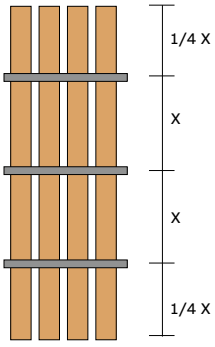
CKBS2161

CKBS2231

Article	Width in mm	Min. cabinet depth mm	Order details Type	Order code	Price	Pcs.
Busbar support linear for flat busbars Behind the device area Rated (In) max. 630 A Rated peak withstand current (Ipk) up to 68 kA Rated short-time withstand current (Icw) 1.0 sec. up to 32 kA To find the right numbers of supports to achive the short-circuit see the table below, numbers of support 1	600	275	CKBS1161	2CPX078447R9999		1
	800	275	CKBS1181	2CPX078448R9999		1
Busbar support scaled for flat busbars For external cable container Rated current (In) max. 630 A Rated peak withstand current (Ipk) up to 48 kA Rated short-time withstand current (Icw) 1.0 sec. up to 23 kA To find the right numbers of supports to achive the short-circuit see the table below, numbers of support 1	300	225	CKBS1231	2CPX078449R9999		1
Busbar support linear for shaped busbars Behind theh device area Rated current (In) max. 800 A Rated peak withstand current (Ipk) up to 74 kA Rated short-time withstand current (Icw) 1.0 sec. up to 35 kA To find the right numbers of supports to achive the short-circuit see the table below , numbers of support 1	600	275	CKBS2161	2CPX078370R9999		1
	800	275	CKBS2181	2CPX078371R9999		1
Busbar support scaled for shaped busbars For internal or external cable container Rated current (In) max. 800 A Rated peak withstand current (Ipk) up to 74 kA Rated short-time withstand current (Icw) 1.0 sec. up to 35 kA To find the right numbers of supports to achive the short-circuit see the table below, numbers of support 1	200/300	225	CKBS2231	2CPX078372R9999		1

Table for rated peak withstand current I_{pk} / rated short-time withstand current $I_{cw\ (1\ sec.)}$

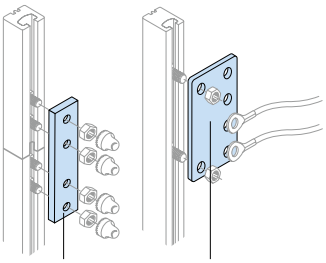
Busbar Type	I_n in A	Busbar support	No. of busbars per phase	No. support H = 1750 mm	Max. X (mm)	No. support H = 1750 mm	Max. X (mm)	No. support H = 1750 mm	Max. X (mm)	No. support H = 1750 mm	Max. X (mm)
Busbar support linear for flat busbar				**17kA / 10kA**		**40kA / 20kA**		**48kA / 23kA**		**67kA / 32kA**	
BR0250	250	CKBS1161 CKBS1181	1	4	500	-	-	-	-	-	-
BR0400	400		1	4	500	6	350	6	350	-	-
BR0630	630		1	4	600	4	600	4	600	9	250
Busbar support scaled for flat busbars											
BR0250	250	CKBS1231	1	8	275	-	-	-	-	-	-
BR0400	400		1	8	275	15	125	18	100	-	-
BR0630	630		1	8	275	15	125	18	100	-	-



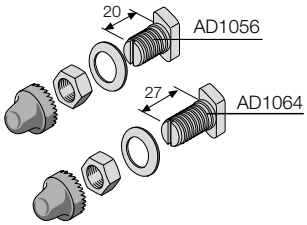
The distance between the first busbar holder and the end of the busbar must not exceed 1/4 of "X".

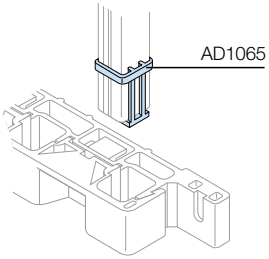
Busbar Type	I_n in A	Busbar support	No. of busbars per phase	No. support	Max. X (mm)	No. support	Max. X (mm)	No. support	Max. X (mm)	No. support	Max. X (mm)
Busbar support linear for shaped busbars				**17kA / 10kA**		**40kA / 20kA**		**48kA / 23kA**		**63kA / 30kA**	
BA0400	400	CKBS2161 CKBS2181	1	5	425	5	425	5	425	-	-
BA0800	800		1	4	550	4	550	4	550	-	-
Busbar support scaled for shaped busbars											
BA0400	400	CKBS2231	1	5	425	5	425	5	425	-	-
BA0800	800		1	5	425	5	425	5	425	4	550

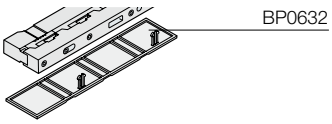
Max X = maximum distance not to be exceeded between two consecutive busbar holders



AD1068 **AD1077**



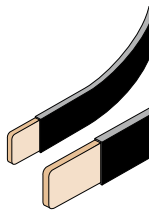




Article	Order details		Price	Pcs.
	Type	Order code		
Joints for busbars with shaped section				
No. 4 copper 400 A branch joints	AD1077			4
No. 4 joints for joining busbars with shaped section 400 / 800 A	AD1068			4
Hammer seal screws for busbars with shaped section				
No. 12 M8 screws L = 20 mm for flexible busbars and cable shoes complete with screw-covering cap	AD1056			12
No. 12 M8 screws L = 27 mm for flat busbars 10 mm complete with screw-covering cap	AD1064			12
Resting bases for busbars with shaped section				
No. 4 resting bases for 400 / 800 A busbars	AD1065			4
Busbars holders end cover				
No. 2 terminal covers for linear busbar holders CKBS1161, CKBS1181	BP0632			1

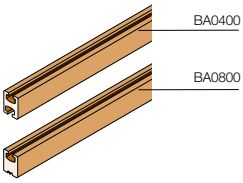
Subdistribution boards

CombiLine S busbar system

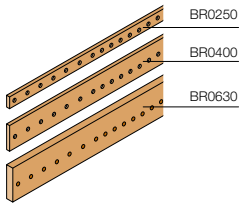


BF1602

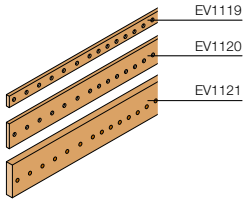
Article	Dimensions Length mm	I_n A	Order details Type	Order code	Price	Pcs.
Flexible Busbars Flexible busbars insulated with self-extinguishing material						
No. 2 flexible busbars, section 20 x 3	2000	250	BF1602			2
No. 2 flexible busbars, section 20 x 5	2000	400	BF2502			2
No. 2 flexible busbars, section 24 x 6	2000	500	BF4002			2
No. 2 flexible busbars, section 32 x 5	2000	630	BF4012			2



Distribution busbars with shaped section						
Busbar I_n = 400 A	1730	400	BA0400			1
Busbar I_n = 800 A	1730	800	BA0800			1



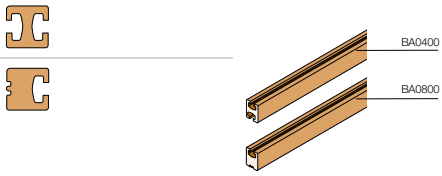
Flat busbar Copper busbars drilled and threaded for rapid connection of the conductors Can be used with both linear CKBS1161, CKBS1181 and scaled CKBS1231 busbar holder						
No. 2 copper busbar 15 x 5	1750	250	BR0250			2
No. 2 copper busbar 25 x 5	1750	400	BR0400			2
No. 2 copper busbar 30 x 10	1750	630	BR0630			2

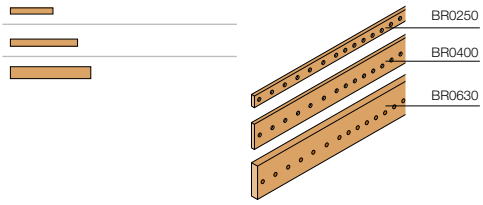


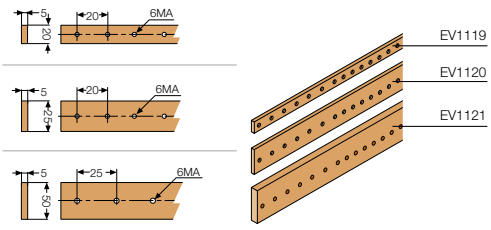
Earthing busbars* Busbar can be mounted directly on the mounting profile or busbar 20 x 5 mm on the support for horizontal installation; Copper busbars drilled and threaded for rapid connection of the conductors						
No. 2 earthing busbars 20 x 5 threaded M6	2000		EV1119			2
No. 2 earthing busbars 25 x 5 threaded M6	2000		EV1120			2
No. 2 earthing busbars 50 x 5 threaded M6	2000		EV1121			2

Support universal, for horizontal installation For a Din rail or cable fastening rail or earth busbar max. 20 x 5 mm For fix mounting Material is metal			CASHP2	2CPX078450R9999		2
			CASHP50	2CPX078451R9999		50

* Busbar dimensions can be selected according to IEC 61439-1 table 5

Cross section	Code	I_n in A	No. busbar/ phase	Dimensions			
				Cu busbar im mm	Section dimensions mm²	Length mm	Weight kg
Flexible busbars up to 630 A							
	BF1602	250	1	20 x 3	60	2000	1.42
	BF2502	400	1	20 x 5	100	2000	2.15
	BF4002	500	1	24 x 6	144	2000	3
	BF4012	630	1	32 x 5	160	2000	3.36
Busbars with shaped section for applications up to 800 A							
	BA0400	400	1	20 x 20	200	1730	4
	BA0800	800	1	20 x 20	280	1730	4,4

Cross section	Code	I_n in A	No. busbar/ phase	Dimensions			
				Cu busbar im mm	Section dimensions mm²	Length mm	Weight kg
Flat busbars for distribution up to 630 A							
	BR0250	250	1	15 x 5	75	1750	1.35
	BR0400	400	1	25 x 5	125	1750	1.8
	BR0630	630	1	30 x 10	300	1750	4.4

Flat drilled and threaded busbars for earthing connections*	Code	Threading	pitch	Dimensions		
				Cu busbar im mm	Section dimensions mm²	Length mm
	EV1119	6 MA	20	20 x 5	100	2000
	EV1120	6 MA	20	25 x 5	125	2000
	EV1121	6 MA	25	50 x 5	250	2000

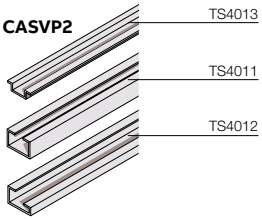
* Busbar dimensions can be selected according to IEC 61439-1 table 5

Subdistribution boards

CombiLine S accessories, mounting support

CASHP2

CASVP2



CAHB16

Article	Width mm	Order details		Price	Pcs.
		Type	Order code		
Support universal, for horizontal installation For a Din rail or cable fastening rail or earth busbar max. 20 x 5 mm Material is metal		CASHP2	2CPX078450R9999		2
		CASHP50	2CPX078451R9999		50
Support universal, for vertical installation For a Din rail or cable fastening Material is metal		CASVP2	2CPX078452R9999		2
		CASVP50	2CPX078453R9999		50
Section for accessories Length 2000 mm					
No. 2 sections EN50024 C30		TS4011			2
No. 2 sections EN50035 G32		TS4012			2
No. 2 DIN sections EN50022		TS4013			2
Horizontal mounting profile for busbar support and cable fixing Mounted on the back level of the vertical mounting profile Material metal	300	CAHB3	2CPX078456R9999		1
	600	CAHB6	2CPX078457R9999		1
	800	CAHB8	2CPX078458R9999		1

Subdistribution boards

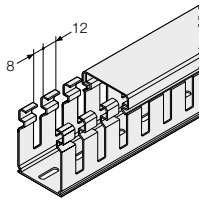
CombiLine S accessories, wiring system

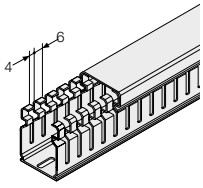
CASWP2

CAHW6

ED44P10

ED45P10

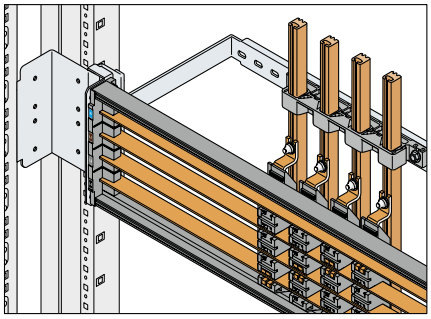




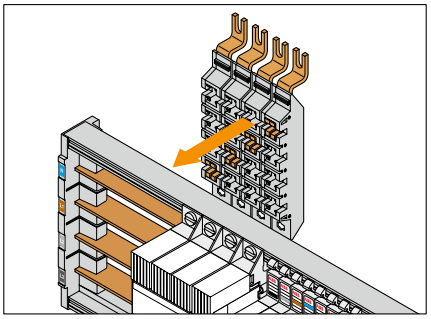
Article	Width mm	Order details		Price	Pcs.
		Type	Order code		
Support for wiring duct For wiring ducts with 60 mm and 80 mm height Material is Polyamid (PA)		CASWP2	2CPX078454R9999		2
		CASWP50	2CPX078455R9999		50
Horizontal mounting profile for Wiring system Mounted on support for wiring duct Material metal	600	CAHW6	2CPX078459R9999		1
	800	CAHW8	2CPX078461R9999		1
Wire holder For horizontal mounting profile					
Depth 28.5 mm		ED44P10	2CPX062335R9999		10
		ED44P50	2CPX062308R9999		50
		ED44P1000	2CPX062703R9999		1000
Depth 55 mm		ED45P10	2CPX062336R9999		10
		ED45P50	2CPX062310R9999		50
		ED45P1000	2CPX062704R9999		1000
Wiring ducts For horizontal and vertical installation RAL 7035, lenght 2000 mm					
Slot 8 - 12 mm Base x Height in mm					
60 x 60		05 067			1
60 x 80		05 087			1
80 x 60		05 069			1
80 x 80		05 089			1
Slot 4 - 6 mm Base x Height in mm					
60 x 60		05 167			1
60 x 80		05 187			1
80 x 60		05 169			1
80 x 80		05 189			

Subdistribution boards

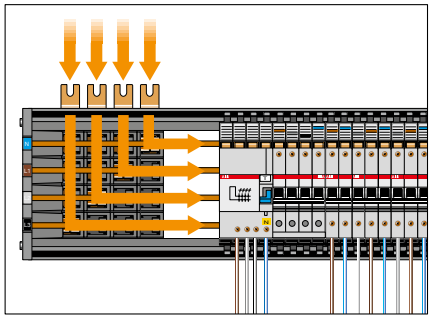
CombiLine S distribution system Unifix, overview



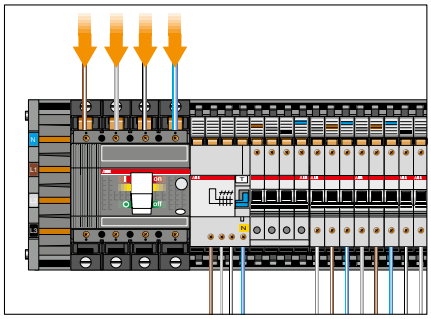
Direct connection with the 400/800 A system of busbars with shaped section.



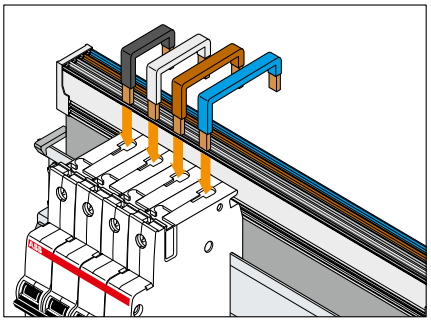
Feeder module for 400 A frame (L1-L2-L3-N).



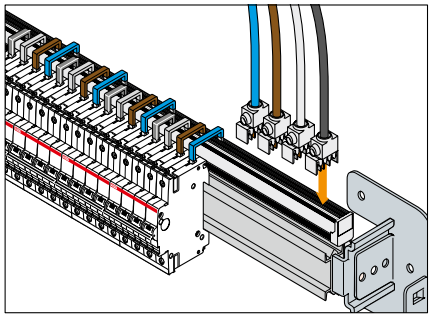
Direct power supply of the bases by means of feeder module ED2209.



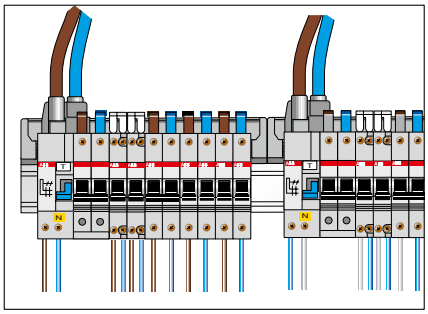
Power supply by means of general row circuit-breaker.



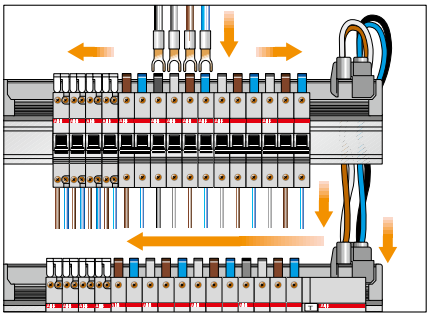
Connections (L1-L2-L3-N) for System pro M modular apparatus.



Power supply of the busbar with 100 A feeder module without cable. Terminal capacity 35mm2.



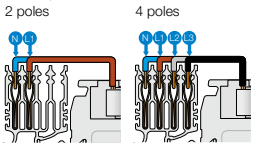
Direct power supply of the busbars by means of feeder module.

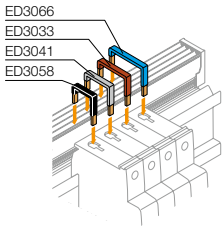


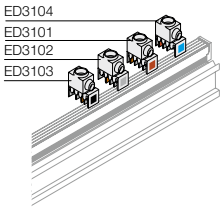
Power supply by means of modules and cables in parallel.

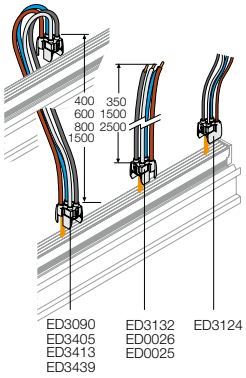
Subdistribution boards

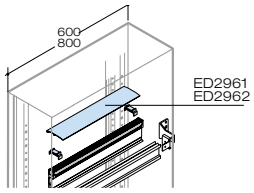
CombiLine S distribution system Unifix L







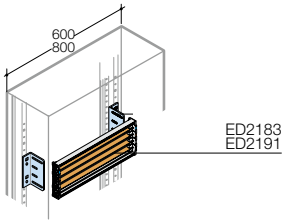


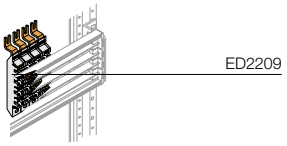


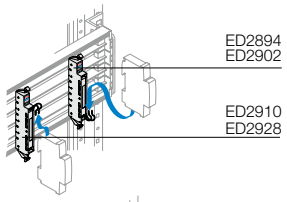
Article	Order details		Price	Pcs.
	Type	Order code		
2-pole busbars				
100 A 2P 8 module busbar, width 200 mm	ED2985			6
100 A 2P 12 module busbar, width 400 mm	ED2993			6
100 A 2P 18 module busbar, width 450 mm	ED3009			6
100 A 2P 24 module busbar, width 600 mm	ED3017			6
100 A 2P 36 module busbar, width 800 mm	ED3025			6
4-pole busbars				
100 A 4P 12 module busbar, width 400 mm	ED2944			6
100 A 4P 18 module busbar, width 450 mm	ED2951			6
100 A 4P 24 module busbar, width 600 mm	ED2969			6
100 A 4P 36 module busbar, width 800 mm	ED2977			6
Connections for various apparatus				
Connection with 2 conductors L/N 16 A	ED3108			6
Connection with 3 conductors L1/L2/L3 16 A	ED3116			6
Connection with 4 conductors L1/L2/L3/N 16 A single phase	ED3124			6
Connection with 2 conductors L1/N 40 A	ED3355			6
Connection with 3 conductors L1/L2/L3 40 A	ED3363			6
Connection with 4 conductors L1/L2/L3/N 40 A	ED3371			6
Connections for apparatus				
No. 10 connections L1-N 40 A	ED3272			10
No. 10 connections L2-N 40 A	ED3280			10
No. 10 connections L3-N 40 A	ED3298			10
No. 10 connections L 1 100 A	ED3033			10
No. 10 connections L 2 100 A	ED3041			10
No. 10 connections L 3 100 A	ED3058			10
No. 10 connections N 100 A	ED3066			10
Feeder with 4P 100 A cable, width 350 mm	ED3132			10
Feeder with 4P 100 A cable, width 1500 mm	ED0026			10
Feeder with 4P 100 A cable, width 1500 mm	ED0025			10
Power supply modules with cable				
Parallel module 2P 100 A with cable, width 600 mm	ED3082			6
Parallel module 4P 100 A with cable, width 400 mm	ED3405			6
Parallel module 4P 100 A with cable, width 600 mm	ED3090			6
Parallel module 4P 100 A with cable, width 800 mm	ED3413			6
Parallel module 4P 100 A with cable, width 1500 mm	ED3439			6
Power supply modules without cable In 100 A				
No. 10 single-pole power supply terminals L1	ED3101			10
No. 10 single-pole power supply terminals L2	ED3102			10
No. 10 single-pole power supply terminals L3	ED3103			10
No. 10 single-pole power supply terminals N	ED3104			10
Accessories				
N°10 busbar covers, width 600 mm	ED2961			10
N°2 busbar covers, width 800 mm	ED2962			2

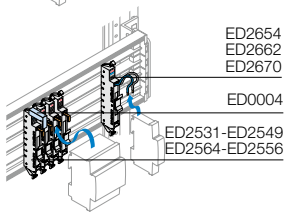
Subdistribution boards

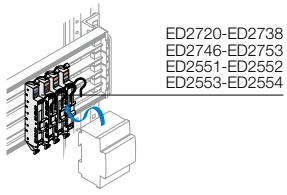
CombiLine S distribution system Unifix H

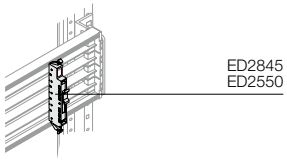


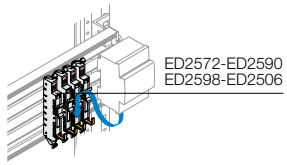




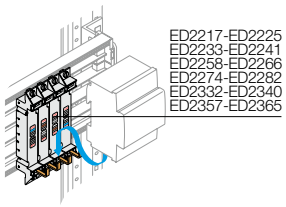


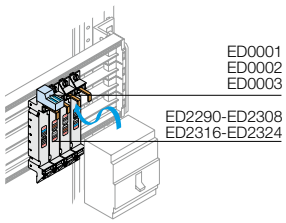


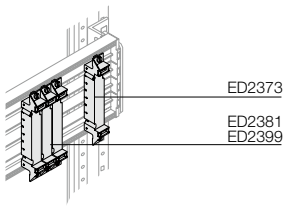


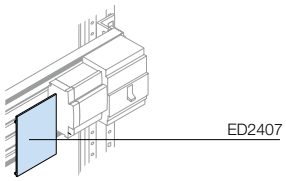


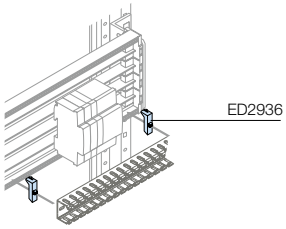
Article	Order details		Price	Pcs.
	Type	Order code		
Frames for Tmax				
Frame with 24 DIN module busbar	ED2183			1
Frame with 36 DIN module busbar	ED2191			1
Feeder modules				
4P 400 A feeder module (for ED2183-ED2191)	ED2209			1
Basic modules In 16 A				
Basic module for DIN L1-N top 16 A	ED2894			1
Basic module for DIN L1-L2 top 16 A	ED2902			1
Basic module for DIN L1-N bottom 16 A	ED2910			1
Basic module for DIN L1-L2 bottom 16 A	ED2928			1
Basic modules In 40 A				
Basic module L1/Neutral top 40 A	ED2654			1
Basic module L2/Neutral top 40 A	ED2662			1
Basic module L3/Neutral top 40 A	ED2670			1
Basic modules In 63 A				
Basic module L1 top 63 A	ED2531			1
Basic module L2 top 63 A	ED2549			1
Basic module L3 top 63 A	ED2556			1
Basic module Neutral top 63 A	ED2564			1
Basic module L1 bottom 63 A	ED2572			1
Basic module L2 bottom 63 A	ED2590			1
Basic module L3 bottom 63 A	ED2598			1
Basic module Neutral bottom 63 A	ED2606			1
Basic modules In 100 A				
Basic module with cable L1 top 100 A	ED2720			10
Basic module with cable L2 top 100 A	ED2738			2
Basic module with cable L3 top 100 A	ED2746			1
Basic module with cable Neutral top 100 A	ED2753			1
Basic modules ≤ In 40 A S800				
Basic module L1 top ≤ 40 A	ED2557			1
Basic module L2 top ≤ 40 A	ED2558			1
Basic module L3 top ≤ 40 A	ED2559			1
Basic module Neutral top ≤ 40 A	ED2560			1
Basic modules ≤ In 125 A S800				
Basic module L1 top 125 A	ED2551			1
Basic module L2 top 125 A	ED2552			1
Basic module L3 top 125 A	ED2553			1
Basic module Neutral bottom 125 A	ED2554			1
Basic module false pole, width 27 mm	ED2557			1











Article	Order details		Price	Pcs.
	Type	Order code		
Basic modules ≤ In 160 A, Tmax XT1				
Basic module L1 top L2 bottom	ED2217			1
Basic module L2 top L1 bottom	ED2225			1
Basic module L3 top Neutral bottom	ED2233			1
Basic module Neutral top L3 bottom	ED2241			1
Basic module false pole for residual current release RC221	ED2373			1
Basic module false pole for solenoid operator	ED2381			1
Basic modules ≤ In 250 A, Tmax XT3				
Basic module L1 top	ED2290			1
Basic module L2 top	ED2308			1
Basic module L3 top	ED2316			1
Basic module N top	ED2324			1
Basic module L1 bottom	ED2332			1
Basic module L2 bottom	ED2340			1
Basic module L3 bottom	ED2357			1
Basic module N bottom	ED2365			1
Basic module false pole for residual current release RC221	ED2373			1
Accessories				
Basic module false pole for DDA	ED2845			1
Basic module false pole for modular MDRC	ED2852			1
No. 2 IP20 covers (for ED2183-ED2191), width 173 mm (10 DIN modules)	ED2407			2
No. 6 duct supports 40 x 60 mm (only for modular apparatus)	ED2936			6
Spare parts				
No. 10 terminal covers for Tmax XT1	ED0001			10
No. 10 terminal covers for Tmax XT3	ED0003			10
No. 10 terminal covers for S200/F200	ED0004			10

Subdistribution boards

CombiLine S distribution system Unifix, technical data

Technical characteristics	Unifix H	Unifix L
Unifix systems		
Rated service voltage (U_e)	690 V AC	400 V AC
Rated insulation voltage (U_i)	1000 V AC	500 V AC
Rated impulse withstand voltage (U_{imp})	8 kV	6 kV
Rated frequency	50/60 Hz	50/60 Hz
Rated current (I_n) central power supply lateral power supply	400 A	100 A
	320 A	80 A
Rated short-time withstand current (I_{cw})	25 kA	-
Maximum peak current (I_{pk})	52,5 kA - 400 V	-
Maximum installable circuit-breaker size	250 A	100 A
Conditioned short-circuit current (I_{cc}) Tmax XT1 Tmax XT3	50 kA - 400 V	-
	50 kA - 400 V	-
With circuit-breaker		
S200	-	6 kA - 400 V
S200M	-	10 kA - 400 V
S200P	-	25 kA - 400 V
Degree of protection	IP20 with accessory	IP20
Characteristics of the insulating material	Self-extinguishing thermoplastic V1 (UL94)	Self-extinguishing thermoplastic V1 (UL94)
Characteristics of the conductor material	Electrolytic copper	Electrolytic copper
Width (No. modules/mm)	24/600 36/800	12/400 24/600 36/800
Installation of Unifix system		
Frame for Tmax XT series 300 x 600 mm (H x L) 300 x 800 mm (H x L)	ED2183	-
	ED2191	-
Fixing brackets Height 300 mm	AD1097	-
Crosspiece for direct connection to the rear busbars with shaped section with PB0803 Width 600 mm Width 800 mm	TL1000	-
	TL1100	-
Busbar 4P 12 mod. 18 mod. 24 mod. 36 mod.	-	ED2993
	-	ED3009
	-	ED3017
	-	ED3025
Busbar 4P 12 mod. 18 mod. 24 mod. 36 mod.	-	
	-	ED2944
	-	ED2951
	-	ED2969
	-	ED2977
Fixing support 24 mod. 36 mod.	-	
	-	GD1520
	-	GD1530

(1) Select circuit-breakers in version with front terminals for copper cables.

Subdistribution boards

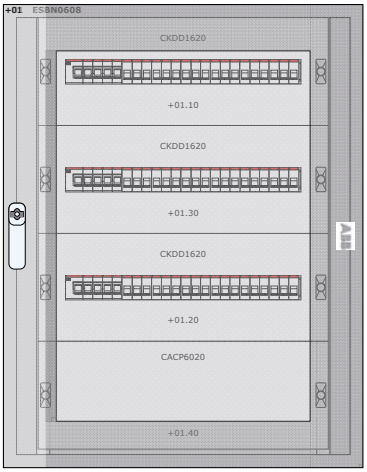
CombiLine S distribution system Unifix, selecting table

Series of circuit-breakers	Unifix H		Unifix L
Unifix systems Table for selecting connections according to the circuit-breaker			
SN201 DS941	(top power supply)		
	ED2654 L1/N 40 A	-	ED3272 L1/N 40 A
	ED2662 L2/N 40 A	-	ED3280 L2/N 40 A
	ED2670 L3/N 40 A	-	ED3298 L3/N 40 A
S200 - DS200 F200 up to 63A (Unifix L)	(top power supply)	(bottom power supply)	
	ED2531 L1 63A	ED2572 L1 63A	ED3033 L1 100A
	ED2549 L2 63A	ED2590 L2 63A	ED3041 L2 100A
	ED2556 L3 63A	ED2598 L3 63A	ED3058 L3 100A
	ED2564 N 63A	ED2606 N 63A	ED3066 N 100A
	ED2845 False pole module	-	-
S800	(top power supply)		
	ED2557 L1 ≤32A	-	-
	ED2558 L2 ≤32A	-	-
	ED2559 L3 ≤32A	-	-
	ED2560 N ≤32A	-	-
	ED2551 L1 125A	-	-
	ED2552 L2 125A	-	-
	ED2553 L3 125A	-	-
	ED2554 N 125A	-	-
	ED2550 False pole module	-	-
S280 (80-100A) E200 up to 100A - RS370 - F200 80/100A (Unifix H)	(top power supply)		
	ED2720 L1 100A	-	ED3132 pow. supply L1/L2/L3/N - 350mm
	ED2738 L2 100A	-	ED0026 pow. supply L1/L2/L3/N - 1500mm
	ED2746 L3 100A	-	ED0025 pow. supply L1/L2/L3/N - 2500mm
	ED2753 N 100A	-	-
MDRC - Various apparatus	(top power supply)	(bottom power supply)	
	ED2894 L1/N 16A	ED2910 L1/N 16A	ED3108 pow. supply 2 cables L1/N 16A
	ED2902 L1/L2 16A	ED2928 L1/L2 16A	ED3116 pow. supply 3 cables L1/L2/L3 16A
	-	-	ED3124 pow. supply 4 cables L1/L2/L3/N 16A
	-	-	ED3355 pow. supply 2 cables L1/N 40A
	-	-	ED3363 pow. supply 3 cables L1/L2/L3 40A
	-	-	ED3371 pow. supply 4 cables L1/L2/L3/N 71A
Circuit-breaker Tmax XT1	(top/bottom power supply)	-	-
	ED2217 L1 Top/L2 Bottom	-	-
	ED2225 L2 Top/L1 Bottom	-	-
Residual current Selenoid operator	ED2233 L3 Top/N Bottom	-	-
	ED2241 N Top/L3 Bottom	-	-
	ED2373 False pole module	-	-
	ED2381 False pole module	-	-
Circuit-breaker Tmax XT3	(top power supply)	(bottom power supply)	-
	ED2290 L1	ED2332 L1	-
	ED2308 L2	ED2340 L2	-
Residual current	ED2316 L3	ED2357 L3	-
	ED2324 N	ED2365 N	-
	ED2373 False pole module	-	-

(1) Select circuit-breakers in version with front terminals for copper cables.

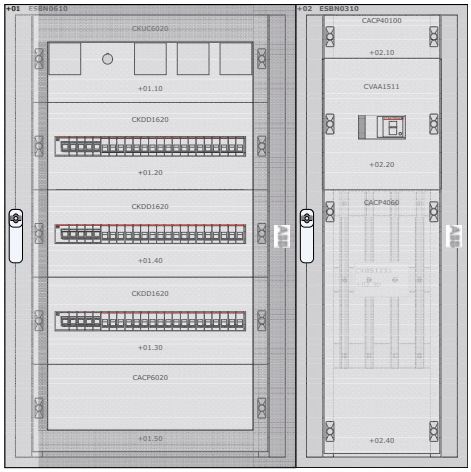
Subdistribution boards

Examples of configurations



TwinLine S 43 (800 x 600 x 225 mm) IP43 and internal configuration CombiLine S

Type	Ord.no.	Description	Pcs.
ESBN0608	2CPX078111R9999	Rear wall, W 600 mm, H 800 mm	1
ESPG0600	2CPX078146R9999	Top/bottom plate (open/closed), D 225 mm, W 600 mm	1
ESSG0008	2CPX078129R9999	Side walls 2 pcs, D 225mm, H 800 mm	1
ESIN0008	2CPX078422R9999	Installation set for internal configuration, H 800 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	2
ESAT0608	2CPX078179R9999	Transparent door, W 600 mm, H 800 mm	1
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	3
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	1

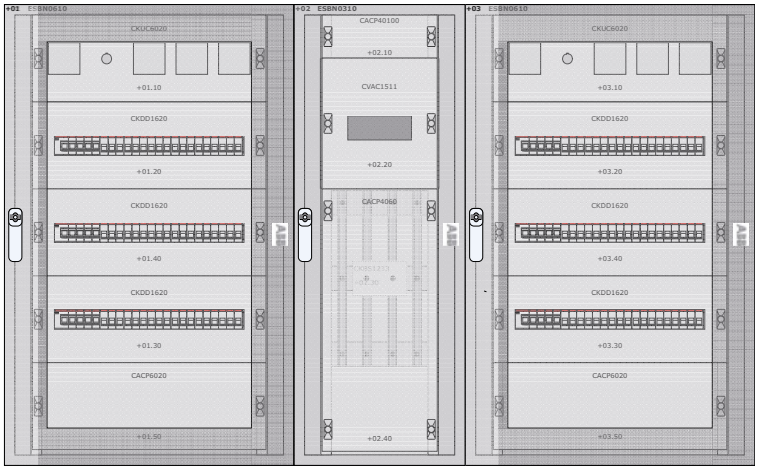


TwinLine S 43 (1000 x 600 x 225 mm + 1000 x 300 x 225 mm) IP43
Internal configuration CombiLine S, with busbars 250 A, 10 kA in external cable container

Type	Ord.no.	Description	Pcs.
ESBN0610	2CPX078112R9999	Rear wall, W 600 mm , H 1000 mm	1
ESPG0600	2CPX078146R9999	Top/bottom plate (open/closed), D 225 mm , W 600 mm	1
ESSG0010	2CPX078130R9999	Side walls 2 pcs, D 225 mm , H 1000 mm	1
ESAT0610	2CPX078180R9999	Transparent door, W 600 mm , H 1000 mm	1
ESBN0310	2CPX078103R9999	Rear wall, W 300 mm , H 1000 mm	1
ESPG0300	2CPX078145R9999	Top/bottom plate (open/closed), D 225 mm , W 300 mm	1
ESIN0010	2CPX078423R9999	Installation set for internal configuration, H 1000 mm	2
ESUG0010	2CPX078226R9999	Upright cabinet connection, D 225 mm , H 1000 mm	1
ESAS0310	2CPX078154R9999	Sheet steel door, W 300 mm , H 1000 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	3
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm , 1 row, W 600 mm , H 200 mm	3
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm , H 200 mm	1
CKUC6020	2CPX078314R9999	CombiLine S, Measuring instruments, 4 pcs. 72x72 mm , W 600 mm , H 200 mm ,	1
CVAC1511	2CPX078269R9999	CombiLine S, Device vertical, W 300 mm , Tmax XT3, 1 device, 3/4 pole, fixed, lever operation	1
CACP3060	2CPX078348R9999	CombiLine S, Cover, plain, W 300 mm , H 600 mm	1
CACP3010	2CPX078341R9999	CombiLine S, Cover, plain, W 300 mm , H 100 mm	1
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	3
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	3
CKBS1231	2CPX078449R9999	CombiLine S, Busbar, support, flat busbars, holder scaled, W 300 mm , 1 support	3
BR0250		No. 2 flat busbars 250 A	1

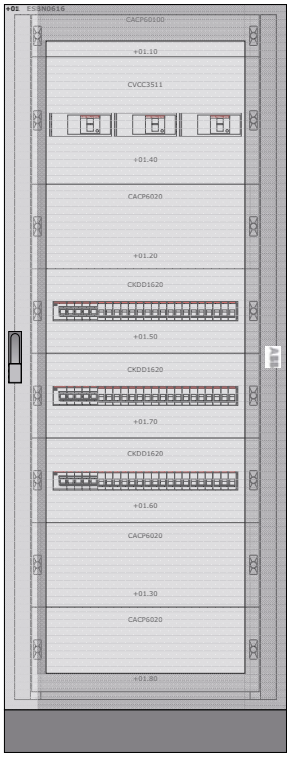
Subdistribution boards

Examples of configurations



TwinLine S 43 (1000 x 600 x 225 mm + 1000 x 300 x 225 mm + 1000 x 600 x 225 mm) IP43, Internal configuration CombiLine S, with busbars 250 A,10 kA in external cable container

Type	Ord.no.	Description	Pcs.
ESBN0610	2CPX078112R9999	Rear wall, W 600 mm, H 1000 mm	2
ESPG0600	2CPX078146R9999	Top/bottom plate (open/closed), D 225 mm, W 600 mm	2
ESSG0010	2CPX078130R9999	Side walls 2 pcs, D 225 mm, H 1000 mm	1
ESIN0010	2CPX078423R9999	Installation set for internal configuration, H 1000 mm	3
ESAT0610	2CPX078180R9999	Transparent door, W 600 mm, H 1000 mm	2
ESBN0310	2CPX078103R9999	Rear wall, W 300 mm, H 1000 mm	1
ESPG0300	2CPX078145R9999	Top/bottom plate (open/closed), D 225 mm, W 300 mm	1
ESUG0010	2CPX078226R9999	Upright cabinet connection, D 225 mm, H 1000 mm	2
ESAS0310	2CPX078154R9999	Sheet steel door, W 300 mm, H 1000 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	5
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	6
CKUC6020	2CPX078314R9999	CombiLine S, Measuring instruments, 4 pcs. 72x72 mm, W 600 mm, H 200 mm	2
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	2
CACP3060	2CPX078348R9999	CombiLine S, Cover, plain, W 300 mm, H 600 mm	1
CACP3010	2CPX078341R9999	CombiLine S, Cover, plain, W 300 mm, H 100 mm	1
CVAC1511	2CPX078269R9999	CombiLine S, Device vertical, W 300 mm, Tmax XT3, 1 device, 3/4 pole, fixed, lever operation	1
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	6
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	6
CKBS1231	2CPX078449R9999	CombiLine S, Busbar, support, flat busbars, holder scaled, W 300 mm, 1 support	3
BR0250		No. 2 flat busbars 250A	1

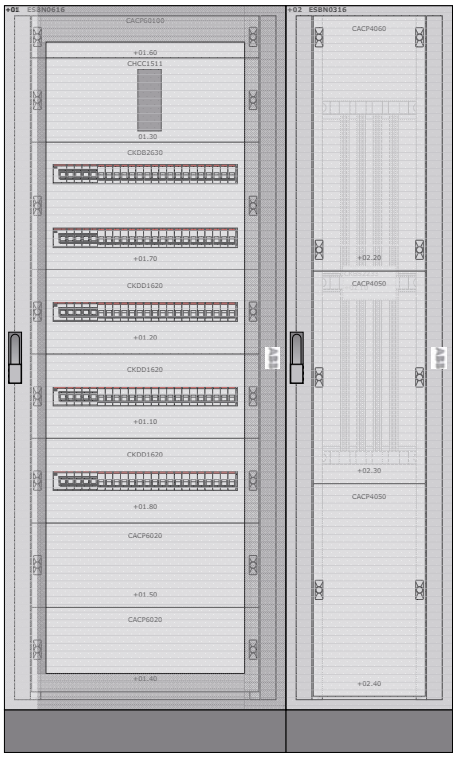


TwinLine S 43 (1600 x 600 x 275 mm) IP43
Internal configuration CombiLine S

Type	Ord.no.	Description	Pcs.
ESBN0616	2CPX078115R9999	Rear wall, W 600 mm, H 1600 mm	1
ESPL0600	2CPX078149R9999	Top/bottom plate (open/closed), D 275 mm, W 600 mm	1
ESSL0016	2CPX078142R9999	Side walls 2 pcs, D 275 mm, H 1600 mm	1
ESIN0016	2CPX078426R9999	Installation set for internal configuration, H 1600 mm	1
ESAL0610	2CPX078211R9999	Plinth, D 275 mm, W 600 mm, H 100 mm	1
ESAT0616	2CPX078183R9999	Transparent door, W 600 mm, H 1600 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	2
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	3
CACP6010	2CPX078351R9999	CombiLine S, Cover, plain, W 600 mm, H 100 mm	1
CVCC3511	2CPX078400R9999	CombiLine S, Device vertical, W 600 mm, Tmax XT3, 3 device, 3/4 pole, fixed, lever operation	1
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	3
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	3
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	3

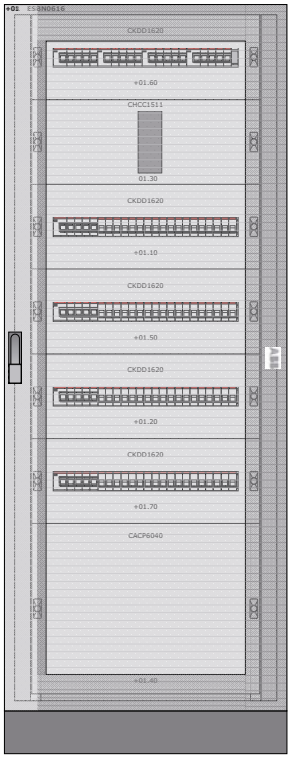
Subdistribution boards

Examples of configurations



TwinLine S 43 (1600 x 600x 225 mm + 1600 x 300 x 225 mm) IP43
Internal configuration CombiLine S, with busbars 400 A, 23 kA in external cable container

Type	Ord.no.	Description	Pcs.
ESBN0616	2CPX078115R9999	Rear wall, W 600 mm, H 1600 mm	1
ESPG0600	2CPX078146R9999	Top/bottom plate (open/closed), D 225 mm, W 600 mm	1
ESSG0016	2CPX078133R9999	Side walls 2 pcs, D 225 mm, H 1600 mm	1
ESIN0016	2CPX078426R9999	Installation set for internal configuration, H 1600 mm	2
ESAG0610	2CPX078205R9999	Plinth, D 225 mm, W 600 mm, H 100 mm	1
ESAT0616	2CPX078183R9999	Transparent door, W 600 mm, H 1600 mm	1
ESBN0316	2CPX078106R9999	Rear wall, W 300 mm, H 1600 mm	1
ESPG0300	2CPX078145R9999	Top/bottom plate (open/closed), D 225 mm, W 300 mm	1
ESUG0016	2CPX078229R9999	Upright cabinet connection, D 225 mm, H 1600 mm	1
ESAG0310	2CPX078203R9999	Plinth, D 225 mm, W 300 mm, H 100 mm	1
ESAS0316	2CPX078157R9999	Sheet steel door, W 300 mm, H 1600 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	3
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	3
CACP6010	2CPX078351R9999	CombiLine S, Cover, plain, W 600 mm, H 100 mm	1
CHCC1511	2CPX078243R9999	CombiLine S, Device horizontal, W 600 mm, Tmax XT3, 1 device, 3/4 pole, fixed, lever operation	1
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	2
CKDB2630	2CPX078406R9999	CombiLine S, DIN Components, Row distance 150 mm, 2 row, W 600 mm, H 300 mm	1
CACP3060	2CPX078348R9999	CombiLine S, Cover, plain, W 300 mm, H 600 mm	1
CACP3050	2CPX078347R9999	CombiLine S, Cover, plain, W 300 mm, H 500 mm	2
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	5
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	5
CASVP2	2CPX078452R9999	CombiLine S, Support, vertical universal, 2 pcs	2
CKBS2231	2CPX078372R9999	CombiLine S, Busbar, support, shaped busbars, holder scaled, W 300 mm, 1 support	4
BA0400		Busbar In = 400A	2

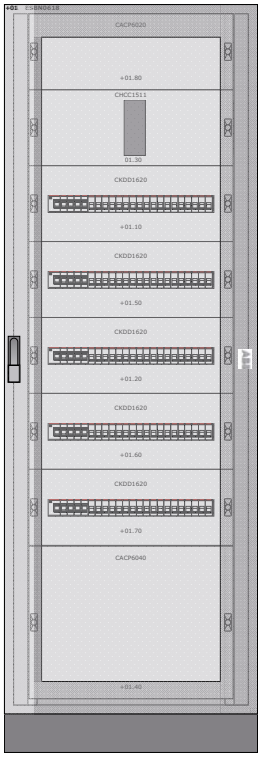


TwinLine S 43 (1600 x 600 x 225 mm) IP43
Internal configuration CombiLine S

Type	Ord.no.	Description	Pcs.
ESBN0618	2CPX078116R9999	Rear wall, W 600 mm, H 1800 mm	1
ESPG0600	2CPX078146R9999	Top/bottom plate (open/closed), D 225 mm, W 600 mm	1
ESSG0018	2CPX078134R9999	Side walls 2 pcs, D 225 mm, H 1800 mm	1
ESIN0018	2CPX078427R9999	Installation set for internal configuration, H 1800 mm	1
ESAG0610	2CPX078205R9999	Plinth, D 225 mm, W 600 mm, H 100 mm	1
ESAT0618	2CPX078184R9999	Transparent door, W 600 mm, H 1800 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	2
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	5
CHCC1511	2CPX078243R9999	CombiLine S, Device horizontal, W 600 mm, Tmax XT3, 1 device, 3/4 pole, fixed, lever operation	1
CACP6040	2CPX078356R9999	CombiLine S, Cover, plain, W 600 mm, H 400 mm	1
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	6
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	6

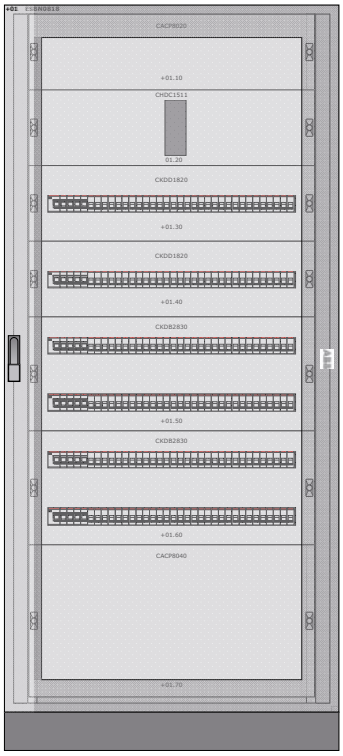
Subdistribution boards

Examples of configurations



TwinLine S 43 (1800 x 600x 275 mm + Busbar 250 A, 25 kA) IP43
Internal configuration CombiLine S, with busbars 250 A, 16 kA

Type	Ord.no.	Description	Pcs.
ESBN0618	2CPX078116R9999	Rear wall, W 600 mm, H 1800 mm	1
ESPL0600	2CPX078149R9999	Top/bottom plate (open/closed), D 275 mm, W 600 mm	1
ESSL0018	2CPX078143R9999	Side walls 2 pcs, D 275 mm, H 1800 mm	1
ESIN0018	2CPX078427R9999	Installation set for internal configuration, H 1800 mm	1
ESAL0610	2CPX078211R9999	Plinth, D 275 mm, W 600 mm, H 100 mm	1
ESAT0618	2CPX078184R9999	Transparent door, W 600 mm, H 1800 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	2
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	5
CHCC1511	2CPX078243R9999	CombiLine S, Device horizontal, W 600 mm, Tma x xT3, 1 device, 3/4 pole, fi xed, lever operation	1
CACP6040	2CPX078356R9999	CombiLine S, Cover, plain, W 600 mm, H 400 mm	1
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	1
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	5
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	5
CKBS1161	2CPX078447R9999	CombiLine S, Busbar, support, flat busbars, holder linear, W 600 mm, 1 support	4
BR0250		No. 2 flat busbars 250 A	4

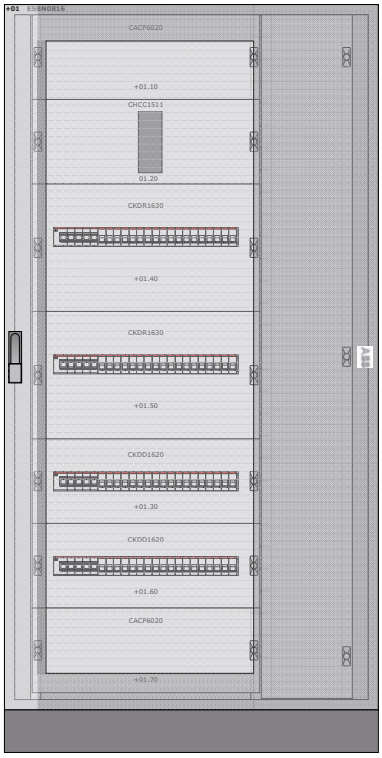


TwinLine S 43 (1800 x 800 x 275 mm) IP43
Internal configuration CombiLine S

Type	Ord.no.	Description	Pcs.
ESBN0818	2CPX078125R9999	Rear wall, W 800 mm, H 1800 mm	1
ESPL0800	2CPX078150R9999	Top/bottom plate (open/closed), D 275 mm, W 800 mm	1
ESSL0018	2CPX078143R9999	Side walls 2 pcs, D 275 mm, H 1800 mm	1
ESIN0018	2CPX078427R9999	Installation set for internal configuration, H 1800 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	3
ESAL0810	2CPX078213R9999	Plinth, D 275 mm, W 800 mm, H 100 mm	1
ESAT0818	2CPX078192R9999	Transparent door, W 800 mm, H 1800 mm	1
CKDC1820	2CPX078322R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 800 mm, H 200 mm	2
CKDB2830	2CPX078407R9999	CombiLine S, DIN Components, Row distance 150 mm, 2 row, W 800 mm, H 300 mm	2
CHDC1511	2CPX078250R9999	CombiLine S, Device horizontal, W 800 mm, Tmax XT3, 1 device, 3/4 pole, fixed, lever operation	1
CACP8020	2CPX078363R9999	CombiLine S, Cover, plain, W 800 mm, H 200 mm	1
CACP8040	2CPX078366R9999	CombiLine S, Cover, plain, W 800 mm, H 400 mm	1
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	6
CAHW8	2CPX078461R9999	CombiLine S, Mounting profile, for wiring system, W 800 mm	6

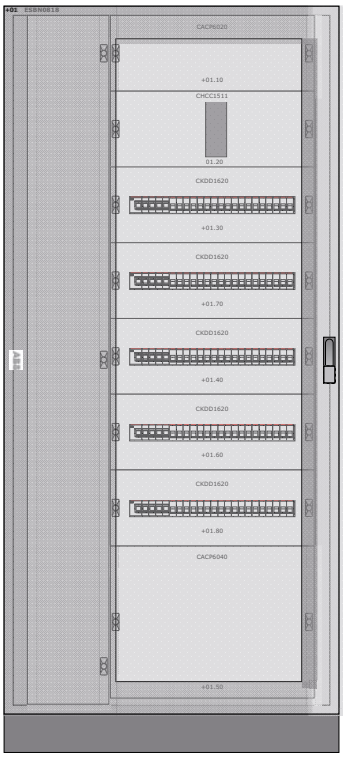
Subdistribution boards

Examples of configurations



TwinLine S 43 (1600 x 800 x 225 mm) IP43 and internal cable container
Internal configuration CombiLine S

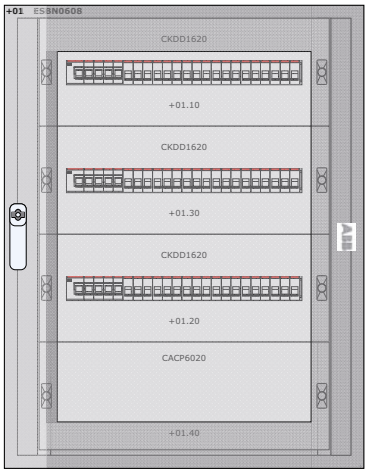
Type	Ord.no.	Description	Pcs.
ESBN0816	2CPX078124R9999	Rear wall, W 800 mm, H 1600 mm	1
ESPG0800	2CPX078147R9999	Top/bottom plate (open/closed), D 225 mm, W 800 mm	1
ESSG0016	2CPX078133R9999	Side walls 2 pcs, D 225 mm, H 1600 mm	1
ESIN0016	2CPX078426R9999	Installation set for internal configuration, H 1600 mm	1
ESAI0216	2CPX078220R9999	Internal cable container, H 1600 mm	1
ESAG0810	2CPX078207R9999	Plinth, D 225 mm, W 800 mm, H 100 mm	1
ESAT2616	2CPX078199R9999	Transparent door, for internal cable container, W 800 mm, H 1600 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	3
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	2
CHCC1511	2CPX078243R9999	CombiLine S, Device horizontal, W 600 mm, Tmax XT3, 1 device, 3/4 pole, fixed, lever operation	1
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	2
CKDR1630	2CPX078383R9999	CombiLine S, DIN Components, Tmax breaker + RC mod, 1 row, W 600 mm, H 300 mm	2
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	4
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	4



TwinLine S 43 (1800 x 800 x 275 m) IP43 and internal cable container
Internal configuration CombiLine S

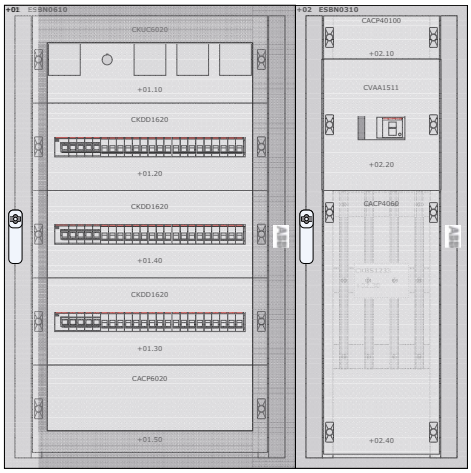
Type	Ord.no.	Description	Pcs.
ESBN0818	2CPX078125R9999	Rear wall, W 800 mm, H 1800 mm	1
ESPL0800	2CPX078150R9999	Top/bottom plate (open/closed), D 275 mm, W 800 mm	1
ESSL0018	2CPX078143R9999	Side walls 2 pcs, D 275 mm, H 1800 mm	1
ESIN0018	2CPX078427R9999	Installation set for internal configuration, H 1800 mm	1
ESAI0218	2CPX078221R9999	Internal cable container, H 1800 mm	1
ESAL0810	2CPX078213R9999	Plinth, D 275 mm, W 800 mm, H 100 mm	1
ESAT2618	2CPX078200R9999	Transparent door, for internal cable container, W 800 mm, H 1800 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	3
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	5
CHCC1511	2CPX078243R9999	CombiLine S, Device horizontal, W 600 mm, Tmax XT3, 1 device, 3/4 pole, fixed, lever operation	1
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	1
CACP6040	2CPX078356R9999	CombiLine S, Cover, plain, W 600 mm, H 400 mm	1
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	5
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	5

Examples of configurations



TwinLine S 55 (800 x 600 x 225 mm) IP55 and internal configuration CombiLine S

Type	Ord.no.	Description	Pcs.
ESWG0608	2CPX078568R9999	Structure TLS55, W 600 mm, H 800 mm , D 225 mm	1
ESFG0008	2CPX078598R9999	Side walls 2 pcs, D 225 mm, H 800 mm	1
ESIN0008	2CPX078422R9999	Installation set for internal configuration, H 800 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	2
ESAT0608	2CPX078179R9999	Transparent door, W 600 mm, H 800 mm	1
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	3
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	1

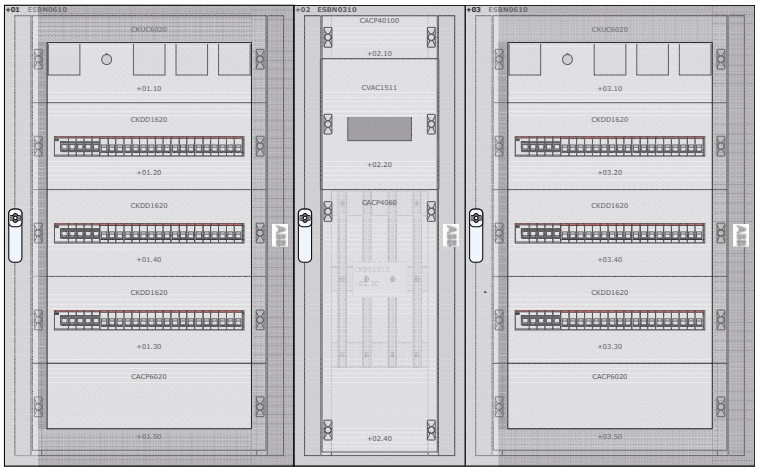


TwinLine S 55 (1000 x 600 x 225 mm + 1000 x 300 x 225 mm) IP55
Internal configuration CombiLine S, with busbars 250 A, 10 kA in external cable container

Type	Ord.no.	Description	Pcs.
ESWG0610	2CPX078569R9999	Structure TLS55, W 600 mm, H 1000 mm, D 225 mm	1
ESFG0010	2CPX078599R9999	Side walls 2 pcs, D 225 mm, H 1000 mm	1
ESWG0310	2CPX078563R9999	Structure TLS55, W 300 mm, H 1000 mm, D 225 mm	1
ESAT0610	2CPX078180R9999	Transparent door, W 600 mm , H 1000 mm	1
ESAC3005	2CPX078415R9999	Connection set for side-by-side structuring of cabinets	1
TZ626	2CPX010778R9999	Protective frame for connecting cabinets	1
ESIN0010	2CPX078423R9999	Installation set for internal configuration, H 1000 mm	2
ESAS0310	2CPX078154R9999	Sheet steel door, W 300 mm , H 1000 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	3
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm , 1 row, W 600 mm , H 200 mm	3
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm , H 200 mm	1
CKUC6020	2CPX078314R9999	CombiLine S, Measuring instruments, 4 pcs. 72x72 mm , W 600 mm , H 200 mm ,	1
CVAC1511	2CPX078269R9999	CombiLine S, Device vertical, W 300 mm , Tmax XT3, 1 device, 3/4 pole, fixed, lever operation	1
CACP3060	2CPX078348R9999	CombiLine S, Cover, plain, W 300 mm , H 600 mm	1
CACP3010	2CPX078341R9999	CombiLine S, Cover, plain, W 300 mm , H 100 mm	1
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	3
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	3
CKBS1231	2CPX078449R9999	CombiLine S, Busbar, support, flat busbars, holder scaled, W 300 mm , 1 support	3
BR0250		No. 2 flat busbars 250 A	1

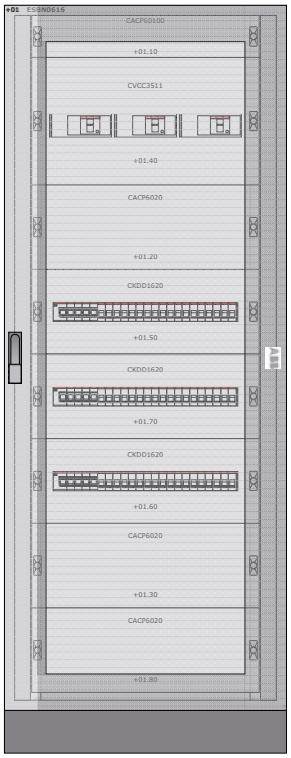
Subdistribution boards

Examples of configurations



TwinLine S 55 (1000 x 600 x 225 mm + 1000 x 300 x 225 mm + 1000 x 600 x 225 mm) IP55, Internal configuration CombiLine S, with busbars 250 A,10 kA in external cable container

Type	Ord.no.	Description	Pcs.
ESWG0610	2CPX078569R9999	Structure TLS55, W 600 mm, H 1000 mm, D225 mm	2
ESFG0010	2CPX078599R9999	Side walls 2 pcs, D 225 mm, H 1000 mm	1
ESWG0310	2CPX078563R9999	Structure TLS55, W 300 mm, H 1000 mm, D 225 mm	1
ESIN0010	2CPX078423R9999	Installation set for internal configuration, H 1000 mm	3
ESAT0610	2CPX078180R9999	Transparent door, W 600 mm, H 1000 mm	2
ESAC3005	2CPX078415R9999	Connection set for side-by-side structuring of cabinets	2
TZ626	2CPX010778R9999	Protective frame for connecting cabinets	2
ESAS0310	2CPX078154R9999	Sheet steel door, W 300 mm, H 1000 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	5
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	6
CKUC6020	2CPX078314R9999	CombiLine S, Measuring instruments, 4 pcs. 72x72 mm, W 600 mm, H 200 mm	2
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	2
CACP3060	2CPX078348R9999	CombiLine S, Cover, plain, W 300 mm, H 600 mm	1
CACP3010	2CPX078341R9999	CombiLine S, Cover, plain, W 300 mm, H 100 mm	1
CVAC1511	2CPX078269R9999	CombiLine S, Device vertical, W 300 mm, Tmax XT3, 1 device, 3/4 pole, fixed, lever operation	1
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	6
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	6
CKBS1231	2CPX078449R9999	CombiLine S, Busbar, support, flat busbars, holder scaled, W 300 mm, 1 support	3
BR0250		No. 2 flat busbars 250A	1

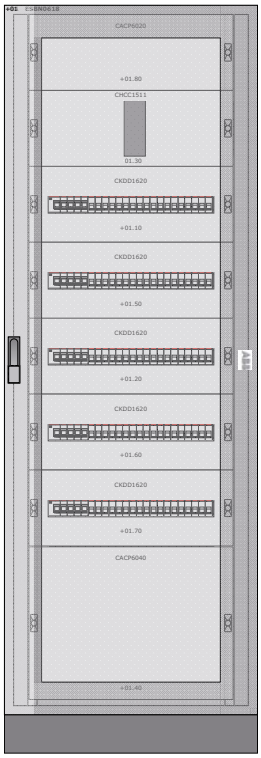


TwinLine S 55 (1600 x 600 x 275 mm) IP55
Internal configuration CombiLine S

Type	Ord.no.	Description	Pcs.
ESWL0616	2CPX078587R9999	Structure TLS55, W 600 mm, H 1600 mm, D 275 mm	1
ESFL0016	2CPX078606R9999	Side walls 2 pcs, D 275 mm, H 1600 mm	1
ESIN0016	2CPX078426R9999	Installation set for internal configuration, H 1600 mm	1
ESAL0610	2CPX078211R9999	Plinth, D 275 mm, W 600 mm, H 100 mm	1
ESAT0616	2CPX078183R9999	Transparent door, W 600 mm, H 1600 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	2
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	3
CACP6010	2CPX078351R9999	CombiLine S, Cover, plain, W 600 mm, H 100 mm	1
CVCC3511	2CPX078400R9999	CombiLine S, Device vertical, W 600 mm, Tmax XT3, 3 device, 3/4 pole, fixed, lever operation	1
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	3
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	3
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	3

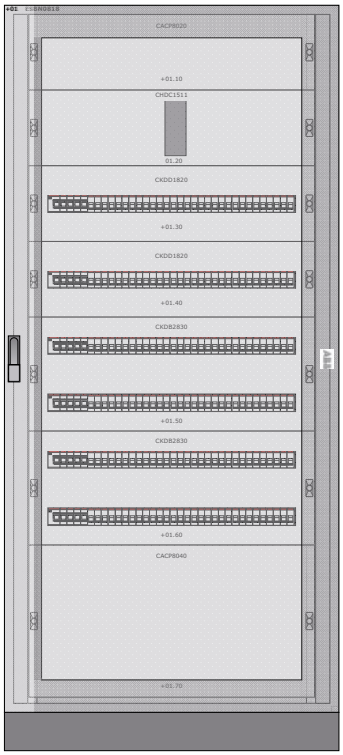
Subdistribution boards

Examples of configurations



TwinLine S 55 (1800 x 600x 275 mm + Busbar 250 A, 25 kA) IP55
Internal configuration CombiLine S, with busbars 250 A, 16 kA

Type	Ord.no.	Description	Pcs.
ESWL0618	2CPX078588R9999	Structure TLS55, W 600 mm, H 1800 mm, D 275 mm	1
ESFL0018	2CPX078607R9999	Side walls 2 pcs, D 225 mm, H 1800 mm	1
ESIN0018	2CPX078427R9999	Installation set for internal configuration, H 1800 mm	1
ESAL0610	2CPX078211R9999	Plinth, D 275 mm, W 600 mm, H 100 mm	1
ESAT0618	2CPX078184R9999	Transparent door, W 600 mm, H 1800 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	2
CKDC1620	2CPX078321R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 600 mm, H 200 mm	5
CHCC1511	2CPX078243R9999	CombiLine S, Device horizontal, W 600 mm, Tma x xT3, 1 device, 3/4 pole, fixed, lever operation	1
CACP6040	2CPX078356R9999	CombiLine S, Cover, plain, W 600 mm, H 400 mm	1
CACP6020	2CPX078353R9999	CombiLine S, Cover, plain, W 600 mm, H 200 mm	1
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	5
CAHW6	2CPX078459R9999	CombiLine S, Mounting profile, for wiring system, W 600 mm	5
CKBS1161	2CPX078447R9999	CombiLine S, Busbar, support, flat busbars, holder linear, W 600 mm, 1 support	4
BR0250		No. 2 flat busbars 250 A	4



TwinLine S 55 (1800 x 800 x 275 mm) IP55
Internal configuration CombiLine S

Type	Ord.no.	Description	Pcs.
ESWL0818	2CPX078594R9999	Structure TLS55, W 800 mm, H 1800 mm, D 275 mm	1
ESFL0018	2CPX078607R9999	Side walls 2 pcs, D 225 mm, H 1800 mm	1
ESIN0018	2CPX078427R9999	Installation set for internal configuration, H 1800 mm	1
TZ101	2CPX010450R9999	Flange for 52 entries	3
ESAL0810	2CPX078213R9999	Plinth, D 275 mm, W 800 mm, H 100 mm	1
ESAT0818	2CPX078192R9999	Transparent door, W 800 mm, H 1800 mm	1
CKDC1820	2CPX078322R9999	CombiLine S, DIN Components, Row distance 200 mm, 1 row, W 800 mm, H 200 mm	2
CKDB2830	2CPX078407R9999	CombiLine S, DIN Components, Row distance 150 mm, 2 row, W 800 mm, H 300 mm	2
CHDC1511	2CPX078250R9999	CombiLine S, Device horizontal, W 800 mm, Tmax XT3, 1 device, 3/4 pole, fixed, lever operation	1
CACP8020	2CPX078363R9999	CombiLine S, Cover, plain, W 800 mm, H 200 mm	1
CACP8040	2CPX078366R9999	CombiLine S, Cover, plain, W 800 mm, H 400 mm	1
CASWP2	2CPX078454R9999	CombiLine S, Support, wiring duct, 2 pcs	6
CAHW8	2CPX078461R9999	CombiLine S, Mounting profile, for wiring system, W 800 mm	6

Electrical installation solutions for buildings
Consumer units

Index

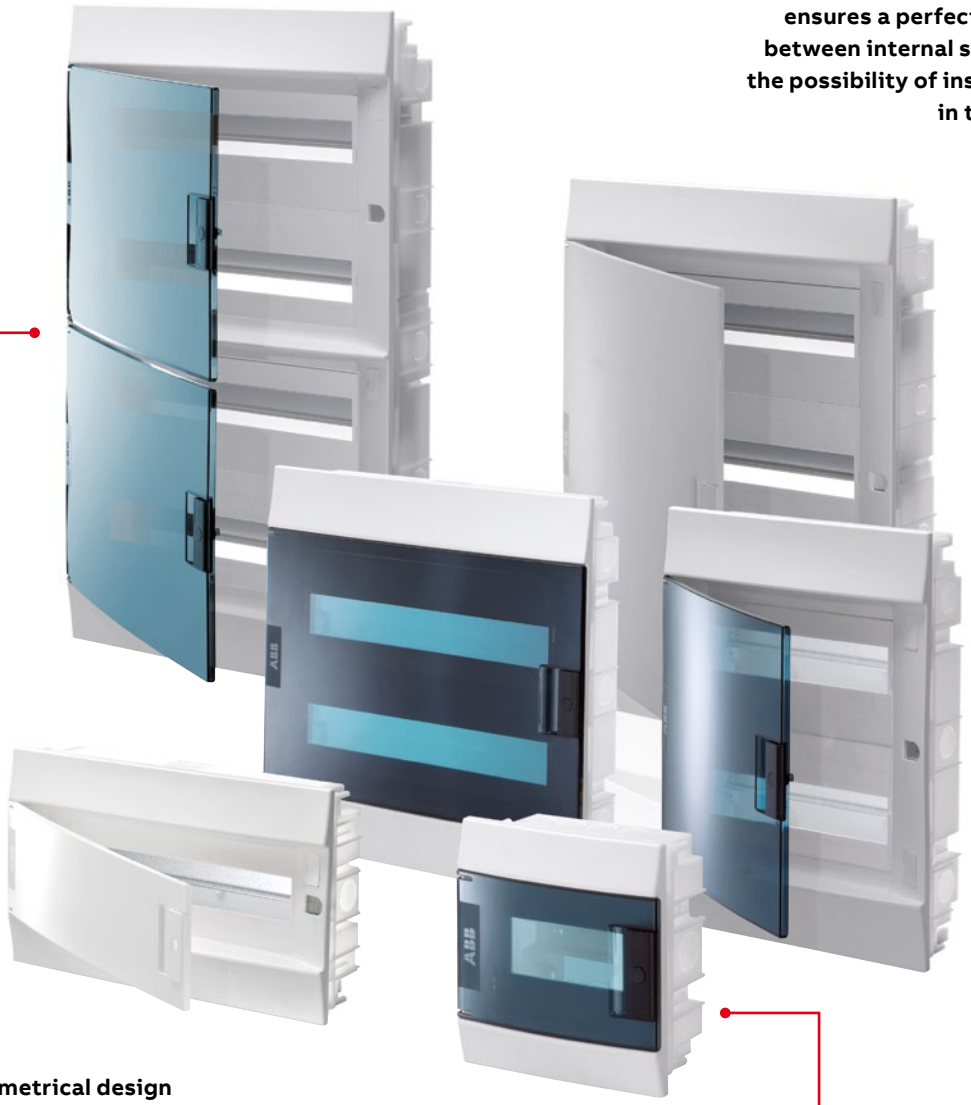
System pro E comfort MISTRAL41F	**18/2**
Flush-mounted – Brick wall	18/8
Flush-mounted – Hollow wall	18/10
Flush-mounted – Concrete wall	18/12
Accessories	18/14
UK600 Flush-mounting Series	**18/16**
Complete version with trim frame and door with N/PE quick-terminals	18/20
Complete version with trim frame and door with N/PE screw-terminals	18/22
Complete version with trim frame and door without terminals	18/24
Basic version UK600 without trim frame and door with N/PE quick-terminals	18/26
Basic version UK600 without trim frame and door with N/PE screw-terminals	18/28
N/PE quick-terminals	18/30
Screw terminals	18/32
Project options	18/34
Spare parts and accessories	18/35
Trim frame with door and design foils	18/37
Design frames and inserts	18/38
Media enclosure UK600 with and without trim frame and door	18/40
Combi enclosure UK600 with trim frame and door	18/42
Media enclosure - accessories	18/44
Media enclosure - doors	18/46
System Pro E comfort Mini EUROPA40	**18/48**
System pro E comfort MISTRAL41W	**18/52**
Wall-mounted (650)	18/59
Wall-mounted (750)	18/60
Wall-mounted with terminals (650)	18/62
Accessories	18/64
System pro E comfort MISTRAL65/MISTRAL65H	**18/66**
MISTRAL65 wall	18/71
MISTRAL65H wall	18/73
MISTRAL65 wall with terminals	18/74
Accessories	18/77
Terminal blocks	**18/79**

System pro E comfort MISTRAL41F
Endless installation possibilities

Reliable technology combined with a modern decorative look in a compact, elegant design.

Door opens up to 180° allowing full access to the interior of the unit.

In the flush-mounted version the depth of the base box ensures a perfect balance between internal space and the possibility of installation in thin walls



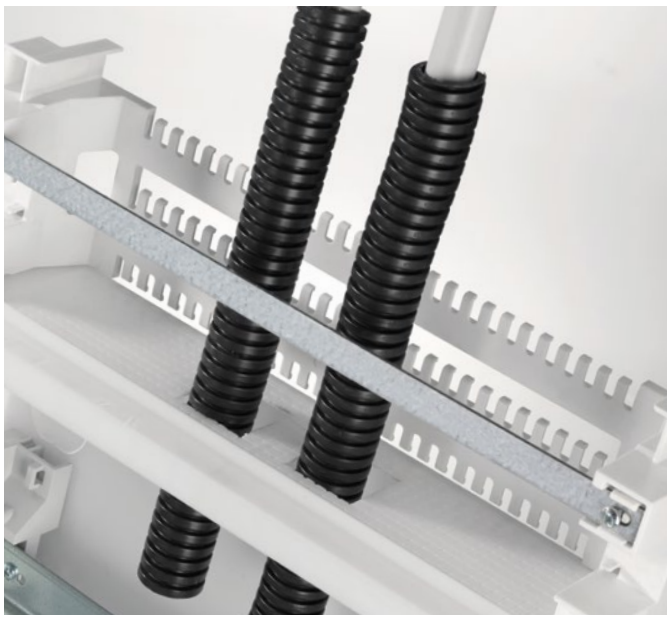
The symmetrical design allows opening of the reversible door either from the left or from the right.

Door available in two versions: petrol blue and opaque.

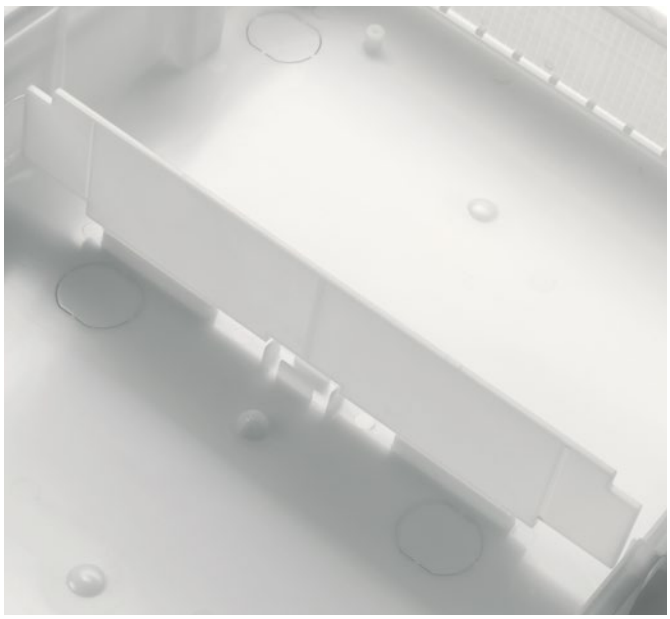
Endless installation possibilities

Horizontal coupling
The consumer units can be coupled side by side with the horizontal junction unit accessory, protecting the passage of cables between adjacent units.

Mortar guard
All versions include a mortar guard that prevents mortar sprays inside the consumer unit.



Dual-function accessory
A single accessory performs a dual function. It can be used to fix pipes to the unit's housing or to vertically couple two consumer units.

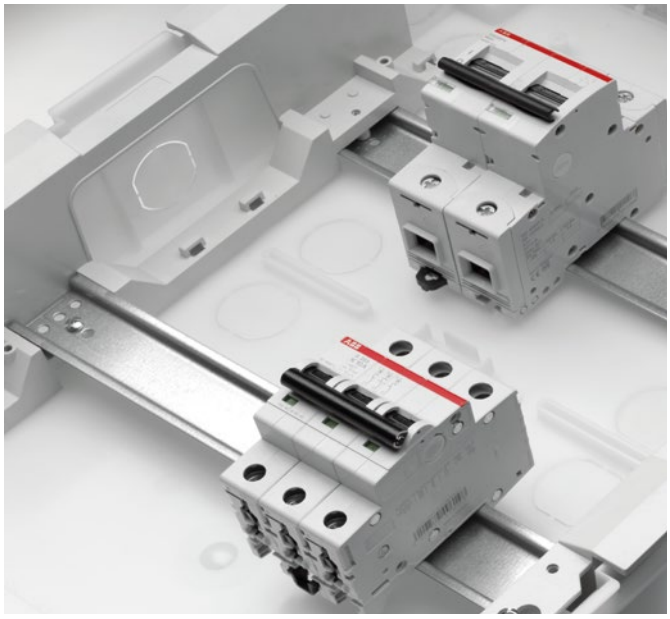


Internal partition
The horizontal partition allows the interior of the unit to be divided into two parts.

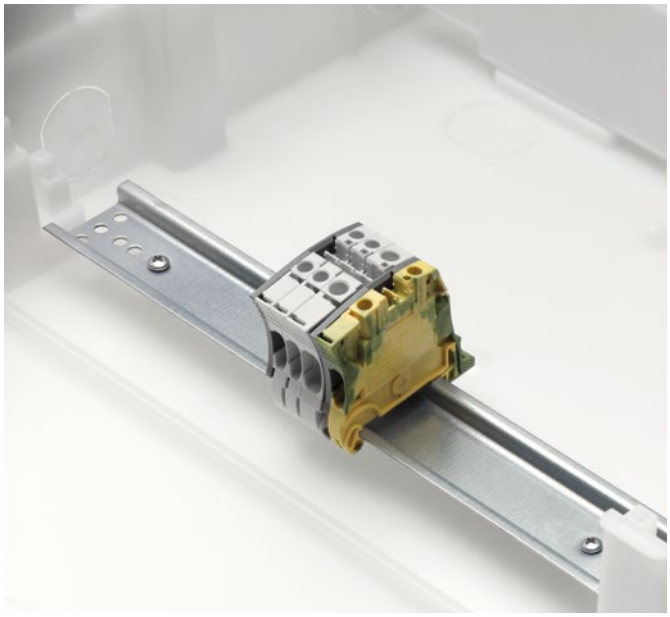
Endless installation possibilities

Flanges
The flange with multi pre-cuts is designed to be sheared only where necessary in order to ensure a more secure fastening. The removable flange with knockout holes ensure a reliable and safe placing of flexible pipes and other conduits, especially in plasterboard installation.

Two DIN rail positions
The extraxtable frame offers two DIN rail positions so devices of different depths, like S200 or S800 miniature circuit breakers, can be installed in perfect alignment.



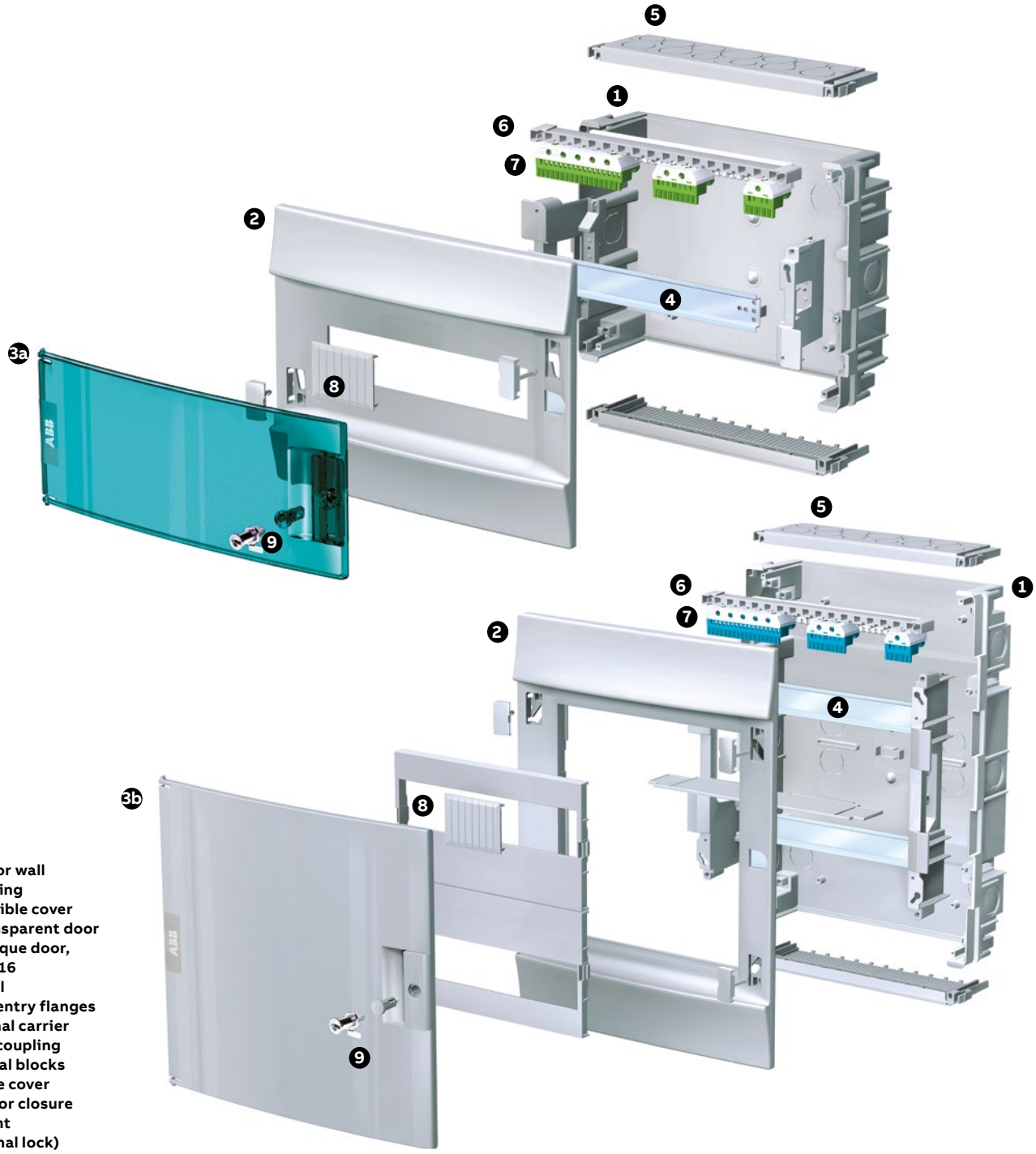
Captive screw covers
Screw covers are hooked to the front panel so they can be removed without the risk of losing them.



DIN rail terminals
It is possible to install an extra DIN rail at the bottom of the consumer unit.

A versatile range suitable for every application

The simple construction of the MISTRAL41F series makes the units fast and easy to assemble. What is more, the flexible design allows easy adaptation to various application requirements.

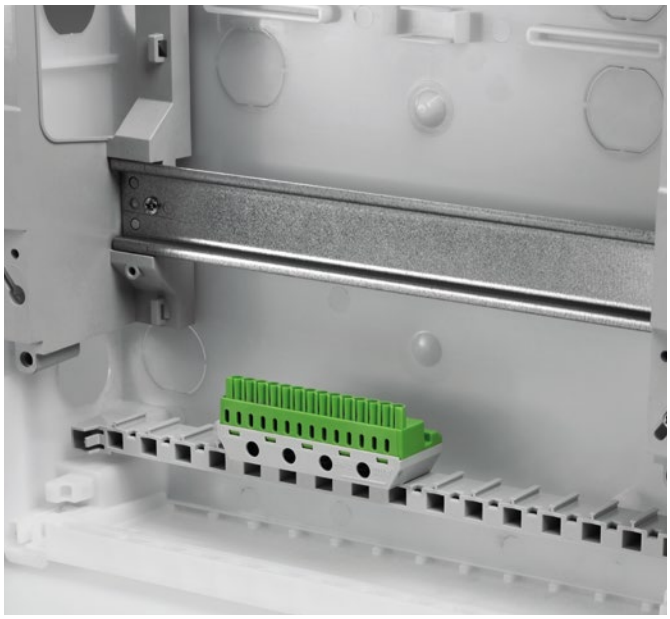


1. Base for wall mounting
2. Reversible cover
3. a) Transparent door
   b) Opaque door, RAL9016
4. DIN rail
5. Cable entry flanges
6. Terminal carrier
7. Quick coupling terminal blocks
8. Module cover
9. Finish or closure element (optional lock)

A versatile range suitable for every application

Horiziontal levelling
The external adjustments of the front cover assure a perfect horizontal levelling even if the consumer unit is slightly crooked.

New generations terminals
The MISTRAL41 range of consumer units is supplied with a wide, completely new ABB terminal block range. Three different versions offer screw and spring fast coupling for easy and effective cabling up to 63A or 100A.



Hollow wall mounting
For the hollow wall mounting our consumer units provide a special enclosure and hollow mounting screws.

Consumer units

MISTRAL41F – Order codes | Flush-mounted – Brick wall

4 modules

6 modules

8 modules

12 modules

18 modules

24 modules

36 modules

MISTRAL41F – Order codes 650

Description	N° of modu-les [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 flush 650 - 1 Row						
Consumer units opaque door 4M	4	650	152 x 202 x 105	1SLM004100A1100	41A04X11	1/24
Consumer units transparent door 4M	4	650	152 x 202 x 105	1SLM004100A1200	41A04X12	1/24
Front transparent door 4M	4	650	152 x 202 x 25	1SLM004100A1600	41F04X12	1/24
Flush-mounting box 4M	4	650	129 x 182 x 80	1SLM004100A1700	41S04X1	1/24
Consumer units opaque door 6M	6	650	192 x 202 x 105	1SLM004100A1101	41A06X11	1/18
Consumer units transparent door 6M	6	650	192 x 202 x 105	1SLM004100A1201	41A06X12	1/18
Front transparent door 6M	6	650	192 x 202 x 25	1SLM004100A1601	41F06X12	1/18
Flush-mounting box 6M	6	650	149 x 182 x 80	1SLM004100A1701	41S06X1	1/18
Consumer units opaque door 8M	8	650	232 x 250 x 108	1SLM004100A1102	41A08X11	1/12
Consumer units transparent door 8M	8	650	232 x 250 x 108	1SLM004100A1202	41A08X12	1/12
Front opaque door 8M	8	650	232 x 250 x 28	1SLM004100A1502	41F08x11	1/12
Front transparent door 8M	8	650	232 x 250 x 28	1SLM004100A1602	41F08X12	1/12
Flush-mounting box 8M	8	650	206 x 230 x 80	1SLM004100A1702	41S08X1	1/12
Consumer units opaque door 12M	12	650	320 x 250 x 108	1SLM004100A1103	41A12X11	1/9
Consumer units transparent door 12M	12	650	320 x 250 x 108	1SLM004100A1203	41A12X12	1/9
Front opaque door 12M	12	650	320 x 250 x 28	1SLM004100A1503	41F12x11	1/9
Front transparent door 12M	12	650	320 x 250 x 28	1SLM004100A1603	41F12X12	1/9
Flush-mounting box 12M	12	650	294 x 230 x 80	1SLM004100A1703	41S12X1	1/9
Consumer units opaque door 18M	18	650	430 x 250 x 108	1SLM004100A1104	41A18X11	1/6
Consumer units transparent door 18M	18	650	430 x 250 x 108	1SLM004100A1204	41A18X12	1/6
Front transparent door 18M	18	650	430 x 250 x 28	1SLM004100A1604	41F18X12	1/6
Flush-mounting box 18M	18	650	404 x 230 x 80	1SLM004100A1704	41S18X1	1/6
Consumer units MISTRAL41 flush 650 - 2 Rows						
Consumer units opaque door 24M	24	650	320 x 435 x 108	1SLM004100A1105	41A12X21	1/5
Consumer units transparent door 24M	24	650	320 x 435 x 108	1SLM004100A1205	41A12X22	1/5
Front opaque door 24M	24	650	320 x 435 x 28	1SLM004100A1505	41F12x21	1/5
Front transparent door 24M	24	650	320 x 435 x 28	1SLM004100A1605	41F12X22	1/5
Flush-mounting box 24M	24	650	294 x 415 x 80	1SLM004100A1705	41S12X2	1/5
Consumer units opaque door 36M 2F	36	650	430 x 435 x 108	1SLM004100A1106	41A18X21	1/3
Consumer units transparent door 36M 2F	36	650	430 x 435 x 108	1SLM004100A1206	41A18X22	1/3

36 modules

54 modules

48 modules

72 modules

MISTRAL41F – Order codes 650

Description	N° of modu-les [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 flush 650 - 3 Rows						
Consumer units opaque door 36M 3F	36	650	320 x 600 x 108	1SLM004100A1107	41A12X31	1/4
Consumer units transparent door 36M 3F	36	650	320 x 600 x 108	1SLM004100A1207	41A12X32	1/4
Front opaque door 36M 3F	36	650	320 x 600 x 28	1SLM004100A1507	41F12x31	1/4
Front transparent door 36M3F	36	650	320 x 600 x 28	1SLM004100A1607	41F12x32	1/4
Flush-mounting box 36M 3F	36	650	294 x 580 x 80	1SLM004100A1707	41S12x31	1/4
Consumer units opaque door 54M	54	650	430 x 600 x 128	1SLM004100A1109	41A18X31	1/1
Consumer units transparent door 54M	54	650	430 x 600 x 128	1SLM004100A1209	41A18X32	1/1
Consumer units MISTRAL41 flush 650 - 4 Rows						
Consumer units opaque door 48M	48	650	320 x 735 x 108	1SLM004100A1108	41A12X41	1/4
Consumer units transparent door 48M	48	650	320 x 735 x 108	1SLM004100A1208	41A12X42	1/4
Consumer units opaque door 72M	72	650	430 x 735 x 128	1SLM004100A1110	41A18X41	1/1
Consumer units transparent door 72M	72	650	430 x 735 x 128	1SLM004100A1210	41A18X42	1/1

Consumer units

MISTRAL41F – Order codes | Flush-mounted – Hollow wall

4 modules

6 modules

8 modules

12 modules

18 modules

24 modules

36 modules

MISTRAL41F – Order codes 850

Description	N° of modu-les [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 flush 850 - 1 Row						
Opaque door 4M	4	850	152 x 202 x 105	1SLM004100A1300	41C04X11	1/24
Transparent door 4M	4	850	152 x 202 x 105	1SLM004100A1400	41C04X12	1/24
Opaque door 6M	6	850	192 x 202 x 105	1SLM004100A1301	41C06X11	1/18
Transparent door 6M	6	850	192 x 202 x 105	1SLM004100A1401	41C06X12	1/18
Opaque door 8M	8	850	232 x 250 x 108	1SLM004100A1302	41C08X11	1/12
Transparent door 8M	8	850	232 x 250 x 108	1SLM004100A1402	41C08X12	1/12
Opaque door 12M	12	850	320 x 250 x 108	1SLM004100A1303	41C12X11	1/9
Transparent door 12M	12	850	320 x 250 x 108	1SLM004100A1403	41C12X12	1/9
Opaque door 18M	18	850	430 x 250 x 108	1SLM004100A1304	41C18X11	1/6
Transparent door 18M	18	850	430 x 250 x 108	1SLM004100A1404	41C18X12	1/6
Consumer units MISTRAL41flush 850 - 2 Rows						
Opaque door 24M	24	850	320 x 435 x 108	1SLM004100A1305	41C12X21	1/5
Transparent door 24M	24	850	320 x 435 x 108	1SLM004100A1405	41C12X22	1/5
Opaque door 36M 2F	36	850	430 x 435 x 108	1SLM004100A1306	41C18X21	1/3
Transparent door 36M 2F	36	850	430 x 435 x 108	1SLM004100A1406	41C18X22	1/3

36 modules

54 modules

48 modules

72 modules

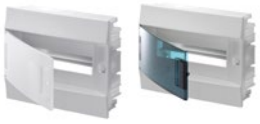
MISTRAL41F – Order codes 850

Description	N° of modu-les [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 flush 850 - 3 Rows						
Opaque door 36M 3F	36	850	320 x 600 x 108	1SLM004100A1307	41C12X31	1/4
Transparent door 36M 3F	36	850	320 x 600 x 108	1SLM004100A1407	41C12X32	1/4
Opaque door 54M	54	850	430 x 600 x 128	1SLM004100A1309	41C18X31	1/1
Transparent door 54M	54	850	430 x 600 x 128	1SLM004100A1409	41C18X32	1/1
Consumer units MISTRAL41 flush 850 - 4 Rows						
Opaque door 48M	48	850	320 x 735 x 108	1SLM004100A1308	41C12X41	1/1
Transparent door 48M	48	850	320 x 735 x 108	1SLM004100A1408	41C12X42	1/1
Opaque door 72M	72	850	430 x 735 x 128	1SLM004100A1310	41C18X41	1/1
Transparent door 72M	72	850	430 x 735 x 128	1SLM004100A1410	41C18X42	1/1

Consumer units

System pro E comfort MISTRAL41F for concrete wall

4 modules



12 modules

18 modules

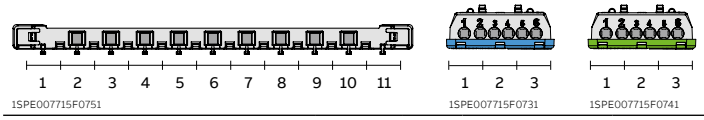
24 modules

36 modules

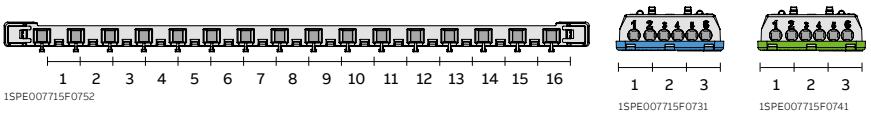
36 modules

MISTRAL41F – Order codes

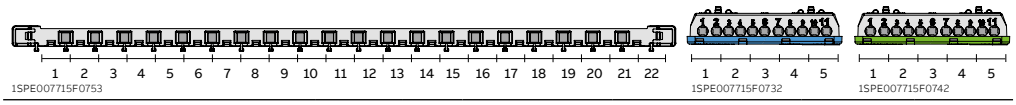
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
MISTRAL41 flush						
Opaque door 8M 12SM	8	650	232 x 250 x 108	1SLM004102A1102	41A08X11A	1/12
Transparent door 8M 12SM	8	650	232 x 250 x 108	1SLM004101A1202	41A08X12A	1/12



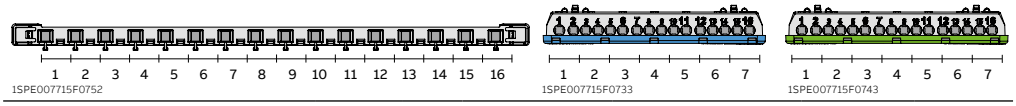
Opaque door 12M 12SM	12	650	320 x 250 x 108	1SLM004102A1103	41A12X11A	1/8
Transparent door 12M 12SM	12	650	320 x 250 x 108	1SLM004101A1203	41A12X12A	1/8



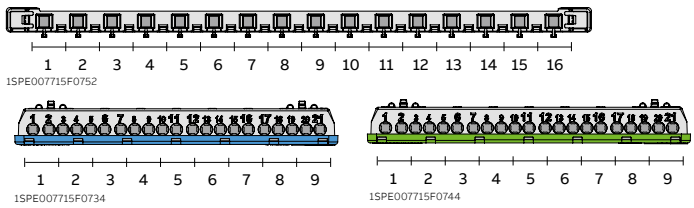
Opaque door 18M 22SM	18	650	430 x 250 x 108	1SLM004102A1104	41A18X11A	1/16
Transparent door 18M 22SM	18	650	430 x 250 x 108	1SLM004101A1204	41A18X12A	1/16



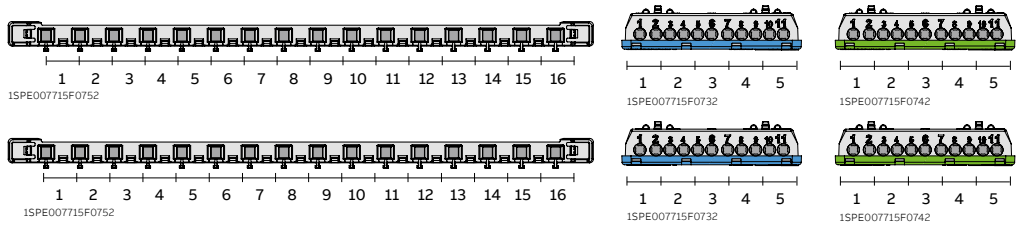
Opaque door 24M 32SM	24	650	320 x 435 x 108	1SLM004102A1105	41A12X21A	1/5
Transparent door 24M 32SM	24	650	320 x 435 x 108	1SLM004101A1205	41A12X22A	1/5



Opaque door 36M 2F 42SM	36	650	430 x 435 x 108	1SLM004102A1106	41A18X21A	1/3
Transparent door 36M 2F 42SM	36	650	430 x 435 x 108	1SLM004101A1206	41A18X22A	1/3



Opaque door 36M 3F 44SM	36	650	320 x 600 x 108	1SLM004102A1107	41A12X31A	1/4
Transparent door 36M 3F 44SM	36	650	320 x 600 x 108	1SLM004101A1207	41A12X32A	1/4



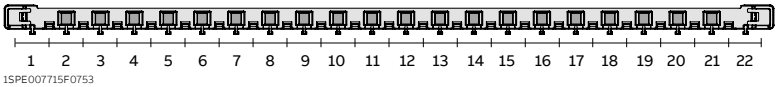
MISTRAL41F – Order codes

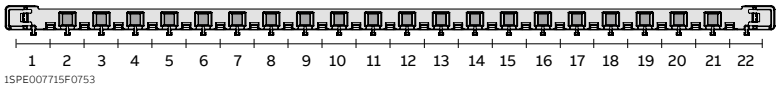
54 modules

48 modules

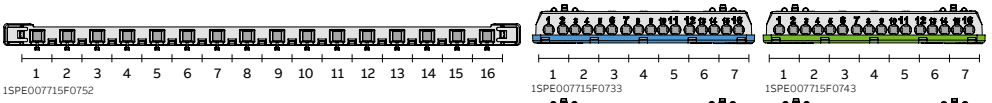
72 modules

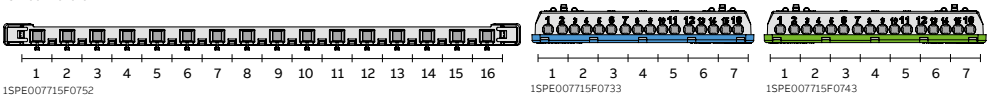
Description	N° of modu-les [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
MISTRAL41 flush						
Opaque door 36M 2F 42SM	54	650	430 x 600 x 128	1SLM004102A1109	41A18X31A	1/1
Transparent door 54M 64SM	54	650	430 x 600 x 128	1SLM004101A1209	41A18X32A	1/1



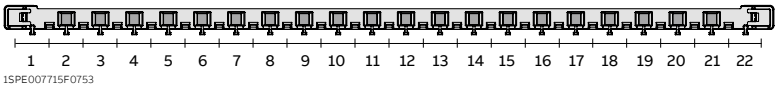


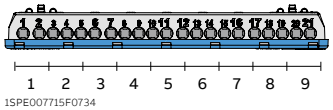
Opaque door 48M 64SM	48	650	320 x 735 x 108	1SLM004102A1108	41A12X41A	1/1
Transparent door 48M 64SM	48	650	320 x 735 x 108	1SLM004101A1208	41A12X42A	1/1

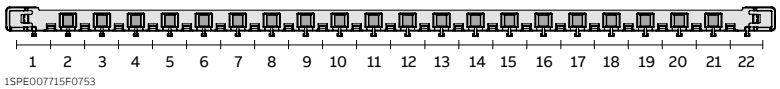


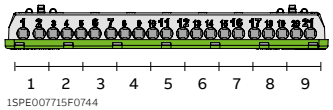


Opaque door 72M 84SM	72	650	430 x 735 x 128	1SLM004102A1110	41A18X41A	1/1
Transparent door 72M 84SM	72	650	430 x 735 x 128	1SLM004101A1210	41A18X42A	1/1









Consumer units

System pro E comfort MISTRAL41F – accessories

MISTRAL41F – Accessories doors

Description	N° of modu-les [18 mm]	Order code	Type number	Packaging
Opaque door				
Opaque door 4M MISTRAL41F	4	1SLM004100A1900	41Z83	1/20
Opaque door 6M MISTRAL41F	6	1SLM004100A1916	41Z84	1/20
Opaque door 8M MISTRAL41F	8	1SLM004100A1902	41Z85	1/10
Opaque door 12M MISTRAL41F	12	1SLM004100A1904	41Z86	1/20
Opaque door 18M MISTRAL41F	18	1SLM004100A1906	41Z87	1/20
Opaque door 24M / 48M MISTRAL41F	24	1SLM004100A1908	41Z88	1/15
Opaque door 36M MISTRAL41F	36	1SLM004100A1910	41Z89	1/10
Opaque door 36M / 72M MISTRAL41F	36	1SLM004100A1912	41Z90	1/10
Opaque door 54M MISTRAL41F	54	1SLM004100A1914	41Z91	1/5
Transparent door				
Transparent door 4M MISTRAL41F	4	1SLM004100A1901	41Z92	1/20
Transparent door 6M MISTRAL41F	6	1SLM004100A1917	41Z93	1/20
Transparent door 8M MISTRAL41F	8	1SLM004100A1903	41Z94	1/10
Transparent door 12M MISTRAL41F	12	1SLM004100A1905	41Z95	1/20
Transparent door 18M MISTRAL41F	18	1SLM004100A1907	41Z96	1/20
Transparent door 24M / 48M MISTRAL41F	24	1SLM004100A1909	41Z97	1/15
Transparent door 36M MISTRAL41F	36	1SLM004100A1911	41Z98	1/10
Transparent door 36M / 72M MISTRAL41F	36	1SLM004100A1913	41Z99	1/10
Transparent door 54M MISTRAL41F	54	1SLM004100A1915	41Z100	1/5

MISTRAL41F – Other accessories

41Z01, 41Z02

41Z03, 41Z04

41Z05

41Z06

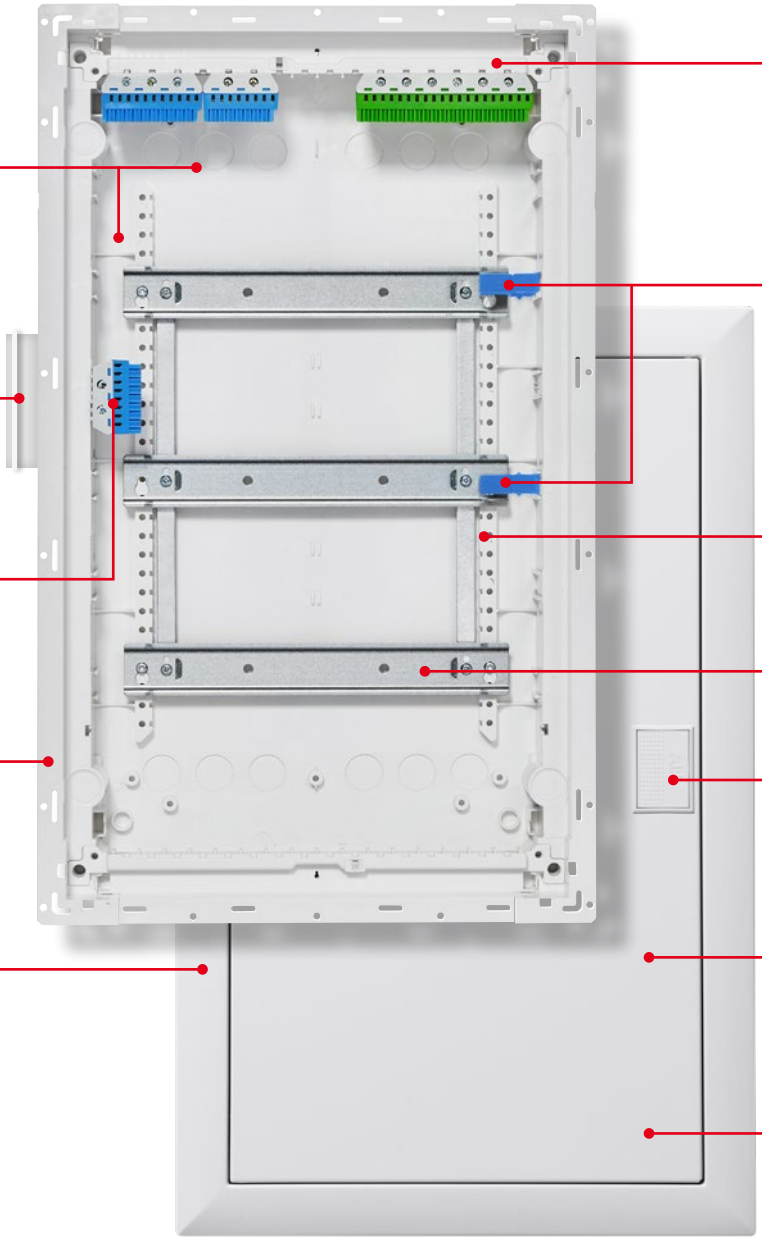
41Z07, 41Z08, 41Z09, 41Z10

41Z11

41Z12

Description	N° of modules [18 mm]	Order code	Type number	Packaging
Other accessories				
Horizontal partition 12M MISTRAL41F	12	1SLM004100A1920	41Z01	1/100
Horizontal partition 18M MISTRAL41F	18	1SLM004100A1921	41Z02	1/100
Vertical coupling / tubes holder 12M	12	1SLM004100A1922	41Z03	1/20
Vertical coupling / tubes holder 18M	18	1SLM004100A1923	41Z04	1/15
Module cover 12M RAL9016	12	1SPE007715F5650	41Z05	5/180
Lock with key MISTRAL41 F		1SLM004100A1931	41Z06	20/300
Central blind panel 12M MISTRAL41F	12	1SLM004100A1945	41Z07	1/20
Blind panel 12M MISTRAL41F	12	1SLM004100A1946	41Z08	1/20
Central blind panel 18M MISTRAL41F	18	1SLM004100A1947	41Z09	1/30
Blind panel 18M MISTRAL41F	18	1SLM004100A1948	41Z10	1/30
Horizontal junction unit		1SLM004100A1949	41Z11	1/50
Wires holder comb	12	1SLM004100A1942	41Z12	1/30
Spirit level		1SLM004100A1943	41Z13	1/30

UK600 Flush-mounting Series
Consumer units



Up to 200 % extended connection space

Connection set for horizontal and vertical connection

Terminals can be mounted to the side, space-saving and flexible

Enclosure for flush- and hollow-wall-mounting

Flat trim frame, adjustable to uneven surfaces

Cable inlet with integrated terminal fixture, at the top and bottom

Wire holder for cable entry

Removable device support

Available in up to 5 rows

TIP-in-closure, possibility to insert a closure with lock

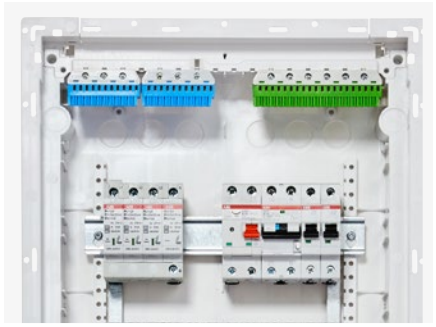
Tool-free reversible opening left / right

Door and frame available in different design variants

Snap-on cable inlet with integrated terminal fixture allows easy insertion of incoming and outgoing cables and uses a quick, single-hand-operated push and-stay design, resulting in 80 % more cable inlet space. Both cable inlets can be screwed tight when installation is complete.

The generous wiring space considerably facilitates installation works for up to 200 % more wiring space and “slide in” wire holder.

All enclosures of the UK600 series are suitable for hollow-wall installation. Upgrading is incredibly quick and simple – just as easy as the hollow wall installation itself. You just need the UZ91P4 hollow wall set for UK600. No screws, yet nothing can slip. Fastening it is as easy as fastening cable ties.



Time-saving installation thanks to intelligent plug-in technology. The N/PE terminals which are laterally assembled provide a high level of flexibility. There are also versions available with screw-type terminals.

An innovative connection set for horizontal and vertical connection of several combi enclosures enables flexible extension and combination options.

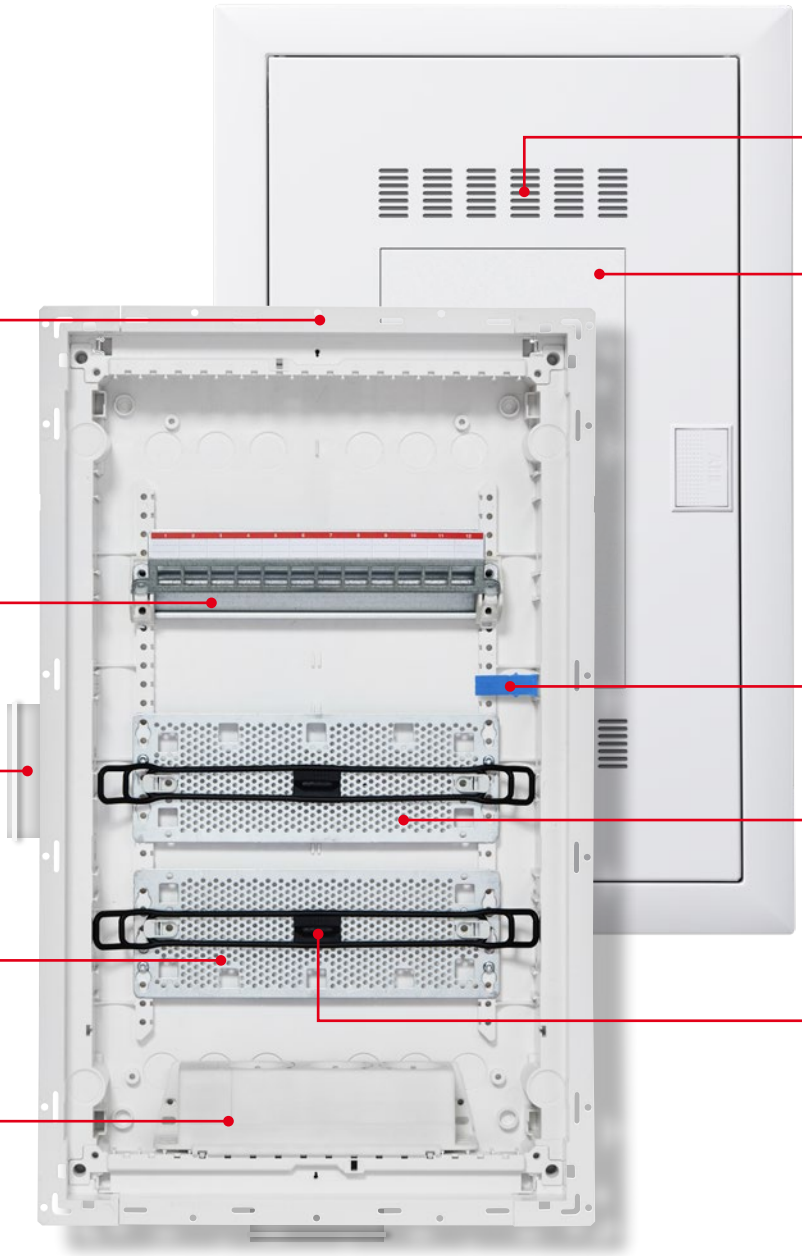
The stable, removable device support can be snapped in and is installed quickly without tools. Here too, a variety of common installation techniques have been catered for – the device support can also be fixed in position using screws.

The triple socket makes the connection of different power supplies very easy. it offers 120° swiveling and can be snapped onto cable inlet.

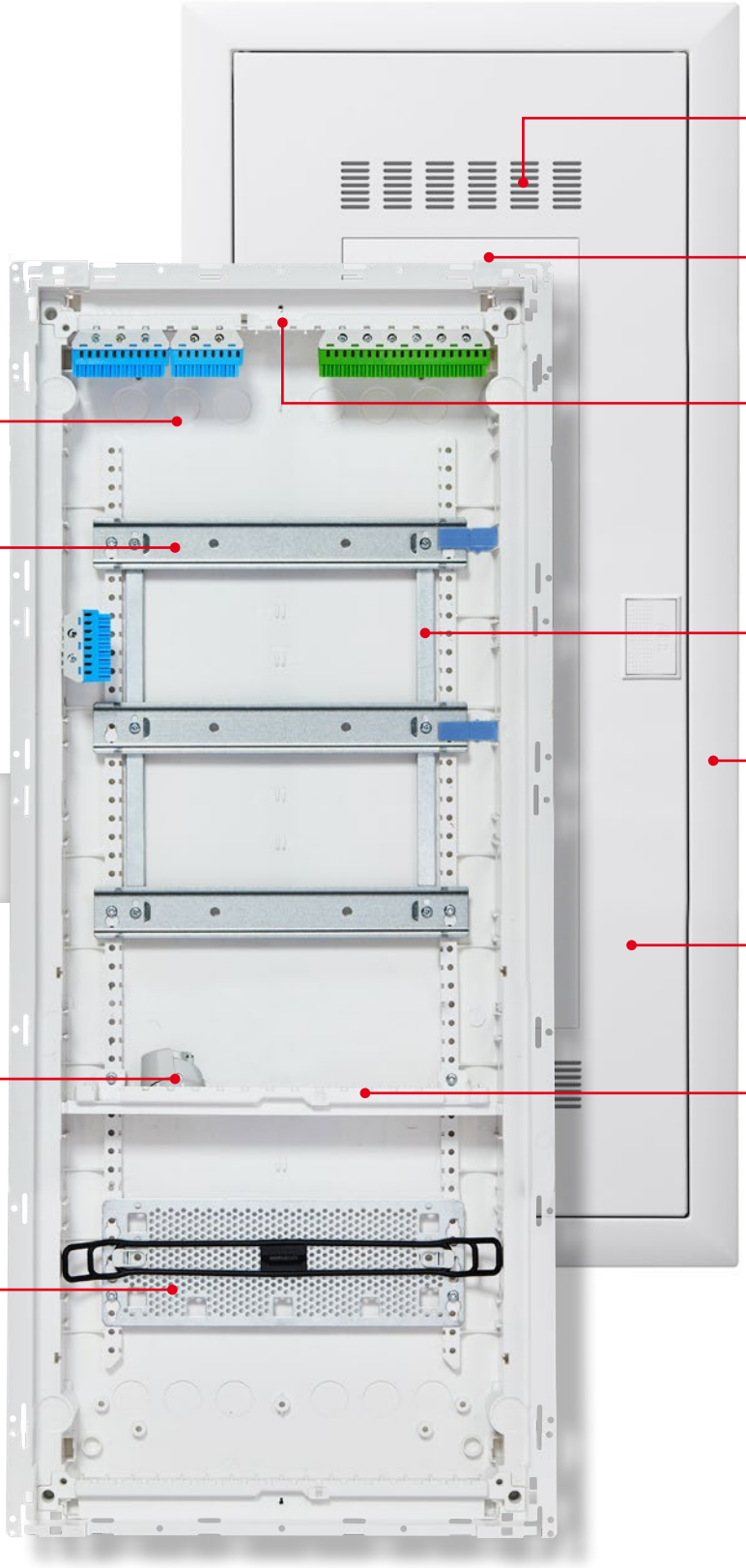
With the new media enclosure all conceivable devices such as routers or media modules find a safe space. The innovative combi enclosure combines the media and the consumer unit in one single cabinet, with a flexible partition separating the two parts from each other.

An attractive design feature – a perfect example of how easy it can be to combine functionality with design. The variety of high-quality doors and frame designs make the UK600 consumer units and media enclosures a design element in every living space. Media doors are available as Wifi-friendly and ventilated versions.

UK600 Flush-mounting Series
Media enclosures



UK600 Flush-mounting Series
Combi enclosures



Doors with ventilation holes

Wifi doors with plastic insert

Cable inlet with integrated terminal fixture, at the top and bottom

Up to 200 % extended connection space

Combination of 3-row consumer unit and additional multimedia module available

Wire holder for cable entry

Flat trim frame, adjustable to uneven surfaces

Connection set for horizontal and vertical connection

Tool-free reversible opening left / right

Sockets may be integrated into partition, 90° swiveling

Partition for the separation of voltage levels

Removable modular perforated sheet steel mounting plates

Consumer units

Complete version UK600 with trim frame and door
With N/PE quick-terminals

— 01 N/PE quick-terminals
— 02 Wall box
— 03 Device carrier
— 04 Cover
— 05 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 - , ;*
I_n up to 63 A
Consumer units DIN EN 60670-24, DIN 43871
Device support with removable DIN rail
Mechanical impact strength: IK07
Available in 1 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Wall grips
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
For building installation according to DIN 18015
With N/PE quick-terminals
Wire holder for professional cable organization
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Trim frame and sheet steel door, adjustable for uneven surface
Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4

UK612N2

UK624N3

UK636N3

UK648N3

UK660N4

Article	H x W x D (mm)	SU	Type	Ord. no.
Flush-mounted consumer units, 1-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, ZK82B, ZK113G	355 x 367 x 95 328 x 340 x 88	12 (13)	UK612N2	2CPX031369R9999
Flush-mounted consumer units, 2-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, ZK82B, ZK144G	480 x 367 x 95 453 x 340 x 88	24 (28)	UK624N3	2CPX031370R9999
Flush-mounted consumer units, 3-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, 2 x ZK113B, ZK206G	605 x 367 x 95 578 x 340 x 88	36 (41)	UK636N3	2CPX031371R9999
Flush-mounted consumer units, 4-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** 2 x ZK82B, ZK144B, ZK237G	730 x 367 x 95 703 x 340 x 88	48 (56)	UK648N3	2CPX031372R9999
Flush-mounted consumer units, 5-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, 2 x ZK82B, ZK144B, ZK268G	855 x 367 x 95 828 x 340 x 88	60 (70)	UK660N4	2CPX031373R9999

> N/PE quick-terminals, see page 41
> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

Complete version UK600 with trim frame and door
N/PE screw-terminals

— 01 Screw-terminals
— 02 Wall box
— 03 Device carrier
— 04 Cover
— 05 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 , ;*
I_n up to 63 A
Consumer units DIN EN 60670-24, DIN 43871
For building installation according to DIN 18015
Mechanical impact strength: IK07
Available in 1 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Wall grips
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
Device support with removable DIN rail
With N/PE screw-terminals
Wire holder for professional cable organization
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Trim frame and sheet steel door, adjustable for uneven surface
Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4

UK612E3

UK624E3

UK636E3

UK648E3

UK660E3

Article	H x W x D (mm)	SU	Type	Ord. no.
Flush-mounted consumer units, 1-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS6B, ZKS16G	355 x 367 x 95 328 x 340 x 88	12 (13)	UK612E2	2CPX077840R9999
Flush-mounted consumer units, 2-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS16B, ZKS21G	480 x 367 x 95 453 x 340 x 88	24 (28)	UK624E3	2CPX077841R9999
Flush-mounted consumer units, 3-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, 2 x ZKS11B, ZKS26G	605 x 367 x 95 578 x 340 x 88	36 (41)	UK636E3	2CPX077842R9999
Flush-mounted consumer units, 4-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS11B, ZKS16B, ZKS26G	730 x 367 x 95 703 x 340 x 88	48 (56)	UK648E3	2CPX077843R9999
Flush-mounted consumer units, 5-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, 2 x ZKS16B, ZKS11G, ZKS21G	855 x 367 x 95 828 x 340 x 88	60 (70)	UK660E3	2CPX077844R9999

> Screw-terminals, see page 42
> Technical specifications UK600 trim frame dimensions, see page 60

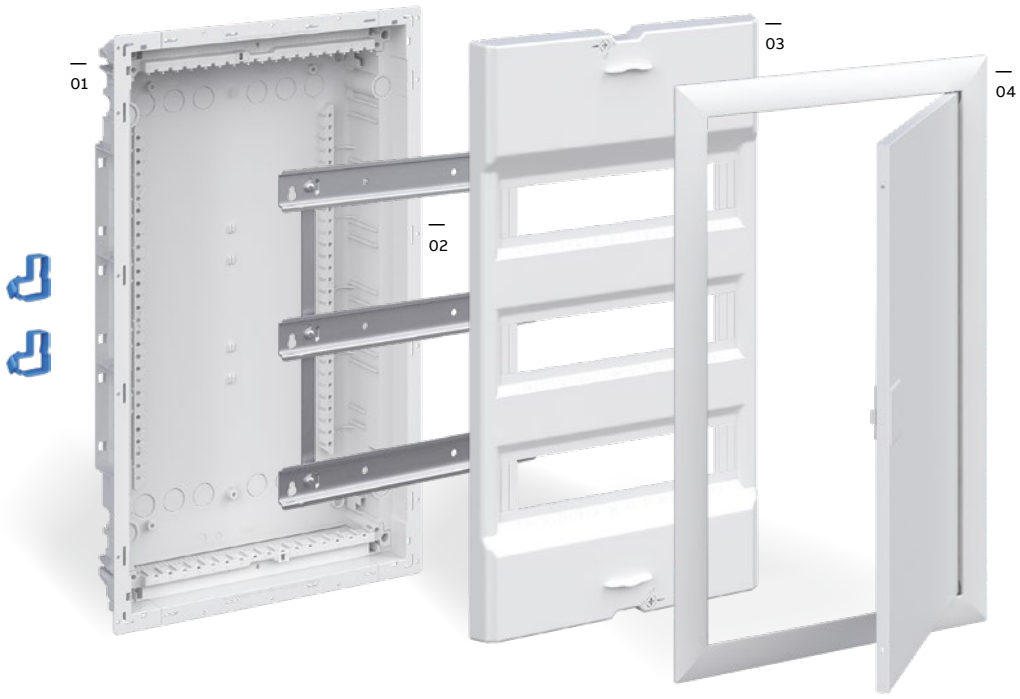
Consumer units

Complete version UK600 with trim frame and door
Without terminals

— 01 Wall box
— 02 Device carrier
— 03 Cover
— 04 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 , ;*
I_n up to 63 A
Consumer units DIN EN 60670-24, DIN 43871
For building installation according to DIN 18015
Mechanical impact strength: IK07
Available in 1 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Wall grips
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
Device support with removable DIN rail
Without terminals
Wire holder for professional cable organization
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Trim frame and sheet steel door, adjustable for uneven surface
Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4



UK612K

UK624K

UK636K

UK648K

UK660K

Article	H x W x D (mm)	SU	Type	Ord. no.
Flush-mounted consumer units, 1-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting	355 x 367 x 95 328 x 340 x 88	12 (13)	UK612K	2CPX031379R9999
Flush-mounted consumer units, 2-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting	480 x 367 x 95 453 x 340 x 88	24 (28)	UK624K	2CPX031380R9999
Flush-mounted consumer units, 3-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting	605 x 367 x 95 578 x 340 x 88	36 (41)	UK636K	2CPX031381R9999
Flush-mounted consumer units, 4-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting	730 x 367 x 95 703 x 340 x 88	48 (56)	UK648K	2CPX031382R9999
Flush-mounted consumer units, 5-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting	855 x 367 x 95 828 x 340 x 88	60 (70)	UK660K	2CPX031383R9999

> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

Basic version UK600 without trim frame and door
With N/PE quick-terminals

— 01 N/PE quick-terminals
— 02 Wall box
— 03 Device carrier
— 04 Cover

Flush-mounted consumer units – UK600, IP30 - , ;*
I_n up to 63 A
Consumer units DIN EN 60670-24, DIN 43871
For building installation according to DIN 18015
Mechanical impact strength: IK07
Available in 1 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Wall grips
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
Device support with removable DIN rail
With N/PE quick-terminals
Wire holder for professional cable organization
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Trim frame and sheet steel door, adjustable for uneven surface
Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4

UK612NB

UK624NB

UK636NB

UK648NB

UK660NB

Article	H x W x D (mm)	SU	Type	Ord. no.
Flush-mounted consumer units, 1-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, ZK82B, ZK113G	355 x 367 x 95 328 x 340 x 88	12 (13)	UK612NB	2CPX031374R9999
Flush-mounted consumer units, 2-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, ZK82B, ZK144G	480 x 367 x 95 453 x 340 x 88	24 (28)	UK624NB	2CPX031375R9999
Flush-mounted consumer units, 3-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, 2 x ZK113B, ZK206G	605 x 367 x 95 578 x 340 x 88	36 (41)	UK636NB	2CPX031376R9999
Flush-mounted consumer units, 4-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** 2 x ZK82B, ZK144B, ZK237G	730 x 367 x 95 703 x 340 x 88	48 (56)	UK648NB	2CPX031377R9999
Flush-mounted consumer units, 5-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE quick-terminals:** ZK51B, 2 x ZK82B, ZK144B, ZK268G	855 x 367 x 95 828 x 340 x 88	60 (70)	UK660NB	2CPX031378R9999

> N/PE quick-terminals, see page 40
> Technical specifications UK600 trim frame dimensions, see page 60

Consumer units

Basic version UK600 without trim frame and door
N/PE screw-terminals

— 01 Screw-terminals
— 02 Wall box
— 03 Device carrier
— 04 Cover
— 05 Trim frame with sheet steel door

Flush-mounted consumer units – UK600, IP30 , ;*
I_n up to 63 A
Consumer units DIN EN 60670-24, DIN 43871
For building installation according to DIN 18015
Mechanical impact strength: IK07
Available in 1 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Wall grips
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
Device support with removable DIN rail
With N/PE screw-terminals
Wire holder for professional cable entry
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Trim frame and sheet steel door, adjustable for uneven surface
Colour: White, RAL 9016

*in connection with hollow-wall-mounting set UZ91P4

UK612EB

UK624EB

UK636EB

UK648EB

UK660EB

Article	H x W x D (mm)	SU	Type	Ord. no.
Flush-mounted consumer units, 1-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS6B, ZKS16G	355 x 367 x 95 328 x 340 x 88	12 (13)	UK612EB	2CPX077845R9999
Flush-mounted consumer units, 2-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS16B, ZKS21G	480 x 367 x 95 453 x 340 x 88	24 (28)	UK624EB	2CPX077846R9999
Flush-mounted consumer units, 3-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, 2 x ZKS11B, ZKS26G	605 x 367 x 95 578 x 340 x 88	36 (41)	UK636EB	2CPX077847R9999
Flush-mounted consumer units, 4-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, ZKS11B, ZKS16B, ZKS26G	730 x 367 x 95 703 x 340 x 88	48 (56)	UK648EB	2CPX077848R9999
Flush-mounted consumer units, 5-row				
Niche dimensions for flush-mounting Wall cut out dimensions for hollow-wall-mounting **With N/PE screw-terminals:** ZK507, 2 x ZKS16B, ZKS11G, ZKS21G	855 x 367 x 95 828 x 340 x 88	60 (70)	UK660EB	2CPX077849R9999

* In connection with a standard door, with TIP-in closure there will be one space unit less.

> Screw-terminals, see page 43
> Technical specifications UK600 trim frame dimensions, see page 60

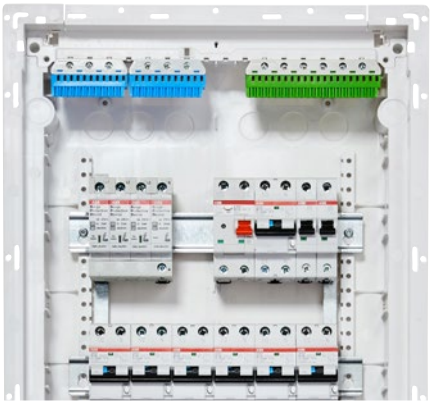
Consumer units

N/PE quick-terminals

Standardized, future-oriented and flexible

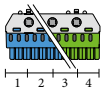
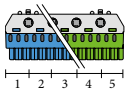
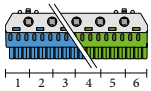
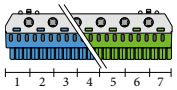
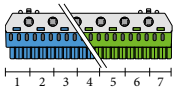
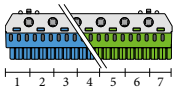
Configure based on your needs

The modularity and the extensive range of products allow customizing the products to the needs based on real-world use. Various quick-terminals can be combined on one quick carrier as necessary. If a larger N or PE terminal has to be used, simply connect two quick-terminals using the ZK10P10 connecting bridge.



Product benefits

- Flexible terminal system for several N potentials: Screw connections: 2.5 to 25 mm² for rigid conductors; for flexible conductors up to 25 mm² (wire end sleeves required)
- Spring connection: 1.5 to 4 mm² for rigid conductors; for flexible conductors up to 25 mm² (wire end sleeves required)
- Optimal when using several residual current circuit breakers
- Ease of expansion using connecting bridges
- Precise assignment of the terminals by clear colour coding: N = blue, PE = yellow-green
- Easy labelling of the terminals using pre-printed, self-adhesive number strips
- Wide range of applications: may be used in the UK600 and MISTRAL65 consumer unit series, in all compact distribution boards, and with all meter cabinets, wall-mounting and floor-standing cabinets

N/PE terminals with units	N quick-terminals		Screw connection system	Spring connection system	PE quick-terminals		Screw connection system	Spring connection system
		ZK50B ZK50BT	0 x 25 mm²	5 x 1,5 - 4 mm²	-		-	-
		ZK51B	1 x 25 mm²	5 x 1,5 - 4 mm²		ZK51G	1 x 25 mm²	5 x 1,5 - 4 mm²
		ZK82B	2 x 25 mm²	8 x 1,5 - 4 mm²		ZK82G	2 x 25 mm²	8 x 1,5 - 4 mm²
		ZK113B	3 x 25 mm²	11 x 1,5 - 4 mm²		ZK113G	3 x 25 mm²	11 x 1,5 - 4 mm²
		ZK144B	4 x 25 mm²	14 x 1,5 - 4 mm²		ZK144G	4 x 25 mm²	14 x 1,5 - 4 mm²
		ZK175B	5 x 25 mm²	17 x 1,5 - 4 mm²		ZK175G	5 x 25 mm²	17 x 1,5 - 4 mm²
		ZK206B	6 x 25 mm²	20 x 1,5 - 4 mm²		ZK206G	6 x 25 mm²	20 x 1,5 - 4 mm²
		ZK237B	7 x 25 mm²	23 x 1,5 - 4 mm²		ZK237G	7 x 25 mm²	23 x 1,5 - 4 mm²
		ZK268B	8 x 25 mm²	26 x 1,5 - 4 mm²		ZK268G	8 x 25 mm²	26 x 1,5 - 4 mm²

Consumer units

N/PE quick-terminals

Accessories / equipment with the UK600

ZK50B

ZK50BT

ZK51G

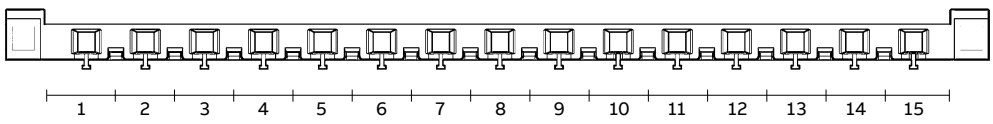
ZK10P10

ZK600

UZB1

ZK603

Article	Number terminals 1.5 x 4 mm²	Number terminals 2.5 x 25 mm²	External dimensions H x W x D in mm	Pieces	Type	Ord. no.
N quick-plug terminals For terminal carriers	5 x 1.5 - 4	0 x 25	23 x 32 x 21	1	ZK50B	2CPX062750R9999
	5 x 1.5 - 4	1 x 25	32 x 32 x 31	1	ZK51B	2CPX062751R9999
	8 x 1.5 - 4	2 x 25	32 x 49 x 31	1	ZK82B	2CPX062752R9999
	11 x 1.5 - 4	3 x 25	32 x 65 x 31	1	ZK113B	2CPX062753R9999
	14 x 1.5 - 4	4 x 25	32 x 82 x 31	1	ZK144B	2CPX062754R9999
	17 x 1.5 - 4	5 x 25	32 x 98 x 31	1	ZK175B	2CPX062755R9999
	20 x 1.5 - 4	6 x 25	32 x 115 x 31	1	ZK206B	2CPX062756R9999
	23 x 1.5 - 4	7 x 25	32 x 132 x 31	1	ZK237B	2CPX063163R9999
	26 x 1.5 - 4	8 x 25	32 x 149 x 31	1	ZK268B	2CPX063164R9999
N quick-plug terminals With adapter ZK15 for lateral assembling in the UK6... or for fastening to the DIN rail	5 x 1.5 - 4	0 x 25	28 x 39 x 25	1	ZK50BT	2CPX062745R9999
PE quick-plug terminals For terminal carriers	5 x 1.5 - 4	1 x 25	32 x 32 x 31	1	ZK51G	2CPX062757R9999
	8 x 1.5 - 4	2 x 25	32 x 49 x 31	1	ZK82G	2CPX062758R9999
	11 x 1.5 - 4	3 x 25	32 x 65 x 31	1	ZK113G	2CPX062759R9999
	14 x 1.5 - 4	4 x 25	32 x 82 x 31	1	ZK144G	2CPX062760R9999
	17 x 1.5 - 4	5 x 25	32 x 98 x 31	1	ZK175G	2CPX062761R9999
	20 x 1.5 - 4	6 x 25	32 x 115 x 31	1	ZK206G	2CPX062762R9999
	23 x 1.5 - 4	7 x 25	32 x 132 x 31	1	ZK237G	2CPX063165R9999
	26 x 1.5 - 4	8 x 25	32 x 149 x 31	1	ZK268G	2CPX063166R9999
Connecting bridges For terminal carriers				10	ZK10P10	2CPX062763R9999
Quick-carriers For UK6... consumer units Usable width for terminals 247 mm 15 units				1	ZK600	2CPX064980R9999
Cable inlet for wall box With integrated terminal carrier Top or bottom, 1 to 5 rows Usable width for terminals 277 mm, 17 units				1	UZB1	2CPX031407R9999
N/PE quick-plug terminal set for UK... Type With Quick-plug terminals: ZK144B: N 4 x 25 + 14 x 4 mm² ZK82B: N 2 x 25 + 8 x 4 mm² ZK206G: PE 6 x 25 + 20 x 4 mm²				1	ZK603	2CPX063177R9999



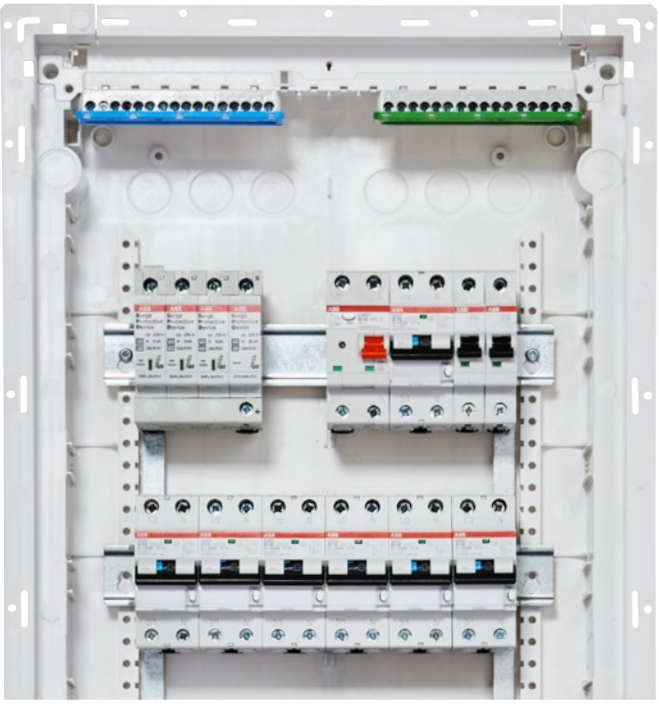
Consumer units

Screw terminals

Standardized, future-oriented and flexible

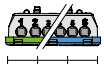
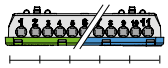
Configure based on your needs

The modularity and the extensive range of products allow customizing the new products to the needs based on real-world use. Various terminals can be combined on one common carrier as necessary.



Product benefits

- Flexible terminal system for several N potentials: Screw connections: 1.5 to 16 mm² for rigid conductors; for flexible conductors up to 16 mm² (wire end sleeves required)
- Optimal when using several residual current circuit breakers
- Precise assignment of the terminals by clear colour coding: N = blue, PE = yellow-green
- Easy labelling of the terminals using pre-printed, self-adhesive number strips
- Wide range of applications: may be used in the UK600 and MISTRAL65 consumer unit series, in all compact distribution boards, and with all meter cabinets, wall-mounting and floor-standing cabinets

N/PE terminals with units	N screw-terminals	Screw connection system		PE screw-terminals	Screw connection system	
 1 2 3	ZKS6B	3 x 6 mm²	3 x 16 mm²	ZKS6G	3 x 6 mm²	3 x 16 mm²
 1 2 3 4 5	ZKS11B	5 x 6 mm²	5 x 16 mm²	ZKS11G	5 x 6 mm²	5 x 16 mm²
1 2 3 4 5 6 7	ZKS16B	9 x 6 mm²	7 x 16 mm²	ZKS16G	9 x 6 mm²	7 x 16 mm²
1 2 3 4 5 6 7 8 9	ZKS21B	12 x 6 mm²	9 x 16 mm²	ZKS21G	12 x 6 mm²	9 x 16 mm²
1 2 3 4 5 6 7 8 9 10 11	ZKS26B	15 x 6 mm²	11 x 16 mm²	ZKS26G	15 x 6 mm²	11 x 16 mm²

Consumer units

Screw terminals

Accessories / equipment with the UK600

ZKS6B

ZKS11B

ZKS16B

ZKS21B

ZKS26B

ZKS6G

ZKS11G

ZKS16G

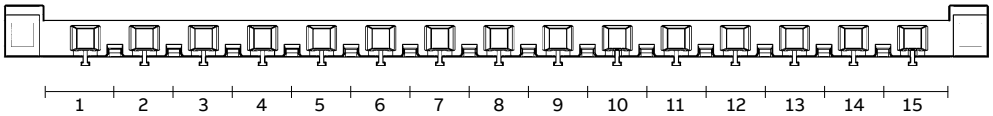
ZKS21G

ZKS21G

ZK507

ZK600

Article	Number terminals 1.5 x 6 mm²	Number terminals 1.5 x 16 mm²	External dimensions H x W x D in mm	Pieces	Type	Ord. no.
N screw-terminals For terminal carriers	3 x 6	3 x 16	27 x 50 x 20	1	ZKS6B	2CPX063167R9999
	6 x 6	5 x 16	27 x 83 x 20	1	ZKS11B	2CPX063168R9999
	9 x 6	7 x 16	27 x 116 x 20	1	ZKS16B	2CPX063169R9999
	12 x 6	9 x 16	27 x 149 x 20	1	ZKS21B	2CPX063170R9999
	15 x 6	11 x 16	27 x 182 x 20	1	ZKS26B	2CPX063171R9999
PE screw-terminals For terminal carriers	3 x 6	3 x 16	27 x 50 x 20	1	ZKS6G	2CPX063172R9999
	6 x 6	5 x 16	27 x 83 x 20	1	ZKS11G	2CPX063173R9999
	9 x 6	7 x 16	27 x 116 x 20	1	ZKS16G	2CPX063174R9999
	12 x 6	9 x 16	27 x 149 x 20	1	ZKS21G	2CPX063175R9999
	15 x 6	11 x 16	27 x 182 x 20	1	ZKS26G	2CPX063176R9999
N-FI rail 3 x 16 mm² + 2 x 10 mm² Cu pluggable				1	ZK507	2CPX030892R9999
Quick-carriers For UK6... consumer units Usable width for terminals 247 mm 15 units				1	ZK600	2CPX063178R9999



Consumer units

UK600 consumer unit

Project options

UZB636

Article	Pieces	Type	Ord. no.
Wall box with wall grips			
To be used with UK61...	1	UZB612	2CPX031113R9999
To be used with UK62...	1	UZB624	2CPX031114R9999
To be used with UK63...	1	UZB636	2CPX031115R9999
To be used with UK64...	1	UZB648	2CPX031116R9999
To be used with UK66..	1	UZB660	2CPX031117R9999

UZS636B

Article	Pieces	Type	Ord. no.
Cover, device support and N/PE quick-plug terminals			
To be used with UK61...	1	UZS612B	2CPX031139R9999
To be used with UK62...	1	UZS624B	2CPX031140R9999
To be used with UK63...	1	UZS636B	2CPX031141R9999
To be used with UK64...	1	UZS648B	2CPX031142R9999
To be used with UK66..	1	UZS660B	2CPX031143R9999

UZS636N

Article	Pieces	Type	Ord. no.
Trim frame with door, cover, device support and N/PE quick-plug terminals			
To be used with UK61...	1	UZS612N	2CPX031131R9999
To be used with UK62...	1	UZS624N	2CPX031132R9999
To be used with UK63...	1	UZS636N	2CPX031133R9999
To be used with UK64...	1	UZS648N	2CPX031134R9999
To be used with UK66..	1	UZS660N	2CPX031135R9999

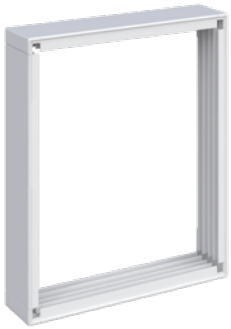
UZS636K

Article	Pieces	Type	Ord. no.
Trim frame with door, cover, device support and DIN rail for terminal blocks			
To be used with UK63...	1	UZS636K	2CPX031136R9999
To be used with UK64...	1	UZS648K	2CPX031137R9999
To be used with UK66..	1	UZS660K	2CPX031138R9999

Consumer units

UK600 consumer unit

Spare parts and accessories



AP636

UZB1

UZB2

UZB3

UZT1

UZT2

UZT3

UZT4

Article	Pieces	Type	Ord. no.
Surface mounting For wall-mounting or partially recessed installation with predetermined breaking points, only suitable for standard door			
To be used with UK61...	1	AP612	2CPX031402R9999
To be used with UK62...	1	AP624	2CPX031403R9999
To be used with UK63...	1	AP636	2CPX031404R9999
To be used with UK64...	1	AP648	2CPX031405R9999
To be used with UK66..	1	AP660	2CPX031406R9999
Cable inlet With integrated terminal carrier Top or bottom, 1 to 5 rows Usable width for terminals 277 mm, 17 units	1	UZB1	2CPX031407R9999
Connecting channel for horizontal and vertical apposition and cross-wiring of the consumer units	1	UZB2	2CPX031408R9999
Horizontal partition with integrated terminal carrier, Knock-out for two sockets, type ZE224 and five knock-outs for communications racks*	1	UZB3	2CPX031409R9999
Hinge set for UK600	2	UZT1	2CPX031410R9999
TIP-in-closure Colour: White, RAL 9016	1	UZT2	2CPX031411R9999
Closure with lock, standard With 2 keys	1	UZT3	2CPX031412R9999
Closure with lock, Ronis With 2 keys	1	UZT4	2CPX031413R9999

Consumer units

UK600 consumer unit

Spare parts and accessories

UZT5

Article	Pieces	Type	Ord. no.
Labelling system Self-adhesive With labelling panels and numbers 1-70 with legend	1	UZT5	2CPX031429R9999

UZ4P2

Wall grips To fix the wall box in two mounting depths	4	UZ4P2	2CPX062447R9999

UZG636

DIN rail with device insert			
To be used with UK61...	1	UZG612	2CPX031118R9999
To be used with UK62...	1	UZG624	2CPX031119R9999
To be used with UK63...	1	UZG636	2CPX031120R9999
To be used with UK64...	1	UZG648	2CPX031121R9999
To be used with UK66..	1	UZG660	2CPX031122R9999

UZA636

Cover with 90° quick-action screws			
To be used with UK61...	1	UZA612	2CPX031123R9999
To be used with UK62...	1	UZA624	2CPX031124R9999
To be used with UK63...	1	UZA636	2CPX031125R9999
To be used with UK64...	1	UZA648	2CPX031126R9999
To be used with UK66..	1	UZA660	2CPX031127R9999

UZM620

Mounting plate, sheet steel, galvanised			
To be used with UK61..., H x W = 212 x 242 mm	1	UZM610	2CPX031414R9999
To be used with UK62..., H x W = 337 x 242 mm	1	UZM620	2CPX031415R9999
To be used with UK63..., H x W = 462 x 242 mm	1	UZM630	2CPX031416R9999
To be used with UK64..., H x W = 587 x 242 mm	1	UZM640	2CPX031417R9999
To be used with UK65..., H x W = 712 x 242 mm	1	UZM650	2CPX031418R9999

UZ91P4

Hollow-wall-mounting set To modify the flush-mounting consumer unit into a hollow-wall consumer unit UK600 (type label and 20 cable ties included) wall thickness min. 8 mm, max. 35 mm	4	UZ91P4	2CPX031434R9999

ZA120

Touch-up applicator Colour: RAL 9016, 12 ml	1	ZA120	2CPX039043R9999

ZA89P20

Screws 20 pcs. for fixing DIN rails and mounting plates	1	ZA89P20	2CPX062376R9999

Consumer units

UK600 consumer unit

Trim frame with door and design foils

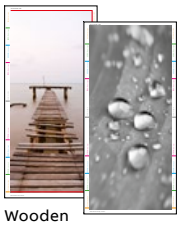
BL610

BL611

Article	To be used with...	Pieces	Type	Ord. no.
Trim frame with door (standard) Colour: White, RAL 9016 sheet steel, powder coated	UK61..	1	BL610	2CPX031081R9999
	UK62..	1	BL620	2CPX031082R9999
	UK63..	1	BL630	2CPX031083R9999
	UK64..	1	BL640	2CPX031084R9999
	UK66..	1	BL650	2CPX031085R9999
Trim frame with door Colour: Anthracite, RAL 7016 sheet steel, powder coated	UK61..	1	BL611	2CPX031086R9999
	UK62..	1	BL621	2CPX031087R9999
	UK63..	1	BL631	2CPX031088R9999
	UK64..	1	BL641	2CPX031089R9999
	UK66..	1	BL651	2CPX031090R9999

Black-board foil

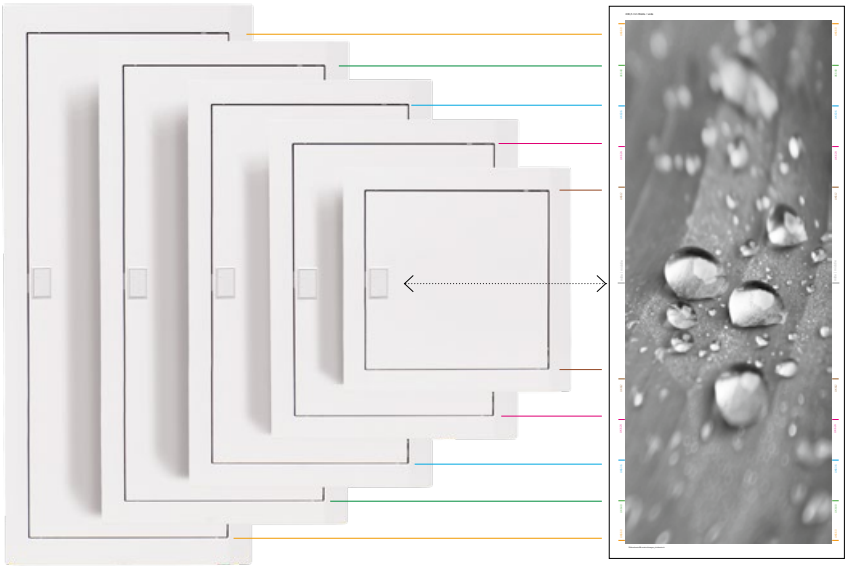
Stones



Wooden walkway

Water drops

Article	To be used with...	Pieces	Type	Ord. no.	EUR
Blackboard foil For labelling of UK600 sheet steel doors	UK61.. UK62.. UK63.. UK64.. UK66..	1	UZ640D		
		10	UZ640DP10	2CPX031790R9999	
Stones Design foil for UK600 sheet steel doors	UK61.. UK62.. UK63.. UK64.. UK66..	1	UZ641D	2CPX031787R9999	
		10	UZ641DP10	2CPX031791R9999	
Wooden walkway Design foil for UK600 sheet steel doors	UK61.. UK62.. UK63.. UK64.. UK66..	1	UZ642D	2CPX031788R9999	
		10	UZ642DP10	2CPX031792R9999	
Water drops Design foil for UK600 sheet steel doors	UK61.. UK62.. UK63.. UK64.. UK66..	1	UZ643D	2CPX031789R9999	
		10	UZ643DP10	2CPX031793R9999	



Consumer units

UK600 consumer unit

Design frames and inserts

BL630D

UZD630

UZD631

UZD632

UZD633

UZD634

UZD635

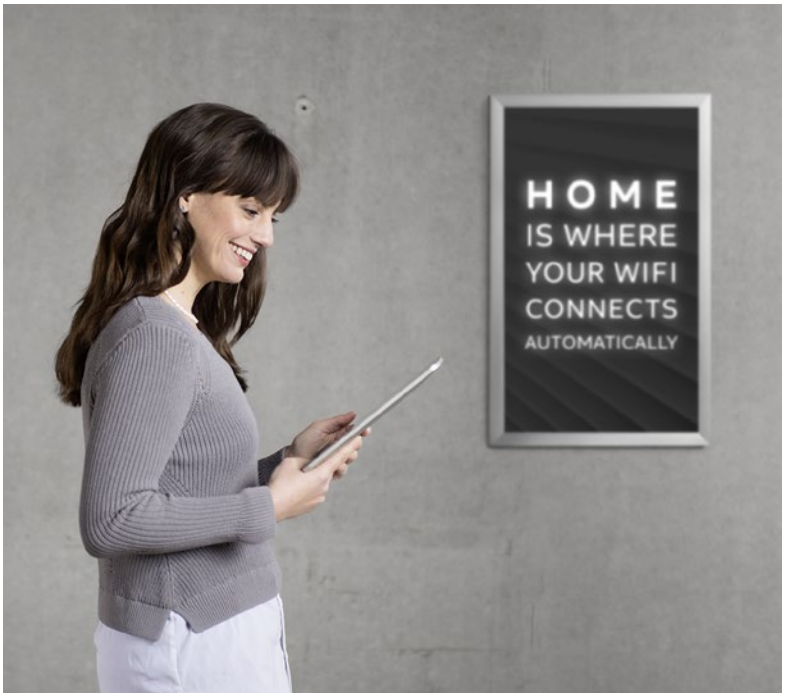
Article	To be used with...	Pieces	Type	Ord. no.
Interchangeable design frame Aluminium brushed, stainless steel finish without insert	UK62..	1	BL620D	2CPX031794R9999
	UK63..	1	BL630D	2CPX031795R9999
	UK64..	1	BL640D	2CPX031796R9999
	UK66..	1	BL650D	2CPX031797R9999
Inserts for the interchangeable design frame				
Image insert For your own images as you wish	UK62..	1	UZD620	2CPX031762R9999
	UK63..	1	UZD630	2CPX031768R9999
	UK64..	1	UZD640	2CPX031774R9999
	UK66..	1	UZD650	2CPX031780R9999
Pinboard insert Grey felt with pins	UK62..	1	UZD621	2CPX031763R9999
	UK63..	1	UZD631	2CPX031769R9999
	UK64..	1	UZD641	2CPX031775R9999
	UK66..	1	UZD651	2CPX031781R9999
Mirror insert	UK62..	1	UZD622	2CPX031764R9999
	UK63..	1	UZD632	2CPX031770R9999
	UK64..	1	UZD642	2CPX031776R9999
	UK66..	1	UZD652	2CPX031782R9999
Stainless steel finish insert	UK62..	1	UZD623	2CPX031765R9999
	UK63..	1	UZD633	2CPX031771R9999
	UK64..	1	UZD643	2CPX031777R9999
	UK66..	1	UZD653	2CPX031783R9999
LED panel insert With backlight foil*	UK62..	1	UZD624	2CPX031766R9999
	UK63..	1	UZD634	2CPX031772R9999
	UK64..	1	UZD644	2CPX031778R9999
	UK66..	1	UZD654	2CPX031784R9999
Wooden finish insert With 5 magnetic pins	UK62..	1	UZD625	2CPX031767R9999
	UK63..	1	UZD635	2CPX031773R9999
	UK64..	1	UZD645	2CPX031779R9999
	UK66..	1	UZD655	2CPX031785R9999

*12 V DC REG voltage supply must be ordered separately.

Consumer units

UK600 consumer unit
Design frames and inserts

A special highlight of the UK600 consumer unit system are the numerous door and frame options, which turn your consumer unit into an attractive design object at home. Images, pinboards, mirrors, magnetic boards and much more may be inserted into the interchangeable design frame.



—
01 Basic version UK600
—
02 Interchangeable design frame
—
03 Insert example with backlight foil LED backlight

—
01

—
02

—
03

Consumer units

Media enclosure UK600

With and without trim frame and door

Flush-mounted consumer units – UK600, IP30 - , ; *
Consumer units UK600 as multimedia version,
dimensions according to the standard enclosures as per DIN 43871
Mechanical impact strength: IK07
Available in 2 up to 5 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
With removable DIN rail in the top row
Patch panel in isolated design for up to 12 keystone modules
Modular perforated sheet steel mounting plate for devices
Simple and tool-free installation of the devices using the "device strap"
120° swiveling triple socket for the power supply of built-in devices
Wire holder for professional cable organization
With trim frame and sheet steel doors as sheet steel door with white plastic insert, for improved Wifi signals or as basic option without trim frame and door

*in connection with hollow-wall-mounting set UZ91P4

UK636MV

Article	Dimensions	H x D x D (mm)	Type	Ord. no.
Flush-mounted media enclosure with trim frame and door with ventilation holes				
Wall box with modular perforated sheet steel mounting plates and removable DIN rail Wire holder for cable entry Patch panel for up to 12 keystone modules Snap-on triple socket swiveling 120° with EURO insert Device strap for tool-free installation. Sheet steel door ventilated	3 rows Niche wall cut out dimensions	605 x 367 x 95 578 x 340 x 88	UK636MV	2CPX031384R9999
	4 rows Niche wall cut out dimensions	730 x 367 x 95 703 x 340 x 88	UK648MV	2CPX031385R9999
	5 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK660MV	2CPX031386R9999

UK636MW

Article	Dimensions	H x D x D (mm)	Type	Ord. no.
Flush-mounted media enclosure with trim frame and ventilated Wifi door				
Wall box with modular perforated sheet steel mounting plates and removable DIN rail Wire holder for cable entry Patch panel for up to 12 keystone modules Snap-on triple socket swiveling 120° with EURO insert Device strap for tool-free installation. Sheet steel door with white plastic insert, for improved Wifi signals	3 rows Niche wall cut out dimensions	605 x 367 x 95 578 x 340 x 88	UK636MW	2CPX031387R9999
	4 rows Niche wall cut out dimensions	730 x 367 x 95 703 x 340 x 88	UK648MW	2CPX031388R9999
	5 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK660MW	2CPX031389R9999

UK630MV

Article	Dimensions	H x D x D (mm)	Type	Ord. no.
Flush-mounted media enclosure with trim frame and door with ventilation holes				
Wall box with modular perforated sheet steel mounting plates and removable DIN rail Wire holder for cable entry Dual socket with mounting bracket Device strap for tool-free installation Sheet steel door ventilated	2 rows Niche wall cut out dimensions	480 x 367 x 95 453 x 340 x 88	UK620MV	2CPX031390R9999
	3 rows Niche wall cut out dimensions	605 x 367 x 95 578 x 340 x 88	UK630MV	2CPX031391R9999
	4 rows Niche wall cut out dimensions	730 x 367 x 95 703 x 340 x 88	UK640MV	2CPX031392R9999
	5 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK650MV	2CPX031393R9999
Flush-mounted media enclosure as basis without trim frame and door				
Wall box with modular perforated sheet steel mounting plates and removable DIN rail Wire holder for cable entry Mounting bracket Device strap for tool-free installation	2 rows Niche wall cut out dimensions	480 x 367 x 95 453 x 340 x 88	UK624MB	2CPX031394R9999
	3 rows Niche wall cut out dimensions	605 x 367 x 95 578 x 340 x 88	UK636MB	2CPX031395R9999
	4 rows Niche wall cut out dimensions	730 x 367 x 95 703 x 340 x 88	UK648MB	2CPX031396R9999
	5 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK660MB	2CPX031397R9999

UK630MB

Consumer units

Combi enclosure UK600

With trim frame and door

Flush-mounted consumer units – UK600, IP30 , ;*
I_n up to 63 A
Combi enclosure as consumer unit and media enclosure
dimensions according to the standard enclosures as per DIN 43871
For building installation according to DIN 18015
Mechanical impact strength: IK07
Available as 2 or 3 row versions as flush-mounted consumer units
Can be upgraded for surface-mounting or partially recessed mounting
Upgradeable for hollow-wall-mounting using UZ91P4
Wall box:
- non-warp, break-proof, non-flammable, low-halogen plastic
- with cable strain relief comb
- with detachable cable inlets
- combinable
Reversible opening (tool-free)
Communication channel for horizontal and vertical connection
With N/PE quick-plug terminal
Cover with 90° quick-action screws, lead-sealable
45 mm slots for 12 devices, expandable to 14
Labelling system
Standardized separation of the voltage levels using a partition with knock-out for socket and media modules
Modular perforated sheet steel mounting plate for devices
Simple and tool-free installation of the devices using the "device strap"
“Click in” socket, swiveling 90° for the power supply of built-in devices
Wire holder for professional cable organization
With trim frame and sheet steel door or sheet steel door with white plastic insert,
for improved Wifi signal, with surface compensation

*in connection with hollow-wall-mounting set UZ91P4

UK662CV

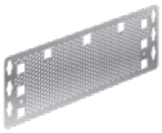
UK662CW

Article	Dimensions	H x D x D (mm)	Type	Ord. no.
Flush-mounted combi enclosure with trim frame and ventilated door				
Wall box with modular perforated sheet steel mounting plates and removable device support Wire holder for cable entry Partition for electrical isolation, snap-on socket, swiveling 90° with EURO insert “Device strap” for tool-free installation Sheet steel door ventilated	2 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK662CV	2CPX031398R9999
	3 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK663CV	2CPX031399R9999
Flush-mounted combination enclosure with trim frame and ventilated Wifi door				
Wall box with modular perforated sheet steel mounting plates and removable device support Wire holder for cable entry Partition for electrical isolation, snap-on socket, swiveling 90° with EURO insert “Device strap” for tool-free installation Sheet steel door ventilated with white plastic insert, for improved Wifi signals	2 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK662CW	2CPX031400R9999
	3 rows Niche wall cut out dimensions	855 x 367 x 95 828 x 340 x 88	UK663CW	2CPX031401R9999

Consumer units

Media enclosure

Accessories



UZM61M

ZX340

ZE336

ZE338

ZE224

ZE225

ZE226

UZB3

Article	Pieces	Type	Ord. no.
Perforated mounting plate for media enclosures	1	UZM61M	2CPX031421R9999
Media device support Device strap elastic with 2 clips for assembly, e.g. to UZM61M	1	ZX340	2CPX031422R9999
Patch panel empty for communication modules, e.g. RJ45, COAX module, etc. For the direct and insulated assembly to the EDF-rail, DIN rail or mounting plate			
Patch panel, 6-fold	1	ZE335	2CPX031423R9999
Patch panel, 12-fold	1	ZE336	2CPX031424R9999
Patch panel holder	1	ZE338	2CPX031426R9999
Single socket Snap-in, swiveling 90° with touch guard and strain relief, for assembling to partition UZB3 with EURO insert	1	ZE224	2CPX031427R9999
Dual socket 230 V AC voltage for assembling to mounting plate ZX29 with EURO insert	1	ZE225	2CPX061177R9999
Triple socket 230 V AC voltage, 120° swiveling with EURO insert to be snapped on to the cable inlet or DIN rail; to be screwed to the mounting plate	1	ZE227	2CPX061211R9999
Partition For standard-compliant electrical isolation with terminal block with 2 knock-outs for the installation of the socket ZE224 5 knock-outs for assembling keystone modules		UZB3	2CPX031409R9999

ZX29

UZED1

ZX287P10

ZE316

ZE317

ZE318

ZE319

ZE320

ZE311

ZE310

ZB120

Article	Pieces	Type	Ord. no.
Mounting plate For clamping on to terminal carrier or for assembling to the perforated sheet steel plate of the UK... media enclosures and of the 1MM... media panels	1	ZX29	2CPX061178R9999
Wire holder UK600	1	UZED1	2CPX031419R9999
	10	UZED1P	2CPX031420R9999
Screws M4 x 14 thread rolling for the perforated sheet steel mounting plate	10	ZX287P10	2CPX061180R9999
Connectors for patch panels			
COAX module F/F connector	1	ZE316	2CPX039246R9999
COAX module IEC connector	1	ZE317	2CPX039247R9999
COAX module IEC plug	1	ZE318	2CPX039248R9999
OpDAT module LC guide sleeve, ceramics	1	ZE319	2CPX039249R9999
Blind module	1	ZE320	2CPX039250R9999
RJ45 connector Plastic	1	ZE311	2CPX038612R9999
IP patch module RJ45 module with adapter for assembling the DIN rail	1	ZE310	2CPX038625R9999
Insulating tube For communication line			
50 mm	1	ZB120	2CPX071111R9999
150 mm	1	ZB122	2CPX071112R9999

Consumer units

Media enclosure

Doors

BL620V

BL620W

Article	To be used with...	Pieces	Type	Ord. no.
Trim frame with door and ventilation holes Colour: White, RAL 9016 Sheet steel, powder-coated	UK62..	1	BL620V	2CPX031091R9999
	UK63..	1	BL630V	2CPX031092R9999
	UK64..	1	BL640V	2CPX031093R9999
	UK66..	1	BL650V	2CPX031094R9999
Trim frame with door and ventilation holes Sheet steel with white plastic insert, for improved Wifi signal	UK62..	1	BL620W	2CPX031095R9999
	UK63..	1	BL630W	2CPX031096R9999
	UK64..	1	BL640W	2CPX031097R9999
	UK66..	1	BL650W	2CPX031098R9999

System Pro E comfort Mini EUROPA40
Wall-mounting covers without door IP40

Available in white and grey and three different sizes to accommodate 2 to 6 modules.

The particularly robust and shock resistant frame ensures complete protection of the equipment installed.

The range is manufactured in accordance with the IEC 60670-24 standard.

Each cover is equipped with a DIN bar.

This consumer unit without door reachs IP40.

The upper and lower walls include precuts on the internal side for the passing through of wiring trunking.

These covers can be opened from the front side to ensure easier access during installation.

Technical characteristics

Protection degree: IP40.
Colour: RAL 9016 red and RAL 7035 grey.
Material: manufactured in self-extinguishing thermoplastic resistant to abnormal heat and to fire up to 650°C (glow wire test), according to IEC 60695-2-11 standard.
Installation temperature: -25°C ÷ +60°C.
Shock resistant: 6 joule (with mounted circuit breakers).
Conformity: IEC 60670-24 certification.

Consumer units

Mini EUROPA40 - Order codes

2 modules

4 modules

6 modules

Description	No. of modules [18 mm]	Dimensions WxHxD [mm]	ABB code	Order code	Price	Packaging
RAL 9016 white	2	50x140x65	1SL2402A00	1SL2402A00		1/45
RAL 7035 grey	2	50x140x65	12422	M124220000		1/45
RAL 9016 white	4	95x160x65	1SL2404A00	1SL2404A00		1/20
RAL 7035 grey	4	95x160x65	12424	M124240000		1/20
RAL 9016 white	6	140x160x65	1SL2406A00	1SL2406A00		1/12
RAL 7035 grey	6	140x160x65	12426	M124260000		1/12

Description No of holes x Ø holes (mm) + No of holes x mm²	For covers type	ABB code	Order code	Price	Packaging
Terminal bars					
2x16 + 3x25	1SL2404A00 - 1SL2406A00 12424 - 12426	12502	M125020000		25/750

Description	No. of modules [18 mm]	ABB code	Order code	Price	Packaging
Module covers					
RAL 9016 white	1	1SL2857A00	1SL2857A00		50/1500
RAL 9016 white	4	1SL2859A00	1SL2859A00		25/300
RAL 7035 grey	1	12861	M128610000		50/1500
RAL 7035 grey	4	12863	M128630000		25/300

Description	ABB code	Order code	Price	Packaging
Screw lead sealing accessory				
	12860	M128600000		50/1500

System pro E comfort MISTRAL41W
Endless installation possibilities

Fast and easy to be installed. Design and simplicity “all in one”.

Concealed rear mounts for secure wall installation.

Door opens up to 180° allowing full access to theinterior of the unit.

Door available in two versions: petrol blue and opaque. Units without doors are also available.

The symmetrical design allows opening of the reversible door either from the left or from the right.

Endless installation possibilities

Invisible cable entry and exit
Pre-cut knockout slots allow cable entry and exit from the top and bottom. When not used, the slots remain invisible on the outside maintaining the consumer unit's sleek look and feel.

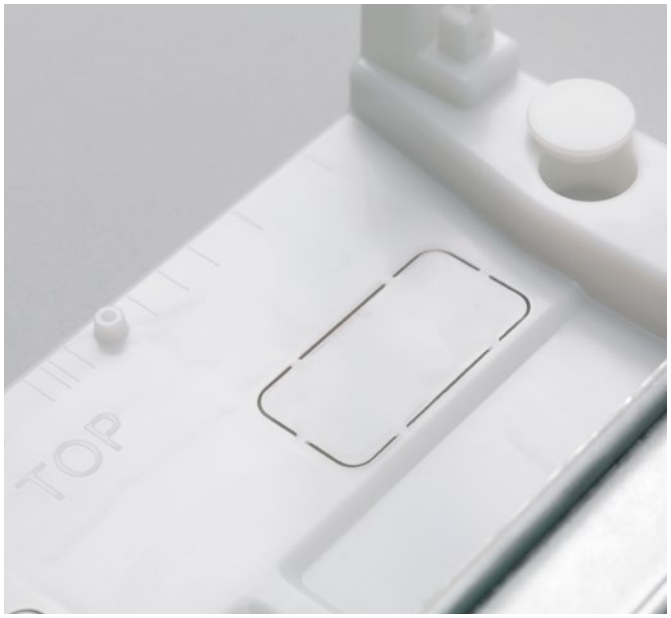
More than enough internal space
Lots of internal space makes cabling even easier. Cable clips and holes allow wires to be fastened to the frame with simple cable ties.

Easy installation of extra modules
An extra module can be added by removing two pre-cut elements. This offers a quick and easy solution when unexpected additional installation is required.

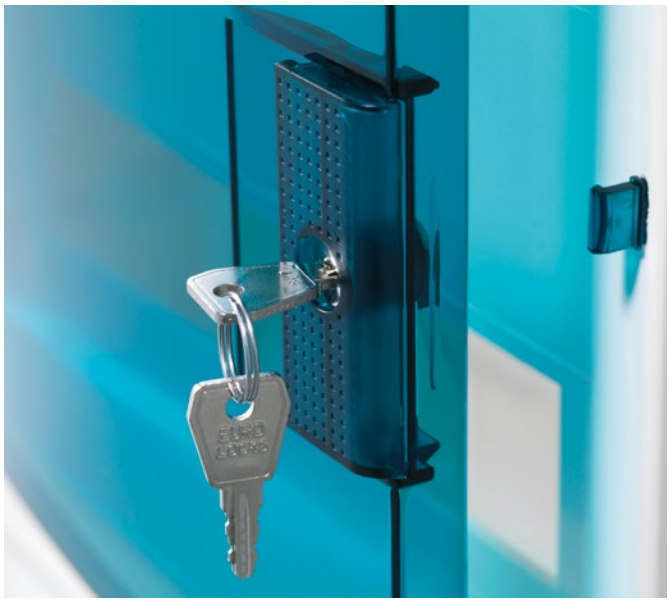
Fast and tidy cabling
Various snap-on terminal blocks for N and PE connection be installed in the upper and lower part of the unit. Two versions offer screw or spring couplings.

Endless installation possibilities

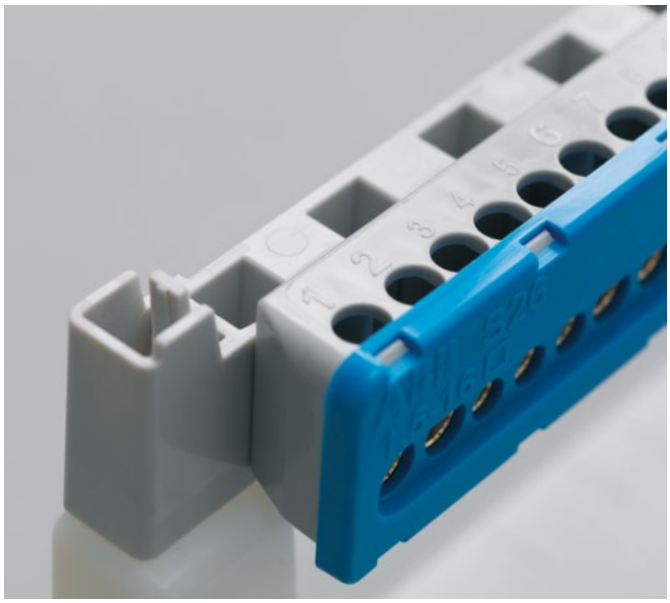
Double insulation protection
The unit housing and all accessories have been designed and developed to ensure Class II double insulation protection.



Multi-row units
Multi-row units are available with a standard distance of 125 mm between DIN rails.



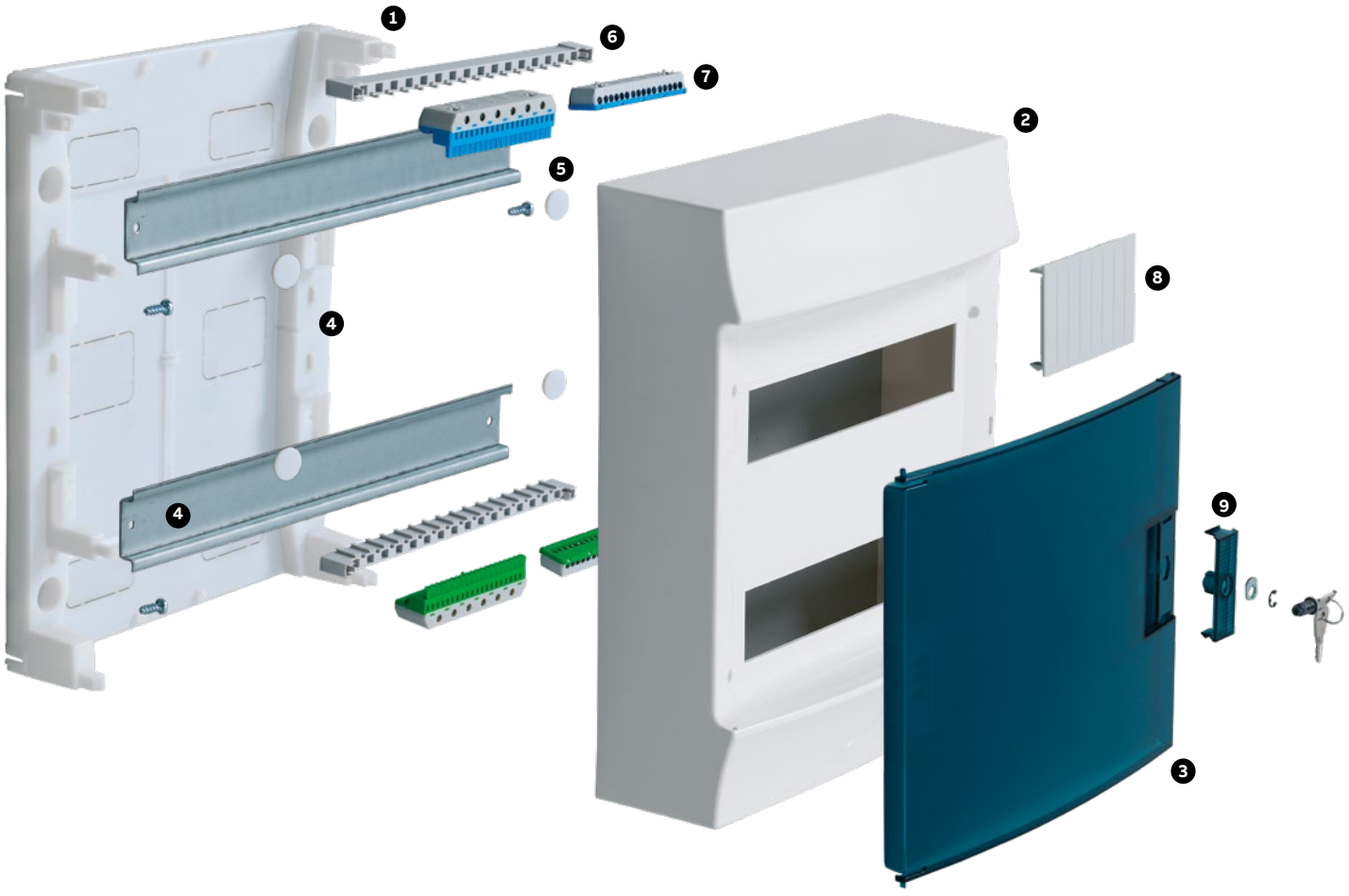
Optional door lock
The standard door with ergonomic handle is available with a lock for added security.



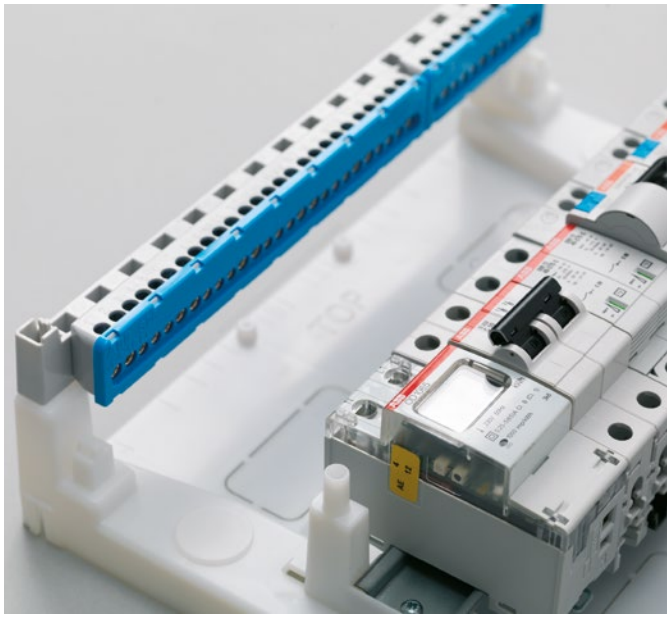
New generation terminals
The MISTRAL range of consumer units is amended with a wide, completely new ABB terminal blocks. Two different versions offer screw and spring fast coupling for easy and effective cabling up to 63A or 100A.

A versatile range suitable for every application

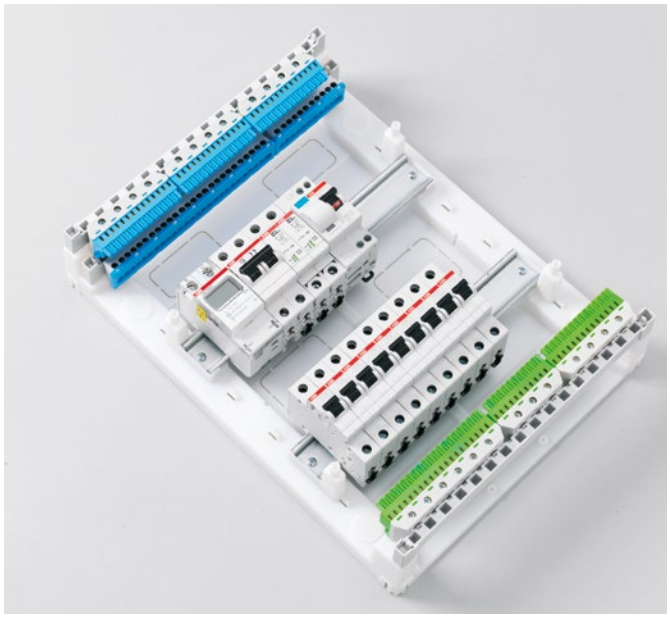
The simple construction of the MISTRAL41W series makes the units fast and easy to assemble. Furthermore, they can be easily adapted to various application requirements thanks to their flexible design.



1. Base for wall mounting
2. Reversible cover
3. Transparent door
4. DIN rail
5. Plugs, protection class II
6. Terminal carrier
7. Quick coupling terminal blocks
8. Module cover
9. Finish or closure element (optional lock)



A unified range of products
The MISTRAL41W series is compatible with a unified range of ABB products. As a result, terminal blocks, circuit breakers, switches, surge protective devices and many other components can all be installed in the units for a wide variety of applications.



3 different terminal systems available
A new generation of terminal blocks is available in different colours, wide range of sizes and two different connection options.

MISTRAL41W
Wall-mounted series

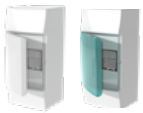
The MISTRAL41W series of consumer units gives installers the freedom and flexibility to implement any type of electrical distribution system in residential buildings. This wide range of wall-mounted, IP41-rated units has been designed from scratch to enhance the unique features that make ABB the leading industry standard.

The units are fast and easy to install and look great anywhere thanks to their elegant design. Furthermore, ample internal space, a choice of doors and a unified range of accessories offer endless possibilities to create high-quality work installers can be proud of.

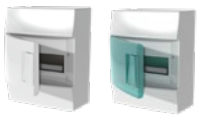
Consumer units

MISTRAL41W – Order codes wall-mounted (650)

2 modules



4 modules

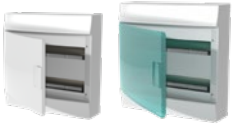


8 modules

12 modules

18 modules

24 modules



36 modules

MISTRAL41W – Order codes 650

Description	N° of modu-les [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 wall - 1 Row						
Without door 2M	2	650	68 x 210 x 93	1SPE007717F0100	41P02X10	1/36
Without door 4M	4	650	96 x 210 x 93	1SPE007717F0200	41P04X10	1/24
Opaque door 4M	4	650	96 x 210 x 93	1SPE007717F0210	41P04X11	1/24
Transparent door 4M	4	650	96 x 210 x 93	1SPE007717F0220	41P04X12	1/24
Without door 8M	8	650	202 x 257 x 120	1SPE007717F0300	41P08X10	1/7
Opaque door 8M	8	650	202 x 257 x 120	1SPE007717F0310	41P08X11	1/7
Transparent door 8M	8	650	202 x 257 x 120	1SPE007717F0320	41P08X12	1/7
Without door 12M	12	650	292 x 257 x 120	1SPE007717F0400	41P12X10	1/3
Opaque door 12M	12	650	292 x 257 x 120	1SPE007717F0410	41P12X11	1/3
Transparent door 12M	12	650	292 x 257 x 120	1SPE007717F0420	41P12X12	1/3
Without door 18M	18	650	382 x 257 x 120	1SPE007717F0800	41P18X10	1/3
Opaque door 18M	18	650	382 x 257 x 120	1SPE007717F0810	41P18X11	1/3
Transparent door 18M	18	650	382 x 257 x 120	1SPE007717F0820	41P18X12	1/3
Consumer units MISTRAL41 wall - 2 Rows						
Without door 24M	24	650	292 x 382 x 120	1SPE007717F0500	41P12X20	1/2
Opaque door 24M	24	650	292 x 382 x 120	1SPE007717F0510	41P12X21	1/2
Transparent door 24M	24	650	292 x 382 x 120	1SPE007717F0520	41P12X22	1/2
Without door 36M 2F	36	650	382 x 382 x 120	1SPE007717F0900	41P18X20	1/2
Opaque door 36M 2F	36	650	382 x 382 x 120	1SPE007717F0910	41P18X21	1/2
Transparent door 36M 2F	36	650	382 x 382 x 120	1SPE007717F0920	41P18X22	1/2

36 modules

54 modules

48 modules

72 modules

MISTRAL41W – Order codes 650

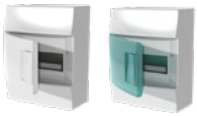
Description	N° of modu-les [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 wall - 3 Rows						
Without door 36M 3F	36	650	292 x 507 x 120	1SPE007717F0600	41P12X30	1/2
Opaque door 36M 3F	36	650	292 x 507 x 120	1SPE007717F0610	41P12X31	1/2
Transparent door 36M 3F	36	650	292 x 507 x 120	1SPE007717F0620	41P12X32	1/2
Without door 54M	54	650	382 x 507 x 120	1SPE007717F1000	41P18X30	1/2
Opaque door 54M	54	650	382 x 507 x 120	1SPE007717F1010	41P18X31	1/2
Transparent door 54M	54	650	382 x 507 x 120	1SPE007717F1020	41P18X32	1/2
Consumer units MISTRAL41 wall - 4 Rows						
Without door 48M	48	650	292 x 656 x 120	1SPE007717F0700	41P12X40	1/1
Opaque door 48M	48	650	292 x 656 x 120	1SPE007717F0710	41P12X41	1/1
Transparent door 48M	48	650	292 x 656 x 120	1SPE007717F0720	41P12X42	1/1
Without door 72M	72	650	382 x 656 x 120	1SPE007717F1100	41P18X40	1/1
Opaque door 72M	72	650	382 x 656 x 120	1SPE007717F1110	41P18X41	1/1
Transparent door 72M	72	650	382 x 656 x 120	1SPE007717F1120	41P18X42	1/1

Consumer units

MISTRAL41W – Order codes wall-mounted (750)

2 modules

4 modules

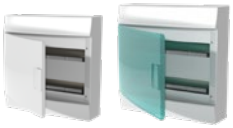


8 modules

12 modules

18 modules

24 modules



36 modules

MISTRAL41W – Order codes 750

Description	N° of modu-les [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 wall - 1 Row						
Without door 2M	2	750	68 x 210 x 93	1SPE007717F1500	41P02X100750	1/36
Without door 4M	4	750	96 x 210 x 93	1SPE007717F1600	41P04X100750	1/24
Opaque door 4M	4	750	96 x 210 x 93	1SPE007717F1610	41P04X110750	1/24
Transparent door 4M	4	750	96 x 210 x 93	1SPE007717F1620	41P04X120750	1/24
Without door 8M	8	750	202 x 257 x 120	1SPE007717F1700	41P08X100750	1/7
Opaque door 8M	8	750	202 x 257 x 120	1SPE007717F1710	41P08X110750	1/7
Transparent door 8M	8	750	202 x 257 x 120	1SPE007717F1720	41P08X120750	1/7
Without door 12M	12	750	292 x 257 x 120	1SPE007717F1800	41P12X100750	1/3
Opaque door 12M	12	750	292 x 257 x 120	1SPE007717F1810	41P12X110750	1/3
Transparent door 12M	12	750	292 x 257 x 120	1SPE007717F1820	41P12X120750	1/3
Without door 18M	18	750	382 x 257 x 120	1SPE007717F2200	41P12X200750	1/3
Opaque door 18M	18	750	382 x 257 x 120	1SPE007717F2210	41P12X210750	1/3
Transparent door 18M	18	750	382 x 257 x 120	1SPE007717F2220	41P12X220750	1/3
Consumer units MISTRAL41 wall - 2 Rows						
Without door 24M	24	750	292 x 382 x 120	1SPE007717F1900	41P12X300750	1/2
Opaque door 24M	24	750	292 x 382 x 120	1SPE007717F1910	41P12X310750	1/2
Transparent door 24M	24	750	292 x 382 x 120	1SPE007717F1920	41P12X320750	1/2
Without door 36M 2F	36	750	382 x 382 x 120	1SPE007717F2300	41P12X400750	1/2
Opaque door 36M 2F	36	750	382 x 382 x 120	1SPE007717F2310	41P12X410750	1/2
Transparent door 36M 2F	36	750	382 x 382 x 120	1SPE007717F2320	41P12X420750	1/2

36 modules

54 modules

48 modules

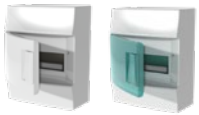
72 modules

MISTRAL41W – Order codes 750

Description	N° of modu-les [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41 wall - 3 Rows						
Without door 36M 3F	36	750	292 x 507 x 120	1SPE007717F2000	41P18X100750	1/2
Opaque door 36M 3F	36	750	292 x 507 x 120	1SPE007717F2010	41P18X110750	1/2
Transparent door 36M 3F	36	750	292 x 507 x 120	1SPE007717F2020	41P18X120750	1/2
Without door 54M	54	750	382 x 507 x 120	1SPE007717F2400	41P18X300750	1/2
Opaque door 54M	54	750	382 x 507 x 120	1SPE007717F2410	41P18X310750	1/2
Transparent door 54M	54	750	382 x 507 x 120	1SPE007717F2420	41P18X320750	1/2
Consumer units MISTRAL41 wall - 4 Rows						
Without door 48M	48	750	292 x 656 x 120	1SPE007717F2100	41P18X200750	1/1
Opaque door 48M	48	750	292 x 656 x 120	1SPE007717F2110	41P18X210750	1/1
Transparent door 48M	48	750	292 x 656 x 120	1SPE007717F2120	41P18X220750	1/1
Without door 72M	72	750	382 x 656 x 120	1SPE007717F2500	41P18X400750	1/1
Opaque door 72M	72	750	382 x 656 x 120	1SPE007717F2510	41P18X410750	1/1
Transparent door 72M	72	750	382 x 656 x 120	1SPE007717F2520	41P18X420750	1/1

Consumer units

MISTRAL41W – Order codes with terminals (650)

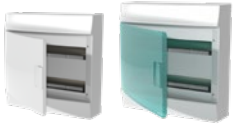


8 modules

12 modules

18 modules

24 modules

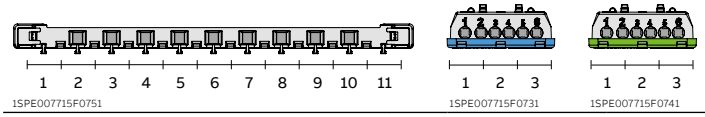


36 modules

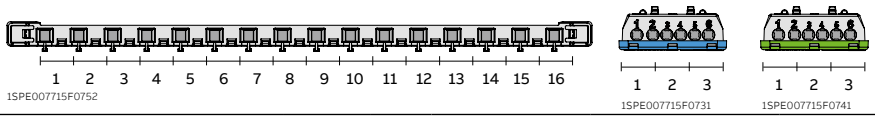
36 modules

MISTRAL41W – Order codes

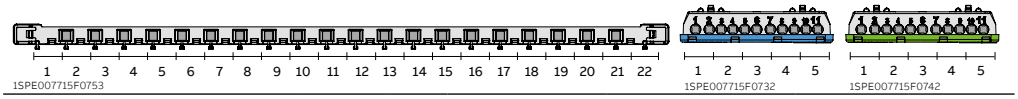
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41W						
Opaque door 8M 12SM	8	650	202 x 257 x 120	1SLM004102A3102	41P08X11A	1/7
Transparent door 8M 12SM	8	650	202 x 257 x 120	1SPE007717F0321	41P08X12A	1/7



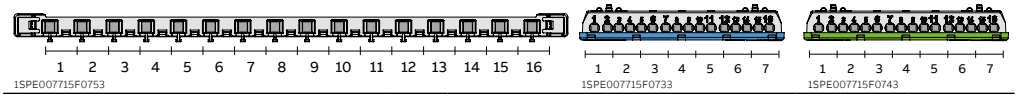
Opaque door 12M 12SM	12	650	292 x 257 x 120	1SLM004102A3103	41P12X11A	1/3
Transparent door 12M 12SM	12	650	292 x 257 x 120	1SPE007717F0421	41P12X12A	1/3



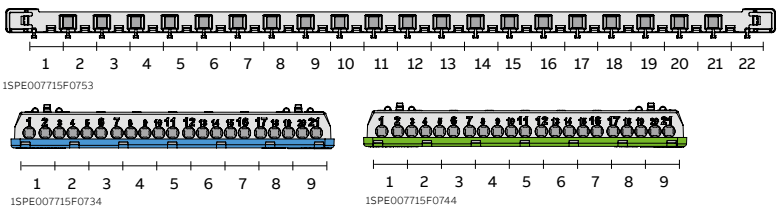
Opaque door 18M 22SM	18	650	382 x 257 x 120	1SLM004102A3104	41P12X21A	1/3
Transparent door 18M 22SM	18	650	382 x 257 x 120	1SPE007717F0821	41P12X22A	1/3



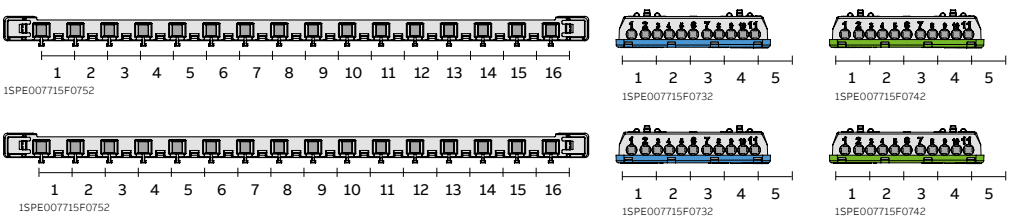
Opaque door 24M 32SM	24	650	292 x 382 x 120	1SLM004102A3105	41P12X31A	1/2
Transparent door 24M 32SM	24	650	292 x 382 x 120	1SPE007717F0521	41P12X32A	1/2



Opaque door 36M 2F 42SM	36	650	382 x 382 x 120	1SLM004102A3106	41P12X41A	1/2
Transparent door 36M 2F 42SM	36	650	382 x 382 x 120	1SPE007717F0921	41P12X42A	1/2



Opaque door 36M 3F 44SM	36	650	292 x 507 x 120	1SLM004102A3107	41P18X11A	1/2
Transparent door 36M 3F 44SM	36	650	292 x 507 x 120	1SPE007717F0621	41P18X12A	1/2



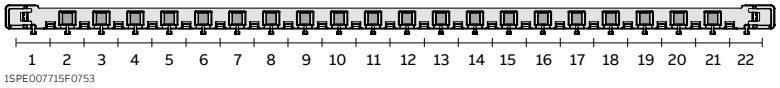
54 modules

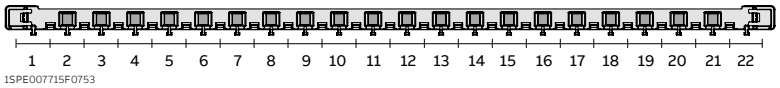
48 modules

72 modules

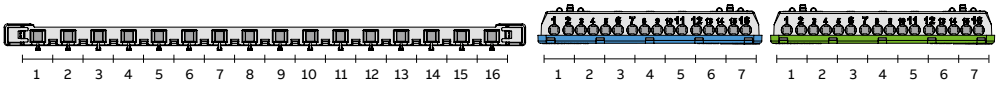
MISTRAL41W – Order codes

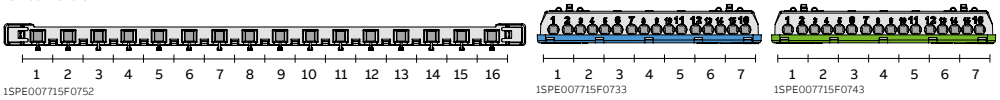
Description	N° of modu-les [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL41W						
Opaque door 54M 64SM	54	650	382 x 507 x 120	1SLM004102A3109	41P18X31A	1/2
Transparent door 54M 64SM	54	650	382 x 507 x 120	1SPE007717F1021	41P18X32A	1/2



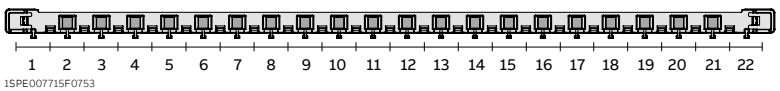


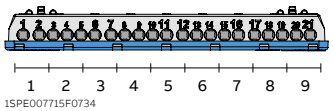
Opaque door 48M 64SM	48	650	292 x 656 x 120	1SLM004102A3108	41P18X21A	1/1
Transparent door 48M 64SM	48	650	292 x 656 x 120	1SPE007717F0721	41P18X22A	1/1

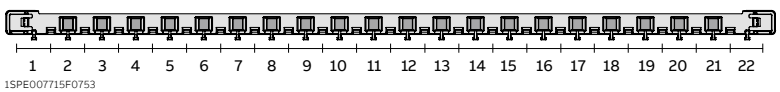


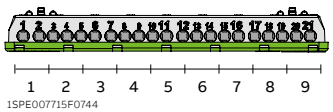


Opaque door 72M 84SM	72	650	382 x 656 x 120	1SLM004102A3110	41P18X41A	1/1
Transparent door 72M 84SM	72	650	382 x 656 x 120	1SPE007717F1121	41P18X42A	1/1









Consumer units

MISTRAL41W – Order codes accessories

MISTRAL41W – Accessories doors

Description	N° of modules [18 mm]	Order code	Type number	Packaging
Opaque door				
Opaque door 4M MISTRAL41W	4	1SPE007717F9900	41Z33	1/24
Opaque door 8M MISTRAL41W	8	1SPE007717F9901	41Z34	1/14
Opaque door 12M MISTRAL41W	12	1SPE007717F9902	41Z35	1/14
Opaque door 24/48M MISTRAL41W	24/48	1SPE007717F9903	41Z36	1/15
Opaque door 36M (3 rows) MISTRAL41W	36	1SPE007717F9904	41Z37	1/18
Opaque door 18M MISTRAL41W	18	1SPE007717F9905	41Z38	1/14
Opaque door 36/72M (2 rows) MISTRAL41W	36/72	1SPE007717F9906	41Z39	1/18
Opaque door 54M MISTRAL41W	54	1SPE007717F9907	41Z40	1/18
Transparent door				
Transparent door blue 4M MISTRAL41W	4	1SPE007717F9908	41Z41	1/24
Transparent door blue 8M MISTRAL41W	8	1SPE007717F9909	41Z42	1/14
Transparent door blue 12M MISTRAL41W	12	1SPE007717F9910	41Z43	1/14
Transparent door blue 24/48M MISTRAL41W	24/48	1SPE007717F9911	41Z44	1/15
Transparent door blue 36M (3 rows) MISTRAL41W	36	1SPE007717F9912	41Z45	1/18
Transparent door blue 18M MISTRAL41W	18	1SPE007717F9913	41Z46	1/14
Transparent door blue 36/72M (2 rows) MISTRAL41W	36/72	1SPE007717F9914	41Z47	1/18
Transparent door blue 54M MISTRAL41W	54	1SPE007717F9915	41Z48	1/18

MISTRAL41W – Other accessories

41Z14, 41Z15, 41Z16

41Z17, 41Z18

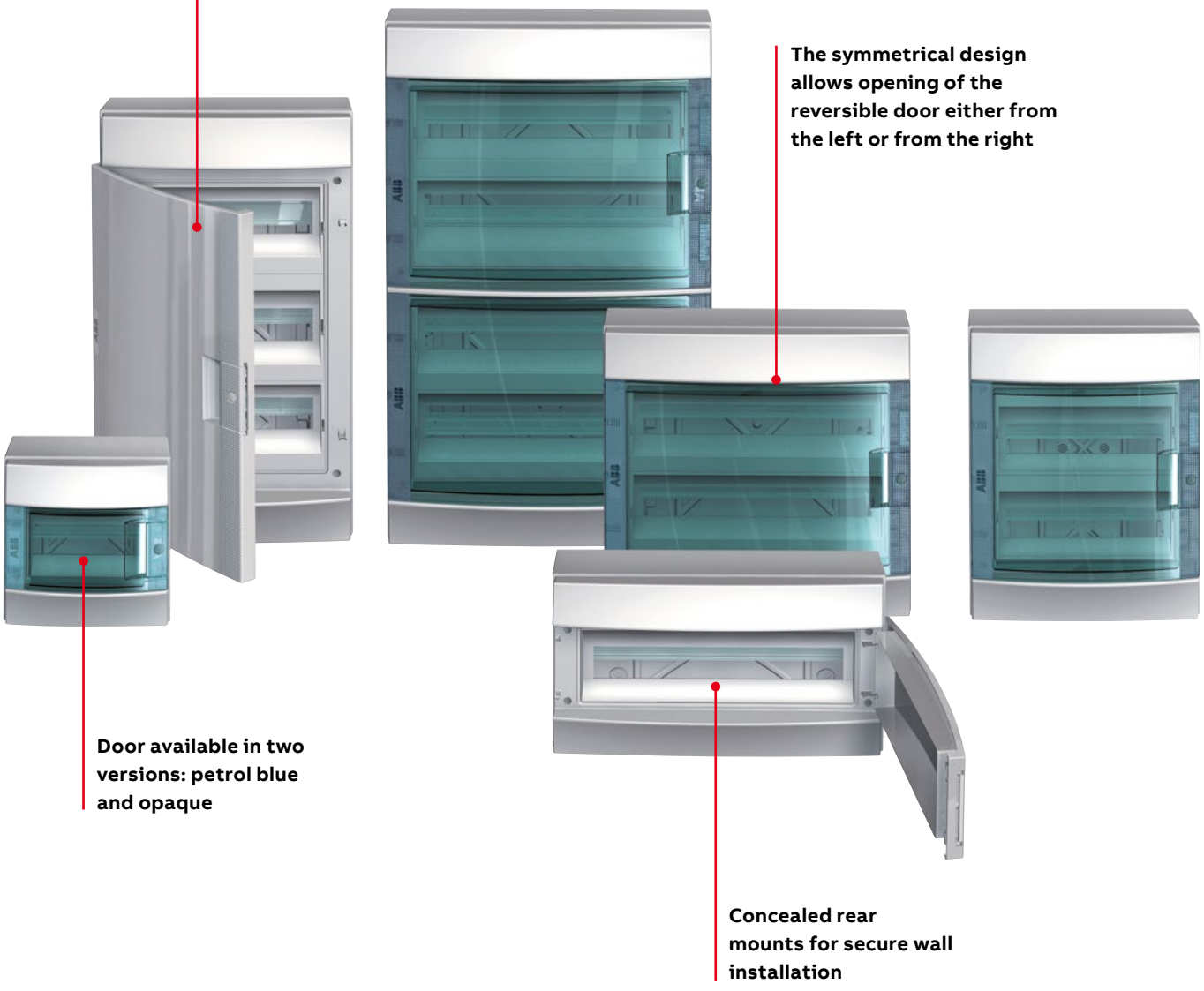
41Z19, 41Z20

41Z21, 41Z22

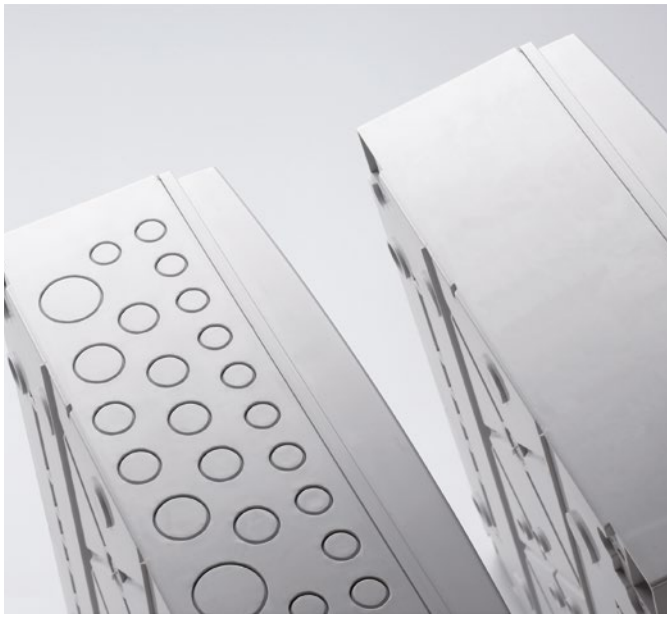
41Z23, 41Z24

Description	N° of modu-les [18 mm]	Order code	Type number	Packaging
Other accessories				
Lock set white LMW		1SPE007715F5009	41Z14	1
Lock set grey LMG		1SPE007715F5011	41Z15	1
Lock set blue LMB		1SPE007715F5010	41Z16	1
Flange for conduit derivation GWT 650		1SLM004100A1951	41Z17	1/30
Flange for conduit derivation GWT 750		1SPE007715F5111	41Z18	1/30
Label holder 12M	12	1SPE007715F5012	41Z19	5
Label holder 18M	18	1SPE007715F5018	41Z20	5
Partition wall 12M	12	1SPE007715F5112	41Z21	5
Partition wall 18M	18	1SPE007715F5118	41Z22	5
MCB cover 12M GWT 650	12	1SPE007715F5650	41Z23	5/180
MCB cover 12M GWT 750	12	1SPE007715F5750	41Z24	5/180

System pro E comfort MISTRAL65/MISTRAL65H
Endless installation possibilities

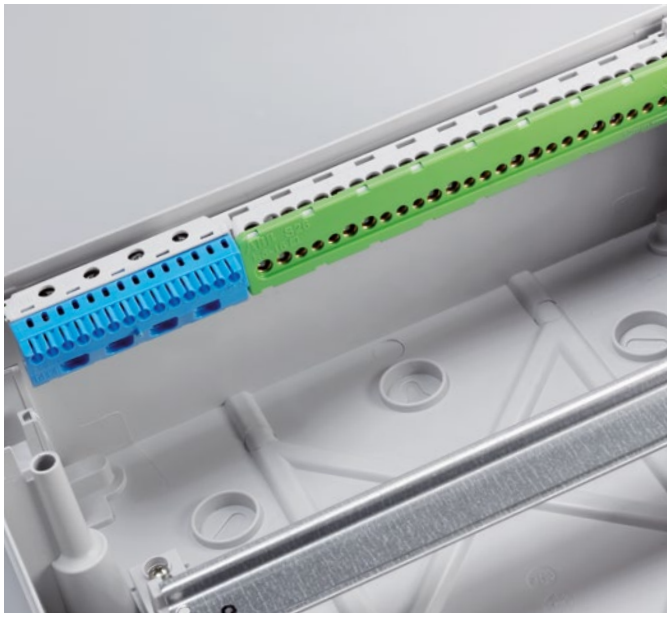


Invisible cable entry and exit
The MISTRAL65 comes with smooth surfaces for the cables entry on top and bottom. The MISTRAL65H version is provided with knockouts of various dimensions (on one side only).



More internal space
Internal spaces have been created to make cabling even easier, with cable clips and holes for fastening wires to the frame with simple cable ties.

Easy installation of extra modules
Additional modules can be installed by removing two pre-trimmed elements. This offers an easy and tidy solution when there are unforeseen installation requirements.

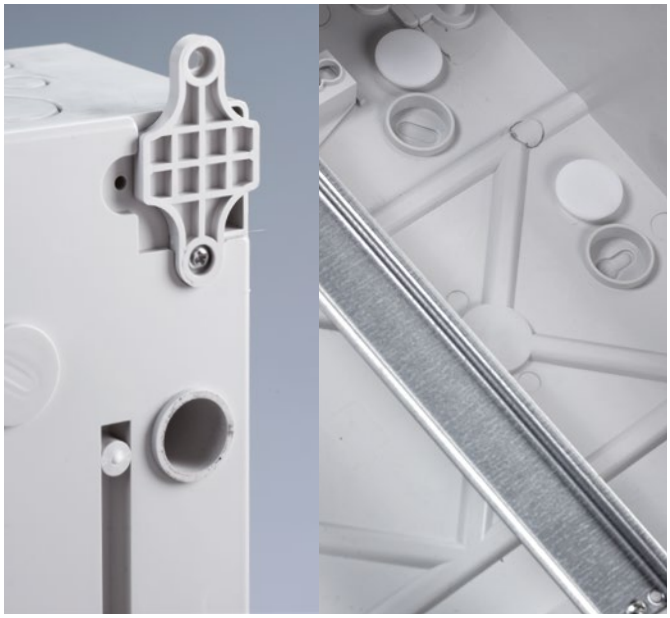


New generation terminals
The new System pro E comfort MISTRAL® range of consumer units is amended with a wide, completely new ABB terminal blocks. To different versions offer screw and spring fast coupling for easy and effective cabling up to 63A or 100A.

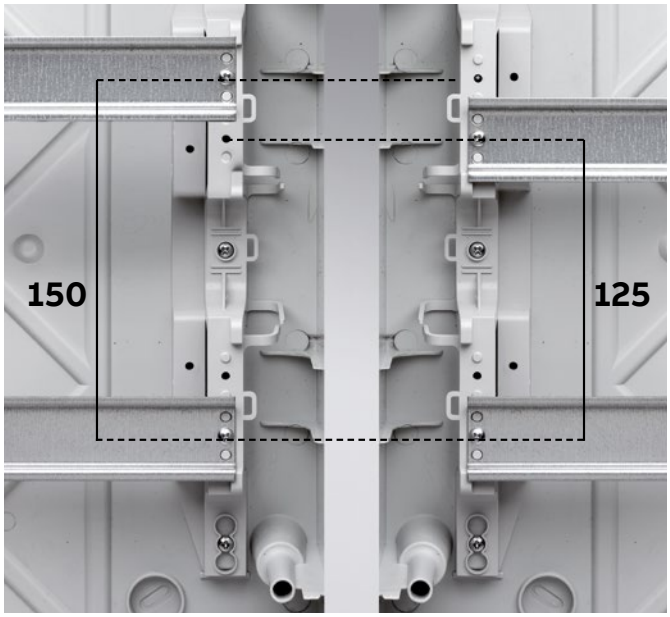
System pro E comfort MISTRAL65/MISTRAL65H
Endless installation possibilities

Protected trunking entry
The new polycarbonate accessory for trunking entry can be positioned at the top or bottom of the consumer unit, connecting and protecting the conductor bundles. A series of internal knockouts allows it to house any type of trunking.

Aesthetically clean installation
Interior slots allow the unit to be fixed to the wall at points that cannot be seen from the outside, making for an aesthetically clean installation. Special snap-in closure plugs guarantee class II protection (double insulation).

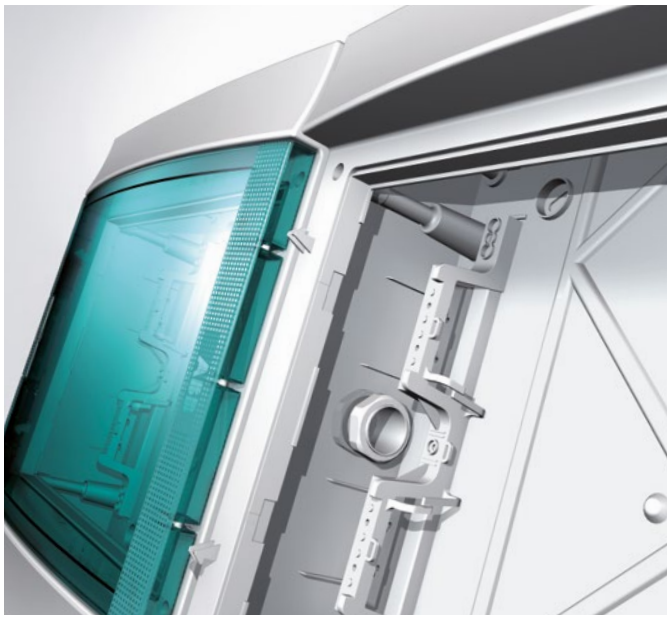


Optional door lock
The standard door with ergonomic handle and snap-on closure can be supplied with a lock and key on request. This ensures only authorized people have access and prevents tampering or incorrect operation.

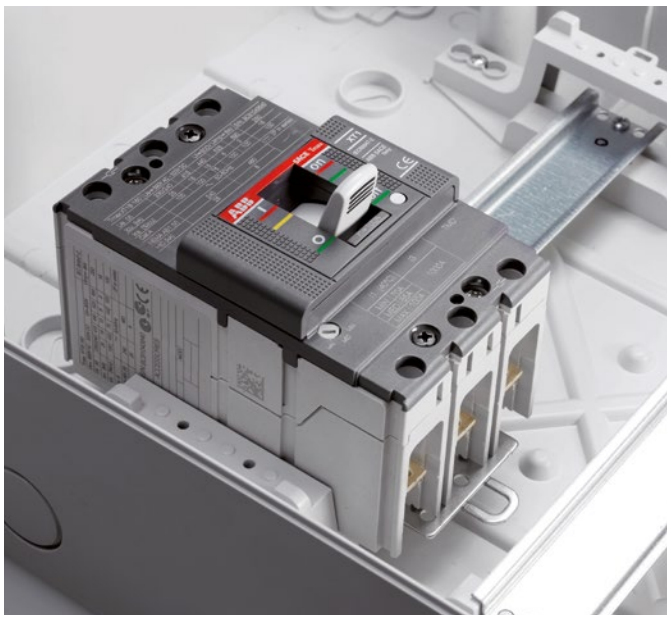


Variable distance between DIN-Rails
To create space at the top or bottom of the consumer unit, the central distance between the DIN-Rails can be modified from the standard 150 mm to 125 mm. The front panel can be removed, reversed and re-installed with a simple click.

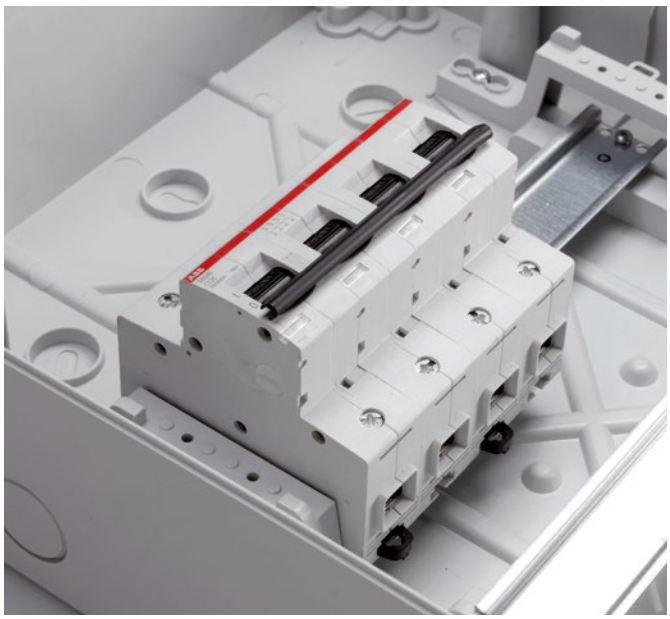
Horizontal coupling
The consumer units can be installed side by side, with cable gland accessories protecting the conductors' path between adjacent units.



Blind panels for small automation application
Accessories include blind panels and base plates allowing the installation of other types of devices, in addition to modular DIN-Rail products, like contactors, motor starters or devices on the front of the panel.



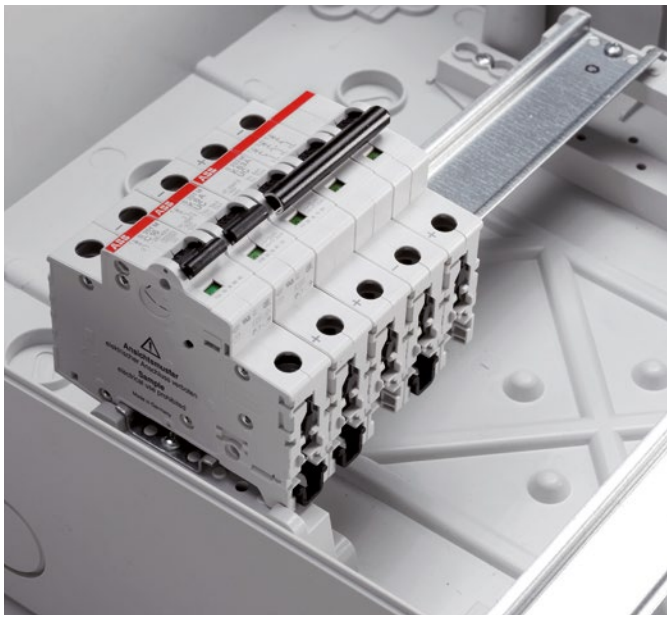
Two DIN positions
The frame has two DIN-Rail positions so accessories of different depths, like MCCBs, can be installed in perfect alignment.



Easy installation of non-standard devices
The flexibility of the frame allows easy installation of devices with above-standard depth like high-performance MCBs.

System pro E comfort MISTRAL65/MISTRAL65H
Endless installation possibilities

Compatible with standard modular devices
The first depth allows the installation of standard products. These include most modular devices currently on the market.



Non-modular equipment
Accessories like blind panels and base plates enable the installation of other types of devices, in addition to modular DIN products, on the front of the panel. These include control buttons and indicator lights.

Consumer units

System pro E comfort MISTRAL65

4 modules

8 modules

12 modules

18 modules

24 modules

36 modules

Description	GWT	N° of modules [18 mm]	Dimensions WxHxD [mm]	Order code	Type number	Price	Packaging
Consumer units MISTRAL65 wall - 1 Row							
Opaque door 4M	650	4	152x202x117	1SL1100A00	65P04X11		1/24
Transparent door 4M	650	4	152x202x117	1SL1200A00	65P04X12		1/24
Opaque door 8M	650	8	232x250x154	1SL1101A00	65P08X11		1/11
Transparent door 8M	650	8	232x250x154	1SL1201A00	65P08X12		1/11
Opaque door 12M	650	12	320x250x155	1SL1102A00	65P12X11		1/7
Transparent door 12M	650	12	320x250x155	1SL1202A00	65P12X12		1/7
Opaque door 18M	650	18	430x250x155	1SL1103A00	65P18X11		1/4
Transparent door 18M	650	18	430x250x155	1SL1203A00	65P18X12		1/4
Consumer units MISTRAL65 wall - 2 Rows							
Opaque door 24M	650	24	320x435x155	1SL1104A00	65P12X21		1/4
Transparent door 24M	650	24	320x435x155	1SL1204A00	65P12X22		1/4
Opaque door 36M2F	650	36	430x435x155	1SL1105A00	65P18X21		1/2
Transparent door 36M2F	650	36	430x435x155	1SL1205A00	65P18X22		1/2

Consumer units

System pro E comfort MISTRAL65

36 modules

54 modules

48 modules

72 modules

Description	GWT	N° of mod-ules [18 mm]	Dimensions WxHxD [mm]	Order code	Type number	Price	Packaging
Consumer units MISTRAL65 wall - 3 Rows							
Opaque door 36M3F	650	36	320x600x155	1SL1106A00	65P12X31		1/3
Transparent door 36M3F	650	36	320x600x155	1SL1206A00	65P12X32		1/3
Opaque door 54M	650	54	430x600x155	1SL1108A00	65P18X31		1/1
Transparent door 54M	650	54	430x600x155	1SL1208A00	65P18X32		1/1
Consumer units MISTRAL65 wall - 4 Rows							
Opaque door 48M	650	48	320x735x155	1SL1107A00	65P12X41		1/1
Transparent door 48M	650	48	320x735x155	1SL1207A00	65P12X42		1/1
Opaque door 72M	650	72	430x735x155	1SL1109A00	65P18X41		1/1
Transparent door 72M	650	72	430x735x155	1SL1209A00	65P18X42		1/1

Consumer units

System pro E comfort MISTRAL65H

4 modules

8 modules

12 modules

18 modules

24 modules

36 modules

36 modules

54 modules

48 modules

72 modules

Description	GWT	N° of mod-ules [18 mm]	Dimensions WxHxD [mm]	Order code	Type number	Price	Packag-ing
Consumer units MISTRAL65H wall - 1 Row							
Opaque door 4M	750	4	152x202x117	1SLM006500A2110	H65P04X110750		1/24
Transparent door 4M	750	4	152x202x117	1SLM006500A2210	H65P04X120750		1/24
Opaque door 8M	750	8	232x250x154	1SLM006500A2111	H65P08X110750		1/11
Transparent door 8M	750	8	232x250x154	1SLM006500A2211	H65P08X120750		1/11
Opaque door 12M	750	12	320x250x155	1SLM006500A2112	H65P12X110750		1/7
Transparent door 12M	750	12	320x250x155	1SLM006500A2212	H65P12X120750		1/7
Opaque door 18M	750	18	430x250x155	1SLM006500A2113	H65P18X110750		1/4
Transparent door 18M	750	18	430x250x155	1SLM006500A2213	H65P18X120750		1/4
Consumer units MISTRAL65H wall - 2 Rows							
Opaque door 24M	750	24	320x435x155	1SLM006500A2114	H65P12X210750		1/4
Transparent door 24M	750	24	320x435x155	1SLM006500A2214	H65P12X220750		1/4
Opaque door 36M2F	750	36	430x435x155	1SLM006500A2115	H65P18X210750		1/2
Transparent door 36M2F	750	36	430x435x155	1SLM006500A2215	H65P18X220750		1/2
Consumer units MISTRAL65H wall - 3 Rows							
Opaque door 36M3F	750	36	320x600x155	1SLM006500A2116	H65P12X310750		1/3
Transparent door 36M3F	750	36	320x600x155	1SLM006500A2216	H65P12X320750		1/3
Opaque door 54M	750	54	430x600x155	1SLM006500A2118	H65P18X310750		1/1
Transparent door 54M	750	54	430x600x155	1SLM006500A2218	H65P18X320750		1/1
Consumer units MISTRAL65H wall - 4 Rows							
Opaque door 48M	750	48	320x735x155	1SLM006500A2117	H65P12X410750		1/1
Transparent door 48M	750	48	320x735x155	1SLM006500A2217	H65P12X420750		1/1
Opaque door 72M	750	72	430x735x155	1SLM006500A2119	H65P18X410750		1/1
Transparent door 72M	750	72	430x735x155	1SLM006500A2219	H65P18X420750		1/1

Consumer units

System pro E comfort MISTRAL65 with terminals

8 modules

12 modules

18 modules

18 modules

24 modules

Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL65 wall - 8 modules						
Opaque door 8M 12SM	8	650	232x250x154	1SLM006501A1101	65P08X11A	1/11
Transparent door 8M 12SM	8	650	232x250x154	1SLM006501A1201	65P08X12A	1/11
Consumer units MISTRAL65 wall - 12 modules						
Opaque door 12M 22SM	12	650	320x250x155	1SLM006501A1102	65P12X11A	1/7
Transparent door 12M 22SM	12	650	320x250x155	1SLM006501A1202	65P12X12A	1/7
Consumer units MISTRAL65 wall - 18 modules						
Opaque door 18M 12SM	18	650	430x250x155	1SLM006501A1103	65P18X11Z	1/4
Transparent door 18M 12SM	18	650	430x250x155	1SLM006501A1203	65P18X12Z	1/4
Consumer units MISTRAL65 wall - 18 modules						
Opaque door 18M 32SM	18	650	430x250x155	1SLM006502A1103	65P18X11A	1/4
Transparent door 18M 32SM	18	650	430x250x155	1SLM006502A1203	65P18X12A	1/4
Consumer units MISTRAL65 wall - 24 modules						
Opaque door 24M 24SM	24	650	320x435x155	1SLM006501A1104	65P12X21Z	1/4
Transparent door 24M 24SM	24	650	320x435x155	1SLM006501A1204	65P12X22Z	1/4

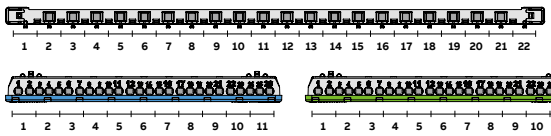
24 modules

36 modules

36 modules

Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL65 wall - 24 modules						
Opaque door 24M 42SM	24	650	320x435x155	1SLM006502A1104	65P12X21A	1/4
Transparent door 24M 42SM	24	650	320x435x155	1SLM006502A1204	65P12X22A	1/4

Consumer units MISTRAL65 wall - 36 modules						
Opaque door 36M2F 52SM	36	650	430x435x155	1SLM006501A1105	65P18X21A	1/2
Transparent door 36M2F 52SM	36	650	430x435x155	1SLM006501A1205	65P18X22A	1/2



Consumer units MISTRAL65 wall - 36 modules						
Opaque door 36M3F 42SM	36	650	320x600x155	1SLM006501A1106	65P12X31A	1/3
Transparent door 36M3F 42SM	36	650	320x600x155	1SLM006501A1206	65P12X32A	1/3

Consumer units

System pro E comfort MISTRAL65 with terminals

48 modules

54 modules

72 modules

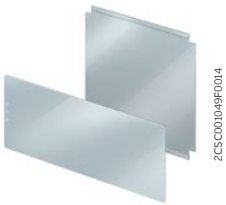
Description	N° of modules [18 mm]	GWT	Dimensions W x H x D [mm]	Order code	Type number	Packaging
Consumer units MISTRAL65 wall - 48 modules						
Opaque door 48M 52SM	48	650	320x735x155	1SLM006501A1107	65P12X41A	1/1
Transparent door 48M 52SM	48	650	320x735x155	1SLM006501A1207	65P12X42A	1/1
Consumer units MISTRAL65 wall - 54 modules						
Opaque door 54M 52SM	54	650	430x600x155	1SLM006501A1108	65P18X31A	1/1
Transparent door 54M 52SM	54	650	430x600x155	1SLM006501A1208	65P18X32A	1/1
Consumer units MISTRAL65 wall - 72 modules						
Opaque door 72M 52SM	72	650	430x735x155	1SLM006501A1109	65P18X41A	1/1
Transparent door 72M 52SM	72	650	430x735x155	1SLM006501A1209	65P18X42A	1/1

Consumer units

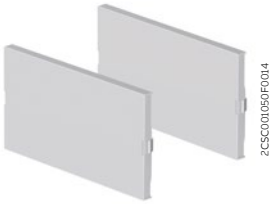
Accessories for System pro E comfort MISTRAL65/MISTRAL65H

Opaque door

Transparent door



Base plates



Blind panel

Description	Order code	Type number	Price	Packaging
Opaque door				
Opaque door 4M MISTRAL65	1SL1900A00	1SLM006500A1900		1/15
Opaque door 8M MISTRAL65	1SL1902A00	1SLM006500A1902		1/20
Opaque door 12M MISTRAL65	1SL1904A00	1SLM006500A1904		1/10
Opaque door 18M MISTRAL65	1SL1906A00	1SLM006500A1906		1/20
Opaque door 24M / 48M MISTRAL65	1SL1908A00	1SLM006500A1908		1/6
Opaque door 36M (3 rows) MISTRAL65	1SL1910A00	1SLM006500A1910		1/10
Opaque door 36M (2 rows) / 72M MISTRAL65	1SL1912A00	1SLM006500A1912		1/14
Opaque door 54M MISTRAL65	1SL1914A00	1SLM006500A1914		1/8
Transparent door				
Transparent door 4M MISTRAL65	1SL1901A00	1SLM006500A1901		1/15
Transparent door 8M MISTRAL65	1SL1903A00	1SLM006500A1903		1/20
Transparent door 12M MISTRAL65	1SL1905A00	1SLM006500A1905		1/10
Transparent door 18M MISTRAL65	1SL1907A00	1SLM006500A1907		1/20
Transparent door 24M / 48M MISTRAL65	1SL1909A00	1SLM006500A1909		1/6
Transparent door 36M (3 rows) MISTRAL65	1SL1911A00	1SLM006500A1911		1/10
Transparent door 36M (2 rows) / 72M MISTRAL65	1SL1913A00	1SLM006500A1913		1/14
Transparent door 54M MISTRAL65	1SL1915A00	1SLM006500A1915		1/8
Base plates				
Metal base plate 12M MISTRAL65	1SL1920A00	1SLM006500A1920		1/12
Metal base plate 2x12M MISTRAL65	1SL1921A00	1SLM006500A1921		1/4
Metal base plate 18M MISTRAL65	1SL1922A00	1SLM006500A1922		1/8
Metal base plate 2x18M MISTRAL65	1SL1923A00	1SLM006500A1923		1/4
Blind panel				
Central blind panel 12M MISTRAL65 *	1SL1945A00	1SLM006500A1945		1/15
Blind panel 12M MISTRAL65	1SL1946A00	1SLM006500A1946		1/20
Central blind panel 18M MISTRAL65 **	1SL1947A00	1SLM006500A1947		1/30
Blind panel 18M MISTRAL65	1SL1948A00	1SLM006500A1948		1/30

* Blind panel for the central rowof MISTRAL65 36 modules (3 x 12)
** Blind panel for the central rowof MISTRAL65 54 modules (3 x 18)

Consumer units

Accessories for System pro E comfort MISTRAL65/MISTRAL65H

Wall fixing brackets

Module cover

Lock

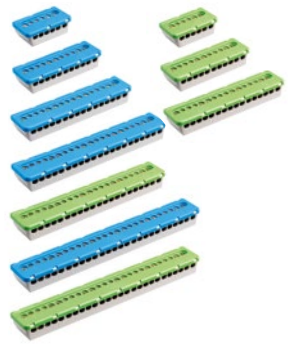
Cable gland

Adapter for trunking

Junction unit

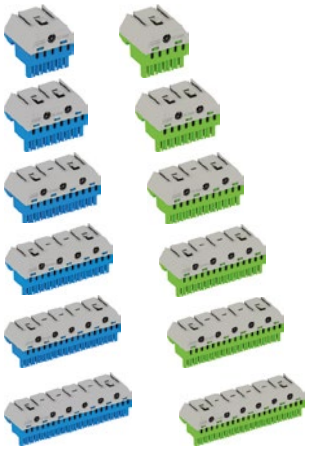
Description	Order code	Type number	Price	Packaging
Other accessories				
Wall fixing brackets (4 pcs) MISTRAL65	1SL1927A00	1SLM006500A1927		1/30
Module cover 12M MISTRAL65	1SL1929A00	1SLM006500A1929		5/180
Sealing kit MISTRAL65	1SL1950A00	1SLM006500A1950		1/50
Lock with key MISTRAL65	1SL1931A00	1SLM006500A1931		1/10
Cable glands				
Cable gland Ø 16	1SL1935A00	1SLM006500A1935		10/100
Cable gland Ø 20	1SL1936A00	1SLM006500A1936		10/100
Cable gland Ø 25	1SL1937A00	1SLM006500A1937		10/100
Cable gland Ø 32	1SL1938A00	1SLM006500A1938		5/50
Adapter				
Adapter for trunking MISTRAL65	1SL1942A00	1SLM006500A1942		1/10
Junction unit				
Junction unit Ø 28,5 MISTRAL65	1SL1949A00	1SLM006500A1949		10/400

Consumer units
Terminal blocks



MISTRAL41 – Terminal blocks

Description	Maximum current [A]	Order code	Type number	Packaging
Terminal block				
Terminal block N 3 x 16 mm²+3 x 6 mm²	100	1SPE007715F0731	41Z57	5/270
Terminal block N 5 x 16 mm²+6 x 6 mm²	100	1SPE007715F0732	41Z58	5/150
Terminal block N 7 x 16 mm²+9 x 6 mm²	100	1SPE007715F0733	41Z59	5/120
Terminal block N 9 x 16 mm²+12 x 6 mm²	100	1SPE007715F0734	41Z60	5/90
Terminal block N 11 x 16 mm²+15 x 6 mm²	100	1SPE007715F0735	41Z61	5/90
Terminal block PE 3 x 16 mm²+3 x 6 mm²	100	1SPE007715F0741	41Z62	5/270
Terminal block PE 5 x 16 mm²+6 x 6 mm²	100	1SPE007715F0742	41Z63	5/150
Terminal block PE 7 x 16 mm²+9 x 6 mm²	100	1SPE007715F0743	41Z64	5/120
Terminal block PE 9 x 16 mm²+12 x 6 mm²	100	1SPE007715F0744	41Z65	5/90
Terminal block PE 11 x 16 mm²+15 x 6 mm²	100	1SPE007715F0745	41Z66	5/90



MISTRAL41 – Terminal blocks screwless

Description	Maximum current [A]	Order code	Type number	Packaging
Terminal block screwless				
Terminal block screwless N 5 x 1,5–4mm²	63	1SPE007715F9701	41Z70	5/280
Terminal block screwless N 5 x 1,5–4 mm²+1 x 25 mm²	63	1SPE007715F9702	41Z71	5/180
Terminal block screwless N 8 x 1,5–4 mm²+2 x 25 mm²	63	1SPE007715F9703	41Z72	5/150
Terminal block screwless N 11 x 1,5–4 mm²+3 x 25 mm²	63	1SPE007715F9704	41Z73	5/100
Terminal block screwless N 14 x 1,5–4 mm²+4 x 25 mm²	63	1SPE007715F9705	41Z74	5/90
Terminal block screwless N 17 x 1,5–4 mm²+5 x 25 mm²	63	1SPE007715F9706	41Z75	5/70
Terminal block screwless N 20 x 1,5–4 mm²+6 x 25 mm²	63	1SPE007715F9707	41Z76	5/60
Terminal block screwless PE 5 x 1,5–4 mm²+1 x 25 mm²	63	1SPE007715F9712	41Z77	5/180
Terminal block screwless PE 8 x 1,5–4 mm²+2 x 25 mm²	63	1SPE007715F9713	41Z78	5/150
Terminal block screwless PE 11 x 1,5–4 mm²+3 x 25 mm²	63	1SPE007715F9714	41Z79	5/100
Terminal block screwless PE 14 x 1,5–4 mm²+4 x 25 mm²	63	1SPE007715F9715	41Z80	5/90
Terminal block screwless PE 17 x 1,5–4 mm²+5 x 25 mm²	63	1SPE007715F9716	41Z81	5/70
Terminal block screwless PE 20 x 1,5–4 mm²+6 x 25 mm²	63	1SPE007715F9717	41Z82	5/60

MISTRAL41 – Terminal block carriers

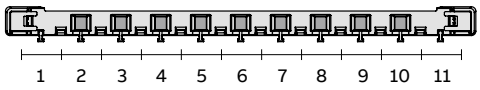
Description	Order code	Type number	Packaging
Terminal carriers			
Carrier 8M	1SPE007715F0751	41Z67	5/280
Carrier 12M	1SPE007715F0752	41Z68	5/225
Carrier 18M	1SPE007715F0753	41Z69	5/150

Consumer units

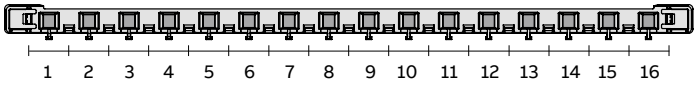
Terminal blocks

Terminal block carriers

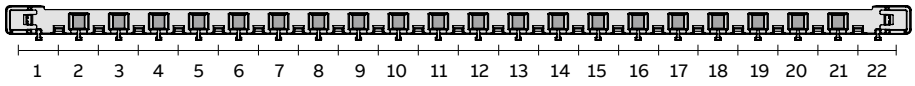
1SPE007715F0751



1SPE007715F0752

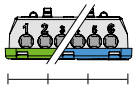


1SPE007715F0753

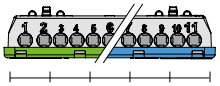


Terminal blocks

1SPE007715F0741
1SPE007715F0731

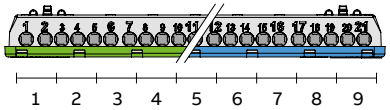


1SPE007715F0742
1SPE007715F0732

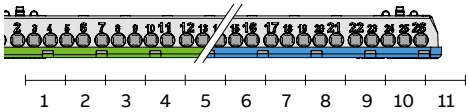


1SPE007715F0743
1SPE007715F0733

1SPE007715F0744
1SPE007715F0734

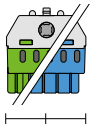


1SPE007715F0745
1SPE007715F0735



Terminal blocks screwless

1SPE007715F9712
1SPE007715F9702



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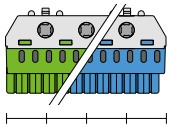
1SPE007715F9703

1SPE007715F9714
1SPE007715F9704



1SPE007715F9715
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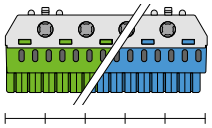

1SPE007715F9716
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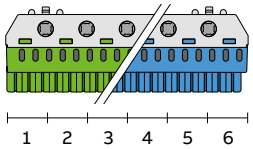
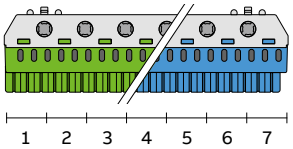
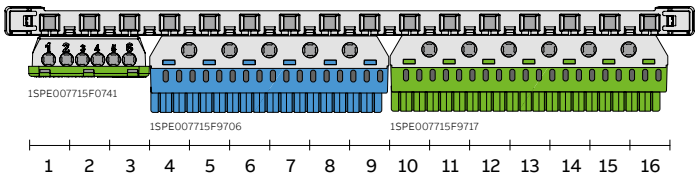


1SPE007715F9717
1SPE007715F9707



Assembly examples

1SPE007715F0752



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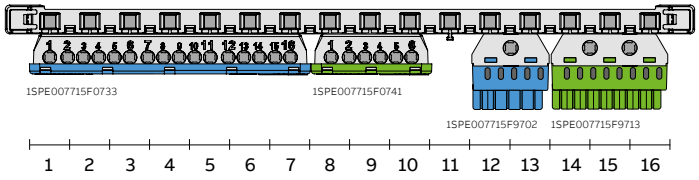

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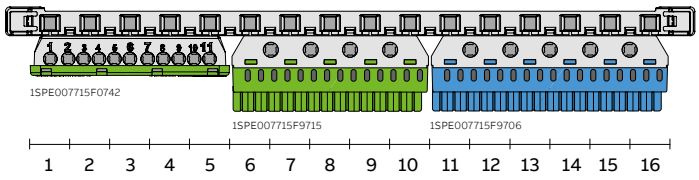


Consumer units

Terminal blocks for MISTRAL series

MISTRAL41 – Terminal bars

Description	Order code	Type number
Terminal bars		
Terminal bar 5 holes D.4.5 mm	M125310000	41Z28
Terminal bar 10 holes D.4.5 mm and 3 holes D.5.6 mm	M125320000	41Z29
Terminal bar 16 holes D.4.5 mm and 3 holes D.5.6 mm	M125330000	41Z30
Terminal bar 15 holes D.4.5 mm and 6 holes D.5.6 mm	M125340000	41Z31
Terminal bar 19 holes D.4.5 mm and 6 holes D.5.6 mm	M125350000	41Z32

MISTRAL41 – Terminal bar carriers

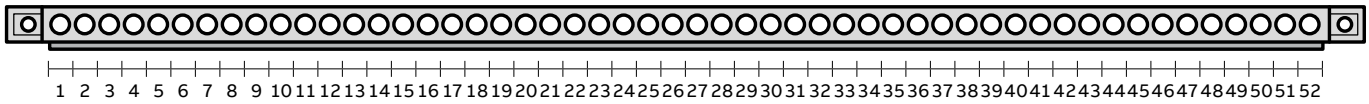
Description	Order code	Type number
Terminal carrier		
Carrier for 8 moduls	1SLM004100A1953	41Z25
Carrier for 12 modules	1SLM004100A1954	41Z26
Carrier for 18 modules	1SLM004100A1955	41Z27

Consumer units

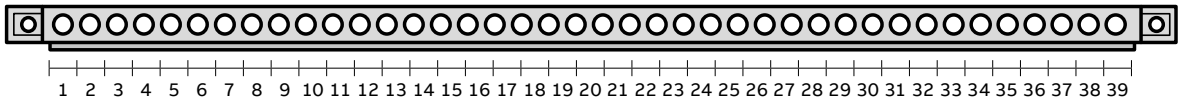
Terminal blocks – assembly examples

Terminal bar carriers

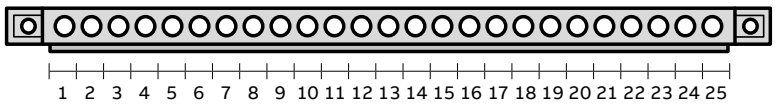
1SLM004100A1955



1SLM004100A1954

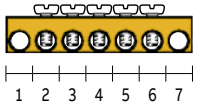


1SLM004100A1953



Terminal bars

12531



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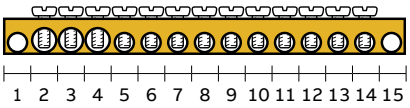

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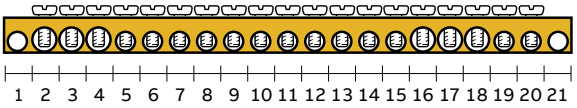

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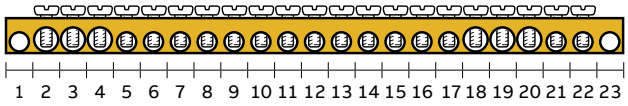

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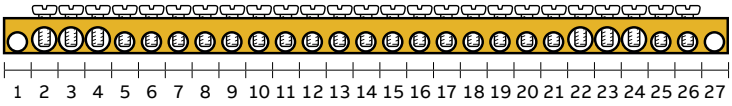

Assembly examples

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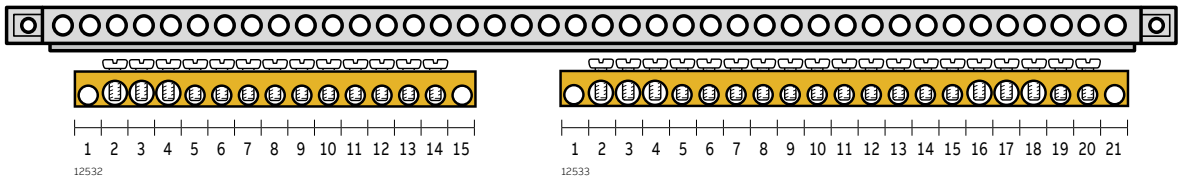

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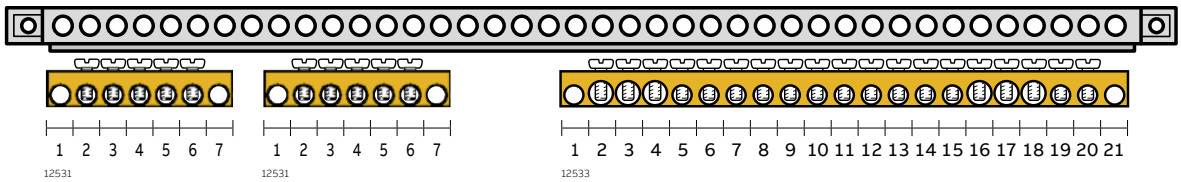


Electrical installation solutions for buildings
Automation boards

Index

Characteristics of Gemini switchboards	19/2
Basic configuration - Gemini switchboards	19/6
Components for automation applications	19/9
Components for distribution and mixed applications	19/14
Accessories	19/22
Fast selection table	19/27
General characteristics of SR2 Enclosures	19/30
Selection table - SR2 enclosures	19/33
Ordering codes - SR2 enclosures	19/34
General characteristics and ordering codes - SR2 EMC enclosures	19/50
Ordering codes - SR2 EMC enclosures	19/51
General characteristics and applications - SRX enclosures	19/52
Selection of the structure - SRX enclosures	19/54
Ordering codes - SRX enclosures	19/55

Automation boards
Characteristics of Gemini switchboards

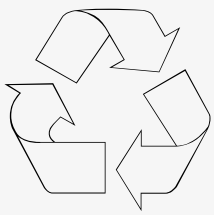
Gemini, something completely different in switchboards
Gemini range is revolutionizing the market of low voltage electric insulating switchboards. The reason for this is that it is the first switchboard made in thermoplastic material, to which the co-injection molding technique gives the same mechanical characteristics as polyester. This means that it is extremely sturdy, with its rigid covering and expanded internal core. Moreover, it contains no fiberglass, a material that with time rises to the surface, jeopardizing the functioning and safety of switchboards made in polyester with which it is usually mixed. Gemini switchboards have an IP66 protection degree (IP30 with the door open and with the appropriate components installed) and a very high resistance to chemical and atmospheric agents. This is the reason why Gemini guarantees excellent performances even in particularly severe operating conditions.

Strong outside and versatile inside, Gemini fits to any application
There are as many configurations as ABB devices for low voltage automation and distribution: moulded-case circuit breakers, modular circuit breakers, monitoring, control and signaling devices, wiring ducts and electrical connection systems. All of these components give to “Gemini system” an enormous range of specific solutions that are easy to assemble with the snap-on system. Nothing can be compared to Gemini, even when they reach the end of their life cycle because they are totally ecologically compatible. The material used to manufacture Gemini is 100% recyclable. Polyester, on the other hand, cannot be recovered. Moreover, to make sure that correct disposal procedures are followed, instructions are provided about how to identify materials and what to do with the product once it has served its useful purpose.

Gemini switchboards are made through co-injection, technology and ABB is the first manufacturer to use it as a molding technique. This process obtains a “sandwich” of two materials with a compact external covering and an expanded core, guaranteeing the highest level of mechanical protection against impacts (IK10) without the need to add hardening substances. Competitors products are usually made in polyester that is usually mixed with fiberglass; passing the time, it rises to the surface and become a risk factor for skin burns that may occur during installation and maintenance through accidental contact. Moreover, it causes deterioration of the technical strength and lasting characteristics of the material to which it is added. Gemini, on the other hand, keeps its mechanical characteristics in the long term. The co-injection technique makes the manufacturing operations themselves safe because the products are completely finished when they come out of the mold without any flash or other surface irregularities.

Quality and safety
Gemini is designed and built in compliance with reference Standards that define its constructional and functional characteristics. In particular, the IP66 degree certifies that Gemini is totally protected against the infiltration of solid bodies and is resistant to the penetration of jets of water similar to sea waves. Absolute protection is provided by double insulation even in the event of indirect contact. Even in very difficult application circumstances, Gemini gives high-level performances, with resistance to fire and abnormal heat up to a temperature of 750 °C and a functioning temperature from -25 °C to 100 °C. Moreover, the material with which it is manufactured retains its characteristics for a long time since it is not subject to corrosion by chemical or atmospheric agents. Also it does not turn yellow when exposed to UV rays.

Photovoltaic
In a typical photovoltaic plant the direct current section comprises a generator consisting of strings composed of photovoltaic modules connected in series. The Gemini series of IP65 sealed switchboards are ideal for use as field combiners or as parallel switchboards, i.e. for outdoor installation near the modules. ABB has a range which is currently unique on the market, and has developed a family of plug & operate solutions, i.e. a series of finished, wired and certified switchboards to meet the needs of a huge range of plant types: from single string for residential applications to large-scale solar fields.



Gemini is made in thermoplastic material that is 100% recyclable. The environmental compatibility of Gemini is an important objective right from the design phase where the Life Cycle Assessment (LCA) procedure, defined in 1990 during the Society of Environmental Toxicology and Chemistry Conference (Vermont, USA), is followed.
Life Cycle Assessment is an objective method for analyzing the energy and environmental loads relating to a product, process or activity, carried out by identifying and quantifying energy, the materials used and emissions released into the environment. Divided into four phases, the assessment covers the entire life cycle of the product, process or activity, from the extraction and transformation of raw materials, to manufacturing and distribution, and from usage to recycling and decommissioning.

Automation boards
Characteristics of Gemini switchboards

A switchboard that is not just one system, but three
Gemini is the result of design work conducted by ABB with the direct collaboration of switchboard manufacturers, installers and designers who considered versatility to be the discriminating element when purchasing a switchboard, equally important as sturdiness and reliability. Gemini fulfils this requirement by providing a product that can be used for three different purposes: in addition to the basic configuration, it also provides the components necessary to be equipped as an automation switchboard or as a distribution and mixed switchboard. In any application, compatibility with ABB protection, control and monitoring portfolio of products means that a real system of integrated and complementary functions can be configured.
Typical examples of some Gemini applications can be seen in industrial production departments and on board machines, in galvanization plants and varnishing cabins, in petrol stations and carwashing plants, boiler-rooms, car parks, shopping malls and in any other environments where distribution and automation demand specific safety requirements and service continuity.
Gemini is also flexible with six different box sizes and internal space to accommodate from 24 to 216 DIN modules.
To respect safety standards, all the switchboard components can be fixed to the base plate or to the box frame without using any tool; wiring is carried out from the front followed by snapping the base plate or the frame onto the box.
The patented frame is fitted with the cable duct incorporated in the uprights.
In its design, Gemini repeats the shapes and RAL 7035 grey color of ABB switchboards with which it can be configured as a main protection switchboard.

Experience and innovation
Gemini has two central aspects. It is both the result of years of work in the production of installation material and the expression of the most advanced technology, from design to distribution. In ABB laboratories, computer aided design programs simulate all types of application conditions, translating virtual checks into a process to improve the Gemini performances so that it will be able to respond more accurately to market requirements.
Through Internet at URL www.abb.com/edesign-software you could download free of charge ABB “e-design” software; it includes softwares for the configuration and budgeting of Gemini in distribution and automation mixed applications.

Distribution switchboards
System pro E power

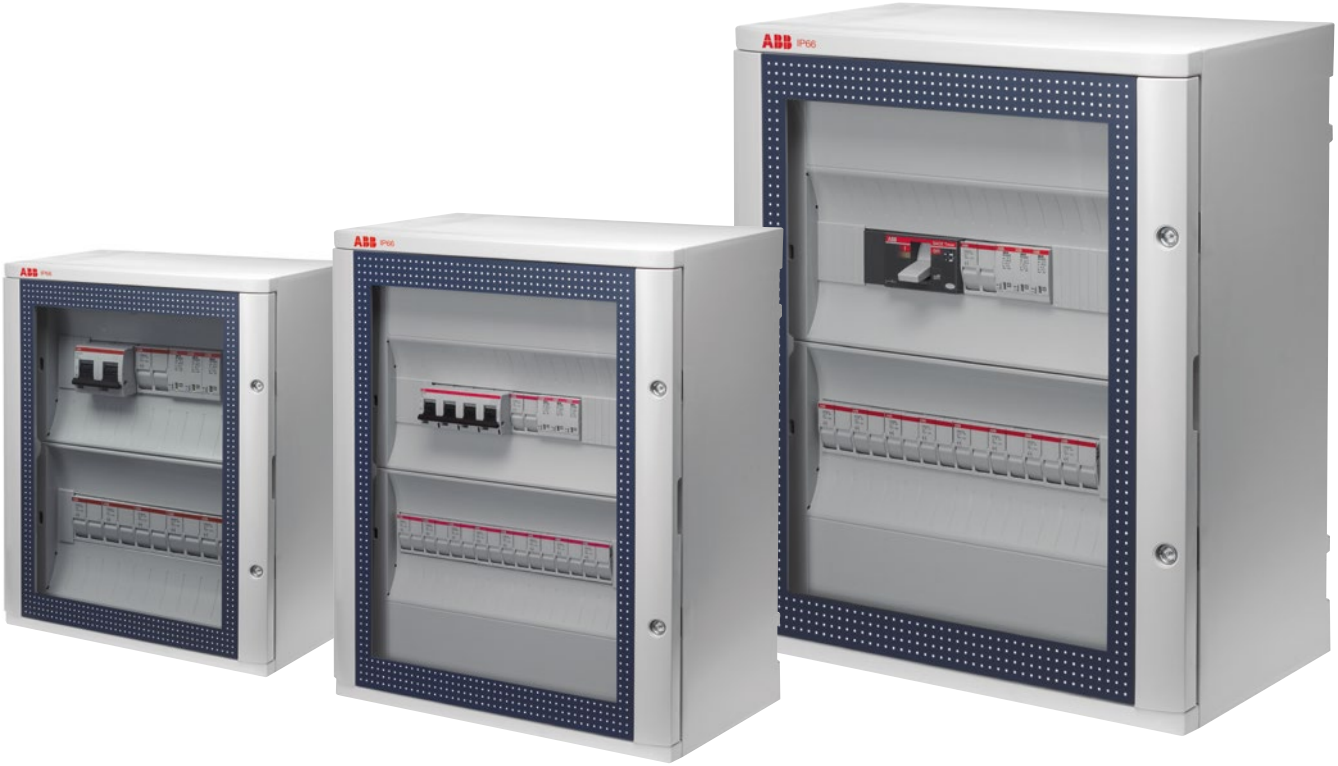


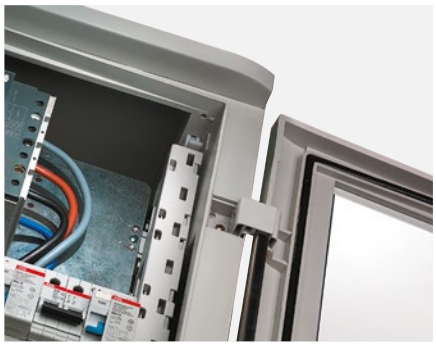
ABB IP66

Automation boards

Basic configuration - Gemini switchboards

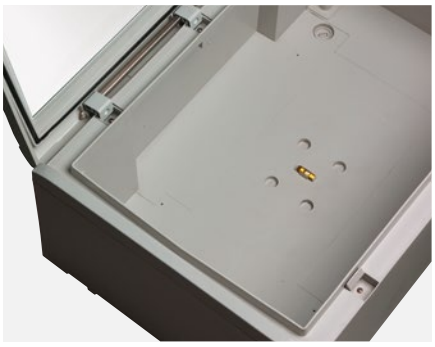
In the basic configuration, Gemini switchboards are composed of boxes in six different sizes ranging from 335x400x210 mm to 840x1005x360 mm (WxHxD, external measurements) and with opaque or transparent doors. In both versions, the doors are reversible and clip onto the hinges without the need to use tools; the fact that they open at an angle of more than 180° means that it is easy to work on the components installed inside the switchboard.
The seal applied by extrusion along the sides of the doors guarantees IP66 degree of protection. Access to the inside of the switchboard is protected by a standard double bit lock that can be replaced by locks of another type available in the accessories. Boxes and doors can be requested either separately or as combined “box + door” codes, to make filling out the order form more flexible. Inside the packages, the door is always wrapped separately and inserted inside a pocket that protects it from accidental damage until wiring is completed and the switchboard is installed.
Hole-cover plugs to guarantee IP protection and double insulation for wall mounting are also supplied with the pack together with the instruction sheet.

Specifications	
Protection	IP66 (IEC EN 60529) Class II insulation
Strength	Thermoplastic material moulded in co-injection Resistance to abnormal heat and fire up to a temperature of 750 °C (IEC EN 60695-2-11) IK10 (IEC EN 50102) degree of resistance to impacts Protection against chemical and atmospheric agents (water, saline solutions, acids, basic agents, mineral oils, UV rays) Operating temperature -25 °C ÷ +100 °C
Performances	Rated service voltage up to 690 V Rated insulating DC voltage up to 1000 V Rated insulating AC voltage up to 1500 V
Flexibility of use	6 sizes from 335x400x210 mm to 840x1005x360 mm (WxHxD, external dimensions) DIN 24 to 216 modules
Installation	Snap-on mounting of all components in compliance with safety Standards
Quality and environment	Compliance with CEI EN 62208 international reference Standard, qualification for the requirements of CEI EN 60439 Standard, IMQ mark according to EN 62208 Standard. 100% recyclable



Gemini doors open at an angle of more than 180° giving easy access to the devices installed inside the switchboard.

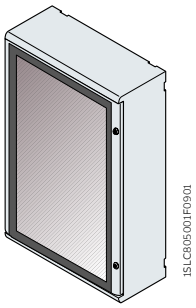
No tools are needed for installation. The doors hook onto the hinges with special hinge pins and are reversible.



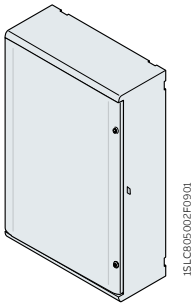
The special structure of the inner perimeter of the box ensures further protection against the penetration of water. The box is supplied with a spirit level.

Boxes and doors

- Available in 6 sizes
- Single order code combined with box and transparent and opaque door
- Pack with door dismounted and wrapped separately
- Door designed so that it can be hooked onto hinges at both vertical sides and mounted without the use of tools
- To be mounted to the wall using internal holes or fixing brackets supplied as accessories
- Door opening at an angle of more than 180°
- RAL 7035 grey color
- Doors supplied with 2 standard double bit locks (3 for sizes 5 and 6) that can be replaced with locks for ciphered key or with square/triangular impression (the standard triplex key is suitable for use with three types of impressions).



Transparent door switchboard



Opaque door switchboard

Transparent door

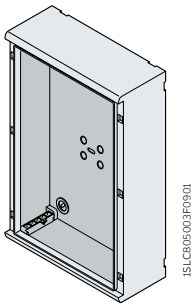
Size	External		Modules		Code	Unit/Pack
	Dimensions WxHxD (mm)	Internal WxHxD (mm)	Max No. DIN mod.	No. vertical mod. (H=150 mm)		
1	335x400x210	250x300x180	24 (12x2)	2	1SL0211A00	1/1
2	460x550x260	375x450x230	54 (18x3)	3	1SL0212A00	1/1
3	460x700x260	375x600x230	72 (18x4)	4	1SL0213A00	1/1
4	590x700x260	500x600x230	96 (24x4)	4	1SL0214A00	1/1
5	590x855x360	500x750x330	120 (24x5)	5	1SL0215A00	1/1
6	840x1005x360	750x900x330	216 (36x6)	6	1SL0216A00	1/1

Opaque door

Size	External		Modules		Code	Unit/Pack
	Dimensions WxHxD (mm)	Internal WxHxD (mm)	Max No. DIN mod.	No. vertical mod. (H=150 mm)		
1	335x400x210	250x300x180	24 (12x2)	2	1SL0201A00	1/1
2	460x550x260	375x450x230	54 (18x3)	3	1SL0202A00	1/1
3	460x700x260	375x600x230	72 (18x4)	4	1SL0203A00	1/1
4	590x700x260	500x600x230	96 (24x4)	4	1SL0204A00	1/1
5	590x855x360	500x750x330	120 (24x5)	5	1SL0205A00	1/1
6	840x1005x360	750x900x330	216 (36x6)	6	1SL0206A00	1/1

Automation boards

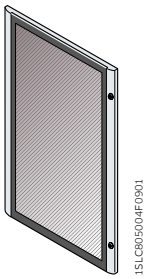
Basic configuration - Gemini switchboards



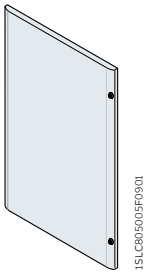
Single box

Single boxes

Size	External dimensions WxHxD (mm)	Internal WxHxD (mm)	Code	Unit/Pack
1	335x400x210	250x300x180	1SL0221A00	1/1
2	460x550x260	375x450x230	1SL0222A00	1/1
3	460x700x260	375x600x230	1SL0223A00	1/1
4	590x700x260	500x600x230	1SL0224A00	1/1
5	590x855x360	500x750x330	1SL0225A00	1/1
6	840x1005x360	750x900x330	1SL0226A00	1/1



Transparent door



Opaque door

Single doors

Transparent door

Size	Box dimensions WxHxD (mm)	Code	Unit/Pack
1	335x400x210	1SL0241A00	1/1
2	460x550x260	1SL0242A00	1/1
3	460x700x260	1SL0243A00	1/1
4	590x700x260	1SL0244A00	1/1
5	590x855x360	1SL0245A00	1/1
6	840x1005x360	1SL0246A00	1/1

Opaque door

Size	Box dimensions WxHxD (mm)	Code	Unit/Pack
1	335x400x210	1SL0231A00	1/1
2	460x550x260	1SL0232A00	1/1
3	460x700x260	1SL0233A00	1/1
4	590x700x260	1SL0234A00	1/1
5	590x855x360	1SL0235A00	1/1
6	840x1005x360	1SL0236A00	1/1

Automation boards

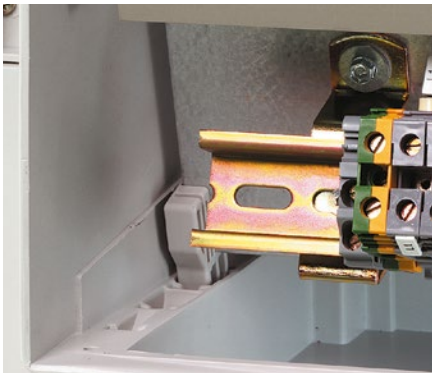
Components for automation applications

Gemini switchboards are designed to be perfectly compatible with ABB components for low voltage control and monitoring. For these applications they can be equipped with modular devices belonging to the System pro M range, with Tmax moulded-case circuit-breakers and control and signaling devices, creating a truly integrated automation system. When deciding the Gemini layout for control and monitoring applications, not only is it possible to select the box and door in the required size, but you can also select the base plate in one of the three versions in the range.

After wiring with the ducts and the Fix-O-Rapid device, the special standard adjustable feet and hooks must be fitted onto the base plate, allowing it to be inserted inside the box at up to seven different depths and three further levels of adjustment: no tools need to be used to carry out these operations. To finish the job, the inner door can be mounted (reversible and in insulating material), guaranteeing IP30 degree of protection when the switchboard door is open. No tools are needed unless the inner door is equipped with buttons, warning lights, etc.

The fixing hooks and feet supplied in the standard versions are applied without having to use tools, making it possible to install the base plate at seven different depths inside the switchboard. They can also be adjusted at three further positions.

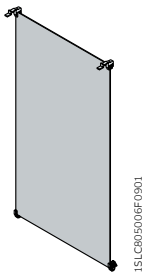
Application of the inner door guarantees IP40 degree of protection when the switchboard door is open.



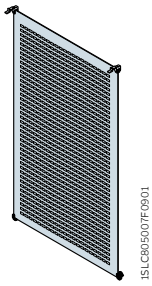
Example of the configuration of a switchboard for an automation application: some ABB control and protection devices are installed on the plate. The inner door is fitted with light-signaling devices.

Automation boards

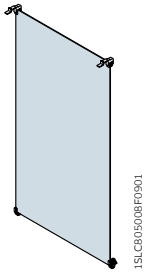
Components for automation applications



Blank metal base plate



Drilled metal base plate



Insulating material base plate

Base plates

- Available in three versions in blank or drilled metal and insulating material
- Positioning at 3 different depths for size 1, 4 different depths for sizes 2-3-4 and 7 different depths for sizes 5-6 (adjustments with 30 mm pitch)
- Supplied with feet and hooks adjustable at three further positions (with 7.5 mm pitch)
- Snap-on mounting
- Plates can also be mounted directly on the base with the special kit.

Blank metal

Size of the switchboard	Code	Unit/Pack
1	1SL0259A00	1/6
2	1SL0260A00	1/6
3	1SL0261A00	1/4
4	1SL0262A00	1/4
5	1SL0263A00	1/4
6	1SL0264A00	1/2

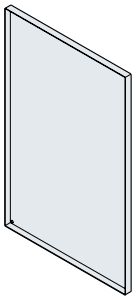
Drilled metal

Size of the switchboard	Code	Unit/Pack
1	1SL0275A00	1/6
2	1SL0276A00	1/6
3	1SL0277A00	1/4
4	1SL0278A00	1/4
5	1SL0279A00	1/4
6	1SL0280A00	1/2

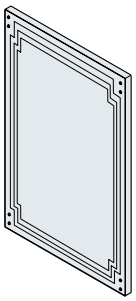
Insulating material

Size of the switchboard	Code	Unit/Pack
1	1SL0267A00	1/6
2	1SL0268A00	1/6
3	1SL0269A00	1/4
4	1SL0270A00	1/4
5	1SL0271A00	1/4
6	1SL0272A00	1/2

Description	Code	Unit/Pack
Base mounting kit for metal plate	1SL0383A00	1/10



Inner door, sizes 1-2



Inner door, sizes 3-4-5-6

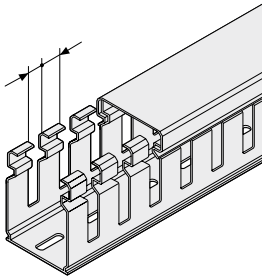
Inner doors

- Made in insulating material
- IP30 degree of protection with door open
- Designed so that door can be hinged onto both vertical sides
- Snap-on mounting and fixing

Size of the switchboard	Code	Unit/Pack
1	1SL0251A00	1/4
2	1SL0252A00	1/4
3	1SL0253A00	1/2
4	1SL0254A00	1/2
5	1SL0255A00	1/2
6	1SL0256A00	1/1

Automation boards

Components for automation applications



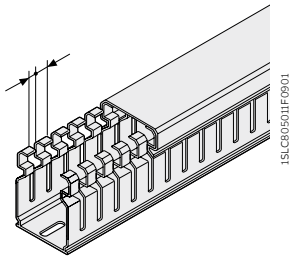
Wiring duct with 8/12 mm slot

Wiring ducts

- Made in self-extinguishing thermoplastic material (UL 94 V0), resistant to abnormal heat and fire up to 960 °C (IEC 695-2-1)
- RAL 7030 grey color
- Available in version with 8/12 mm and 4/6 mm slots
- Base strip designed to snap onto Fix-O-Rapid
- Available in standard lengths of 2 m

With 8/12 mm slots

Dimensions WxH (mm)	Code	Weight (kg/m)	Unit/ Pack- meters
15x17	05 019	0,06	46
25x30	05 033	0,21	58
25x40	05 043	0,25	48
25x60	05 063	0,24	34
25x80	05 083	0,29	28
25x100	05 094	0,46	20
40x30	05 035	0,27	40
40x40	05 045	0,31	30
40x60	05 065	0,34	22
40x80	05 085	0,38	36
40x100	05 095	0,53	28
60x30	05 037	0,38	52
60x40	05 047	0,46	40
60x60	05 067	0,47	32
60x80	05 087	0,50	24
60x100	05 096	0,73	20
80x40	05 049	0,47	32
80x60	05 069	0,52	24
80x80	05 089	0,59	16
80x100	05 097	0,91	14
100x40	05 051	0,55	24
100x60	05 071	0,59	20
100x80	05 091	0,68	16
100x100	05 098	1,06	8
120x40	05 053	0,65	20
120x60	05 073	0,73	14
120x80	05 093	0,89	12
150x100	05 099	1,37	8



Wiring duct with 4/6 mm slot

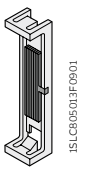
With 4/6 mm slots

Dimensions WxH (mm)	Code	Weight (kg/m)	Unit/ Pack-meters
15x17	05 119	0,06	46
25x30	05 133	0,21	58
25x40	05 143	0,25	48
25x60	05 163	0,24	34
25x80	05 183	0,29	28
25x100	05 194	0,46	20
40x30	05 135	0,27	40
40x40	05 145	0,31	30
40x60	05 165	0,34	22
40x80	05 185	0,38	36
40x100	05 195	0,53	28
60x30	05 137	0,38	52
60x40	05 147	0,46	40
60x60	05 167	0,47	32
60x80	05 187	0,50	24
60x100	05 196	0,73	20
80x40	05 149	0,47	32
80x60	05 169	0,52	24
80x80	05 189	0,59	16
80x100	05 197	0,91	14
100x40	05 151	0,55	24
100x60	05 171	0,59	20
100x80	05 191	0,68	16
100x100	05 198	1,06	8
120x40	05 153	0,65	20
120x60	05 173	0,73	14
120x80	05 193	0,89	12
150x100	05 199	1,37	8

Fix-O-Rapid

Rapid mounting device for attaching wiring ducts to the base plate: it snaps onto the plate after drilling a ø 7 mm hole. Two Fix-O-Rapid devices are enough for each wiring duct section. Fix-O-Rapid guarantees maximum insulation since it does not involve the use of any metal component inside the wiring duct. If the wrong wiring duct is selected, it can be dismounted and a version with the same base and a different height can be attached to the Fix-O-Rapid.

Description	Code	Unit/ Pack-no. pieces
Rapid mounting device for wiring duct, W 25 mm	05 270	20/600
Rapid mounting device for wiring duct, W 40 mm	05 272	20/600
Rapid mounting device for wiring duct, W 60 mm	05 274	20/600
Rapid mounting device for wiring duct, W 80 mm	05 276	20/240
Rapid mounting device for wiring duct, W 100 mm	05 278	20/240
Rapid mounting device for wiring duct, W 120 mm	05 280	20/240
Rapid mounting device for wiring duct, W 150 mm	05 282	20/240



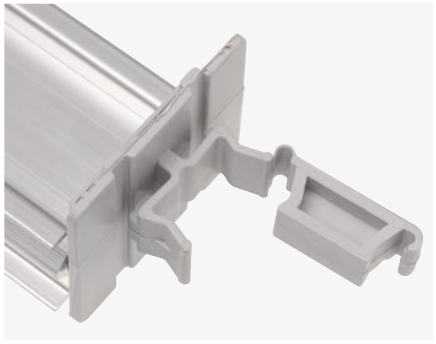
Fix-O-Rapid

Automation boards

Components for distribution and mixed applications

In distribution and mixed applications, the Gemini switchboard is designed to be fitted with System pro M modular devices and Tmax moulded-case circuit breakers. The frame is the load-bearing element of the configuration: DIN rails, partial modular plates and the special Tmax mounting and cabling kits are snapped onto the uprights.
All the components can be adjusted to six different depths with a pitch of 12.5 mm and arranged at heights with standard installation pitch of 150, 225 and 300 mm and a distance of 75 mm between the rows.

Blank or drilled front panels are applied to protect the equipment and these can be hinged onto both sides; the cables are housed inside the vertical wiring duct integrated in the uprights according to an exclusive ABB patent. Wiring is carried out by pulling out the frame and working from the front; the ergonomic grip and the standard feet and snap-on hooks supplied make it easy to insert it inside the switchboard after the job is finished.



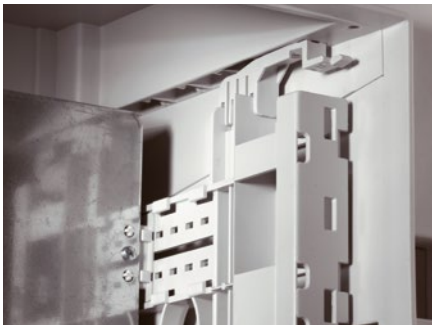
The DIN rail is supplied with special hooks already in position for attaching to the uprights.

The upright with the incorporated wiring duct is an exclusive ABB patent that rationalizes the path of cables inside the switchboard.

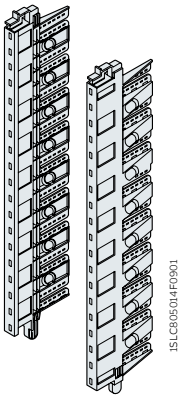
The depth at which the DIN rail, the modular plates, the kit for fixing the Tmax circuit breakers and the wiring duct are positioned can be adjusted with a simple sliding movement.

The frame can be extracted to make wiring operations easier at the workbench.

The blank and drilled panels are hinged onto both sides; the description of the installed components can be kept in the special compartment protected by a transparent, hinged flange.



Fixing hooks and feet allow the frame to be snap-mounted inside the box.

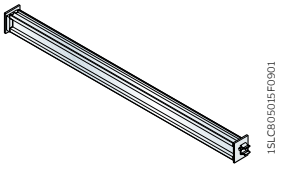


Uprights

Uprights

- Incorporated vertical wiring duct (ABB patent)
- Snap-on mounting of all components (installation pitch of 75 mm)
- Snap-on insertion into box
- Depth of installed components adjusted at a pitch of 12.5 mm (4 positions for uprights of size 1 and 6 positions for the remaining ones)
- Ergonomic grip to make it easy to insert and extract

Size of the switchboard	Code	Unit/Pack
1	1SL0283A00	1/4
2	1SL0284A00	1/4
3	1SL0285A00	1/4
4	1SL0285A00	1/4
5	1SL0286A00	1/2
6	1SL0287A00	1/1



DIN rail

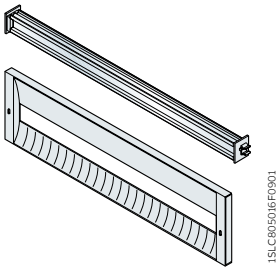
DIN rails

- Two-sided version
- Supplied with mounting supports that snap onto uprights
- Depth adjustment on uprights
- Designed so that rapid Unifix L mounting bars can be snapped on

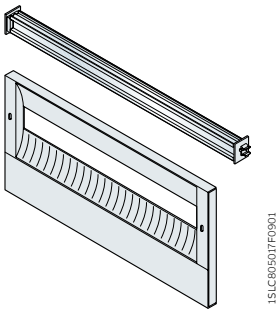
Size of the switchboard	Modules per row	Code	Unit/Pack
1	12	1SL0290A00	1/10
2	18	1SL0291A00	1/10
3	18	1SL0291A00	1/10
4	24	1SL0292A00	1/10
5	24	1SL0292A00	1/10
6	36	1SL0293A00	1/10

Automation boards

Components for distribution and mixed applications



Drilled panel, 1 module



Drilled panel, 1 + 1/2 module

Drilled panels

- Supplied with DIN rail complete with supports to snap onto uprights and adjustable in depth
- Available in 1 module (H 150 mm) and 1+1/2 module (H 225 mm, sizes 2-6) dimensions
- Designed to be hinged onto both vertical sides
- Snap-on mounting onto uprights (in compliance with reference Standards a tool must be used for removing the panel)
- Document pocket for storing descriptions of installed devices

1 module

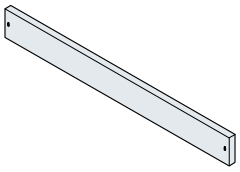
Size of the switchboard	Code	Unit/Pack
1	1SL0307A00	1/8
2	1SL0308A00	1/8
3	1SL0308A00	1/8
4	1SL0309A00	1/4
5	1SL0309A00	1/4
6	1SL0310A00	1/2

1 + 1/2 module

Size of the switchboard	Code	Unit/Pack
2	1SL0313A00	1/8
3	1SL0313A00	1/8
4	1SL0314A00	1/4
5	1SL0314A00	1/4
6	1SL0315A00	1/2

Blank panels

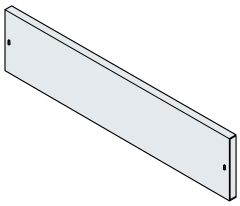
- Available in 1/2 module (H 75 mm), 1 module (H 150 mm) and 2 modules (H 300 mm) dimensions
- H 150 mm and H 300 panels designed to be hinged onto both vertical sides
- Snap-on mounting onto uprights (in compliance with reference Standards a tool must be used for removing the panel)



Blank panel, 1/2 module

1/2 module

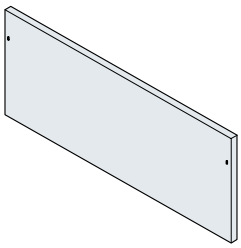
Size of the switchboard	Code	Unit/Pack
1	1SL0318A00	1/10
2	1SL0319A00	1/10
3	1SL0319A00	1/10
4	1SL0320A00	1/6
5	1SL0320A00	1/6
6	1SL0321A00	1/4



Blank panel, 1 module

1 module

Size of the switchboard	Code	Unit/Pack
1	1SL0324A00	1/8
2	1SL0325A00	1/8
3	1SL0325A00	1/8
4	1SL0326A00	1/4
5	1SL0326A00	1/4
6	1SL0327A00	1/4



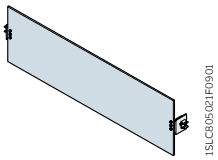
Blank panel, 2 modules

2 modules

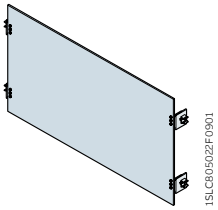
Size of the switchboard	Code	Unit/Pack
1	1SL0330A00	1/6
2	1SL0331A00	1/6
3	1SL0331A00	1/6
4	1SL0332A00	1/4
5	1SL0332A00	1/4
6	1SL0333A00	1/4

Automation boards

Components for distribution and mixed applications



Partial modular plate, 1 module



Partial modular plate, 2 modules

Partial modular plates

- Available in 1 module (H 150 mm) and 2 module (H 300 mm, sizes 2-6) dimensions
- Snap-on mounting onto uprights with depth adjustment.

1 module

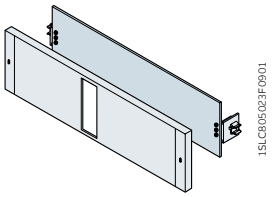
Size of the switchboard	Code	Unit/Pack
1	1SL0296A00	1/6
2	1SL0297A00	1/4
3	1SL0297A00	1/4
4	1SL0298A00	1/4
5	1SL0298A00	1/4
6	1SL0299A00	1/2

2 modules

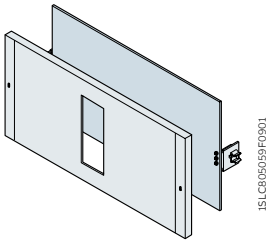
Size of the switchboard	Code	Unit/Pack
2	1SL0302A00	1/4
3	1SL0302A00	1/4
4	1SL0303A00	1/4
5	1SL0303A00	1/4
6	1SL0304A00	1/2

Kit for installing Tmax XT moulded-case circuit breakers

- For installing Tmax XT moulded-case circuit breakers in fixed version with front terminals
- Composed of a plate with special drilled holes and a protection panel with vertical slots that can be hinged on both sides and snap-on mounted (in compliance with reference Standards a tool must be used for removing the panel)
- Available for sizes 2-6
- Snap-on mounting onto uprights with the possibility of adjusting the plate depth



H 150 mm



H 300 mm

H 150 mm

Size of the switchboard	Code	Unit/Pack
2	1SL0373A00	1/4
3	1SL0373A00	1/4
4	1SL0374A00	1/4
5	1SL0374A00	1/4
6	1SL0375A00	1/2

H 300 mm

Size of the switchboard	Code	Unit/Pack
2	1SL0376A00	1/4
3	1SL0376A00	1/4
4	1SL0377A00	1/4
5	1SL0377A00	1/4
6	1SL0378A00	1/2

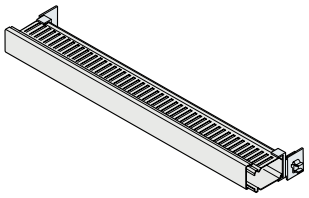
Automation boards

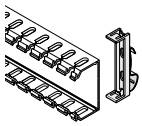
Components for distribution and mixed applications

Kit selection

Size	Installation	XT1				XT2				XT3				XT4			
		3p	4p	3p D	4p D	3p	4p	3p D	4p D	3p	4p	3p D	4p D	3p	4p	3p D	4p D
1	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	O1	■	■	■	■	■	■	■	■	■	■			■	■		
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	K1	■	■	■													
	K2		■	■	■					■	■	■	■				
	O1	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■
	O2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	K1	■	■	■													
	K2		■	■	■					■	■	■	■				
	O1	■	■	■	■	■	■	■	■	■	■	■		■	■	■	
	O2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	K1	■	■	■													
	K2		■	■	■					■	■	■	■				
	O1	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■
	O2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	K1	■	■	■													
	K2		■	■	■					■	■	■	■				
	O1	■	■	■	■	■	■	■	■	■	■	■		■	■	■	
	O2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
6	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	K1	■	■	■													
	K2		■	■	■					■	■	■	■				
	O1	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■
	O2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Caption
- D, installation on DIN rail
- K1, installation with Tmax kit H = 150 (holes made)
- K2, installation with Tmax kit H = 300 (holes made)
- O1, installation on modular plate (1 module, H = 150 mm)
- O2, installation on modular plate (2 modules, H = 300 mm)
- T, installation on total base plate





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Wiring kit

Wiring kits

- omposed of wiring duct in versions 25x60 mm and 40x60 mm (WxH, 8-12 mm slots) and Fix-O-Rapid
- Snap-on mounting on uprights with depth adjustment

Wiring duct 25x60 mm

Size of the switchboard	Code	Unit/Pack
1	1SL0353A00	1/4
2	1SL0354A00	1/4
3	1SL0354A00	1/4
4	1SL0355A00	1/4
5	1SL0355A00	1/4
6	1SL0356A00	1/4

Wiring duct 40x60 mm

Size of the switchboard	Code	Unit/Pack
1	1SL0360A00	1/4
2	1SL0361A00	1/4
3	1SL0361A00	1/4
4	1SL0362A00	1/4
5	1SL0362A00	1/4
6	1SL0363A00	1/4

Automation boards
Accessories

Gemini switchboards have the same accessories for both automation and distribution applications, ensuring maximum versatility and integration of functions. In particular, the ventilation and anti-condensation kits make it even safer for the devices to run, protecting them from the effects of heat and humidity while the wall brackets, pole mounting kit and pedestal make it easier to install the switchboards in any context.

Three different kinds of locks are supplied for the doors with which it is possible to replace the standard double bit model. The universal drill bit can be used to open the side branch connections. Module covers hide the unused modules of the DIN rail guaranteeing IP40 protection when the door is open in distribution and mixed configurations.

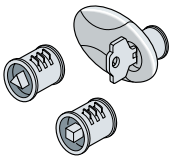
The standard locks supplied can be replaced by the version with ciphered key and handle or with square or triangular impression.

Gemini wall-mounted installation using the special mounting brackets.

The fact that Gemini switchboards can also be pole-mounted (see photo above) or mounted on a special pedestal (see photo at the side) makes them suitable for any application situation.

Locks

Available in three versions with ciphered key and handle, with triangular and square impressions.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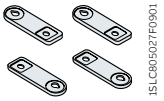
Locks

Description	Code	Unit/Pack
Lock with Yale type ciphered key and handle	1SL0340A00	1/10
Lock with triangular impression	1SL0341A00	1/10
Lock with square impression	1SL0339A00	1/10
Tamper-proof locking kit (code 1SLO340A00 included)	1SL0458A00	1/10
Gemini standard lock	1SL0459A00	1/10

Mounting elements

Guarantee optimum wall, pole and floor mounting conditions.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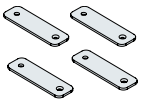
Plastic wall brackets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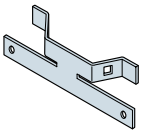
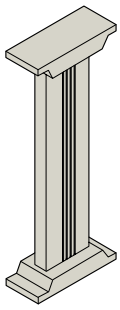
Iron wall brackets


1SLC805028F0901

Pole mounting kit


1SLC805029F0901

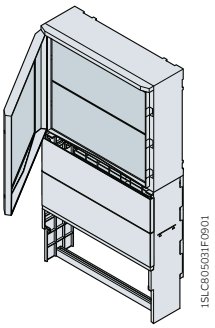
Floor mounting pedestal

Description	Code	Unit/Pack
Horizontal and vertical plastic wall brackets (4 pieces)*	1SL0342A00	1/10
Iron wall brackets (4 pieces	1SL0401A00	1/10
Pole mounting kit for sizes 1 switchboards**	1SL0343A00	1/4
Pole mounting kit for sizes 2-3 switchboards**	1SL0344A00	1/4
Pole mounting kit for sizes 4-5 switchboards**	1SL0345A00	1/2
Pole mounting kit for size 6 switchboards**	1SL0346A00	1/2
IP43 Floor mounting pedestal for sizes 1-4	1SL0352A00	1/1

* There are two types of inserts for adapting brackets to ø 6 e 8 mm fixing devices.
** The kit includes two elements for fixing the upper and the lower part of the switchboard.

Pedestals

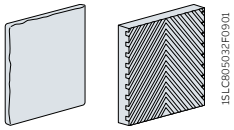
Allows the application of the Gemini switchboard to the ground without the need to prepare the construction of concrete footings or foundations when the pedestal is buried.


1SLC805031F0901

Pedestal

Description	Code	Unit/Pack
Pedestal Gemini size 4	1SL0464A00	1/1
Pedestal Gemini size 5	1SL0465A00	1/1
Pedestal Gemini size 6	1SL0466A00	1/1

Automation boards
Accessories



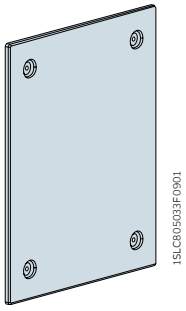
Ventilation kit

IP21/54 ventilation kits

- Composed of plastic grills and filter to ensure switchboard ventilation.
- Degree of protection without filter: IP21.
- Degree of protection with filter: IP54.
- Preassembled seal.

Description	Dimensions (mm)	Code	Unit/Pack
Grid + air flow kit	105x105	EN0105K	1/1
Grid + air flow kit (not suitable for size. 1)	150x150	EN0150K	1/1
Grid + air flow kit (not suitable for size. 1)	204x204	EN0204K	1/1

Note: screws not included; use 4 self lock screws 2,9x13 or ask for order code 1SL0384A00.

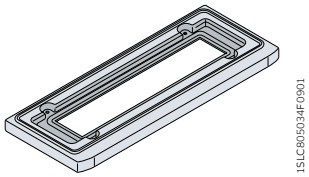


Base cover

Base covers

For aesthetic as well as functional purposes, in particular for pedestal installations.

Size of the switchboard	Code	Unit/Pack
1	1SL0385A00	1/4
2	1SL0386A00	1/4
3	1SL0387A00	1/2
4	1SL0388A00	1/2
5	1SL0389A00	1/2
6	1SL0390A00	1/2



Coupling kit

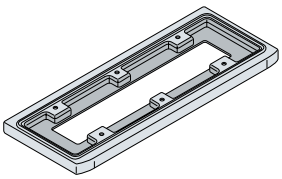
Coupling kits

It follows the aesthetic outline of the boxes.

Description	Code	Unit/Pack
Vertical coupling kit for sizes 2-3 switchboards	1SL0413A00	1/2
Vertical coupling kit for sizes 4 switchboards	1SL0414A00	1/2
Vertical coupling kit for sizes 5 switchboards	1SL0415A00	1/2
Vertical coupling kit for sizes 6 switchboards	1SL0416A00	1/2

Bottom bases H 30

For fixing the Gemini switchboard directly to the floor.

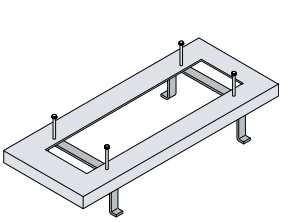


Bottom base

Description	Code	Unit/Pack
Bottom base for size 2-3 switchboards	1SL0423A00	1/2
Bottom base for size 4 switchboards	1SL0424A00	1/2
Bottom base for size 5 switchboards	1SL0425A00	1/2
Bottom base for size 6 switchboards	1SL0426A00	1/2

Fixed frames

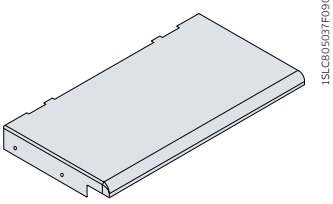
- In combination with bottom base H 30
- For fixing onto poured concrete floors and bases.



Fixed frame

Description	Code	Unit/Pack
Fixed frame for size 2-3 switchboards	1SL0433A00	1/2
Fixed frame for size 4 switchboards	1SL0434A00	1/2
Fixed frame for size 5 switchboards	1SL0435A00	1/2
Fixed frame for size 6 switchboards	1SL0436A00	1/2

Integral covers

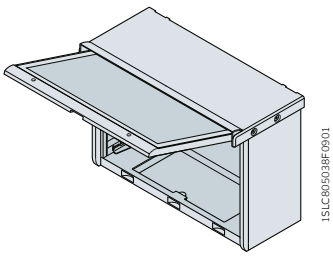


Integral cover

Description	Code	Unit/Pack
Integral cover for size 1 switchboard	1SL0451A00	1/1
INtegral cover for size 2-3 switchboard	1SL0452A00	1/1
Integral cover for size 4 switchboard	1SL0454A00	1/1
Integral cover for size 5switchboard	1SL0455A00	1/1
Integral cover for size 6 switchboard	1SL0456A00	1/1

Horizontal Kits

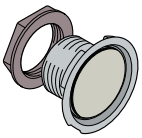
Kit for a proper opening of switchboard upward.



Horizontal Kit Gemini

Description	Code	Unit/Pack
Horizontal Kit Gemini size 3	1SL0470A00	1/1
Horizontal Kit Gemini size 4	1SL0471A00	1/1
Horizontal Kit Gemini size 5	1SL0472A00	1/1
Horizontal Kit Gemini size 6	1SL0473A00	1/1

Automation boards
Accessories



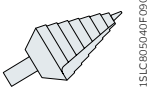
Base socket

Anti-condensation kits

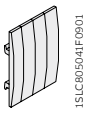
- Kit in special material to prevent condensation from forming inside the switchboard: it include GORE™ MEMBRANE VENTING
- Impermeable to water (pressure): 0.6 bar / 60 sec.
- Air flow: 400 ml/min. (dp = 70 mbar)
- 1 kit for sizes 1-2, 2 kits for sizes 3-4 and 3 kits for sizes 5-6 are recommended to guarantee adequate dissipation; in any case the number of kits to be installed depend on the number and type of devices installed inside the switchboard.
- IP66

Description	Code	Unit/Pack
Anti-condensation kit	1SL0351A00	1/6

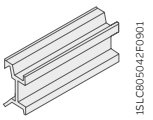
Other accessories



Universal drill bit



Module covers



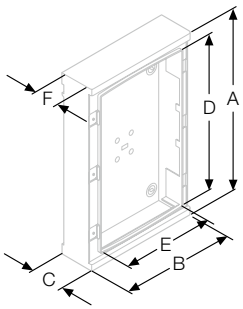
Spacer

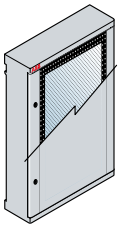
Description	Code	Unit/Pack
Universal drill bit	12894	1/30
Module covers in RAL 7035 grey, 4 modules	12863	25/300
Plastic spacer for installing modular devices and moulded-case circuit breakers at the same depth	12851	10/60
Small bag plate mounting kit	1SL0383A00	1/10
Small bag for ventilation kit	1SL0384A00	10/50

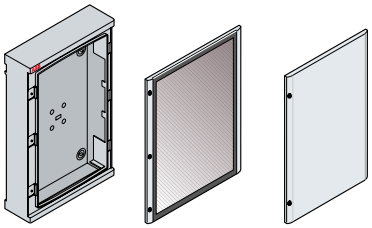
Automation boards

Fast selection table

Basic configuration

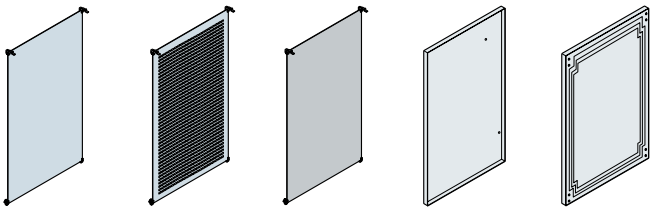


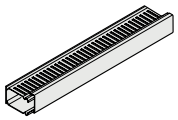




Size	No. of installable DIN modules	No. of vertical mod.	External dimensions			Internal dimensions			Complete switchboard		Box	Door	
	(mod. x row)	(H=150 mm)	A	B	C	D	E	F	Trasparent door	Opaque door		Transparent	Opaque
1	24 (12x2)	2	400	335	210	300	250	180	1SL0211A00	1SL0201A00	1SL0221A00	1SL0241A00	1SL0231A00
2	54 (18x3)	3	550	460	260	450	375	230	1SL0212A00	1SL0202A00	1SL0222A00	1SL0242A00	1SL0232A00
3	72 (18x4)	4	700	460	260	600	375	230	1SL0213A00	1SL0203A00	1SL0223A00	1SL0243A00	1SL0233A00
4	96 (24x4)	4	700	590	260	600	500	230	1SL0214A00	1SL0204A00	1SL0224A00	1SL0244A00	1SL0234A00
5	120 (24x5)	5	855	590	360	750	500	330	1SL0215A00	1SL0205A00	1SL0225A00	1SL0245A00	1SL0235A00
6	216 (36x6)	6	1005	840	360	900	750	330	1SL0216A00	1SL0206A00	1SL0226A00	1SL0246A00	1SL0236A00

Components for automation





Size	Base plate			Inner door	
	Blank	Drilled	Insulating	Former version	New version
1	1SL0259A00	1SL0275A00	1SL0267A00	1SL0251A00	-
2	1SL0260A00	1SL0276A00	1SL0268A00	1SL0252A00	-
3	1SL0261A00	1SL0277A00	1SL0269A00	-	1SL0253A00
4	1SL0262A00	1SL0278A00	1SL0270A00	-	1SL0254A00
5	1SL0263A00	1SL0279A00	1SL0271A00	-	1SL0255A00
6	1SL0264A00	1SL0280A00	1SL0272A00	-	1SL0256A00

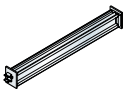
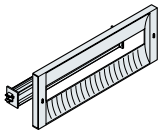
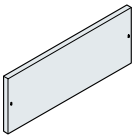
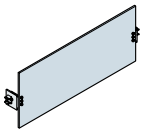
Accessories for distribution

Wiring ducts	Fix-O-Rapid
See pag. 2/8-2/9	See pag. 2/9

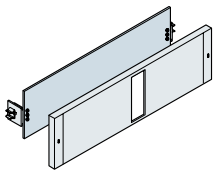
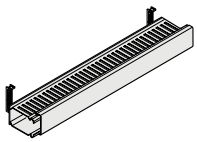
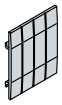
Automation boards

Fast selection table

Components for automation

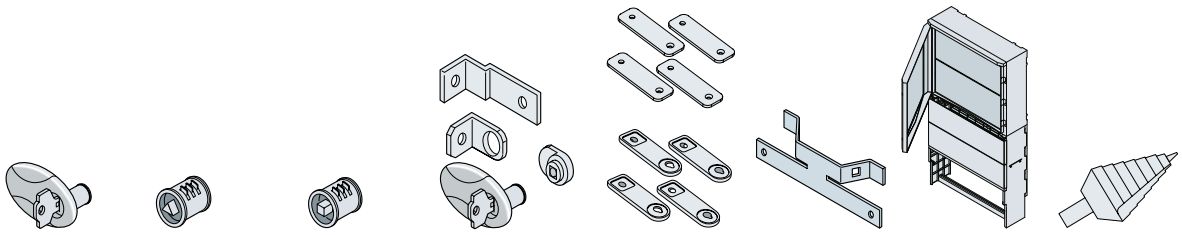
Size	Uprights	DIN rail	Drilled panel		Blank panel			Modular plate	
			H=150 mm	H=225 mm	H=75 mm	H=150mm	H=300 mm	H=150 mm	H=300 mm
1	1SL0283A00	1SL0290A00	1SL0307A00	-	1SL0318A00	1SL0324A00	1SL0330A00	1SL0296A00	-
2	1SL0284A00	1SL0291A00	1SL0308A00	1SL0313A00	1SL0319A00	1SL0325A00	1SL0331A00	1SL0297A00	1SL0302A00
3	1SL0285A00	1SL0291A00	1SL0308A00	1SL0313A00	1SL0319A00	1SL0325A00	1SL0331A00	1SL0297A00	1SL0302A00
4	1SL0285A00	1SL0292A00	1SL0309A00	1SL0314A00	1SL0320A00	1SL0326A00	1SL0332A00	1SL0298A00	1SL0303A00
5	1SL0286A00	1SL0292A00	1SL0309A00	1SL0314A00	1SL0320A00	1SL0326A00	1SL0332A00	1SL0298A00	1SL0303A00
6	1SL0287A00	1SL0293A00	1SL0310A00	1SL0315A00	1SL0321A00	1SL0327A00	1SL0333A00	1SL0299A00	1SL0304A00

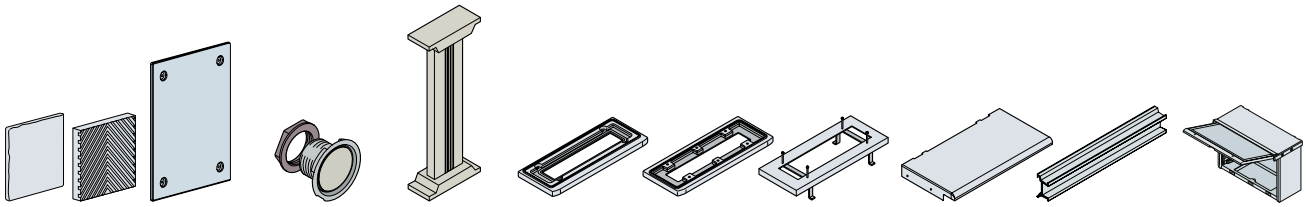
Accessories for distribution

Size	Kit for Tmax XT		x-O-Rapid kit with wiring duct		Module covers RAL 7035
	H. 150 mm	H. 300 mm	25x60 mm	40x60 mm	
1	-	-	1SL0353A00	1SL0360A00	12863
2	1SL0373A00	1SL0376A00	1SL0354A00	1SL0361A00	
3	1SL0373A00	1SL0376A00	1SL0354A00	1SL0361A00	
4	1SL0374A00	1SL0377A00	1SL0355A00	1SL0362A00	
5	1SL0374A00	1SL0377A00	1SL0355A00	1SL0362A00	
6	1SL0375A00	1SL0378A00	1SL0356A00	1SL0363A00	

Accessories common to the whole range



Size	Lock with handle	Lock with triangular impression	Lock with square impression	Anti tampering locking kit	Bounting brackets	Pole installation kit	Pedestal	Universal drill bit	Base mounting kit for metal plate
1	1SL0340A00	1SL0341A00	1SL0339A00	1SL0458A00	See pag. 2/20	1SL0343A00	-	12894	1SL0383A00
2						1SL0344A00	-		
3						1SL0344A00	-		
4						1SL0345A00	1SL0464A00		
5						1SL0345A00	1SL0465A00		
6						1SL0346A00	1SL0466A00		



Size	Ventilation kit	Base cover	Anti condensation kit	Floor pedestal	Coupling kit	Bottom base H 30	Fixed frame	Integral cover	Depth adapter	Horizontal kit
1	See pag. 2/21	1SL0385A00	1SL0351A00	1SL0352A00	-	-	-	1SL0451A00	12851	-
2		1SL0386A00			1SL0413A00	1SL0423A00	1SL0433A00	1SL0452A00		1SL0470A00
3		1SL0387A00			1SL0413A00	1SL0423A00	1SL0433A00	1SL0452A00		1SL0471A00
4		1SL0388A00			1SL0414A00	1SL0424A00	1SL0434A00	1SL0454A00		
5		1SL0389A00		-	1SL0415A00	1SL0425A00	1SL0435A00	1SL0455A00		1SL0472A00
6		1SL0390A00		-	1SL0416A00	1SL0426A00	1SL0436A00	1SL0456A00		1SL0473A00

Automation boards
General characteristics of SR2 Enclosures

The range of SR2 enclosures is a complete offer of monobloc enclosures for constructing small and medium-sized electric automation, switching and control switchboards.

The SR2 enclosures come from the experience ABB has gained over the years in building IP65 metal structures (in accordance with the IEC 60529 Standard), together with the innovative new production process used for construction and patented by ABB.
The typical use of SR2 Enclosures is to make switchgear and controlgear switchboards for a very wide variety of industrial machines: from large machinery with automated production lines or parts of these, down to the typical installations of on-board machine switchboards, boilers, heating plants and so on.

They conform to the EN 62208 Standard “Empty enclosures for low voltage protection switchgear and controlgear assemblies” and allow realization of electrical equipment conforming to the prescriptions of the IEC 60204-1 Standard “Safety of machinery. Electrical equipment of machines” and of the EN 60439- 1 Standard and the new EN 61439-1-2 Standard “Low voltage protection switchgear and controlgear for assemblies”. The degree of protection, in accordance with the IEC 60529 Standard “Degrees of protection of enclosures (IP Code)”, is IP65.

The SR2 enclosures have also passed the control required to obtain the UL (Underwriters Laboratories) and CSA (Canadian Standards Association) Type 12 marks.

The SR2 enclosures also allow secondary distribution switchboards to be made, thanks to the possibility, in the 400, 600 and 800 mm widths, of installing the whole range of apparatus and modular circuit-breakers on DIN rails combined with special pre-drilled and hinged modular front panels, thereby allowing construction of AS/ANS type electrical switchgear conforming to the IEC 60439-1 Standard and the new EN
61439-1-2 Standard. A single line of metalwork structures therefore allows construction of automation and secondary and end distribution electrical switchboards thanks to the availability of a series of accessories (modular panels, DIN rails) and to the possibility of stacking the enclosures.

The SR2 enclosures are available in two versions (blind door or glazed door) and in 23 different dimensions, as well as a further 19 combinations obtained by stacking the enclosures, up to a maximum height of 2000 mm, which guarantee ample selection possibilities for the various end applications.

The SR2 enclosures have been designed to fulfil all the typical needs of the builder or installer of switchgear in the best way possible and the user is presented with a unique ensemble of functional characteristics:

- wide dimensional range
- certified IP65 degree of protection
- internal galvanised sheet mounting plate with 20/10 thickness (made to allow threaded holes to be made easily), adjustable in depth by using a special accessory
- fairlead plate screwed on (at top and bottom) made of 15/10 thick galvanised sheet, with a sealing gasket applied inside
- complete reversibility of the enclosure, so the door can open either on the right or on the lefthand side
- possibility of installing all the apparatus and modular circuit-breakers on a DIN rail combined with a hinged modular panel

The standard colour is RAL 7035 orange peel. On request, the SR2 enclosures can be ordered in a wide range of RAL colours (see page 7/12).

Both the enclosures with glazed door or blind door can be stacked:
stacking is done simply by removing the fairlead plates and inserting the IP65 sealing gasket (GZ....), made of neoprene with closed cells.

Assembly of the stacked enclosures is carried out by means of the same holes used for the fairlead plates.
The door is supplied with the enclosure (single code) so as to reduce the number of articles and assembly times.

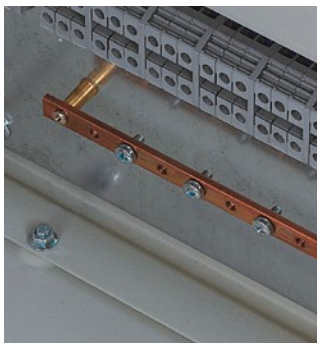
Automation boards
General characteristics of SR2 Enclosures

The range is completed with a series of accessories: brackets for wall assembly, rain shield top cover, locks of various types, internal document pocket, spacers, and spray paint for touching up. It is possible floor fixing by means plinth.

Plastic document pocket, RAL 7035, size A4, the pocket is apply within the solid doors wider than 400 mm, with stickers provided.

Many closure systems can replace the standard closures of the external doors. The inserts are interchangeable and easily replaced by loosening a nut.

The brackets for wall mounting allows installation of the boxes on the wall using the holes located on the back of the enclosure.



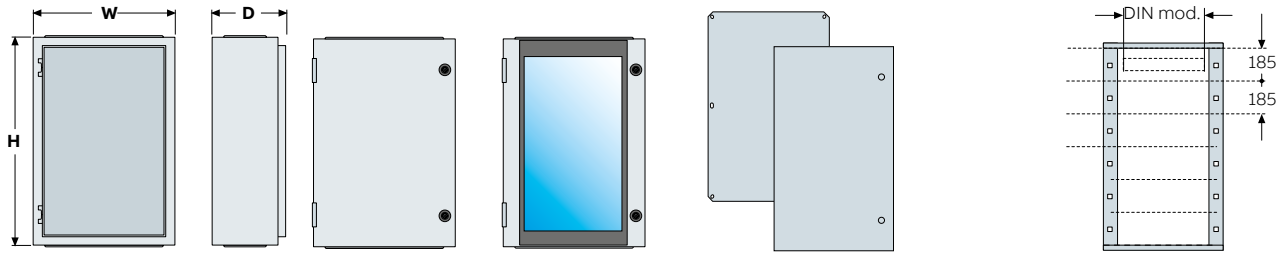
The bars, made of electrolytic copper with M6 threaded holes in 25 mm, can be mounted on mounting plates using the appropriate supports.

Technical characteristics		
Conformity with Standard		IEC 62208, IEC 61439-1-2
Degree of protection		IP65 (IEC 60529) TYPE 12 (Normativa UL)
Degree of mechanical strength		IK10 blind door
		IK09 glazed door
		(IEC 62262)
Certifications		c UL us LISTED Ex II 3 G D
Type of material		Metallic
Installation site		Indoors
Fixing method		floor/wall
Normal service conditions - ambient temperature		from –5 up to +40°C
Operating climate (t°/Ur%)	costant	23°C/83% - 40°C/93%
	variable	23°C/98% - 40°C/98%

Automation boards

Selection table - SR2 enclosures

Quick selection table

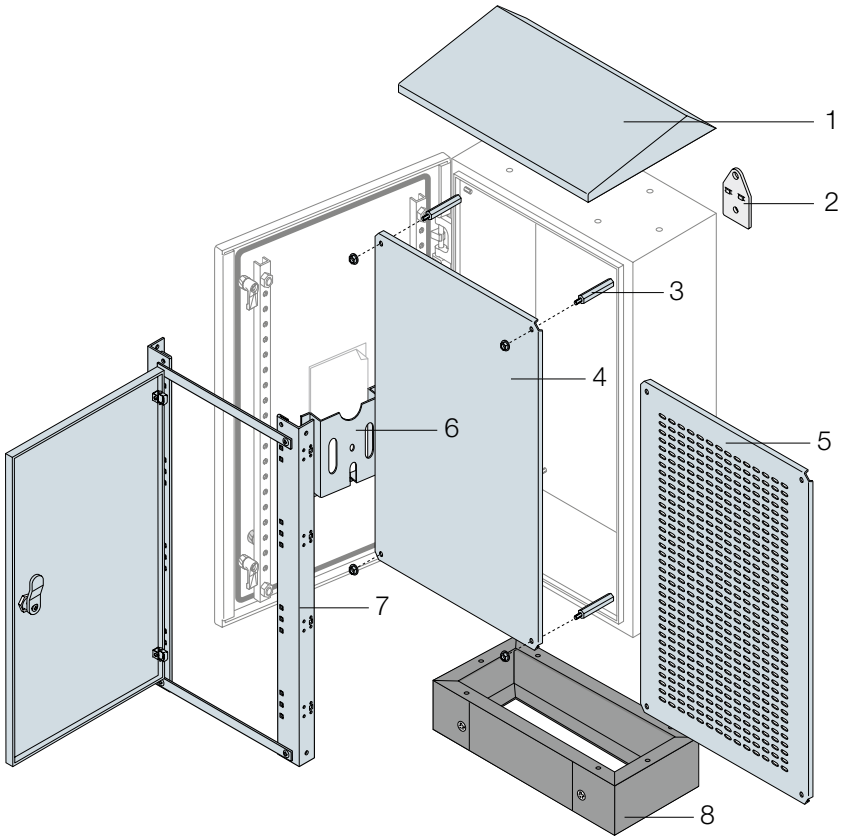


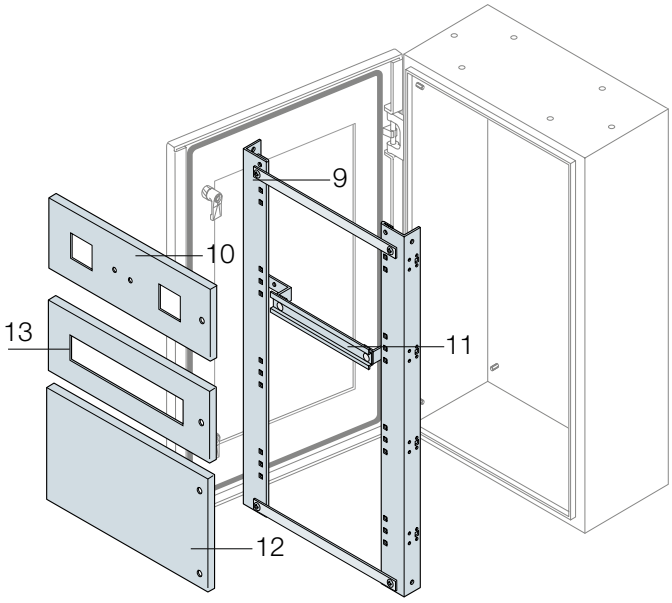
Overall dimensions			Enclosures		Kit for automation		Kit for distribution Supports for mounting modular panels			
H mm	W mm	D mm	Enclosures with blind door + back plate	with glazed door *	Blind counterdoor	Back plate	No. vertical mod. H=185mm	No. DIN mod. per row	Total modules	DIN Supports
300	200	150	SRN3215K							
	300		SRN3315K							
	400		SRN3415K							
400	300	150	SRN4315K							
	300	200	SRN4320K							
	400		SRN4420K							
	600		SRN4620K							
500	300	200	SRN5320K							
	400		SRN5420K	SRN5420VK*	KC5040K	PF5040	2	14	28	KD5040K
	400	250	SRN5425K	SRN5425VK*	KC5040K	PF5040	2	14	28	KD5040K
600	400	200	SRN6420K	SRN6420VK*	KC6040K	PF6040	3	14	42	KD6040K
	400	250	SRN6425K	SRN6425VK*	KC6040K	PF6040	3	14	42	KD6040K
	600		SRN6625K							
700	500	200	SRN7520K	SRN7520VK*	KC7050K	PF7050				
	500	250	SRN7525K	SRN7525VK*	KC7050K	PF7050				
800	600	250	SRN8625K	SRN8625VK*	KC8060K	PF8060	4	25	100	KD8060K
	600	300	SRN8630K	SRN8630VK*	KC8060K	PF8060	4	25	100	KD8060K
	800		SRN8830K							
1000	600	250	SRN10625K	SRN10625VK*	KC1060K	PF1060	5	25	125	KD1060K
	600	300	SRN10630K	SRN10630VK*	KC1060K	PF1060	5	25	125	KD1060K
	800		SRN10830K	SRN10830VK*	KC1080K	PF1080	5	36	180	KD1080K
1200	600	300	SRN12630K	SRN12630VK*	KC1260K	PF1260	6	25	150	KD1260K
	800		SRN12830K	SRN12830VK*	KC1280K	PF1280	6	36	216	KD1280K

* The mounting plate must be ordered separately.

Automation boards

Ordering codes - SR2 enclosures





1 - Spray protection roof
Page 19/43

2 - Wall-mounting brackets
Page 19/39

3 - Spacers for back plates
Page 19/38

4 -Blind internal plate
Page 19/37

5 - Slotted internal plate
Page 19/38

6 - Document pocket
Page 19/44

7 - Counterdoor
Page 19/37

8 - Plinth
Page 19/39

9 - Frame for DIN rail
Page 19/41

10 - Modular panels for apparateus
Page 19/42

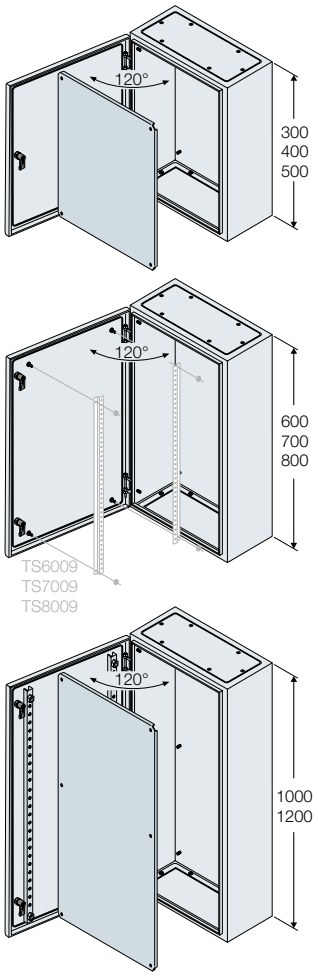
11 - DIN rail
Page 19/42

12 - Blind modular panels
Page 19/42

13 - Modular panel for DIN rail
Page 19/42

SR2 Enclosures with blind door (internal plate included)

The enclosures with blind door, typically for making automation switchgear, are already fitted with the internal galvanised sheet mounting plate.

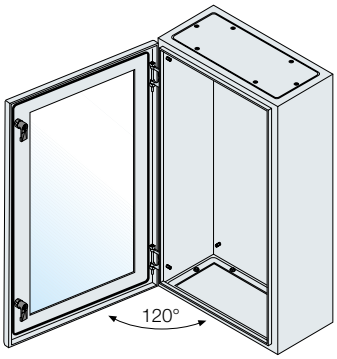


Enclosures with blind door (internal plate included)				
Dimensions (mm)				**Package/ No. of pieces**
H	**W**	**D**	**Code**	
300 (1)	200	150	SRN3215K	1/1
	300	150	SRN3315K	1/1
	400	150	SRN3415K	1/1
400 (1)	300	150	SRN4315K	1/1
	300	200	SRN4320K	1/1
	400	200	SRN4420K	1/1
	600	200	SRN4620K	1/1
500 (1)	300	200	SRN5320K	1/1
	400	200	SRN5420K	1/1
	400	250	SRN5425K	1/1
600	400	200	SRN6420K	1/1
	400	250	SRN6425K	1/1
	600	250	SRN6625K	1/1
700	500	200	SRN7520K	1/1
	500	250	SRN7525K	1/1
800	600	250	SRN8625K	1/1
	600	300	SRN8630K	1/1
	800	300	SRN8830K	1/1
1000*	600	250	SRN10625K	1/1
	600	300	SRN10630K	1/1
	800	300	SRN10830K	1/1
1200*	600	300	SRN12630K	1/1
	800	300	SRN12830K	1/1

(1) The enclosures with height less or egual to 500mm hare only a closing box.
* Plates height 1000 / 1200mm have six mounting points .

Automation boards

Ordering codes - SR2 enclosures



Enclosures with glazed door

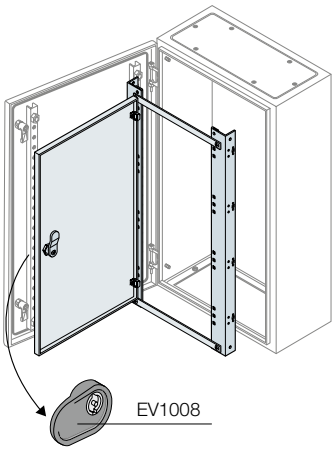
The enclosures with glazed door are also used for distribution configurations. The internal equipment is made, alternatively, by selecting the special kits:

- KD... (Distribution Kit) consisting of a pair of functional uprights for assembly of the modular panels (to be ordered separately) and of any compensation panel.

The modular panels, which can also be installed on the enclosures with blind door with the help of the KD.. kit itself, are all hinged and have vertical modularity of 185 mm.

Enclosures with glazed door				
Dimensions (mm)				
H	W	D	Code	Package/ No. of pieces
500 (1)	400	200	SRN5420VK	1/1
	400	250	SRN5425VK	1/1
600	400	200	SRN6420VK	1/1
	400	250	SRN6425VK	1/1
700	500	200	SRN7520VK	1/1
	500	250	SRN7525VK	1/1
800	600	250	SRN8625VK	1/1
	600	300	SRN8630VK	1/1
1000	600	250	SRN10625VK	1/1
	600	300	SRN10630VK	1/1
	800	300	SRN10830VK	1/1
1200	600	300	SRN12630VK	1/1
	800	300	SRN12830VK	1/1

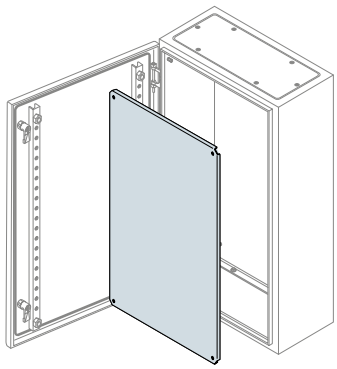
(1) The enclosures with height less or egual to 500mm hare only a closing box.



Blind counterdoor

The internal counterdoor guarantees IP20 degree of protection. Made of steel sheet 15/10mm thick, galvanized and painted orange peel RAL 7035 colour, complete with the EV1008 ergonomic box and insert with double tongue.

Blind counterdoor			
Dimensions (mm)			**Package/ No. of pieces**
H	**W**	**Code**	
500	400	KC5040K	1/1
600	400	KC6040K	1/1
700	500	KC7050K	1/1
800	600	KC8060K	1/1
1000	600	KC1060K	1/1
1000	800	KC1080K	1/1
1200	600	KC1260K	1/1
1200	800	KC1280K	1/1



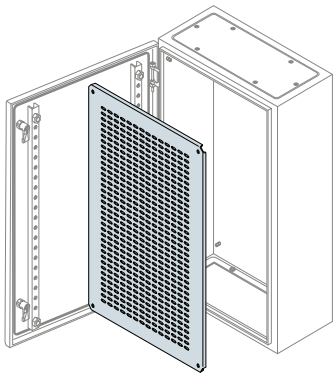
Blind internal mounting plate

Internal galvanised sheet mounting plate 20/10mm thick complete with fixing with small items provided. Possibility of adjusting the depth with the help of a special spacer kit (to be ordered separately).

Blind back plate for enclosure			
Dimensions (mm)			**Package/ No. of pieces**
H	**W**	**Code**	
300	200	PF3020	1/1
300	300	PF3030	1/1
300	400	PF3040	1/1
400	300	PF4030	1/1
400	400	PF4040	1/1
400	600	PF4060	1/1
500	300	PF5030	1/1
500	400	PF5040	1/1
600	400	PF6040	1/1
600	600	PF6060	1/1
700	500	PF7050	1/1
800	600	PF8060	1/1
800	800	PF8080	1/1
1000	600	PF1060	1/1
1000	800	PF1080	1/1
1200	600	PF1260	1/1
1200	800	PF1280	1/1

Automation boards

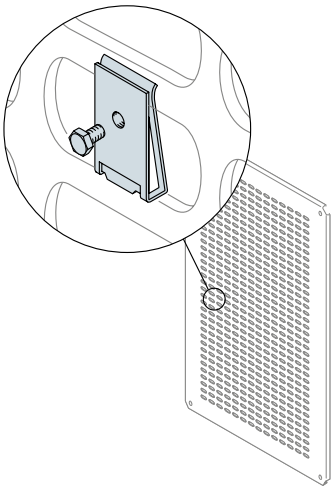
Ordering codes - SR2 enclosures



Slotted internal mounting plate

Fixing with small items provided. Possibility of adjusting the depth with the help of a special spacer kit (to be ordered separately).

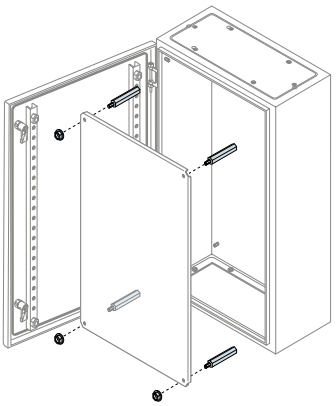
Back plate for enclosure			
Dimensions (mm)			Package/ No. of pieces
W	H	Code	
200	300	TQ3020	1/1
300	300	TQ3030	1/1
400	300	TQ3040	1/1
300	400	TQ4030	1/1
400	400	TQ4040	1/1
600	400	TQ4060	1/1
300	500	TQ5030	1/1
400	500	TQ5040	1/1
400	600	TQ6040	1/1
600	600	TQ6060	1/1
500	700	TQ7050	1/1
600	800	TQ8060	1/1
800	800	TQ8080	1/1
600	1000	TQ1060	1/1
800	1000	TQ1080	1/1
600	1200	TQ1260	1/1
800	1200	TQ1280	1/1



Clip nuts

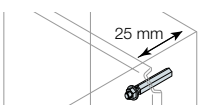
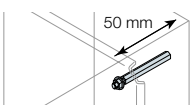
For slotted plates with M6x10mm hexagonal head screws.

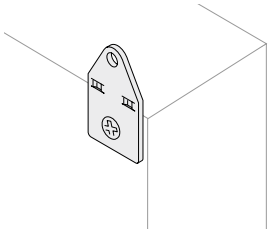
Description	Code	Package/ No. of pieces
No.20 clip nuts	TQ6610	1/20



Spacer Kit for adjusting the depth of the back plates

Kit consisting of 12 spacers for fixing the back plate with the possibility of adjusting the depth with 25 mm pitch.

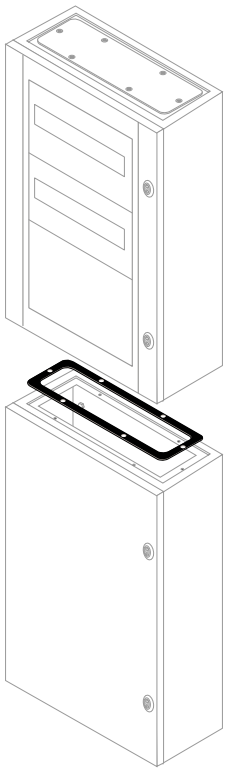
Description	Code	Package/ No. of pieces
Spacers 25mm long 	AA8025	1/12
Spacers 50mm long 	AA8050	1/12



Brackets for wall fixing

These allow wall installation of the enclosures and are mounted by using the special holes positioned on the rear of the enclosures.

Description	Code	Package/ No. of pieces
Brackets for wall fixing	AA1206	1/4



Accessories for stacking

Dimensions (mm)			Package/ No. of pieces
W	D	Code	
IP65 gasket			
400	200	GZ4020	1/1
	250	GZ4025	1/1
600	200	GZ6020	1/1
	250	GZ6025	1/1
	300	GZ6030	1/1
800	300	GZ8030	1/1

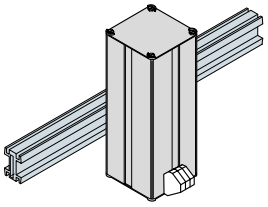
Plinth

Steel plinth 25/10 thick grey RAL7012 color.

Plinth				
Dimensions (mm)				Package/ No. of pieces
W	D	H	Code	
400	200	100	ZA4020	1/1
	250	100	ZA4025	1/1
600	250	100	ZA6025	1/1
	300	100	ZA6030	1/1
800	300	100	ZA8030	1/1

Automation boards

Ordering codes - SR2 enclosures



Temperature management

Heater for IP20 electrical switchboards

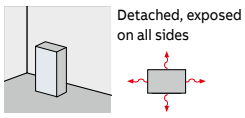
Their use prevents condensation in the electric cabinets. They consist of a heating element (PTC thermistor) inserted in an aluminium alloy ground plate. The PTC thermistor is a component which modifies its impedance according to the operating temperature. It is intrinsically stable and ensures primary safety features for the heater and service stability.
The main qualities of the heaters using PTC are:

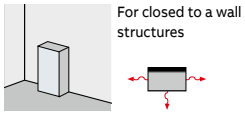
- electrical absorption (or dissipated power) which is almost constant in
- the range of power supply voltage between 100 and 250V;
- electrical absorption bound by inverse law to the trend of the ambient temperature.

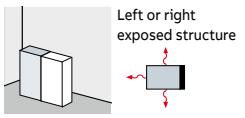
The special tubular geometry of the ground plate allows efficient thermal exchange with the heating element. This allows high powers and limited overall dimensions (especially in width and depth); Snap-on assembly on 35 mm DIN rail. Requires a thermostat.

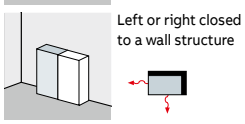
Description	Dimensions (mm) H	W	D	Code	Package/ No. of pieces
Anti-condensation heater 30W, 110-240 Vac-dc	115	42	42	VA7930	1/1
Anti-condensation heater 50W, 110-240 Vac-dcc	165	42	42	VA7950	1/1
Anti-condensation heater 75W, 110-240 Vac-dc	210	42	42	VA7975	1/1
Anti-condensation heater 100W, 110-240 Vac-dc	165	42	51	VA7910	1/1
Anti-condensation heater 150W, 110-240 Vac-dc	146	82	51	VA7915	1/1
Anti-condensation heater with fan 300W, 230 Vac-dc	148	82	91	VA8300	1/1

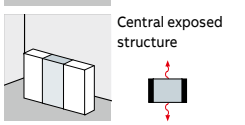
All the heaters with PTC absorb a higher power than the rated one on inrush according to a transitory which lasts a few tenths of a second.
If the heaters are to be supplied by means of an auxiliary transformer, its apparent power must be sized taking 1.5 times the rated power of the heaters with natural aeration and twice those with forced ventilation into consideration.

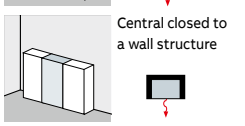

Detached, exposed on all sides

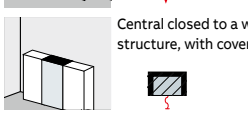

For closed to a wall structures


Left or right exposed structure


Left or right closed to a wall structure


Central exposed structure


Central closed to a wall structure


Central closed to a wall structure, with covered roof

IEC 890 method for calculating the effective cooling surface (CEI 17-43 method)

The total power dissipation P of an enclosure is linked to the exchange effective dissipating surface S, the ΔT difference between the inner and outer temperature and the k coefficient of heat exchange relative to the material of the enclosure:
P = k * ΔT * S
k = 5,5 for painted steel
ΔT = T1-T2;
T1 = dew point temperature (on overage 25 °C)
T2 = minimum ambient temperature.

The exchange surface S can be calculated using the following table taken from the CEI 17-43

Disposition of the cabinet	Calculating the enclosure surface S (mm²)	Dimensions (m)
Detached, exposed on all sides	S = 1,8 x H x (L+P) + 1,4 x L x P	L = width H = height P = depth
For closed to a wall structures	S = 1,4 x L x (H+P) + 1,8 x P x H	
Left or right exposed structure	S = 1,4 x P x (H+L) + 1,8 x L x H	
Left or right closed to a wall structure	S = 1,4 x H x (P+L) + 1,4 x L x P	
Central exposed structure	S = 1,8 x L x H + 1,4 x L x P + P x H	
Central closed to a wall structure	S = 1,4 x L x (H+P) + P x H	
Central closed to a wall structure, with covered roof	S = 1,4 x L x H + 0,7 x L x P + P x H	

Using a SRN8630K box, in “for closed to a wall structures” case we will obtain:
T1 = 25 °C; T2 = 20 °C; K = 5,5; ΔT = (25-20) = 5 °C; S = 1,4m²

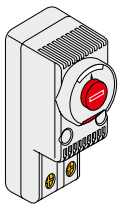
The total power dissipation P obtained will be:
P= k * ΔT * S = 38,5 W

The recommended heater is VA7950 (50W).

Temperature management

IP20 Thermostat

Conforms to EN 60730-1, CE and cURus standards, IP20 degree of protection. Grey RAL 7035 colour; electrical life 100,000 cycles. Dimensions (HxWxD) 68x29x45mm, can be mounted on DIN rail. The version with NO (normally open) contact allows closure of a circuit activating ventilation, air conditioning, or alarms. The version with NC (normally closed) contact allows opening of a circuit, disconnecting any anti-condensation resistances.

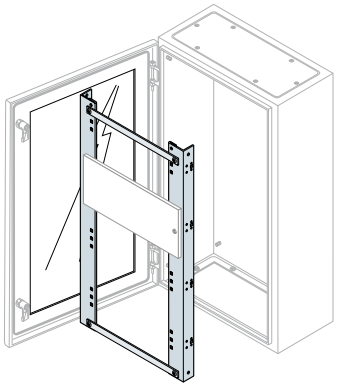


Description	Standard power supply V~/50-60Hz		Code	Package/ No. of pieces
NO ventilation thermostat	12-60 V d.c.; 110-250V a.c.		EN0101K	1/1
NC heating thermostat	12-60 V d.c.; 110-250V a.c.		EN0102K	1/1

Code	Standard power supply V~/50-60Hz	Contact capacity		Temperature scale	Type of contact	Weight
		Load Ω	Load L			
EN0101K	12-60 V d.c.; 110-250V a.c.	10A	2A	-10 +80 °C	NO	54g
EN0102K	12-60 V d.c.; 110-250V a.c.	10A	2A	-10 +80 °C	NC	54g

Frame for DIN rail

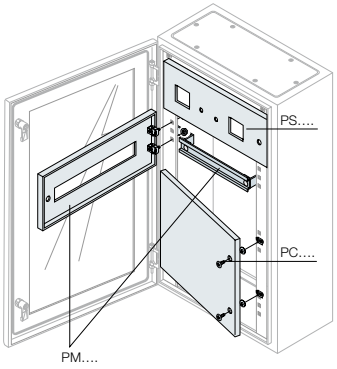
Internal supports for fixing modular panels and DIN rails, colour RAL 7035 orange peel.



Description	Dimensions (mm)		Code	Package/ No. of pieces
	H	W		
Supports 14 mod. DIN x 2 rows	500	400	KD5040K	1/1
Supports 14 mod. DIN x 3 rows	600	400	KD6040K	1/1
Supports 25 mod. DIN x 4 rows	800	600	KD8060K	1/1
Supports 25 mod. DIN x 5 rows	1000	600	KD1060K	1/1
Supports 36 mod. DIN x 5 rows	1000	800	KD1080K	1/1
Supports 25 mod. DIN x 6 rows	1200	600	KD1260K	1/1
Supports 36 mod. DIN x 6 rows	1200	800	KD1280K	1/1

Automation boards

Ordering codes - SR2 enclosures



Modular panels

Modular panels made of 12/10mm thick sheet steel painted RAL 7035 colour orange peel. The modular hinged panels can be mounted on the enclosures by using the special kit (KD...) consisting of functional uprights and compensation panel. The hinges patented by ABB, allow automatic earthing for panel contact when it is closed and are also suitable conventional earthing (with a cable). Each modular panel (PM) has a DIN rail provided (adjustable in depth), the fixing brackets and the relative small items. Modular and circuit-breakers and Tmax moulded-case circuit-breakers up to T3 can be placed side by side on the same DIN rail using the special depth adapter AP6001. To install moulded-case circuit-breakers, it is necessary to fix the DIN rail in a position towards the back. The fixing brackets of the DIN rail allow the wiring duct to be mounted up to a maximum size of 60 x 60 mm.

Modular hinged panels for modular apparatus (DIN rail and fixing brackets included)

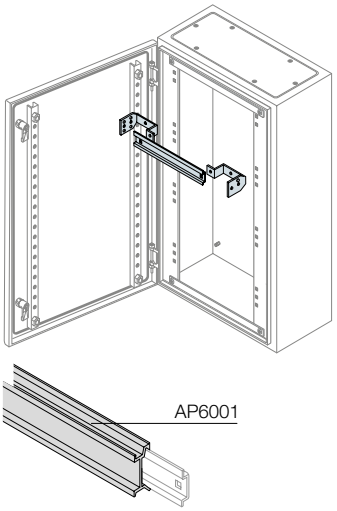
	Dimensions (mm)			
Description	**H**	**W**	**Code**	**Package/ No. of pieces**
14 mod. DIN + fixing bracket	185	400	PM1414K	1/1
25 mod. DIN + fixing bracket	185	600	PM1625K	1/1
36 mod. DIN + fixing bracket	185	800	PM1836K	1/1

Modular hinged panels for measuring instruments

	Dimensions (mm)			
Description	**H**	**W**	**Code**	**Package/ No. of pieces**
2 instruments 72 x 72mm	185	400	PS2476K	1/1
2 instruments 72 x 72mm	185	600	PS2676K	1/1
2 instruments 72 x 72mm	185	800	PS2876K	1/1

Modular hinged blind panels

	Dimensions (mm)			
Description	**H**	**W**	**Code**	**Package/ No. of pieces**
Blind panel	185	400	PC1406K	1/1
Blind panel	185	600	PC1606K	1/1
Blind panel	185	800	PC1806K	1/1
Blind panel	370	600	PC2606K	1/1
Blind panel	370	800	PC2806K	1/1



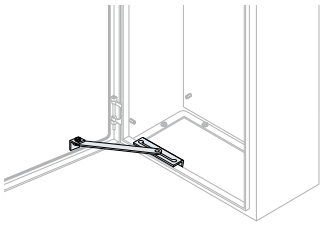
DIN rail and fixing brackets

Description	**No. of modules**	**W (mm)**	**Code**	**Package/ No. of pieces**
DIN rail and fixing brackets	14	400	GD4006	1/1
DIN rail and fixing brackets	25	600	GD6006	1/1
DIN rail and fixing brackets	36	800	GD8006	1/1
Depth adapter				
No.1 depth adapter for Tmax T1-T2-T3-XT1-XT3 W=600mm			AP6001	1/4

Polished flange for DIN-Rail mounting

Description	**Code**	**Package/ No. of pieces**
Polished flange for XT1 3P mounted on DIN rail	AD3301	1/1
Polished flange for XT1 4P mounted on DIN rail	AD3302	1/1
Polished flange for XT3 3P mounted on DIN rail	AD3303	1/1
Polished flange for XT3 4P mounted on DIN rail	AD3304	1/1

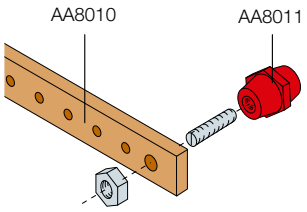
Already supplied in the DIN-Rail mounting kit for breakers in MCCBs catalogue



Door anti-closure device

It can't be mounted with the inner-door or with modular/blind panels mounted down in structure and hinged.

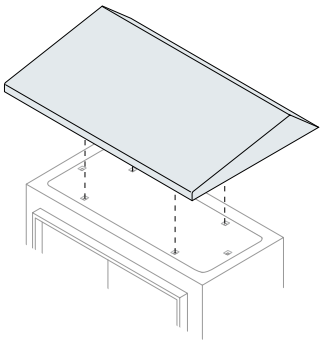
Description	Code	Package/ No. of pieces
Door anti-closure device	EV0015	1/4



Neutral or earthing busbars

The busbars, made of electrolytic copper with M6 threaded holes with 25 mm pitch, can be mounted on the back plates by means of the special supports. They must be sized according to the enclosure and the position they are installed in.

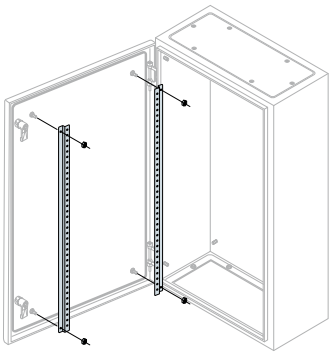
Description	W (mm)	Code	Package/ No. of pieces
No. 4 busbars sect. 20x5mm	1000	AA8010	1/4
No.5 support for busbar		AA8011	1/5



Spray protection roofs

To improve protection against entry of liquids and rain. Made of 15/10mm thick sheet steel, painted RAL 7035 colour orange peel.

Spray protection roof			
Dimensions (mm)			Package/ No. of pieces
W	D	Code	
200	150	TT2015K	1/1
300	150	TT3015K	1/1
400	150	TT4015K	1/1
300	200	TT3020K	1/1
400	200	TT4020K	1/1
500	200	TT5020K	1/1
600	200	TT6020K	1/1
400	250	TT4025K	1/1
500	250	TT5025K	1/1
600	250	TT6025K	1/1
600	300	TT6030K	1/1
800	300	TT8030K	1/1



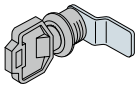
Shaped sections for accessories

These allow fixing of accessories (e.g. wiring ducts) inside the blind doors. They consist of a pair of vertical crosspieces made of 15/10mm thick white galvanised sheet, pre-drilled with 25 mm pitch. In the enclosures with 1000 and 1200 mm height with blind door, the shaped sections are already provided.

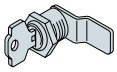
Description	Dimensions (mm)	Code	Package/ No. of pieces
	H		
No. 2 shaped sections for door	600	TS6009	1/2
No. 2 shaped sections for door	700	TS7009	1/2
No. 2 shaped sections for door	800	TS8009	1/2

Automation boards

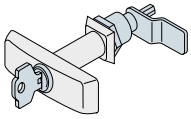
Ordering codes - SR2 enclosures



AA8001



AA8002



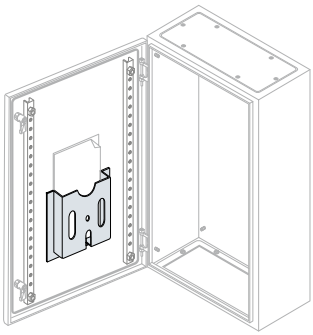
AA8003

EV1008

Closing systems

These can replace the standard closures of the external doors. The inserts are interchangeable and easily replaced by loosening a single nut.

Description	Code	Package/ No. of pieces
Box Ø 19 mm double tongue and plastic key (spare part)	AA8001	1/1
Box Ø 19 mm with security insert and Yale type key	AA8002	1/1
Box Ø 19 mm with handle and Yale type key	AA8003	1/1
Box Ø 19 mm with triangular insert	AA5200	1/1
Plastic key for triangular insert AA5200	AA5190	1/1
Ergonomic box complete with double tongue insert	EV1008	1/1
Single code Yale insert	EV1036	1/1
Ronis 455 insert for	EV1037	1/1
3mm Double tongue insert	EV1039	1/1



Document pocket RAL 7035

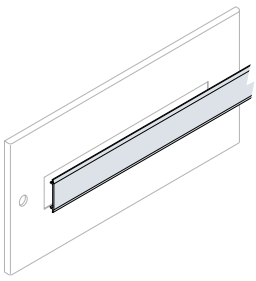
Made of plastic, RAL 7035 colour, A4 size. The pocket can be glued inside the blind door with a width of more than 400 mm, using the adhesives provided.

Description	Code	Package/ No. of pieces
Plastic document pocket for A4	EV1075K	1/1

Special Painting Service

Special painting service has to manage with code of enclosure SRN....SPEC (e.g. SRN4320SPEC VERNSR + note about color required). It is necessary specify the color required in the order. Minimum order quantity 4 pieces. For any other component or further information, please contact you local sales network.

Description	Code	Package/ No. of pieces
Extra cost for special SR painting	VERNSR	

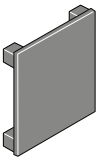


Accessories for DIN panel

Hole covering strip RAL7035 colour

Description	Code	Package/ No. of pieces
No.10 hole covers W=2000mm, grey	AD1086	1/10
No.3 hole covers 24 DIN modules W=600mm	AD1088	1/3
No.3 hole covers 36 DIN modules W=800mm	AD1089	1/3

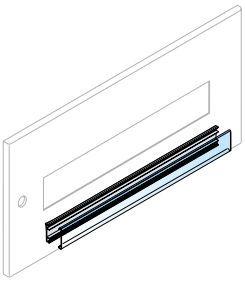
EV1137



EV1135
EV1136

Closing plug for instrument holder panels

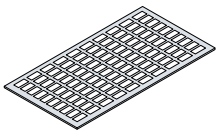
Description	Code	Package/ No. of pieces
No.10 closing plug for instrument holder panels 72x72mm	EV1135	1/10
No.5 closing plug for instrument holder panels 96x96mm	EV1136	1/5
No.50 tappi di chiusura per pulsanti Ø22 mm	EV1137	1/50



AD1101-AD1102
AD1103-AD1104

Adhesive name label holders

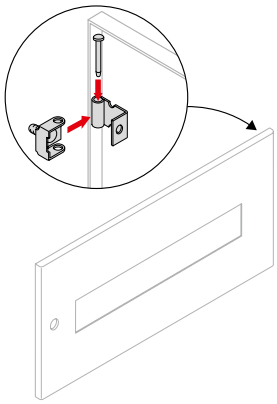
Description	Dimensions (mm) W	Code	Package/ No. of pieces
No. 20 label holders 18 DIN mod	325	EH2118	1/20
No. 20 label holders 29 DIN mod	525	EH2129	1/20
No. 20 label holders 24 DIN mod	432	AD1600	1/20
No. 20 label holders 36 DIN mod	634	AD1800	1/20



EH2118-EH2129
AD1600-AD1800

Etichette scrivibili con sistema Grafoplast compatibile

Description	No. of DIN mod.	Code	Package/ No. of pieces
No. 288 labels 1 DIN mod.	1	AD1101	1/288
No. 192 labels 2 DIN mod.	2	AD1102	1/192
No. 96 labels 3 DIN mod.	3	AD1103	1/96
No. 96 labels 4 DIN mod.	4	AD1104	1/96



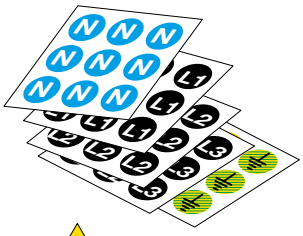
Hinges and quick closures for panels

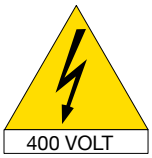
Description	Code	Package/ No. of pieces
No. 10 hinges for panels	EH1889 [1]	1/10
No. 5 quick closures for front panels	EH1890	1/5

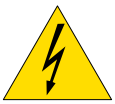
[1] Use No.2 hinges for panel H=150/200/300/400mm, No.3 hinges for panel H=500/600mm.

Automation boards

Ordering codes - SR2 enclosures





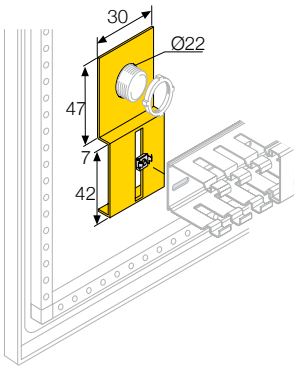


Marking

Description	Code	Package/ No. of pieces
No.5 adhesive labels ABB-IS2 W=1000mm	EV1157	1/5
No.490 adhesive labels Ø 12mm N symbol	EV1150	1/490
No.490 adhesive labels Ø 12mm L1symbol	EV1151	1/490
No.490 adhesive labels Ø 12mm L2 symbol	EV1152	1/490
No.490 adhesive labels Ø 12mm L3 symbol	EV1153	1/490
No.490 adhesive labels Ø 12mm T symbol	EV1154	1/490
No.10 triangular adhesive labels 125mm with 400V lightning arrow symbol	EV1155	1/10
No.100 triangular adhesive labels 50mm with lightning arrow symbol	EV1156	1/100

Screws for apparatus

Description	Code	Package/ No. of pieces
No.1000 perforating screws 4.2x13mm cross slotted head	EV1100	1/1000
No.1000 perforating screws 4.2x19mm cross slotted head	EV1101	1/1000
No.50 trilobed screws M6 L=10mm	AD1033	1/50



Wiring duct support brackets

Description	Code	Package/ No. of pieces
No. 100 wiring duct support brackets on upright structure	EV1131	1/100

Spare parts

Description	Code	Package/ No. of pieces
Ergonomic box complete with double tongue insert (without tongue)	EV1008	1/1
N. 10 hings for SR2 enclosures + countersunk rivets	AA1204	1/1
N. 16 screws and nuts M6x14 for flange	AA1203	1/2
N. 2 fairlead plates for SRN3215K	FLN3215K	1/2
N. 2 fairlead plates for SRN3315K-SRN4315K	FLN3315K	1/2
N. 2 fairlead plates for SRN3415K	FLN3415K	1/2
N. 2 fairlead plates for SRN4320K-SRN5320K	FLN4320K	1/2
N. 2 fairlead plates for SRN4420K-SRN5420K-SRN6420K	FLN4420K	1/2
N. 2 fairlead plates for SRN5425K-SRN6425K	FLN4425K	1/2
N. 2 fairlead plates for SRN4620K	FLN4620K	1/2
N. 2 fairlead plates for SRN6625K-SRN8625K-SRN10625K	FLN6625K	1/2
N. 2 fairlead plates for SRN7520K	FLN7520K	1/2
N. 2 fairlead plates forr SRN7525K	FLN7525K	1/2
N. 2 fairlead plates for SRN8630K-SRN10630K-SRN12630K	FLN8630K	1/2
N. 2 fairlead plates for SRN8830K-SRN10830-SRN12830K	FLN8830K	1/2
Blind door 1000x600mm (hxl)	PRN1066K	1/1
Blind door 1000x800mm (hxl)	PRN1086K	1/1
Blind door 1200x600mm (hxl)	PRN1266K	1/1
Blind door 1200x800mm (hxl)	PRN1286K	1/1
Blind door 300x200mm (hxl)	PRN3026K	1/1
Blind door 300x300mm (hxl)	PRN3006K	1/1
Blind door 300x400mm (hxl)	PRN3046K	1/1
Blind door 400x300mm (hxl)	PRN4036K	1/1
Blind door 400x400mm (hxl)	PRN4046K	1/1
Blind door 400x600mm (hxl)	PRN4066K	1/1
Blind door 500x300mm (hxl)	PRN5036K	1/1
Blind door 500x400mm (hxl)	PRN5046K	1/1
Blind door 600x400mm (hxl)	PRN6046K	1/1
Blind door 600x600mm (hxl)	PRN6066K	1/1
Blind door 700x500mm (hxl)	PRN7056K	1/1
Blind door 800x600mm (hxl)	PRN8066K	1/1
Blind door 800x800mm (hxl)	PRN8086K	1/1
Glazed door 1000x600mm (hxl)	PTN1066K	1/1
Glazed door 1000x800mm (hxl)	PTN1086K	1/1
Glazed door 1200x600mm (hxl)	PTN1266K	1/1
Glazed door 1200x800mm (hxl)	PTN1286K	1/1
Glazed door 500x400mm (hxl)	PTN5046K	1/1
Glazed door 600x400mm (hxl)	PTN6046K	1/1
Glazed door 700x500mm (hxl)	PTN7056K	1/1
Glazed door 800x600mm (hxl)	PTN8066K	1/1
Spray paint color grey RAL7035 for structure	VB7035	1/1
Spray paint color grey RAL7012 for plinth	VB7012	1/1

Automation boards

Ordering codes - SR2 enclosures

Painting Special Service

Description	Code	Package/ No. of pieces
Extra cost for special SR painting	VERNSR	

Standard size enclosures, standard colour
Special painting service with standard colour (for available colours, see page 8/13) for standard size enclosures in quantities equal to or greater than 4 units with single code to be managed with code SRN ... SPEC + VERNSR overprice equal to the number of enclosures + colour note to be specified in the order.

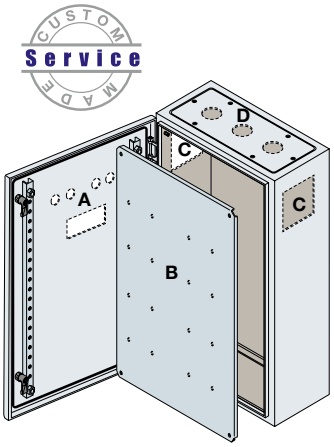
Example: SRN4320SPEC 4
VERNSR 4
COLOUR NOTE

Standard size enclosures, non-standard colour
Request feasibility of implementation by completing the relevant Form for special quotations and send it to the R&D ECS office.
Management is per offer.
If the offer is accepted and after having received it, it will be possible to place the order with the codes indicated in the offer with the following features:

Example: SRN4320SPEC 4
VERNSR 4
OFFER REFERENCE IN THE ORDER

Non-standard size enclosures, standard colour
Request feasibility of implementation by completing the relevant Form for special quotations and send it to the R&D ECS office.
Management is per offer.
If the offer is accepted and after having received it, it will be possible to place the order with the codes indicated in the offer, that will not be SRN...SPEC, but dummy ones:
Always remember to indicate the offer reference in the order.

Non-standard size enclosures, non-standard colour
Request feasibility of implementation by completing the relevant Form for special quotations and send it to the R&D ECS office.
Management is per offer.
If the offer is accepted and after having received it, it will be possible to place the order with the codes indicated in the offer, that will not be SRN...SPEC, but dummy ones:
Always remember to indicate the offer reference in the order.
Please note that the minimum quantity is four pieces with a single code.



Special Drilling Service
The overprice amount depends on the number of individual drilled parts and not on the number of holes.
For single part it means: A-door B-plate; C-housing; D-top/bottom part.
Please note that the minimum quantity is 4 pieces with a single code.
The price of the special drilling service depends on the number of parts to be drilled and on the amount of enclosures to be drilled.

Description	Code	No. of enclosures to be drilled
Maggiorazione foratura per singola parte forata (A-B-C-D)	FORSR1	4-5-6
Maggiorazione foratura per singola parte forata (A-B-C-D)	FORSR2	7-8-9
Maggiorazione foratura per singola parte forata (A-B-C-D)	FORSR	≥ 10

Standard size enclosures with special drilling
The special drilling service for standard size enclosures in quantities equal to or greater than 4 units with a single code has to be managed with code SRN ... SPEC + overprice FORSR/ FORSR1/FORSSR2 (see table) equal to the number of enclosures and the number of parts to be drilled + hole layout to be attached to the order (see useful drilling areas, page 9/49)
Example: Enclosure (4 pcs) with door to be drilled (1 part)

Example: Enclosure (4 pcs) with door and plate to be drilled (1 parts)
SRN4320SPEC 4
FORSR1 4
DRAWINGS TO BE ATTACHED

Example: Enclosure (4 pcs) with door and plate to be drilled (2 parts)
SRN4320SPEC 4
FORSR1 8
DRAWINGS TO BE ATTACHED

Non-standard enclosure sizes, special drilling
Request feasibility of implementation by completing the relevant Form for special quotations and send it together with the drill layout to the R&D ECS office.
Management is per offer.
If the offer is accepted and after having received it, it will be possible to place the order with the codes indicated in the offer, that will not be SRN...SPEC, but dummy ones.
Always remember to indicate the offer reference in the order.
Ricordarsi sempre di indicare nell'ordine il riferimento dell'offerta.

Automation boards
General characteristics and ordering codes - SR2 EMC enclosures

The range of SR2 Enclosures EMC (Electromagnetic Compatibility) version has undergone shielding efficiency tests with success according to the MIL STD 285: 1956 Standard.

This series of products is suitable for making small and medium-sized electric switchboards for automation, operation and control.

The electromagnetic compatibility problem also requires attention when selecting enclosures and cabinets.
The increased number of components in the operation and regulation electronics and the high processing speeds of signals increasingly often leave a possibility of introducing errors which can be attributed to electromagnetic interference.

These interferences may be caused continuously, periodically or at random, from internal or external sources, which generate electric, magnetic or electromagnetic fields.

The suitability tests according to MIL STD 285: 1956 ("Attenuation measurements for enclosures, electromagnetic shielding, for electronic test purposes, method of") have confirmed conformity of the SR2 EMC enclosure with the requirements of the standard.

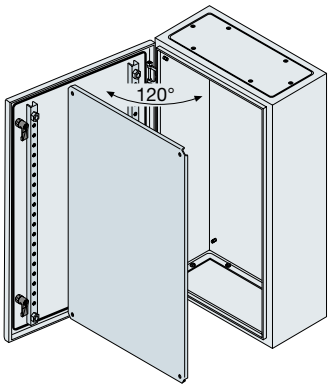
The attenuation level (measured in dB) remains at high levels for a wide spectrum of frequencies (from 30MHz to 10GHz).

The SR2 EMC galvanized sheet enclosures are painted externally with orange peel RAL 7035 colour.
Furthermore, they do not have cable entry flanges on the roof and on the base.

Technical characteristics		
Conformity with the Standard		IEC 62208
Degree of protection		IP54 (IEC 60529)
Degree of mechanical strength		IK10 blind door (IEC 62262)
Certifications		TÜV Rheinland Product Safety; EMV EMC
Type of material		Metallic
Installation site		Indoors
Fixing method		floor/wall
Normal service conditions ambient temperature		from –5 up to +40°C
Operating climate (t°/Ur%)	costant	23°C/83% - 40°C/93%
	variable	23°C/98% - 40°C/98%

Automation boards

Ordering codes - SR2 EMC enclosures



IP54 - EMC Enclosures with blind door

The enclosures with blind door, typically destined for making automation switchboards, are already provided with the internal galvanized sheet plate.

Enclosures with blind door and mounting plate

Dimensions (mm)				Package/ No. of pieces
H	**W**	**D**	**Code**	
400	600	200	SR4620EMCK	1/1
600	600	250	SR6625EMCK	1/1
1000	800	300	SR10830EMCK	1/1

For completion of the structure, see accessories on page 3/6

Automation boards
General characteristics and applications - SRX enclosures

The AISI 304 stainless steel used allows the cabinets to be installed either indoors or outdoors, by fixing to the floor or a wall. AISI 304 stainless steel enclosures with opaque door, usually intended for making enclosures for automation, are supplied with the galvanised sheet metal internal plate and do not have cable entry flanges.

SRX enclosures always conform to IEC EN 62208 and to IEC 61439-1-2, have a degree of protection IP66 (IEC EN 60529) and NEMA 4X (UL standard). The degree of protection against external mechanical impacts is IK10 for the version with opaque door and IK09 for the version with glass door (IEC 62262).
AISI 304 stainless steel enclosures with glass door can also be used for distribution configurations. Alternatively, the internal equipment is made by selecting special kits (Distribution Kit) consisting of a pair of functional uprights for assembly of the AISI 304 stainless steel modular panels (to be ordered separately) and any compensation panels. The modular panels, which can also be installed on the enclosures with opaque door using the same KD Kit....X, are all hinged and have vertical modularity of 185 mm.

SRX enclosures can be equipped with: standard plates, clip nuts, spacers, slotted internal plate, accessories for stacking, DIN rails and fixing brackets, shaped sections for accessories on doors, closing systems.

Spray protection roof
Improves protection against infiltration by liquids and accidental sprays. Made of AISI 304 stainless steel.

Distribution kit
All apparatuses and modular circuit breakers can be installed on a DIN rail combined with a modular panel.

Stacking
SRX enclosures can be stacked using the special kit. The plinth with removable flanges is made of 25/10 thick AISI 304 stainless steel.

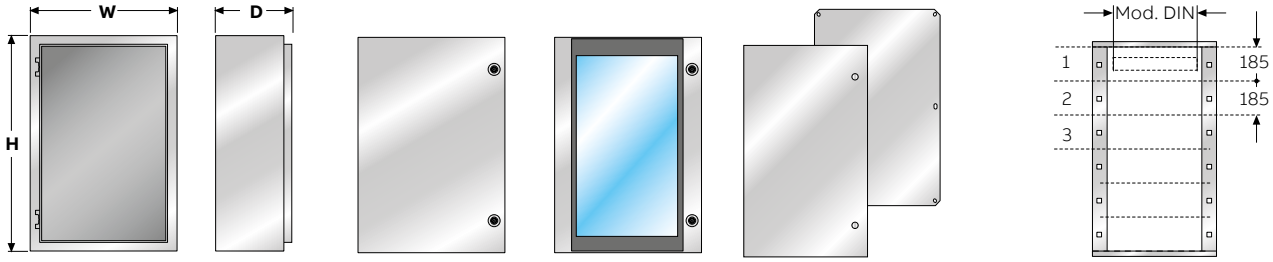
Closing box
A new Ø19 mm closing box made of chrome-finished plastic with double tongue key.

Technical characteristics		
Conforms to		CEI EN 62208, IEC 61439-1-2
Degree of protection		IP66 (CEI EN 60529) NEMA 4X (UL standard)
Degree of mechanical protection		IK10 opaque door
		IK09 glass door
		(IEC 62262)
Certifications		UL LISTED Ex II 3 G D
Type of material		AISI 304
Installation site		indoors/outdoors
Fixing method		floor/wall
Normal operating conditions - ambient temperature		from –5 to +55°C

Automation boards

Selection of the structure - SRX enclosures

Rapid selection table

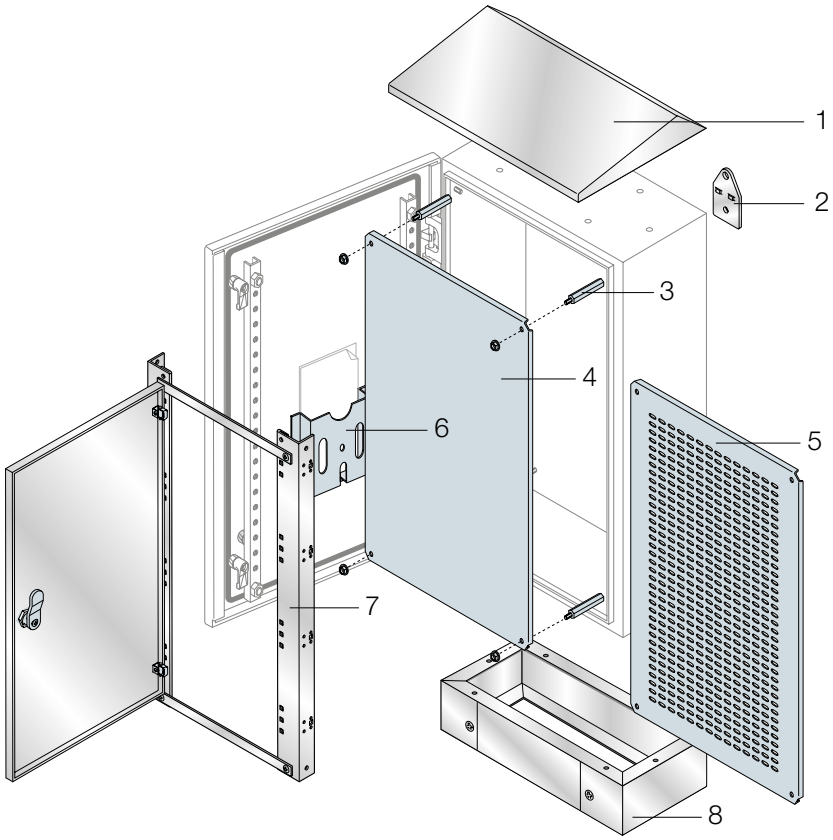


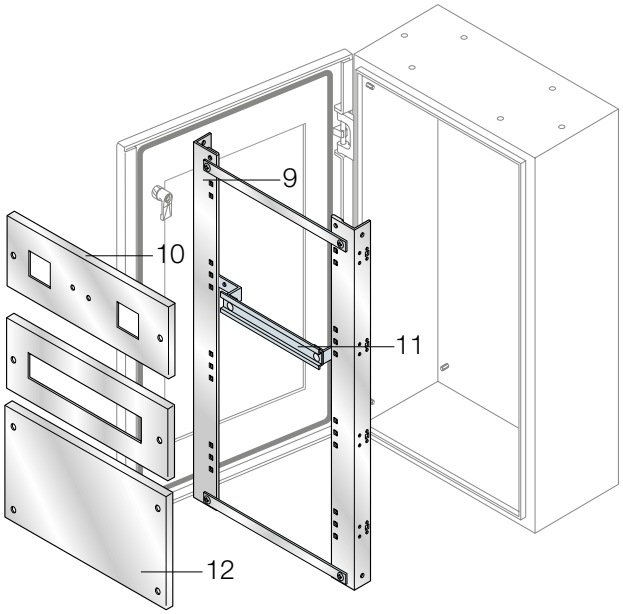
Overall dimensions					Automation kit		Distribution kit Supports for mounting modular panels			
H mm	W mm	D mm	Enclosures with opaque door + mounting plate	Enclosures with transparent door[1]	Opaque inner door IP20	Opaque plate	No. of vertical mod. H=185mm	No. of DIN mod. per row	Total modules	DIN supports
300	200	150	SRN3215X			PF3020				
	400	150	SRN3415X			PF3040				
400	300	150	SRN4315X		KC4030X	PF4030				
		200	SRN4320X							
	400	200	SRN4420X			PF4040				
	600	200	SRN4620X			PF4060				
500	400	200	SRN5420X	SRN5420VX	KC5040X	PF5040	2	14	28	KD5040X
	500	200	SRN5520X			PF5050				
600	400	200	SRN6420X	SRN6420VX	KC6040X	PF6040	3	14	42	KD6040X
	600	200	SRN6620X			PF6060				
		300	SRN6630X							
700	500	250	SRN7525X	SRN7525VX	KC7050X	PF7050				
800	600	200	SRN8620X		KC8060X	PF8060	4	25	100	KD8060X
		250		SRN8625VX				25	100	
		300	SRN8630X					25	100	
	800	300	SRN8830X			PF8080				
1000	800	300	SRN10830X	SRN10830VX	KC1080X	PF1080	5	36	180	KD1080X
1200	600	300	SRN12630X			PF1260				
	800	300	SRN12830X			PF1280				

[1] Mounting plate to be ordered separately.

Automation boards

Ordering codes - SRX enclosures





1 - Spray protection roof
Page 19/62

2 - Wall-mounting brackets
Page 19/59

3 - Spacers for back plates
Page 19/58

4 - Opaque internal plate
Page 19/57

5 - Slotted internal plate
Page 19/58

6 - Document pocket
Page 19/44

7 - Opaque inner door
Page 19/57

8 - Plinth
Page 19/60

9 - Frame for DIN rail
Page 19/60

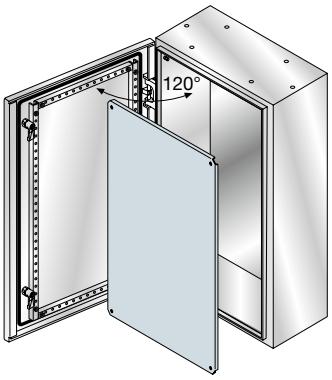
10 - Modular panels for apparatuses
Page 19/61

11 - DIN rail
Page 19/62

12 - Opaque modular panels
Page 19/61

Automation boards

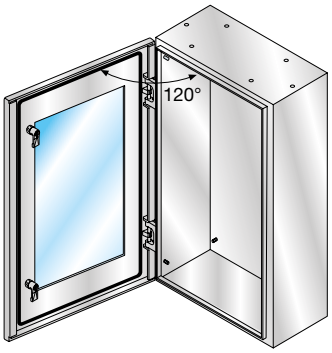
Ordering codes - SRX enclosures



SRX series enclosures with opaque door (internal plate included)

Enclosures with an opaque door, made of AISI 304 stainless steel, usually intended for producing enclosures for automation, come supplied with the galvanised sheet metal internal plate and do not have cable entry flanges.

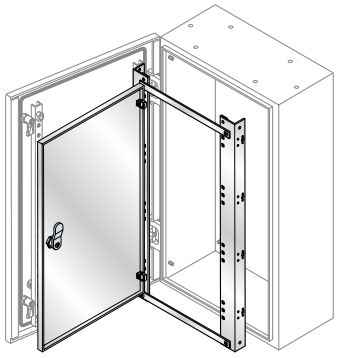
Enclosures with opaque door complete with internal mounting plate				
Dimensions (mm)				Package/ No. of pieces
H	W	D	Code	
300	200	150	SRN3215X	1/1
	400		SRN3415X	1/1
400	300	150	SRN4315X	1/1
	300	200	SRN4320X	1/1
	400		SRN4420X	1/1
	600		SRN4620X	1/1
500	400	200	SRN5420X	1/1
	500		SRN5520X	1/1
600	400	200	SRN6420X	1/1
	600		SRN6620X	1/1
	600	300	SRN6630X	1/1
700	500	250	SRN7525X	1/1
800	600	200	SRN8620X	1/1
	600	300	SRN8630X	1/1
	800		SRN8830X	1/1
1000	800	300	SRN10830X	1/1
1200	600	300	SRN12630X	1/1
	800		SRN12830X	1/1



SRX series stainless steel enclosures with transparent door

AISI 304 stainless steel enclosures with a glass door can also be used for distribution configurations. The internal equipment is set up using the relevant kits:
- KD...X (Distribution Kit) consisting of a pair of functional uprights for assembly of the modular panels made of AISI 304 stainless steel (to be ordered separately) and of any compensation panels. The modular panels, which can also be installed on the enclosures with opaque door using the KD kit, are all hinged and have vertical modularity of 185 mm. The enclosures with see-through door are provided without mounting plate.

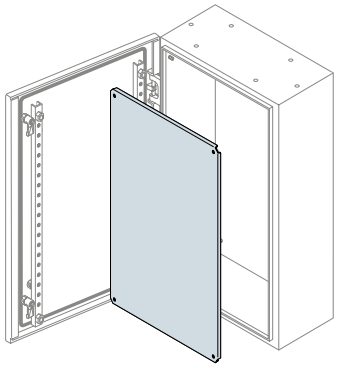
Enclosures with transparent door				
Dimensions (mm)				Package/ No. of pieces
H	W	D	Code	
500	400	200	SRN5420VX	1/1
600	400		SRN6420VX	1/1
700	500	250	SRN7525VX	1/1
800	600		SRN8625VX	1/1
1000	800	300	SRN10830VX	1/1



Opaque inner door

The inner door guarantees a degree of protection of IP20. Made of 15/10 thick AISI 304 stainless steel, complete with box and double tongue insert.

Opaque inner door			
Dimensions (mm)			**Package/ No. of pieces**
H	**W**	**Code**	
400	300	KC4030X	1/1
500	400	KC5040X	1/1
600		KC6040X	1/1
700	500	KC7050X	1/1
800	600	KC8060X	1/1
1000	800	KC1080X	1/1



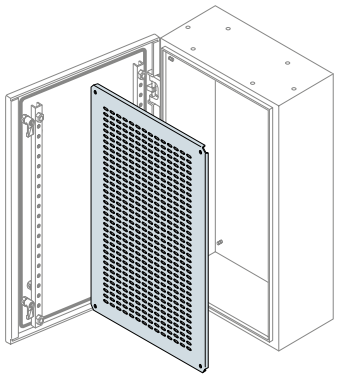
Opaque internal mounting plate

20/10 thick galvanised sheet metal internal plate, complete with fixing with small parts supplied. Depth-adjustable using a special spacer kit (to be ordered separately).

Opaque internal mounting plate			
Dimensions (mm)			**Package/ No. of pieces**
H	**W**	**Code**	
300	200	PF3020	1/1
300	400	PF3040	1/1
400	300	PF4030	1/1
400	400	PF4040	1/1
400	600	PF4060	1/1
500	400	PF5040	1/1
500	500	PF5050	1/1
600	400	PF6040	1/1
600	600	PF6060	1/1
700	500	PF7050	1/1
800	600	PF8060	1/1
800	800	PF8080	1/1
1000	800	PF1080	1/1
1200	600	PF1260	1/1
1200	800	PF1280	1/1

Automation boards

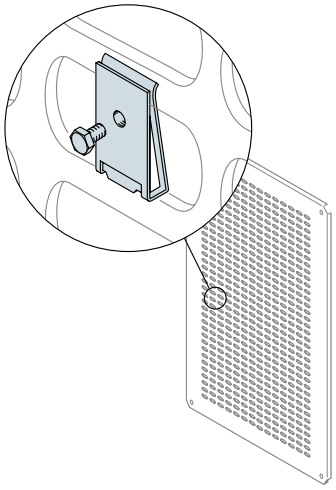
Ordering codes - SRX enclosures



Slotted internal plate

Fixing with small parts supplied. Depth-adjustable using a special spacer kit (to be ordered separately).

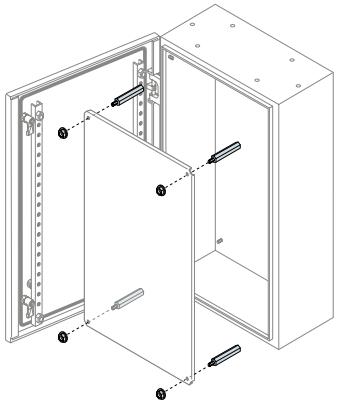
Piastra interna asolata			
Dimensions (mm)			Package/ No. of pieces
H	W	Code	
300	200	TQ3020	1/1
300	400	TQ3040	1/1
400	300	TQ4030	1/1
400	400	TQ4040	1/1
400	600	TQ4060	1/1
500	400	TQ5040	1/1
600	400	TQ6040	1/1
600	600	TQ6060	1/1
700	500	TQ7050	1/1
800	600	TQ8060	1/1
800	800	TQ8080	1/1
1000	800	TQ1080	1/1
1200	600	TQ1260	1/1
1200	800	TQ1280	1/1



Clip nuts

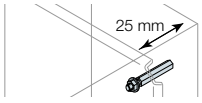
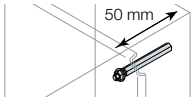
For slotted plates with M6x10mm hexagonal head screws.

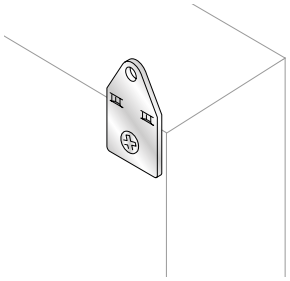
Description	Code	Package/ No. of pieces
Clip nuts	TQ6610	1/20



Spacer kit for adjusting back plate depth

Kit made up of 12 spacers for fixing the mounting plate. Allows depth adjustment in 25 mm steps.

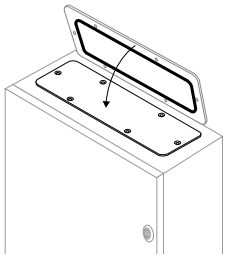
Description	Code	Package/ No. of pieces
Spacers, length 25 mm 	AA8025	1/12
Spacers, length 50 mm 	AA8050	1/12



Wall-mounting brackets

Allow enclosures to be wall-mounted and are fitted using the special holes located on the back of the enclosures. Made of 30/10 thick AISI 304 stainless steel.

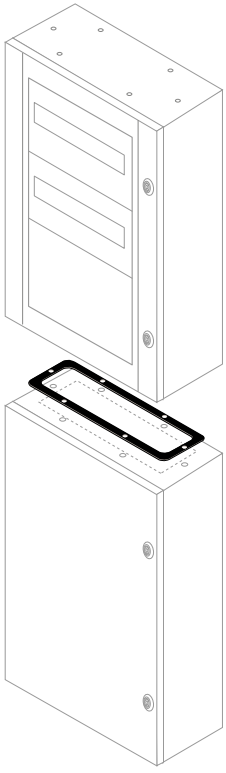
Description	Code	Package/ No. of pieces
No. 4 wall-mounting brackets	AA1206X	1/4



Fairlead plates

Fairlead plates in 25/10 thick AISI 304 stainless steel with polyurethane gasket.

Description	Dimensions (mm)		Code	Package/ No. of pieces
	W	D		
Fairlead plate) for SRN3215X	200	150	FLN3215X	1/1
Fairlead plate for SRN4315X	300	150	FLN4315X	1/1
Fairlead plate for SRN3415X	400	150	FLN3415X	1/1
Fairlead plate for SRN4320X, SRN4320VX	300	200	FLN4320X	1/1
Fairlead plate for SRN4420X, SRN5420X, SRN6420X, SRN5420VX, SRN6420VX	400	200	FLN4420X	1/1
Fairlead plate 500x200mm for SRN5520X	500	200	FLN5520X	1/1
Fairlead plate) for SRN4620X, SRN6620X, SRN8620X	600	200	FLN4620X	1/1
Fairlead plate for SRN7525X, SRN7525VX	500	250	FLN7525X	1/1
Fairlead plate for SRN8625VX	600	250	FLN8625X	1/1
Fairlead plate for SRN6630X, SRN8630X, SRN12630X	600	300	FLN6630X	1/1
Fairlead plate for SRN6830X, SRN8830X, SRN10830X, SRN12830X, SRN10830VX	800	300	FLN6830X	1/1

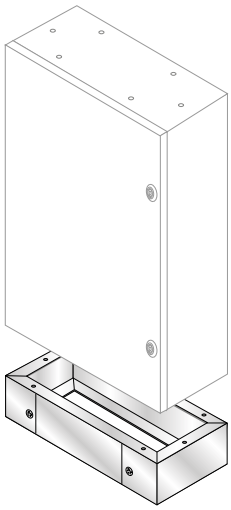


Accessories for stacking

Dimensions (mm)		Code	Package/ No. of pieces
W	D		
IP65 gasket			
400	200	GZ4020	1/1
500	200	GZ5020	1/1
	250	GZ5025	1/1
600	200	GZ6020	1/1
	250	GZ6025	1/1
	300	GZ6030	1/1
800	300	GZ8030	1/1

Automation boards

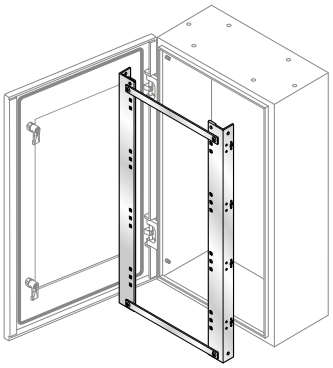
Ordering codes - SRX enclosures



Plinth

25/10 thick AISI 304 stainless steel plinth.

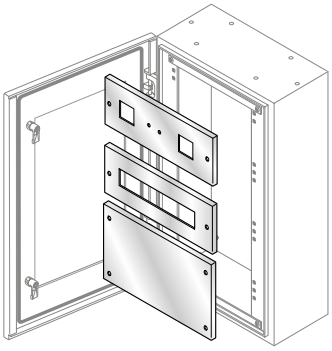
Plinth				
Dimensions (mm)				Package/
H	W	D	Code	No. of pieces
100	400	200	ZA4020X	1/1
100	500	200	ZA5020X	1/1
100		250	ZA5025X	1/1
100	600	200	ZA6020X	1/1
100		300	ZA6030X	1/1
100	800	300	ZA8030X	1/1



Frame for DIN rail

Internal supports for fixing modular panels and DIN rails, with compensation panels, made of AISI 304 stainless steel.

	Dimensions (mm)			
Description	H	W	Code	Package/ No. of pieces
Supports for 14 DIN mod. x 2 rows	500	400	KD5040X	1/1
Supports for 14 DIN mod. x 3 rows	600	400	KD6040X	1/1
Supports for 25 DIN mod. x 4 rows	800	600	KD8060X	1/1
Supports for 36 DIN mod. x 5 rows	1000	800	KD1080X	1/1



Screwed modular panels

12/10 mm thick AISI 304 stainless steel modular panels. The screwed modular panels can be fitted on the enclosures using the special kit (KD...) consisting of functional uprights and a compensation panel.
Each modular panel (PM) comes equipped with a DIN rail (depth-adjustable), fixing brackets and the relative small parts. Tmax modular and moulded-case circuit breakers up to T3 can be positioned side by side on the same DIN rail using the special depth adapter AP 6001.
To install MCCBs, fix the DIN rail in the recessed position. The DIN rail fixing brackets allow mounting of the wiring duct up to a maximum size of 60 x 60 mm.

Stainless steel screwed modular panels for DIN rail (including DIN rail and fixing brackets)

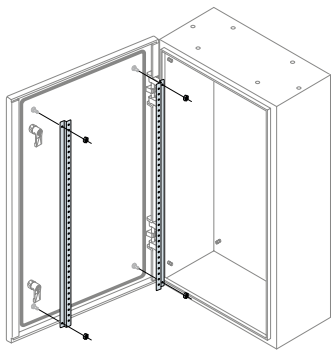
Description	Dimensions (mm)		Code	Package/ No. of pieces
	H	W		
14 DIN mod. + fixing bracket	185	400	PM1414X	1/1
25 DIN mod. + fixing bracket	185	600	PM1625X	1/1
36 DIN mod. + fixing bracket	185	800	PM1836X	1/1

Stainless steel screwed modular panels for measuring instruments

Description	Dimensions (mm)		Code	Package/ No. of pieces
	H	W		
2 instruments 72 x 72mm	185	400	PS2476X	1/1
2 instruments 72 x 72mm	185	600	PS2676X	1/1
2 instruments 72 x 72mm	185	800	PS2876X	1/1

Stainless steel opaque screwed modular panels

Description	Dimensions (mm)		Code	Package/ No. of pieces
	H	W		
Opaque panel	185	400	PC1406X	1/1
Opaque panel	185	600	PC1606X	1/1
Opaque panel	185	800	PC1806X	1/1
Opaque panel	370	600	PC2606X	1/1
Opaque panel	370	800	PC2806X	1/1



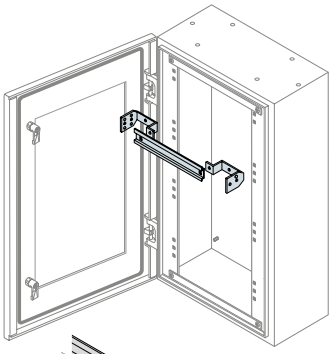
Shaped sections for accessories

Allow fixing of accessories (e.g.: wiring ducts) inside the blind doors. Consist of a pair of vertical crosspieces made of 15/10 thick white galvanised sheet metal, pre-drilled with 25 mm pitch. In enclosures with height 1000 and 1200 mm with a blind door, the shaped sections are already supplied.

Description	Dimensions (mm)	Code	Package/ No. of pieces
	H		
Shaped sections for door	600	TS6009	1/2
Shaped sections for door	700	TS7009	1/2
Shaped sections for door	800	TS8009	1/2

Automation boards

Ordering codes - SRX enclosures



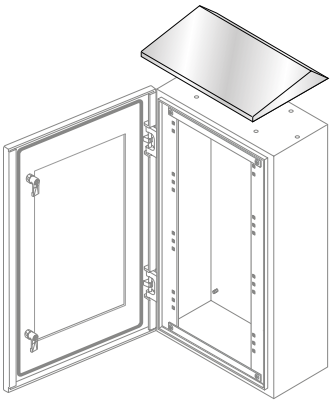
AP6001

DIN rail and fixing brackets

Description	No. modules	W (mm)	Code	Package/ No. of pieces
DIN rail and fixing brackets	14	400	GD4006	1/1
DIN rail and fixing brackets	25	600	GD6006	1/1
DIN rail and fixing brackets	36	800	GD8006	1/1
Depth adapter				
No.1 depth adapter for Tmax T1-T2-T3-XT1-XT3 W=600mm			AP6001	1/4

Spray protection roof

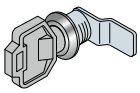
Improves protection against infiltration by liquids and accidental sprays.
Made of 15/10 thick AISI 304 stainless steel.



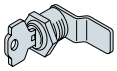
Spray protection roof			
Dimensions (mm)			**Package/ No. of pieces**
W	**D**	**Code**	
200	150	TT2015X	1/1
300	150	TT3015X	1/1
400	150	TT4015X	1/1
300	200	TT3020X	1/1
400	200	TT4020X	1/1
500	200	TT5020X	1/1
600	200	TT6020X	1/1
500	250	TT5025X	1/1
600	250	TT6025X	1/1
600	300	TT6030X	1/1
800	300	TT8030X	1/1

Closing systems

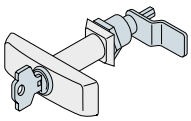
May substitute standard fasteners for the external doors.



AA8001X



AA8002

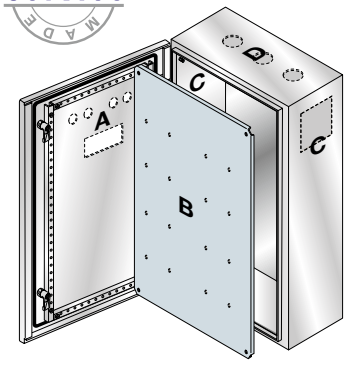


AA8003

EV1008

Description	Code	Package/ No. of pieces
Box Ø19mm double tongue made of chrome-finished plastic and key for external door	AA8001X	1/1
Box Ø19mm with safety insert and Yale type key for external door	AA8002 (1)	1/1
Box Ø19mm with handle and Yale type key for external door	AA8003 (1)	1/1
Box Ø19mm with triangular insert for external door	AA5200 (1)	1/1
Plastic key for triangular insert AA5200 for external door	AA5190	1/1
Box with double tongue insert made of plastic with key for inner door	EV1008	1/1
Single code Yale insert for inner door	EV1036	1/1
Ronis 455 insert for inner door	EV1037	1/1
3mm double tongue insert for inner door	EV1039	1/1

(1) Only for external door



Special Drilling Service
The overprice amount depends on the number of individual drilled parts and not on the number of holes.
For single part it means: A-door B-plate; C-housing; D-top/bottom part.
Please note that the minimum quantity is 10 pieces with a single code. The price of the special drilling service depends on the number of parts to be drilled and on the amount of enclosures to be drilled.

Description	Code	No. of enclosures to be drilled
Extra cost for drilling service per individual drilled part (A-B-C-D)	FORSRX	≥ 10

The special drilling service for standard size enclosures in quantities equal to or greater than 10 units with a single code has to be managed with code SRN ... SPEC + overprice FORSR/ FORSR1/FORSSR2 (see table) equal to the number of enclosures and the number of parts to be drilled + hole layout to be attached to the order (see useful drilling areas, page 7/28)

Example: SRN4320XSPEC 10
FORSRX 10

Example: Enclosure (10 pcs) with door and plate to be drilled (2 parts)
SRN4320XSPEC 10
FORSRX 20
DRAWINGS TO BE ATTACHED

Non-standard enclosure sizes, special drilling
Request feasibility of implementation by completing the relevant Form for special quotations and send it together with the drill layout to the R&D ECS office. Management is per offer.
If the offer is accepted and after having received it, it will be possible to place the order with the codes indicated in the offer.

Painting Special Service
Request feasibility of implementation by completing the relevant Form for special quotations and send it to the R&D ECS office. Management is per offer.
If the offer is accepted and after having received it, it will be possible to place the order with the codes indicated in the offer.

Automation boards

Ordering codes - SRX enclosures

Spare parts

Description	Code	Package/ No. of pieces
Stainless steel screws (No. 16 screws, flanged nuts and nylon washers M6)	AA1203X	1/1
Opaque door 300x200mm (HxW)	PRN3026X	1/1
Opaque door 300x400mm (HxW)	PRN3046X	1/1
Opaque door 400x300mm (HxW)	PRN4036X	1/1
Opaque door 400x400mm (HxW)	PRN4046X	1/1
Opaque door 400x600mm (HxW)	PRN4066X	1/1
Opaque door 500x400mm (HxW)	PRN5046X	1/1
Opaque door 500x500mm (HxW)	PRN5056X	1/1
Opaque door 600x400mm (HxW)	PRN6046X	1/1
Opaque door 600x600mm (HxW)	PRN6066X	1/1
Opaque door 600x800mm (HxW)	PRN6086X	1/1
Opaque door 700x500mm (HxW)	PRN7056X	1/1
Opaque door 800x600mm (HxW)	PRN8066X	1/1
Opaque door 800x800mm (HxW)	PRN8086X	1/1
Opaque door 1000x800mm (HxW)	PRN1086X	1/1
Opaque door 1200x600mm (HxW)	PRN1266X	1/1
Opaque door 1200x800mm (HxW)	PRN1286X	1/1
Glass door 400x300mm (HxW)	PTN4036X	1/1
Glass door 500x400mm (HxW)	PTN5046X	1/1
Glass door 600x400mm (HxW)	PTN6046X	1/1
Glass door 700x500mm (HxW)	PTN7056X	1/1
Glass door 800x600mm (HxW)	PTN8066X	1/1
Glass door 1000x800mm (HxW)	PTN1086X	1/1

Electrical installation solutions for buildings
Junction boxes

Index

Livorno Series emergency consumer units

Technical details designed to facilitate installation	20/2
Livorno Series emergency consumer units	20/4

IP44, IP55 and IP65 Junction boxes

The details make the difference	20/8
IP44, IP55 and IP65 Junction boxes	20/10
IP 44, IP 55 and IP 65 junction boxes in thermoplastic material	20/13
Accessories for IP44, IP55 and IP65 Junction boxes	20/15

Europa65 junction boxes

Technical details designed to facilitate installation	20/17
Order codes	20/20
Order codes – accessories	20/21

Livorno Series emergency consumer units

Technical details designed to facilitate installation

Three degrees of protection IP40, IP55, IP65 allow to install these emergency consumer units in any environment, residential, tertiary or industrial.

The self-extinguishing thermoplastic frame ensures resistance to abnormal heat and fire

The front door is equipped with a protective glass that can be broken in case of need using the glass-breaking hammer (included)

The flush-mounting, wall-mounting or DIN rail versions offer extensive installation choices

The Livorno Series is a range of emergency consumer units equipped with an emergency breakable glass to quickly and effectively stop systems or services in the case of malfunctions or dangers that may occur in residential, tertiary or industrial installations.

Made of self-extinguishing thermoplastic material, these devices are mainly installed in those environments that have greater risk of fire.
The flush- and wall-mounting versions can be equipped with a luminous button and glass-breaking hammer.

Enclosures

Livorno Series emergency consumer units

Consumer units, technical specifications

Protection class	IP40, IP55 or IP65, according to version.
Version	flush- and wall-mounting.
Colour	RAL 3000 red and RAL 7035 grey.
Installation temperature	-25°C ÷ +60°C.
Resistance to heat	ball thermopressure up to +85°C according to EN 60695-10-2 standard.
Front door	breakable glass 0.75 (IK05 degree).
Material	self-extinguishing thermoplastic material, resistant to abnormal heat and fire up to 650°C (glow wire test), according to IEC 60695-2-11 standard.
Door lock	coded-type key
Included accessories	module covers (per DIN rail versions)
	4 screw cover plugs
	certification plate

Consumer units with emergency button, technical specifications

Protection degree	IP55.
Version	flush- and wall-mounting
Colour	RAL 3000 red.
Installation temperature	-25°C ÷ +60°C.
Rated operating voltage Ue	250 V.
Utilisation category	AC 12.
Rated operating voltage Ie	2 A.
Rated insulation voltage Ui	250 V.
Pollution degree	3.
Fuses	10 A, gG type, 10.3x38 mm.
Front door	breakable glass 0.75 (IK05 degree).
Material	self-extinguishing thermoplastic material, resistant to abnormal heat and fire up to 650°C (glow wire test), according to IEC 60695-2-11 standard.
Luminous button	with 1 NO contact + 1 NC contact (2 A, 250 V).
Included accessories	glass-breaking hammer.
Optional accessories	12 or 24 V bulb lamp (incandescent), or 250 V (fluorescent).
Conformity	EN 60947-5-1 standard.
Mark of approval	IMQ according to EN 60947-5-1

13 183

13 144

13 143

Description	IP rating	Dimensions WxHxD [mm]	Order details		Pack. pc.
			Type	Order code	
Flush-mounting version					
RAL 3000 red colour. Possible installation on flush-mounting box with 83.5 mm centre distance. Equipped with luminous button (bulb lamp* - 12 V and 24 V incandescent or 250 V fluorescent), with 1 NO contact + 1 NC contact (2 A, 250 V), complete with glass-breaking hammer. Ⓜ	IP55	100x100x50	-	13 183	1/13
RAL 3000 red colour. With DIN rail x 6 mod.	IP40	200x245x82	-	13 144	1/7
RAL 7035 grey colour. With DIN rail x 6 mod.	IP40	200x245x82	-	13 143	1/7

* lamp not included

Enclosures

Livorno Series emergency consumer units

13 180

13 171 - 13 175

13 161 - 13 165

13 141 - 13 151

Description	IP rating	Dimensions WxHxD [mm]	Order details		Pack. pc.
			Type	Order code	
Wall-mounting version					
RAL 3000 red colour. Equipped with luminous button (bulb lamp* - 12 V and 24 V incandescent or 250 V fluorescent), with 1 NO contact + 1 NC contact (2 A, 250 V), complete with glass-breaking hammer. Ⓜ	IP55	100x100x50	-	13 180	1/14
RAL 3000 red colour. Equipped with flanges for easy branch connections. With DIN rail x 8 mod.	IP65	205x220x140	-	13 171	1/6
RAL 3000 red colour. Equipped with flanges for easy branch connections. With panel.	IP65	205x220x140	-	13 175	1/6
RAL 3000 red colour. With DIN rail x 8 mod.	IP55	165x180x110	-	13 161	1/12
RAL 3000 red colour. With panel.	IP55	165x180x110	-	13 165	1/12
RAL 3000 red colour. With DIN rail x 6 mod.	IP40	170x210x110	-	13 141	1/6
RAL 3000 red colour. With panel.	IP40	170x210x110	-	13 151	1/6

* lampada non fornita

13 190

13 187 - 13 188 - 13 189

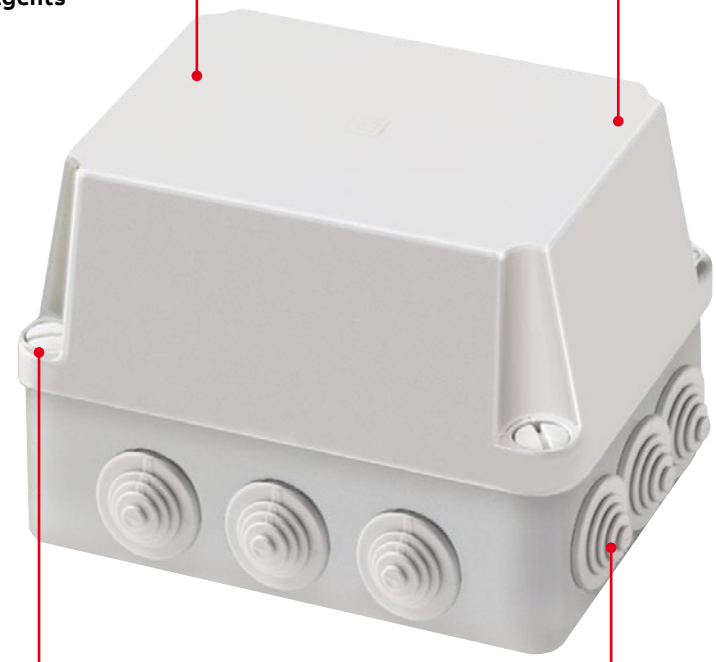
13 186

12 858

Description	Order details		Pack.
	Type	Order code	pc.
Accessories			
Spare lid for consumer units with emergency button	-	13 190	10/40
Bulb lamp for 12 V luminous button - incandescent	-	13 187	10/120
Bulb lamp for 24 V luminous button - incandescent	-	13 188	10/120
Bulb lamp for 250 V luminous button - fluorescent	-	13 189	10/120
Glass-breaking hammer	-	13 186	10/300
Fixing brackets for IP65 insulated consumer units only	-	12 858	20/240

IP44, IP55 and IP65 Junction boxes

The details make the difference

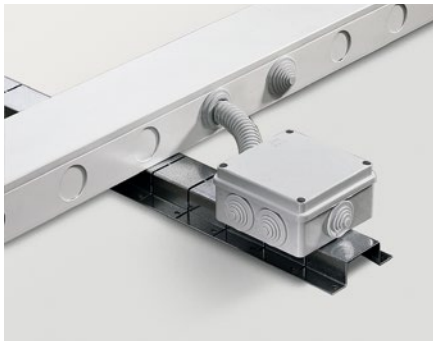


High resistance to heat and chemical and atmospheric agents

Installation temperature from -25 °C to +60 °C

Three lid types available: press-on, with steel screws and with plastic screws with a ¼ turn closing

Boxes with protection degree IP55 and IP65 are composed of a patented lid produced in a single pressing phase together with its seal



A wide range for all needs.
There are IP44 for press-on lid boxes with cable glands, IP55 for screw-on lid boxes with cable glands and IP65 for screw-on lid box with smooth sides.

Some versions of the IP44 and IP55 junction boxes are already equipped with cable glands.

Boxes with protection degree IP55 and IP65 are composed of a patented lid produced in a single pressing phase together with its seal.

Now new: All IP65 junction boxes (with smooth sides) are manufactured in halogen free thermoplastic material.

Wall-mounting is also possible.
All junction boxes measuring 160x135, 220x170 and 310x240 mm can be mounted on the wall with brackets (accessory; code 12858).

All IP44, IP55 and IP65 junction boxes are also available in thermoplastic material, self-extinguishing in compliance with UL 94 V2 Standard and resistant to abnormal heat and fire up to 960 °C GWT.

Enclosures

IP44, IP55 and IP65 Junction boxes

- IP44, IP55 and IP65 Junction boxes for swimming pool control equipment, washing car centers, garages, building services, automatic garden lighting and watering, traffic signs, photovoltaic installations.
- Protection degree: IP44 for press-on lid boxes with cable glands, IP55 for screw-on lid boxes with cable glands, IP65 for screw-on lid box with smooth sides
- Shock resistant: IK07 for IP44 boxes, IK08 for IP55 and IP65 boxes
- IP44 and IP55 boxes with press-on lids in thermoplastic material, self-extinguishing in compliance with UL 94 HB Standard and resistant to abnormal heat and fire up to 650°C (glow wire flammability index) in compliance with IEC 60695-2-11 Standard
- IP65 boxes with screw-on lids in halogen free thermoplastic material, self-extinguishing in compliance with UL 94 HB Standard and resistant to abnormal heat and fire up to 650°C (glow wire flammability index) in compliance with IEC 60695- 2-11 Standard
- Installation temperature from -25°C to +60°C; Resistant to heat: ball thermopressure up to +85°C for IP44, IP55 and IP65 junction boxes
- Boxes with protection degree IP55 and IP65 are composed of a patented lid produced in a single pressing phase together with its seal
- All junction boxes made in compliance with IEC 60670-1 and IEC 60670-22 Standards
- IP44 and IP55 junction boxes in thermoplastic material obtained the IMQ mark of approval
- All the boxes are RoHS compliance

All IP44, IP55 and IP65 junction boxes are also available in thermoplastic material, self-extinguishing in compliance with UL 94 V2 Standard and resistant to abnormal heat and fire up to 960°C (glow wire flammability index) in compliance with IEC 60695-2-11 Standard.

2CSC001064F0014

IP44 boxes

2CSC001065F0014

IP44 boxes

2CSC001066F0014

IP55

Description	Dimensions HxWxD [mm]	Order code	Box/Pack No items
IP44 boxes - GWT 650°C With cable glands and press-on lid			
IP44-Snap-on cover - GWT 650°C	Ø 60 - H 35	00800	240/240
	Ø 80 - H 40	00802	144/144
	65x65x32	00808	168/168
	80x80x40	00810	100/100
IP55 waterproof boxes with plastic 1/4 turn screws - GWT 650°C With cable glands and low screw-on lid RAL 7035			
IP55-Cable glands-low lid-1/4TS GWT 650°C	100x100x50	1SL0816A00	1/54
	105x70x50	1SL0820A00	1/70
	100x100x80	1SL0821A00	1/40
	153x110x66	1SL0822A00	1/32
IP55-Cable glands-low lid-1/4TS GWT 650°C*	160x135x77	1SL0824A00	1/18
	220x170x80	1SL0826A00	1/12
	310x240x110	1SL0828A00	1/6

* Can be wall-mounted using wall brackets code 12858.

IP65

IP65

IP55

IP65

IP65

Description	Dimensions HxWxD [mm]	Order code	Box/Pack No items
IP65 waterproof boxes with plastic 1/4 turn screws - GWT 650°C halogen free With smooth sides and low screw-on lid RAL 7035			
IP65-Smooth-low lid-1/4TS GWT 650°C halogen free	100x100x50	1SL0846A00	1/60
	105x70x50	1SL0850A00	1/100
	100x100x80	1SL0851A00	1/40
	153x110x66	1SL0852A00	1/32
IP65-Smooth-low lid-1/4TS GWT 650°C halogen free*	160x137x77	1SL0854A00	1/24
	220x170x80	1SL0856A00	1/12
	310x240x110	1SL0858A00	1/6
With smooth sides and transparent low screw-on lid			
IP65-Smooth-low transparent lid-1/4TS GWT 650°C halogen free	153x110x66	1SL0872A00	1/34
IP65-Smooth-low transparent lid-1/4TS GWT 650°C halogen free*	160x135x77	1SL0874A00	1/24
	220x170x80	1SL0876A00	1/12
	310x240x110	1SL0878A00	1/6
IP55 waterproof boxes with steel screws - GWT 650°C With cable glands and high screw-on lid RAL 7035			
IP55- Cable glands-low lid - GWT 650°C	100x100x50	00816	1/54
	105x70x50	00820	1/70
	100x100x80	00821	1/40
	153x110x66	00822	1/32
IP65 waterproof boxes with steel screws - GWT 650°C halogen free With smooth sides and high screw-on lid RAL 7035			
IP65- Smooth W.-low lid - GWT 650°C halogen free	100x100x50	00846	1/60
	105x70x50	00850	1/100
	100x100x80	00851	1/40
	153x110x66	00852	1/34
With Smooth sides and transparent high screw-on lid			
IP65- Smooth W.-transparent. low lid-153X110X66 GWT 650°C halogen free	151x110x66	00872	1/34

* Can be wall-mounted using wall brackets code 12858.

Enclosures

IP44, IP55 and IP65 Junction boxes

IP55

IP65

IP65

Description	Dimensions HxWxD [mm]	Order code	Box/Pack No items
IP55 waterproof boxes with plastic 1/4 turn screws - GWT 650°C With Cable glands and high screw-on lid RAL 7035			
IP55-Cable glands-high lid -1/4TS GWT 650°C	160x135x150	1SL0830A00	1/16
	220x170x150	1SL0832A00	1/8
	310x240x160	1SL0834A00	1/4
IP65 waterproof boxes with plastic 1/4 turn screws - GWT 650°C halogen free With Smooth sides and high screw-on lid RAL 7035			
IP65-Smooth-high lid -1/4TS GWT 650°C halogen free	160x135x150	1SL0860A00	1/16
	220x170x150	1SL0862A00	1/8
	310x240x160	1SL0864A00	1/4
With Smooth sides and transparent high screw-on lid			
IP65-Smooth-high transparent lid -1/4TS GWT 650°C halogen free*	160x135x150	1SL0880A00	1/16
	220x170x150	1SL0882A00	1/8
	310x240x160	1SL0884A00	1/4

* Can be wall-mounted using wall brackets code 12858.

Enclosures

IP 44, IP 55 and IP 65 junction boxes in thermoplastic material

IP44

IP44

IP55

IP65

Description	Dimensions HxWxD [mm]	Order code	Box/Pack No items
IP 44 boxes - GWT 960 °C			
With cable glands and press-on lid	Ø 60 - H 35	1SL0900A00	240/240
	Ø 80 - H 40	1SL0901A00	144/144
	65x65x32	1SL0902A00	168/168
	80x80x40	1SL0903A00	100/100
IP 55 waterproof boxes with plastic 1/4 turn screws - GWT 960 °C			
With cable glands and low screw-on lid RAL 7035	100x100x50	1SL0916A00	1/54
	105x70x50	1SL0920A00	1/70
	100x100x80	1SL0921A00	1/40
	153x110x66	1SL0922A00	1/32
	160x135x77	1SL0924A00*	1/18
	220x170x80	1SL0926A00*	1/12
	310x240x110	1SL0928A00*	1/6
IP 65 waterproof boxes with plastic 1/4 turn screws - GWT 960 °C			
With smooth sides and low screw-on lid RAL 7035	100x100x50	1SL0946A00	1/60
	105x70x50	1SL0950A00	1/100
	100x100x80	1SL0951A00	1/40
	153x110x66	1SL0952A00	1/32
	160x137x77	1SL0954A00*	1/24
	220x170x80	1SL0956A00*	1/12
	310x240x110	1SL0958A00*	1/6

* Can be wall-mounted using wall brackets code 12 858.

Enclosures

IP 44, IP 55 and IP 65 junction boxes in thermoplastic material

IP55

2CSC01084F0014

IP65

Description	Dimensions HxWxD [mm]	Order code	Box/Pack No items
IP 65 waterproof boxes with plastic 1/4 turn screws - GWT 960 °C			
With smooth sides and high screw-on lid RAL 7035	160x135x150	1SL0960A00	1/16
	220x170x150	1SL0962A00	1/8
	310x240x160	1SL0964A00	1/4

Enclosures

Accessories for IP44, IP55 and IP65 Junction boxes

Technical characteristics of metric cable clamps:
Protection degree IP68
Material: polyamide 6.6, self-extinguishing material according to UL94V2 Standard and resistant to abnormal heat and to fire up to 750°C (glow wire test) according to IEC 60695-2-11 Standard
Operational temperature: from -20°C up to +120°C (short period of time)
Colour: RAL 7035 grey;
Neoprene seal;
Thread pitch: 1.5 mm; Thread angle: 60°
Tightening with a plate crown on the whole diameter of cable (excluded the possibility to damage the cable itself)
Possibility to recover the cable clamp without compromising its efficiency.

Technical characteristics nuts of with metric pitch collar
Material: polyamide 6.6, self-extinguishing material according to UL94 V2 Standard and resistant to abnormal heat and to fire up to 750°C (glow wire test) according to IEC 60695-2-11 Standard
Operational temperature: from -20°C up to +120°C (continuous) from -20°C up to +120°C (short period of time)
Colour: RAL 7035 grey
Thread pitch: 1.5 mm; Thread angle: 60°.

PG pitch

PG pitch

metric pitch

metric pitch

Cable glands and nuts - PG pitch

Pitch	Torque values	For cables diameter		Cable gland		Nut x cable gland	Cable clamp Box/pack	Nuts x cable Box/pack
Pg	N x m	Min (mm)	Max (mm)	Order code	Price	Order code	No Items	No Items
9	3.75	6.5	8.5	00931		00941	100/500	100/3000
11	3.75	8	10	00932		00942	100/500	100/3000
13.5	3.75	8	11	00933		00943	50/500	50/1500
16	5	11	14	00934		00944	50/300	50/1500
21	7.5	14.5	18	00935		00945	50/300	50/1500
29	7.5	19	26	00936		00946	25/150	50/600
36	7.5	30	34	00937		00947	25/75	25/300
42	7.5	30	38	00938		00948	15/60	25/300

In compliance with CEI EN 50262 Standard.

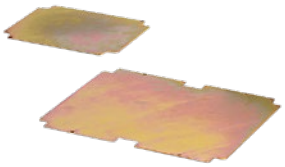
Cable glands and nuts - metric pitch

Pitch	Torque values	Cables diameter		Cable gland		Nut	Box/pack	Cable clamp Box/pack
Pg	N x m	Min (mm)	Max (mm)	Order code	Price	Order code	No Items	No Items
12 x 1.5	2.7	3.5	7	00951		00961	100/1200	100/3000
16 x 1.5	5	5.5	10	00952		00962	100/500	100/3000
20 x 1.5	7	7	13	00953		00963	100/500	50/1500
25 x 1.5	7.5	10	17	00954		00964	50/250	50/1500
32 x 1.5	8	12	21	00955		00965	25/150	50/500
40 x 1.5	8	19	28	00956 *		00966	25/75	25/300
50 x 1.5	10	27	35	00957 *		00967	15/60	25/300
63 x 1.5	10	34	45	00958 *		00968	10/40	20/100

In compliance with CEI EN 50262 Standard.
* Cable clamps and M40, M50 and M63 nuts are available on request.

Enclosures

Accessories for IP44, IP55 and IP65 Junction boxes



2CSC001090F0014

Metal base plates

2CSC001091F0014

Cable Clamps

2CSC001092F0014

Conduit clamps

Description	Order code	Box/Pack No items
Metal base plates		
Metal base plate for boxes with dimensions 160x135x77	900	1/10
Metal base plate for boxes with dimensions 220x170x80	902	1/5
Metal base plate for boxes with dimensions 310x240x110	904	1/5
All metal base plates listed above are equipped with fixing screws type 3.5x9.5.		
Cable Clamps - Protection Degree: IP55		
Cable clamp for conduit Ø 20 mm	908	100/1500
Cable clamp for conduit Ø 25 mm	910	100/1000
Cable clamp for conduit Ø 32 mm	912	50/400
Conduit clamps - Box Connector - Protection Degree: IP67		
Conduit clamp Ø 16 mm	00430	500/500
Conduit clamp Ø 20 mm	00431	300/300
Conduit clamp Ø 25 mm	00432	150/150
Conduit clamp Ø 32 mm	00433	100/100
Conduit clamp Ø 40 mm	00434	50/50
Conduit clamp Ø 50 mm	00435	50/50

Europa65 junction boxes

Technical details designed to facilitate installation

Bi-material flanges allow easy entry of cables or conduits

Convenient mounting brackets (optional) on the back side allow to fix the box to the wall in a quick and accurate way

Accessories include base plates or DIN rails to better integrate different types of devices

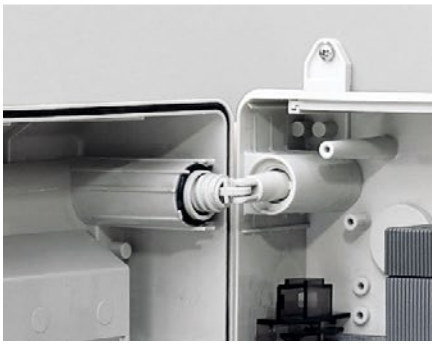
The front cover is provided with captive-type plastic clamping screws to ensure greater ease of use

Europa65 junction boxes

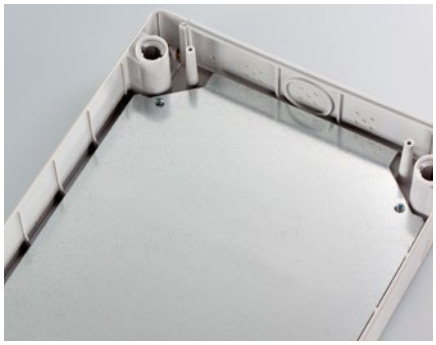
Technical details designed to facilitate installation

Rigid on one side and bi-material flange on the other to facilitate input of conduits and cables. The flanges are removeable and interchangeable.

The Polycarbonate GWT 960 ensure unique mechanical performances (Shock resistance IK10) and ensure high resistance against UV rays.



Perfectly symmetrical consumer units with the possibility of attaching the door hinge onto the front (by means of the special articulated screws supplied) on the right or left with 140° opening.



Different type of devices can be installed in an integrated and rational manner thanks to the many accessories such as base plates or a DIN rail.

The frame that can be fitted onto the consumer unit makes semi-flush mounting possible, guaranteeing an attractive finish.

The consumer unit can be fitted with Neutral (N) or Earth (E) terminals, by combining the copper terminal bars to the corresponding plastic terminal holders.

Europa65 junction boxes

Technical characteristics

- protection degree IP 65
- insulation class II ⧈
- available in RAL 7035 grey
- in polycarbonate material, self-extinguishing and resistant to abnormal heat and fire up to 960 °C (glow wire test) in compliance with IEC 60695-2-11 Standard
- installation temperature from -25 °C to +60 °C
- resistant to heat: ball thermopressure up to +125 °C in compliance with EN 60695-10-2 Standard
- rated insulation voltage: 1000 V AC; 1500 V DC
- shock resistance 20 Joules (IK level 10)
- perfectly symmetrical junction boxes with possibility of attaching the lid hinges, (using the special articulated screws supplied) on the right or left with 140° opening
- boxes code 12 808, 12 812, 12 814, 12 816 and 12 818 fitted with one rigid and one bi-material flange for facilitated input of conduits and cables
- junction boxes produced in compliance with CEI 23-49 (1996) + V1 + V2, CB certificate IEC 60670-24 Standards
- boxes are supplied complete with:
- 4 screw-cover caps to guarantee ⧈
- accessories for attaching the hinges on the front
- 1 certification plate
- instruction sheet
- use 3.5x9.5 self-tapping screws to fix the components on the back

Europa65 junction boxes
Order codes

12804

12808

12812

12814

12816

12818

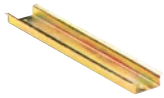
Description	Dimensions WxHxD [mm]	Order code	Packaging
Europa65 junction boxes	140x220x140	12804	1/14
Europa65 junction boxes	205x220x140	12808	1/9
Europa65 junction boxes	275x220x140	12812	1/6
Europa65 junction boxes	275x370x140	12814	1/4
Europa65 junction boxes	275x570x140	12816	1/2
Europa65 junction boxes	380x570x140	12818	1/2

Europa65 junction boxes, accessories

Order codes

Aluminium-plated metal base plates

Insulated base plates



DIN metal rails

Wall fixing brackets

Spare flanges

Semi-flush mounting frames

Universal cutter

Description	For boxes [type]	Order code	Packaging
Base plates			
In aluminium-plated metal	12 804	12842	10/120
	12 808	12844	10/10
	12 812	12845	10/10
	12 814	12846	5/5
	12 816	12847	5/5
	12 818	12848	5/5
In insulated material	12 804	12832	10/10
	12 808	12834	10/10
	12 812	12835	10/10
	12 814	12836	5/5
	12 816	12837	5/5
	12 818	12838	5/5
DIN metal rails			
Complete with fixing screws	12 804	12852	50/600
	12 808	12854	30/360
	12 812 - 12 814 12 816	12855	50/200
	12 818	12856	50/200
Wall fixing brackets			
In insulated material	-	12858	20/240
Spare flanges			
Bi-material flange - 8 modules per row	-	12600	30/120
Bi-material flange - 12 modules per row	-	12601	20/80
Bi-material flange - 18 modules per row	-	12602	20/80
Rigid flange - 8 modules per row	-	1SL0550A00	30/120
Rigid flange - 12 modules per row	-	1SL0551A00	20/80
Rigid flange - 18 modules per row	-	1SL0552A00	20/80
Semi-flush mounting frames			
Semi-flush mounting frames	12 804	12590	5/20
Semi-flush mounting frames	12 808	12591	5/20
Semi-flush mounting frames	12 812	12592	5/20
Semi-flush mounting frames	12 814	12593	5/20
Semi-flush mounting frames	12 816	12594	5/5
Semi-flush mounting frames	12 818	12595	5/5
Universal cutter for drill			
To be use for side branch connections	-	12894	1/30

Europa65 junction boxes, accessories

Order codes

Terminal blocks

The complete terminal blocks are composed of a combination of terminal holders and terminal bars as shown in the description, with the terminal bars already mounted on terminal holders. The complete terminal blocks are standard configurations. For different requirements (customized terminal blocks), the terminal holders and the terminal bars must be purchased separately in the versions given in the table.

Terminal blocks

Description	For boxes [type]	Order code	Packaging
Composed of 12538x2 + 12531x2	12804	12490	10/60
Composed of 12539x2 + 12531x2	12808	12491	10/60
Composed of 12540x1 + 12531x1 + 12532x1	12812	12492	10/40
Composed of 12540x2 + 12533x2	12814	12494	10/40
Composed of 12540x2 + 12534x2	12816	12493	10/40
Composed of 12543x2 + 12535x2	12818	12497	10/40

Terminal holder

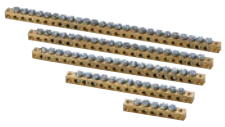
The construction of the terminal block is completed by combining the terminal holders with the necessary terminal bars, taking care to separate the latter from one another.

Terminal holder

Description	For boxes [type]	Order code	Packaging
Terminal holder	12 804	12538	12/360
Terminal holder	12 808	12539	12/360
Terminal holder	12 812 - 12 814 12 816	12540	12/144
Terminal holder	12 818	12543	12/108

Terminal bars

The terminal bars can be installed on any type of terminal holder; they can be hooked by means of 2 snap-on clips through two additional holes at the ends of the bar itself.



Terminal bars

Description No. of holes x Ø holes [mm] + No. of holes x Ø holes [mm]	Order code	Packaging
5x4,5	12531	20/240
10x4,5 + 3x5,6	12532	20/240
16x4,5 + 3x5,6	12533	20/240
15x4,5 + 6x5,6	12534	20/240
19x4,5 + 6x5,6	12535	20/240

Electrical installation solutions for buildings
Electric vehicles charging

Index

ABB EVLunic 21/2

Electric vehicles charging
ABB EVLunic

EVLunic: Powerful AC chargers for residential and commercial applications
ABB EVLunic can charge electric vehicles and plug-in hybrids alike. With many different versions and variants there is a right model for every need.

Options	
Type 2 socket	For cars that have a type 2 connection. Mainly used when different cars will use the charger, or in locations where the driver is not the owner of the charger. The drivers will have to supply their own charge cable.
Type 2 socket with shutters	Same as above, mainly used in France.
Type 2 cable	Mainly used when the owner of the charger is also the driver. Or where the owner of the charger wants to offer the visitors the luxury of not having to supply their own charge cable. Cables are available in 4m and 6m length.
Type 1 cable	Used for cars that have a type 1 connection.
1 phase	The charger can only be connected with one phase.
3 phase	The charger can be connected with either 1 or 3 phases.
10A, 13A, 20A, 25A, 32A	The charger can be set (with a jumper setting) to this maximum current.
Energy meter	The charger has an energy meter to measure voltage, current, power and energy. It can be used to create an overview how much energy was delivered, and to do local load management. This includes a display.
MID	The energy meter is calibrated and certified to be MID compliant. This is necessary in the EU if payment is based on the delivered energy. E.g., if the energy is sold, or when the energy costs can be reimbursed at the lease company.
Enable input	An external device (like a knob) can be used to enable/disable the charger
Switch contact output	An external device can be connected to display charging status.
USB	All chargers have this feature, it is used for software upgrades.
Ethernet (RJ45)	All chargers have this feature, it is used for software upgrades and debugging.
Ethernet LSA+	Connection to a smart home server or to another EVLunic.
Load management + OCPP (slave)	Can be used for load management when connected to a load management master. Can be connected to a back office through OCPP, if connected to a master.
Load management + OCPP (master)	Can be used for load management and to OCPP; up to 15 slaves can be connected to one master.
UMTS/3G	The charger has a SIM card slot for wireless connection
RFID	The charger has authentication through an RFID card
Key	The charger has authentication through a key lock. This can be used to authenticate with the house key (if the charger has the same cylinder)

Safety
EVLunic includes an integrated onboard DC leakage detector, which eliminates the need for an expensive upstream RCD type B. Separate compartments for electronics and grid connection make installation easy. It also makes jumper selection and accessing the USB, Ethernet and SIM card possible without risk of touching the power circuits.

Electric vehicles charging
ABB EVLunic

Electric vehicles charging

ABB EVLunic

Description	Name	Renault Z.E. ready	EV Ready	Type 2 Socket	Type 2 Socket + Shutter	Type 2 cable	Type 1 cable	Cable length 4m	Cable length 6m
wallbox type 2 AC, socket 4.6kW	EVLunic B W4.6-T-0-0			●					
wallbox type 2 AC, socket with shutter 4.6kW	EVLunic B W4.6-S-0-0				●				
wallbox type 2 AC, cable (4m) 4.6kW	EVLunic B W4.6-G4-0-0					●		●	
wallbox type 1 AC, cable (4m) 4.6kW	EVLunic B W4.6-P4-0-0						●	●	
wallbox type 2 AC, socket 22kW	EVLunic B+ W22-T-0-0			●					
wallbox type 2 AC, socket 22kW, RFID	EVLunic B+ W22-T-R-0			●					
wallbox type 2 AC, socket 22kW, Key	EVLunic B+ W22-T-K-0			●					
wallbox type 2 AC, socket with shutter 22kW	EVLunic B+ W22-S-0-0	●	●		●				
wallbox type 2 AC, socket with shutter 22kW, RFID	EVLunic B+ W22-S-R-0	●	●		●				
wallbox type 2 AC, cable (4m) 11kW	EVLunic B+ W11-G4-0-0					●		●	
wallbox type 2 AC, cable (4m) 11kW, RFID	EVLunic B+ W11-G4-R-0					●		●	
wallbox type 2 AC, cable (4m) 22kW	EVLunic B+ W22-G4-0-0					●		●	
wallbox type 2 AC, cable (4m) 22kW, RFID	EVLunic B+ W22-G4-R-0					●		●	
wallbox type 2 AC, cable (4m) 22kW, Key	EVLunic B+ W22-G4-K-0					●		●	
wallbox type 2 AC, cable (6m) 22kW	EVLunic B+ W22-G6-0-0					●			●
wallbox type 2 AC, cable (6m) 22kW, RFID	EVLunic B+ W22-G6-R-0					●			●
wallbox type 2 AC, cable (6m) 22kW, Key	EVLunic B+ W22-G6-K-0					●			●
wallbox type 1 AC, cable (4m) 4.6kW	EVLunic B+ W4.6-P4-0-0						●	●	
wallbox type 1 AC, cable (4m) 4.6kW, RFID	EVLunic B+ W4.6-P4-R-0						●	●	
wallbox type 2 AC, socket 22kW	EVLunic Pro S W22-T-0-0			●					
wallbox type 2 AC, socket 22kW, RFID	EVLunic Pro S W22-T-R-0			●					
wallbox type 2 AC, socket with shutter 22kW	EVLunic Pro S W22-S-0-0	●	●		●				
wallbox type 2 AC, socket with shutter 22kW, RFID	EVLunic Pro S W22-S-R-0	●	●		●				
wallbox type 2 AC, cable (4m) 11kW	EVLunic Pro S W11-G4-0-0					●		●	
wallbox type 2 AC, cable (4m) 22kW	EVLunic Pro S W22-G4-0-0					●		●	
wallbox type 2 AC, cable (4m) 22kW, RFID	EVLunic Pro S W22-G4-R-0					●		●	
wallbox type 2 AC, cable (6m) 22kW	EVLunic Pro S W22-G6-0-0					●			●
wallbox type 2 AC, cable (6m) 22kW, RFID	EVLunic Pro S W22-G6-R-0					●			●
wallbox type 1 AC, cable (4m) 4.6kW	EVLunic Pro S W4.6-P4-0-0						●	●	
wallbox type 1 AC, cable (4m) 4.6kW, RFID	EVLunic Pro S W4.6-P4-R-0						●	●	

●	●										●	●														●	●	●	●	1-phase
		●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●	●					3-phase
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10A
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	13A
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	16A
●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	●	20A
		●	●	●	●		●	●	●	●			●	●	●	●	●	●			●	●	●	●	●					25A
		●	●	●	●		●	●	●	●			●	●	●	●	●	●			●	●	●	●	●					32A
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	DC Leakage detection
●	●	●	●	●	●	●	●	●	●	●																				Energy Meter
																														Metering MID
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				Enable input
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				Switch contact output output
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	USB
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Ethernet RJ45 (debug)
●	●	●	●	●	●	●	●	●	●	●																				Ethernet LSA+
●	●	●	●	●	●	●	●	●	●	●																				UDP
●	●	●	●	●	●	●	●	●	●	●																				Slave (OCPP, Loadma-nagement)
																														Master (OCPP, Loadma-nagement)
																														UMTS/3G
●		●		●			●		●		●			●			●		●		●			●						RFID (Mifare)
													●			●							●							Key switch
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				VDE Certified

Electric vehicles charging

ABB EVLunic

Description	Name	Renault Z.E. ready	EV Ready	Type 2 Socket	Type 2 Socket + Shutter	Type 2 cable	Type 1 cable	Cable length 4m	Cable length 6m
wallbox type 2 AC, socket 22kW	EVLunic Pro M W22-T-0-0			●					
wallbox type 2 AC, socket 22kW, RFID	EVLunic Pro M W22-T-R-0			●					
wallbox type 2 AC, socket 22kW, UMTS/3G	EVLunic Pro M W22-T-0-C			●					
wallbox type 2 AC, socket 22kW, RFID, UMTS/3G	EVLunic Pro M W22-T-R-C			●					
wallbox type 2 AC, socket with shutter 22kW	EVLunic Pro M W22-S-0-0	●	●		●				
wallbox type 2 AC, socket with shutter 22kW, RFID	EVLunic Pro M W22-S-R-0	●	●		●				
wallbox type 2 AC, socket with shutter 22kW, UMTS/3G	EVLunic Pro M W22-S-0-C	●	●		●				
wallbox type 2 AC, socket with shutter 22kW, RFID, UMTS/3G	EVLunic Pro M W22-S-R-C	●	●		●				
wallbox type 2 AC, cable (4m) 11kW	EVLunic Pro M W11-G4-0-0					●		●	
wallbox type 2 AC, cable (4m) 11kW, UMTS/3G	EVLunic Pro M W11-G4-0-C					●		●	
wallbox type 2 AC, cable (4m) 22kW	EVLunic Pro M W22-G4-0-0					●		●	
wallbox type 2 AC, cable (4m) 22kW, RFID	EVLunic Pro M W22-G4-R-0					●		●	
wallbox type 2 AC, cable (4m) 22kW, UMTS/3G	EVLunic Pro M W22-G4-0-C					●		●	
wallbox type 2 AC, cable (4m) 22kW, RFID, UMTS/3G	EVLunic Pro M W22-G4-R-C					●		●	
wallbox type 2 AC, cable (6m) 22kW	EVLunic Pro M W22-G6-0-0					●			●
wallbox type 2 AC, cable (6m) 22kW, RFID	EVLunic Pro M W22-G6-R-0					●			●
wallbox type 2 AC, cable (6m) 22kW, UMTS/3G	EVLunic Pro M W22-G6-0-C					●			●
wallbox type 2 AC, cable (6m) 22kW, RFID, UMTS/3G	EVLunic Pro M W22-G6-R-C					●			●
wallbox type 1 AC, cable (4m) 4.6kW	EVLunic Pro M W4.6-P4-0-0						●	●	
wallbox type 1 AC, cable (4m) 4.6kW, RFID	EVLunic Pro M W4.6-P4-R-0						●	●	
wallbox type 1 AC, cable (4m) 4.6kW, UMTS/3G	EVLunic Pro M W4.6-P4-0-C						●	●	
wallbox type 1 AC, cable (4m) 4.6kW, RFID, UMTS/3G	EVLunic Pro M W4.6-P4-R-C						●	●	
Pedestal for one wallbox - stainless steel	EVLunic P1								
Pedestal for two wallboxes - stainless steel	EVLunic P2								
Triangle pedestal for two wallboxes - stainless steel	EVLunic T2								

* MID certified models will be available in 2018

●	●	●	●																			1-phase
				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	3-phase
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10A
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	13A
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	16A
●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	20A
				●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	25A
				●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	32A
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	DC Leakage detection
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Energy Meter
																						Metering MID
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Enable input
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Switch contact output output
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	USB
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Ethernet RJ45 (debug)
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Ethernet LSA+
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	UDP
																						Slave (OCPP, Loadma-nagement)
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Master (OCPP, Loadma-nagement)
●	●			●	●			●	●			●		●	●			●	●			UMTS/3G
●		●		●		●		●		●				●		●		●		●		RFID (Mifare)
																						Key switch
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	VDE Certified

Electrical installation solutions for buildings
Quick product references

Index

MCBs wiring diagrams	22/2
RCDs wiring diagrams	22/4
Auxiliary elements	22/12
Protection and safety wiring diagrams	22/17
Command and signaling wiring diagrams	22/33
Control and automation wiring diagrams	22/41
Energy efficiency wiring diagrams	22/49
Overall dimensions	22/58
MCBs and RCDs worldwide marks and approvals	22/170
MDRCs worldwide marks and approvals	22/178

Quick product references

MCBs wiring diagrams

MCBs

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		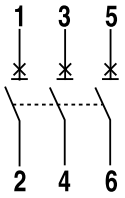	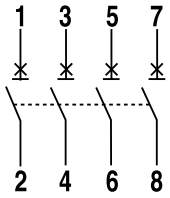	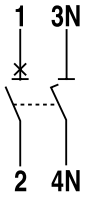	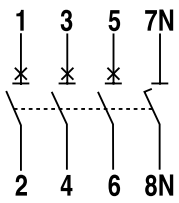

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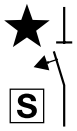	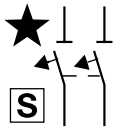	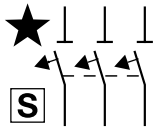	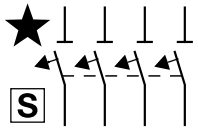

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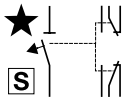	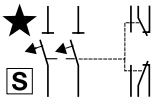	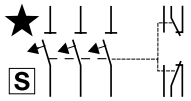	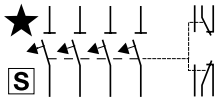

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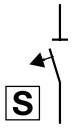	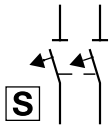	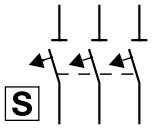	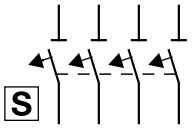

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		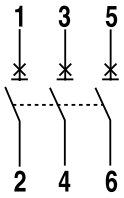	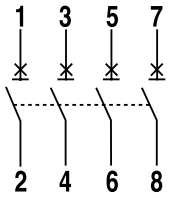

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	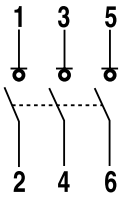	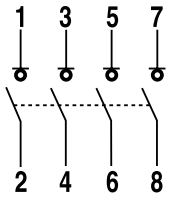

Quick product references

RCDs wiring diagrams

RCDs

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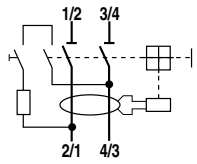

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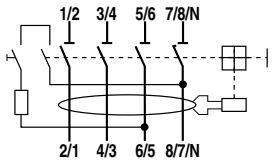

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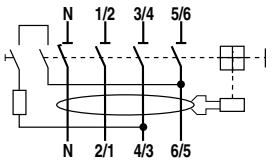

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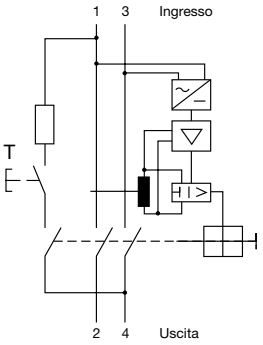

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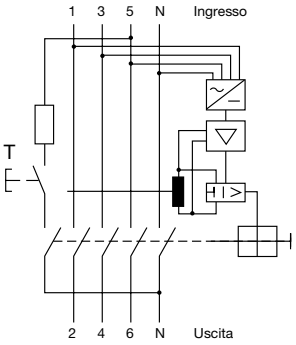

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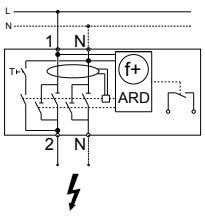

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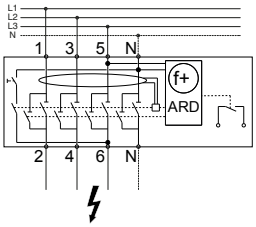

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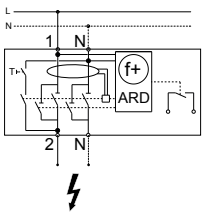

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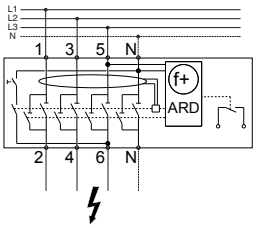

RCD-blocks

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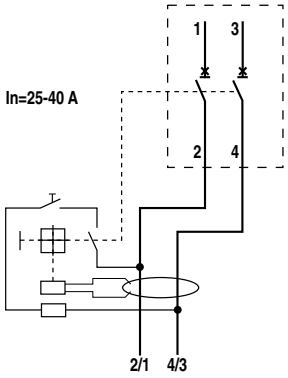

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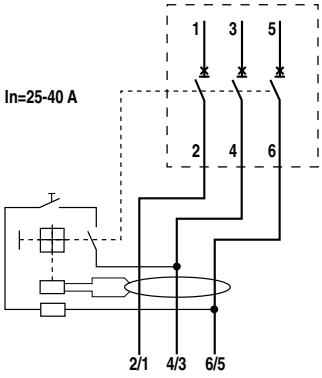

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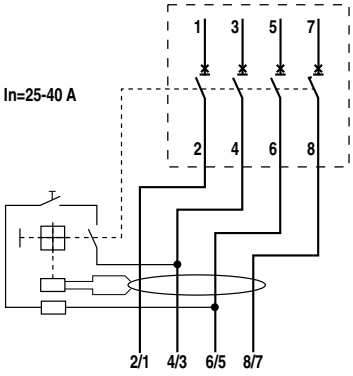

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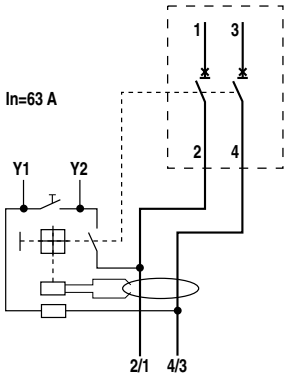

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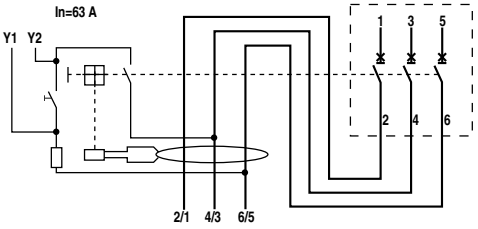

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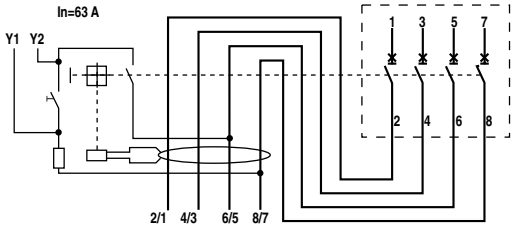

Quick product references

RCDs wiring diagrams

RCD-blocks

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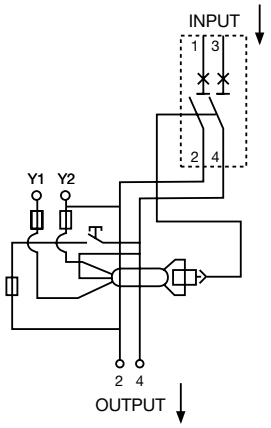

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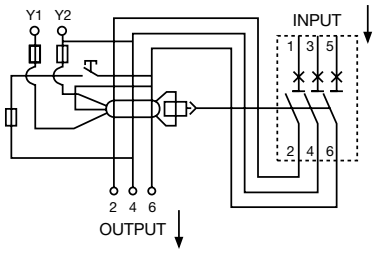

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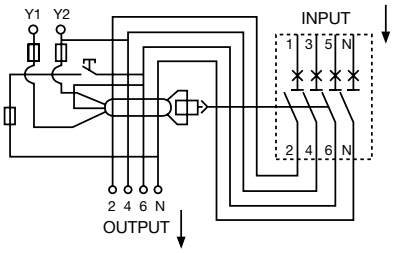

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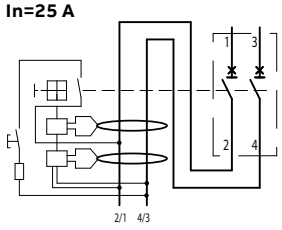

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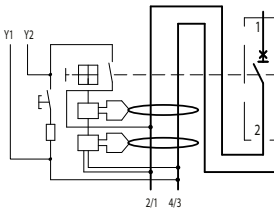

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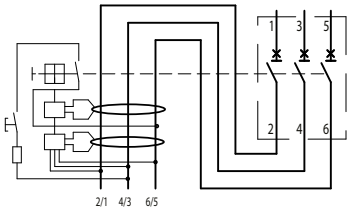

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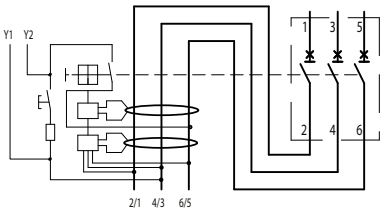

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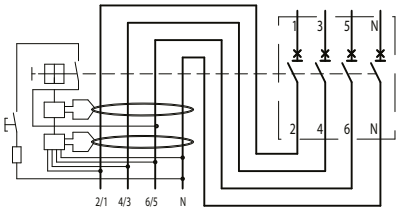

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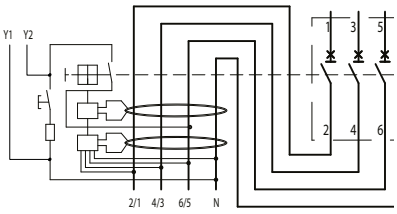

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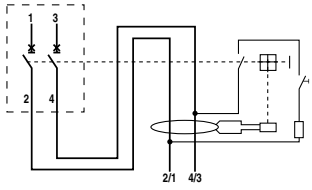

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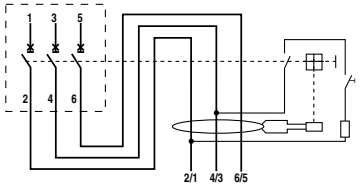

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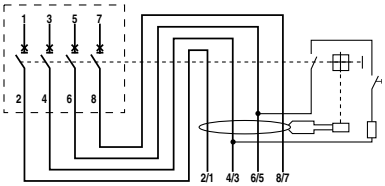

RCBOs

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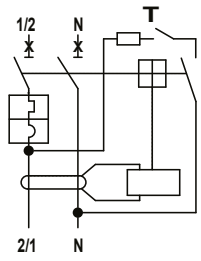

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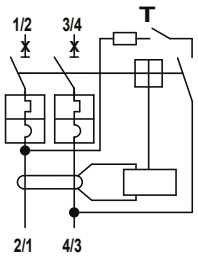
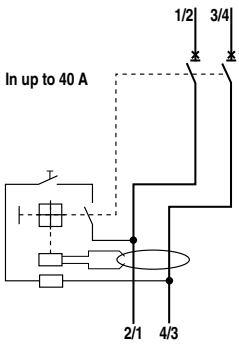
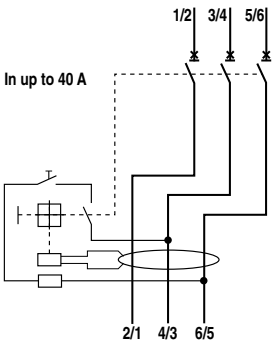


DS 202



DS 203



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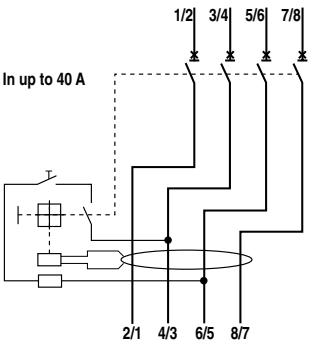

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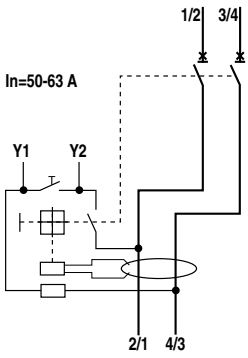

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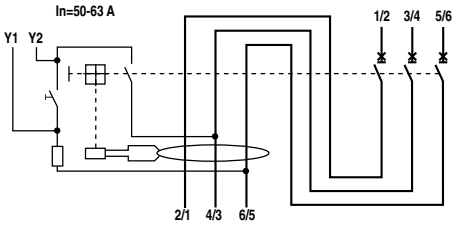

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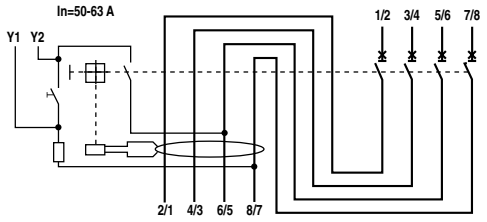
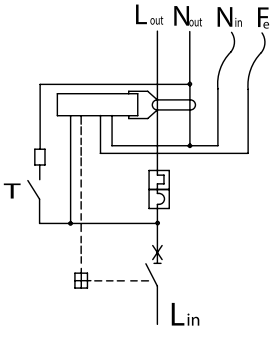


DSE201 - DSE201 M

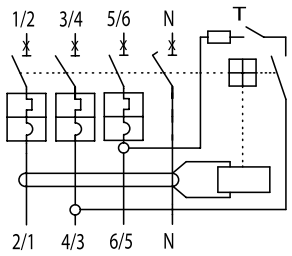


Quick product references

RCDs wiring diagrams

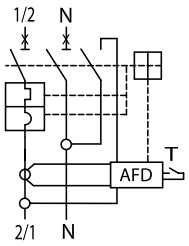
RCBOs

DS203NC



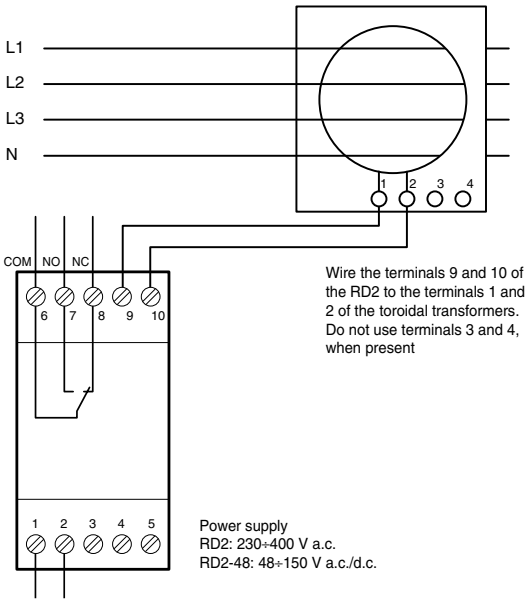
AFDD

S-ARC1



Residual current relays

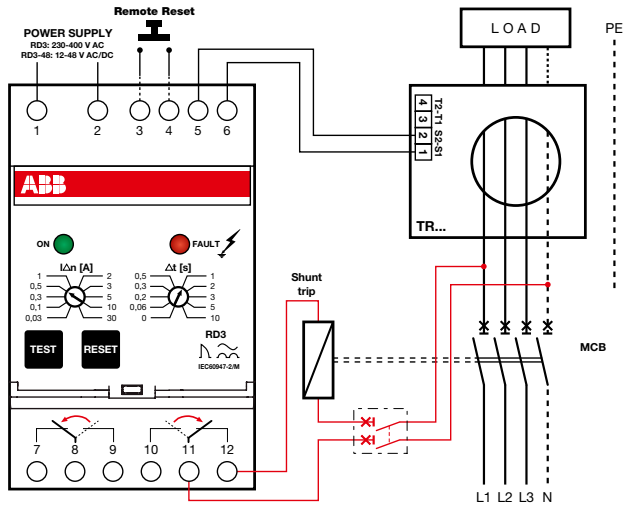
RD2 residual current relays



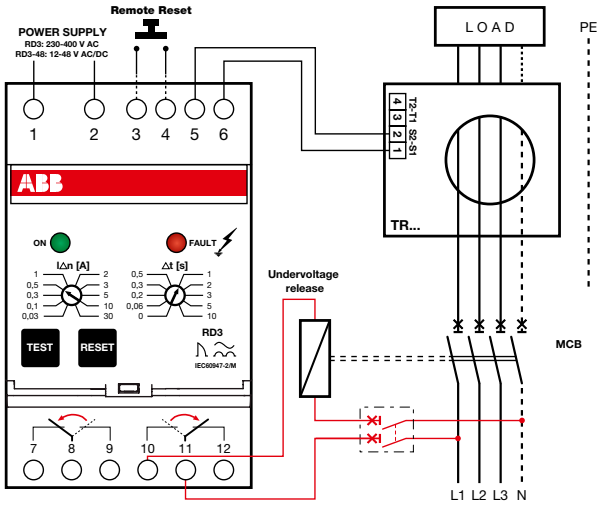
Wire the terminals 9 and 10 of the RD2 to the terminals 1 and 2 of the toroidal transformers. Do not use terminals 3 and 4, when present

Power supply
RD2: 230÷400 V a.c.
RD2-48: 48÷150 V a.c./d.c.

RD3 - undervoltage release wiring

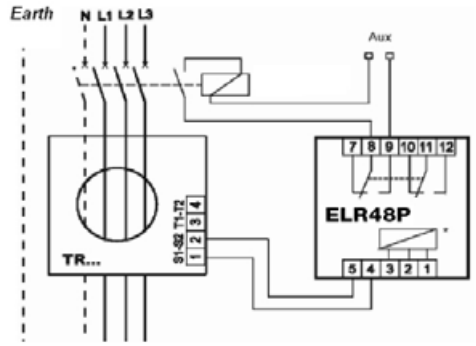


RD3 - shunt trip wiring

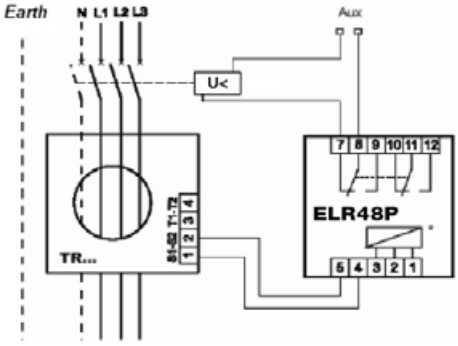


* The residual current protection is not active when this circuit breaker is switch-off

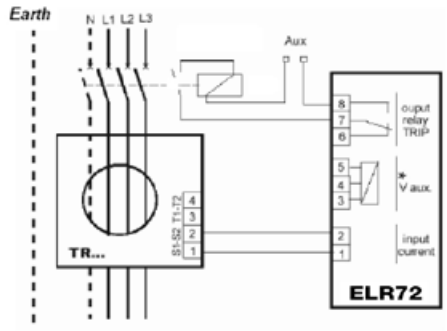
ELR48P - shunt trip wiring



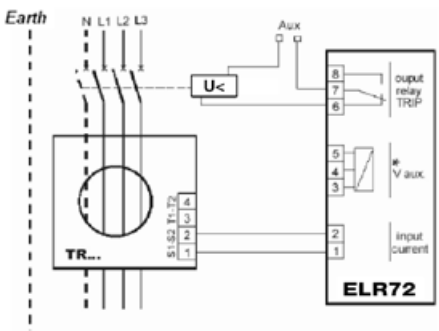
ELR48P - undervoltage release wiring



ELR72 - shunt trip wiring



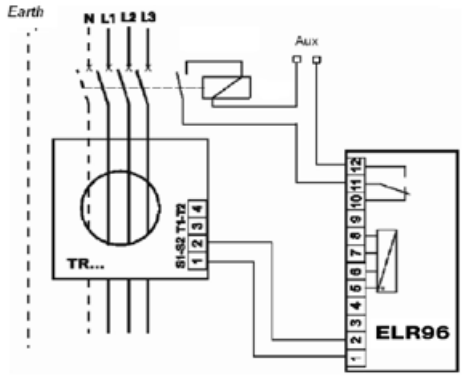
ELR72 - undervoltage release wiring



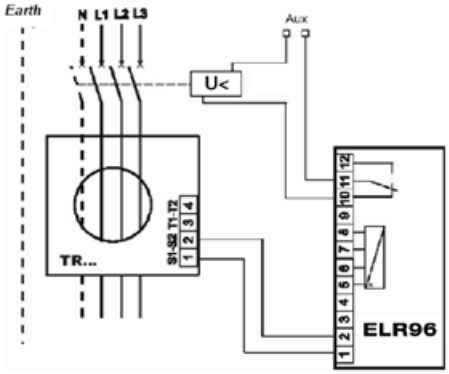
Quick product references

RCDs wiring diagrams

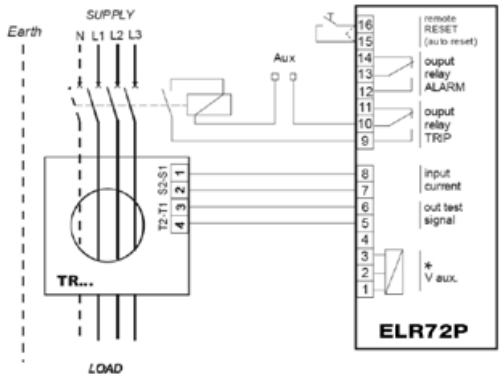
ELR96 - shunt trip wiring



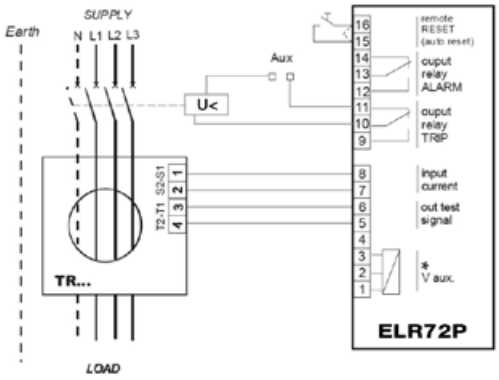
ELR96 - undervoltage release wiring



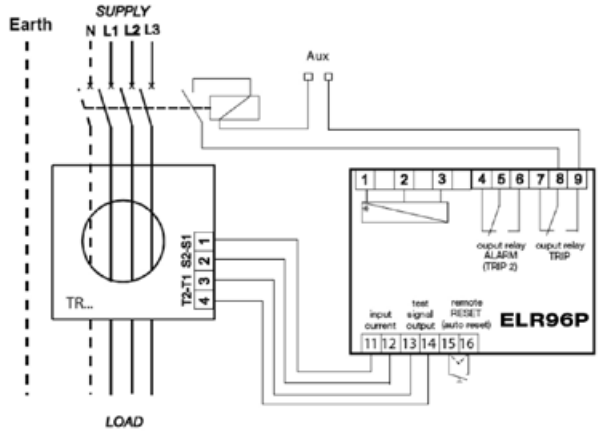
ELR72P - shunt trip wiring



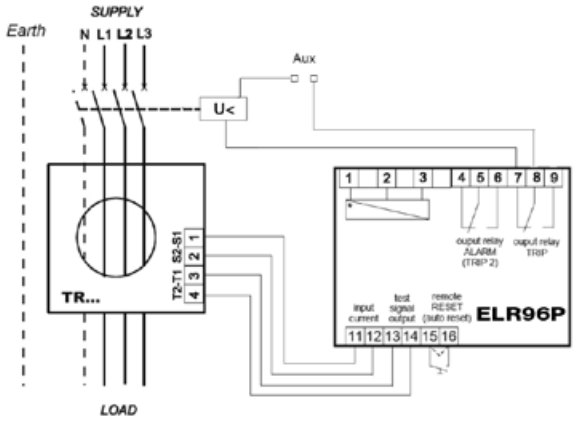
ELR72P - undervoltage release wiring



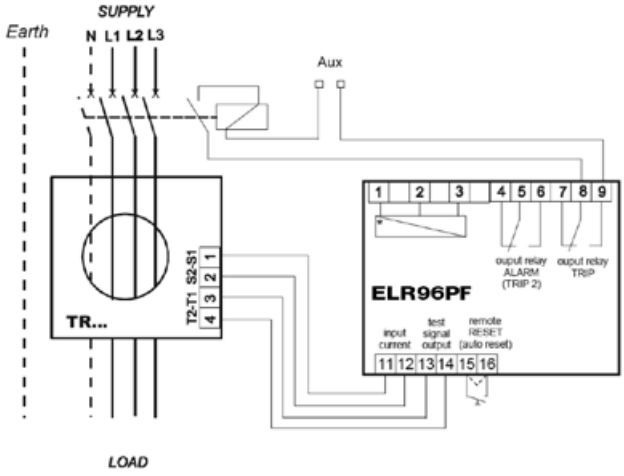
ELR96P - shunt trip wiring



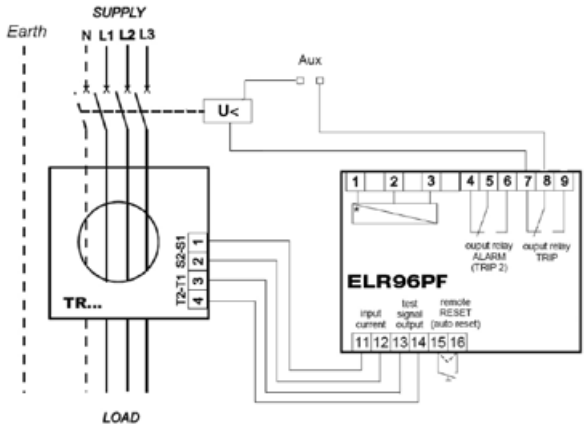
ELR96P - undervoltage release wiring



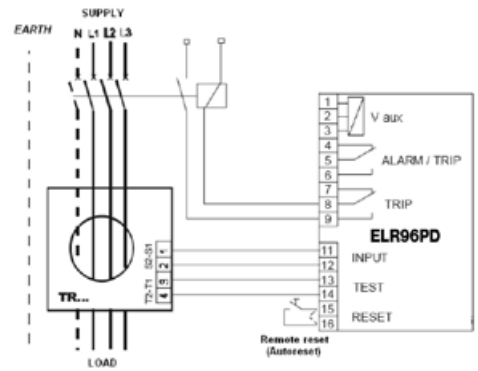
ELR96PF - shunt trip wiring



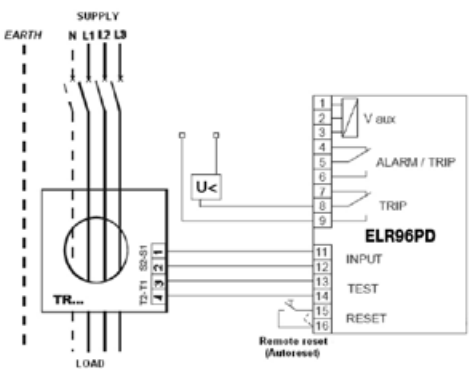
ELR96PF - undervoltage release wiring



ELR96PD - shunt trip wiring



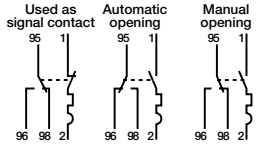
ELR96PD - undervoltage release wiring



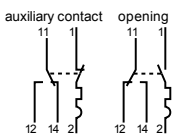
Quick product references

Auxiliary elements

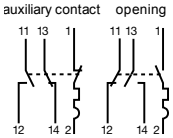
S2C-S/H6R



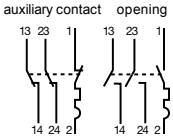
S2C-H6R



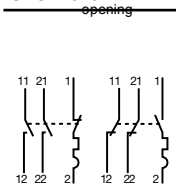
S2C-H6-11R



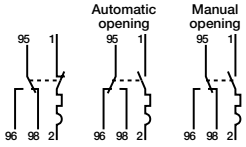
S2C-H6-20R



S2C-H6-02R



SN201-S



SN201-IH

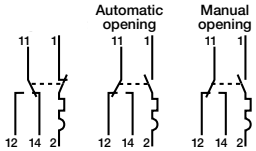
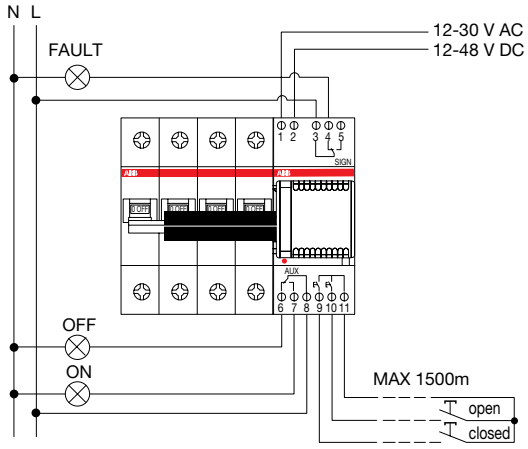


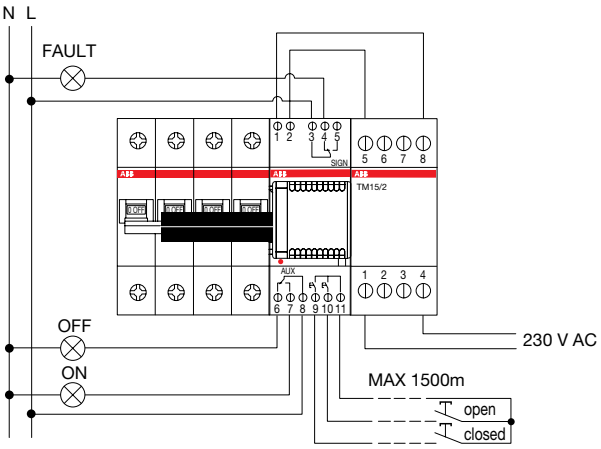
ABB has a full product range of auxiliary contacts completed by the S2C-S/H6R universal contacts. An auxiliary contact indicates the position of the MCB. A signal contact indicates the MCB position plus the fault event, i.e., overload or short-circuit.

Wiring diagrams for S2C-CM motor operating devices

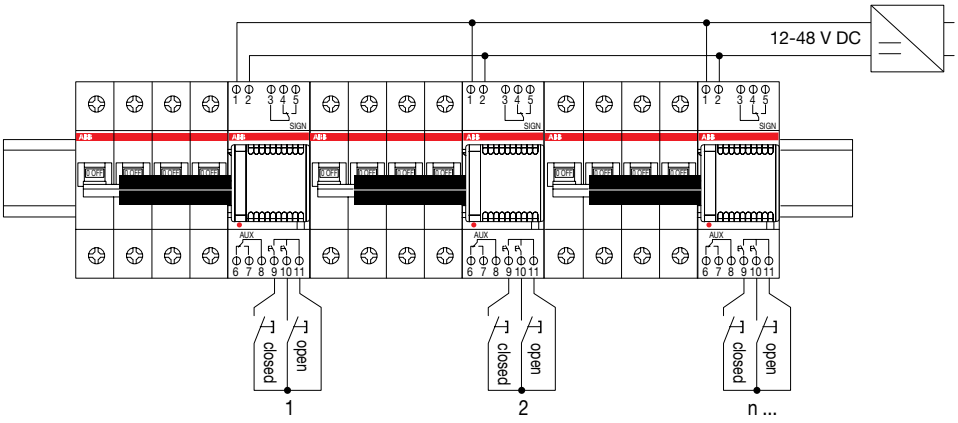
Low voltage use: 12...30 V AC, 12...48 V DC



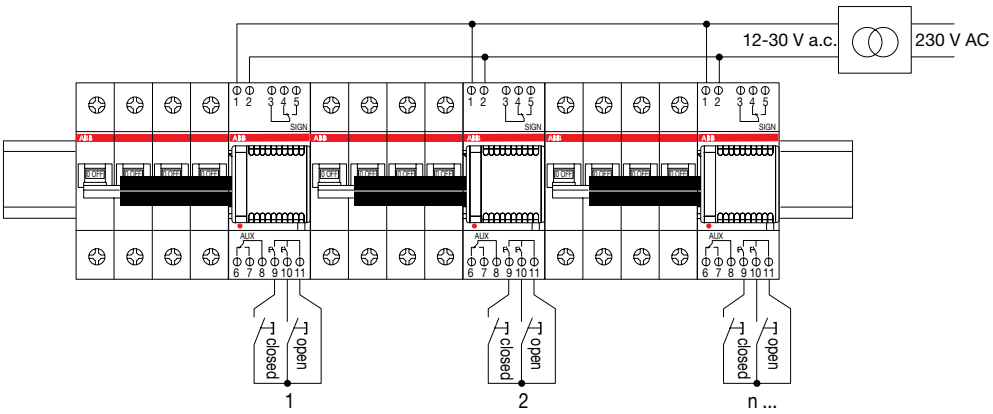
Use at 230 V AC via a TM15/12 bell transformer



Low voltage use of several motor operating devices: 12...30 V AC, 12...48 V DC



Use of several motor operating devices at 230 V AC via a single safety transformer

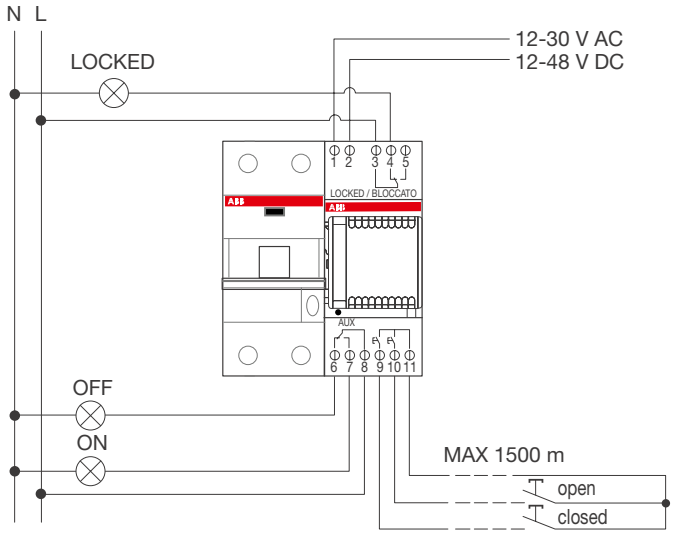


Quick product references

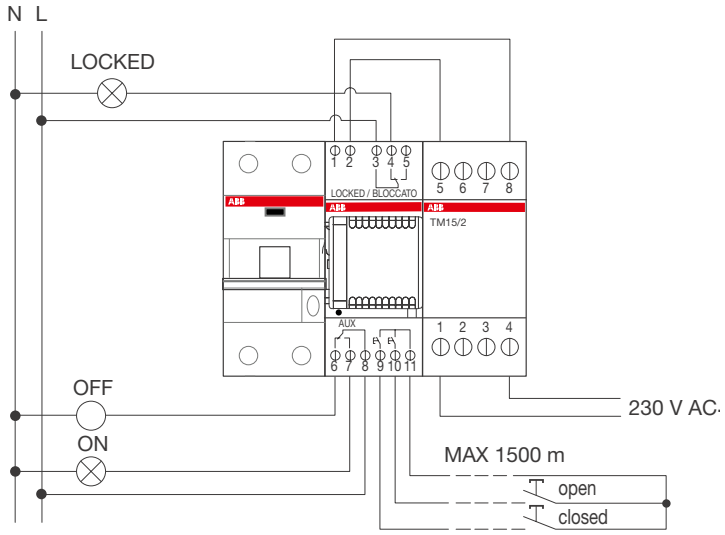
Auxiliary elements

Wiring diagrams for DS2C-CM motor operating devices

Low voltage use 12...30 V AC, 12...48 V DC

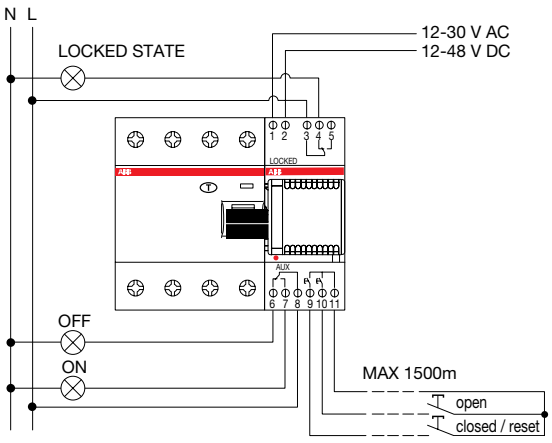


Use at 230 V AC via a TN15/12 transformer

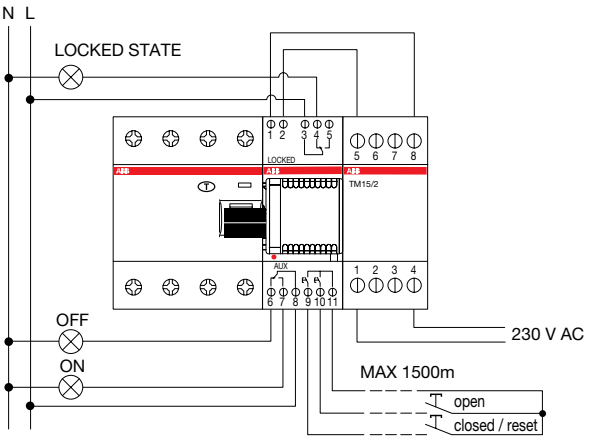


Wiring diagrams for motor operating device F2C-CM and F2C-ARI auto-reclosing unit

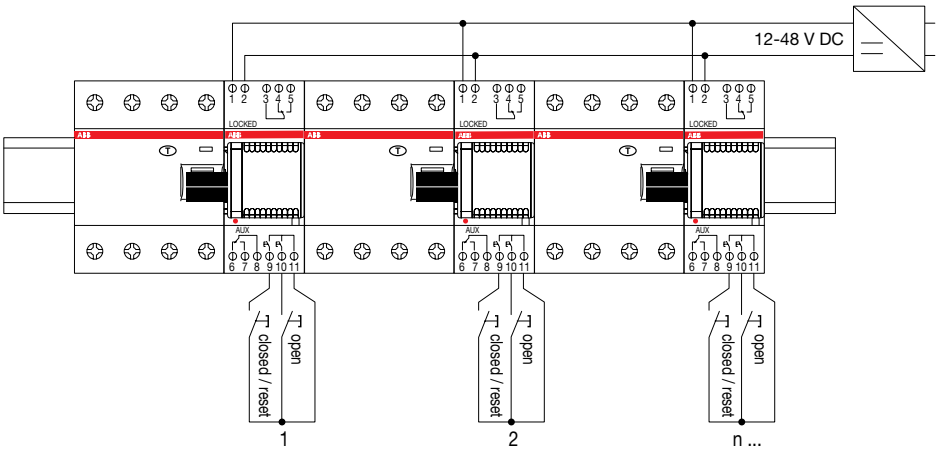
Low voltage use: 12...30 V AC, 12...48 V DC



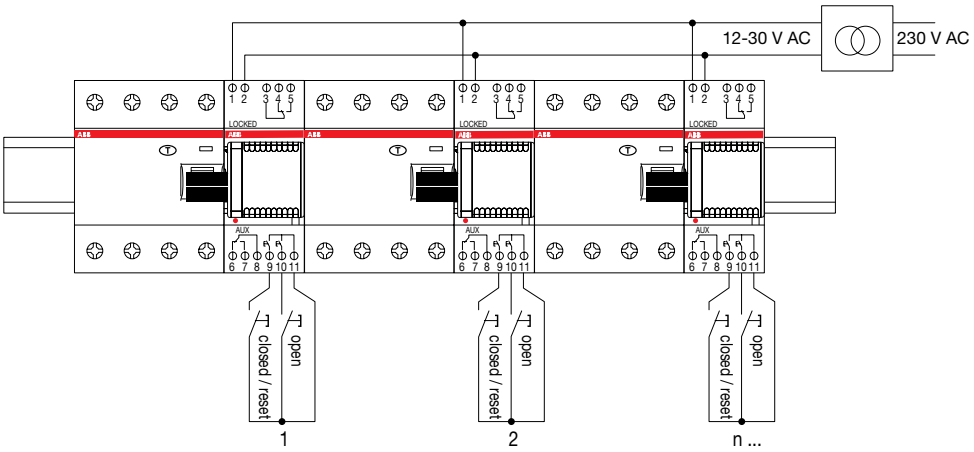
Use at 230 V AC via a TM15/12 bell transformer



Low voltage use of several motor operating devices or auto-reclosing units: 12-30 V AC, 12-48 V DC



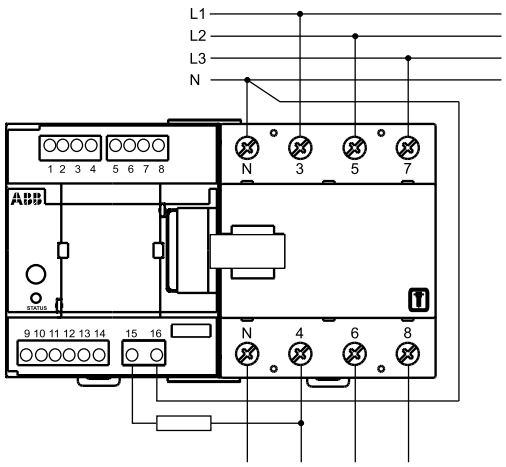
Use of several motor operating devices or auto-reclosing units at 230 V AC via a single transformer



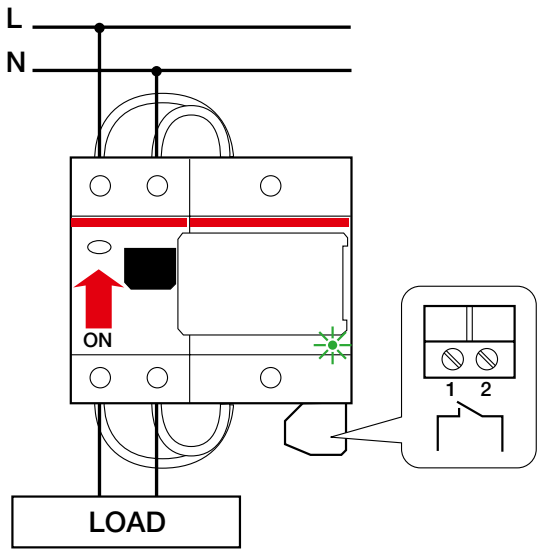
Quick product references

Auxiliary elements

Wiring diagram for F2 CM4 motor operating devices



Wiring diagram for F2C-ARH and F2C-ARH-T

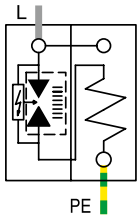


Quick product references

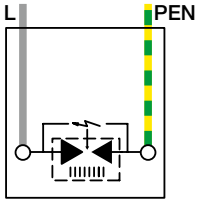
Protection and safety wiring diagrams

Surge Protective Devices - Type 1

Single pole Type 1 SPD

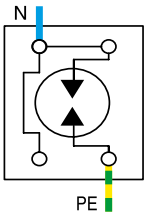


OVR T1 25 255



OVR T1 25 440-50

OVR T1 25 255-7



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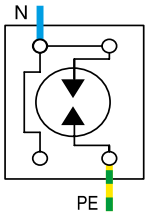
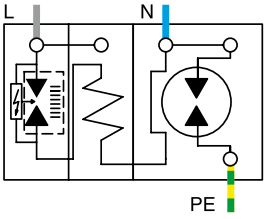
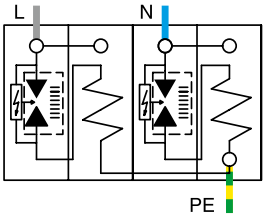


OVR T1 100 N

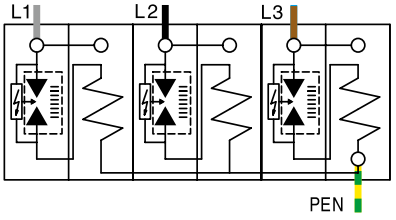
Multipole Type 1 SPD



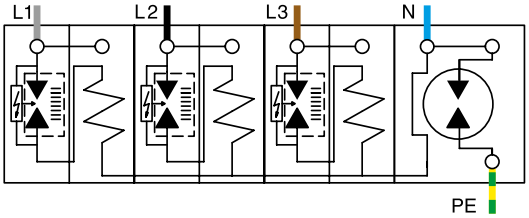
OVR T1 1N 25 255



OVR T1 2L 25 255



OVR T1 3L 25 255



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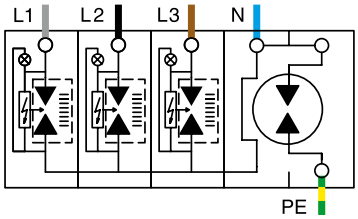
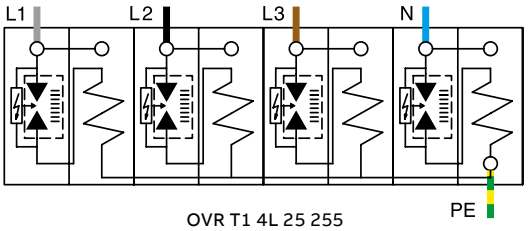
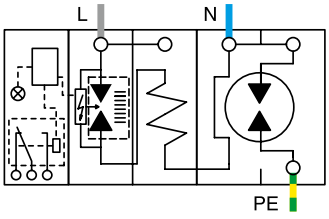


OVR T1 3N 25 255-7

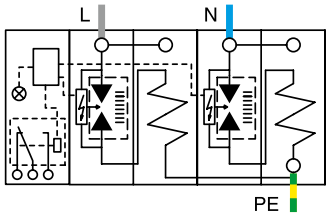


OVR T1 4L 25 255

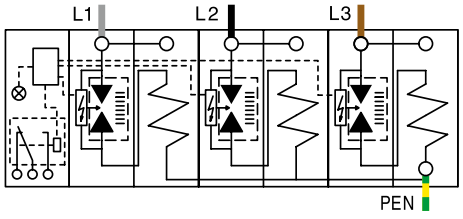
Multipole Type 1 SPD with remote indication (TS)



OVR T1 1N 25 255 TS



OVR T1 2L 25 255 TS



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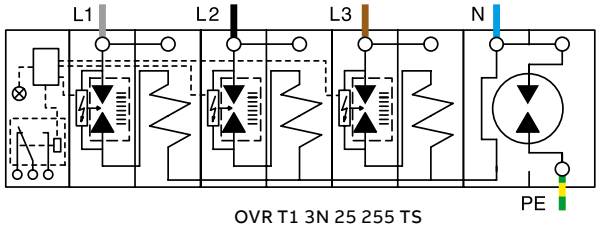
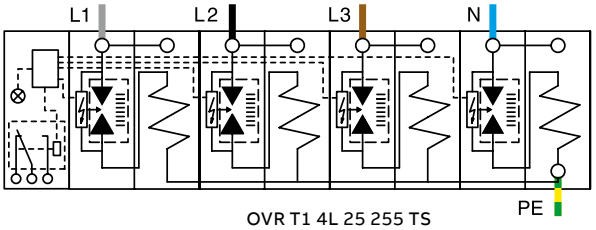


OVR T1 3N 25 255 TS

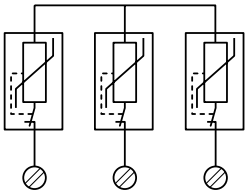


OVR T1 4L 25 255 TS

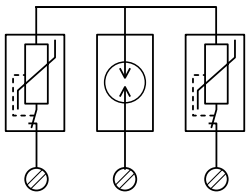
Quick product references

Protection and safety wiring diagrams

Surge Protective Devices - Photovoltaic SPDs - OVR PV

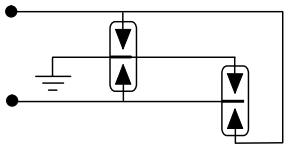


OVR PV T2 40-600 P QS

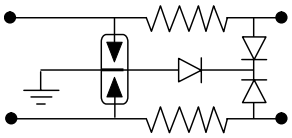


OVR PV T2 40-1000/1500 P QS

Surge Protective Devices - Low Current SPDs - OVR TC

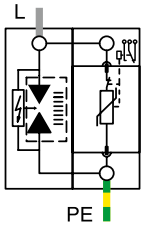


OVR TC 200 V in parallel

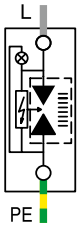


OVR TC / xx V / 200 FR in series

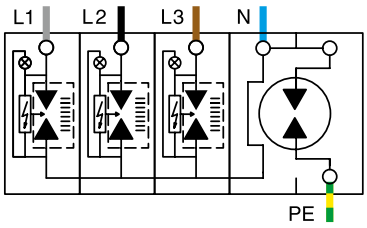
Surge Protective Devices - Type 1+2



OVR T1+2 25 255 TS



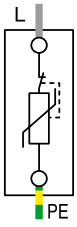
OVR T1+2 15 255-7



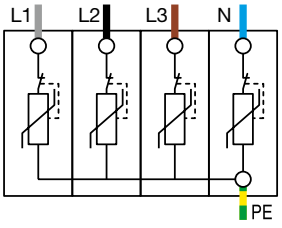
OVR T1+2 3N 15 255-7

Surge Protective Devices - Type 1+2 / Type 2

Non pluggable Type 2 SPDs



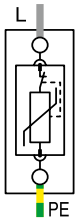
OVR T2 40 275 QS
OVR T2-T3 20 QS



OVR T2 4L 40-275 P QS

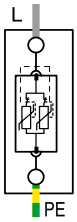
Pluggable Type 1+2 / Type 2 SPDs

Single pole Type 2 SPD



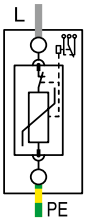
OVR T2-T3 20-275 P QS, OVR T2 40-275 P QS, OVR T2-T3 20-440 P QS, OVR T2 40-275 P QS

Single pole Type 2 SPD with safety reserve (s)



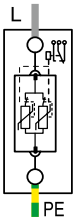
OVR T2 40-275s P QS, OVR T2 80 275s P QS, OVR T2 40-440s P QS, OVR T2 80-440s P QS, OVR T1+2 7 275s P

Single pole Type 2 SPD with remote indication (TS)



OVR T2-T3 20-275 P TS QS, OVR T2 40-275 P TS QS, OVR T2-T3 20-440 P TS QS, OVR T2 40-440 P TS QS

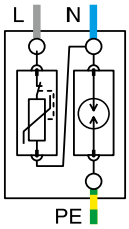
Single pole Type 2 SPD with safety reserve (s) and remote indication (TS)



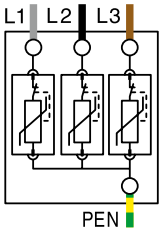
OVR T2 40-275s P TS QS, OVR T2 80-275s P QS, OVR T2 40-440s P TS QS, OVR T2 80-440s P TS QS

Surge Protective Devices - Type 1+2 / Type 2

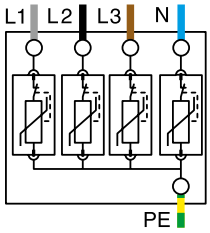
Multipole Type 2 SPD



OVR T2-T3 1N 20-275 P QS,
OVR T2 1N 40-275 P QS



OVR T2-T3 3L 20-275 P QS,
OVR T2 3L 40-275 P QS



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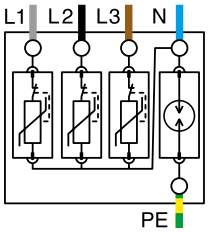
T2 4l 40-275 P QS



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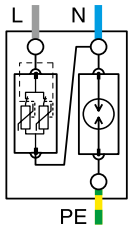
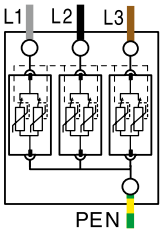
OVR T2 3N 40-275 P QS

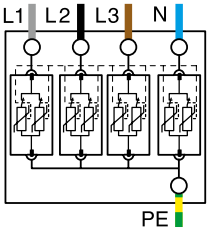
Multipole Type 2 SPD with safety reserve (s)



OVR T2 1N 40-275s P QS,
OVR T2 1N 80-275s P QS,
OVR T1+2 1N 7 275s P



OVR T2 3L 40-275s P QS,
OVR T2 3L 80-275s P QS,
OVR T1+2 3L 7 275s P



OVR T2 4L 40-275s P QS,
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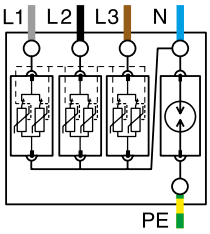
OVR T1+2 4L 7 275s P



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OVR T2 3N 80-275s P QS,
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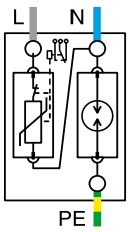
Multipole Type 2 SPD with remote indication (TS)



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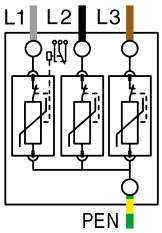
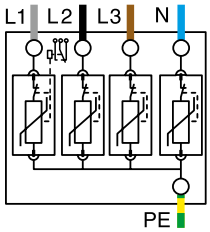
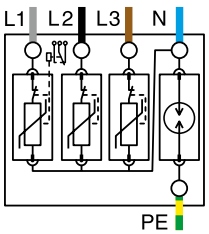
OVR T2 1N 40-275 P TS QS



OVR T2-T3 3L 20-275 P TS QS,
OVR T2 3L 40-275 P TS QS

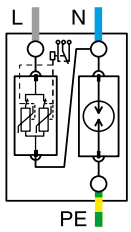


OVR T2-T3 4L 20-275 P TS QS,
OVR T2 4l 40-275 P TS QS

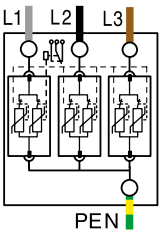


OVR T2-T3 3N 20-275 P TS QS,
OVR T2 3N 40-275 P TS QS

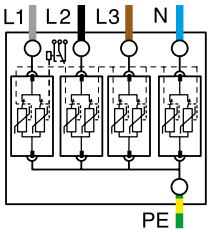
Multipole Type 2 SPD with safety reserve (s) and remote indication (TS)



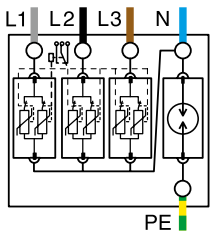
OVR T2 1N 40-275s P TS QS,
OVR T2 1N 80-275s P TS QS



OVR T2 3L 40-275s P TS QS,
OVR T2 3L 80-275s P TS QS



OVR T2 4L 40-275s P TS QS,
OVR T2 4L 80-275s P TS QS



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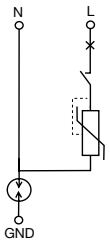
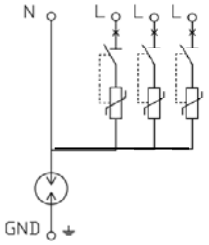
OVR T2 3N 80-275s P TS QS

Type 2 auto-protected SPD

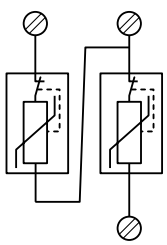


OVR Plus N1 20

Type 2 Special 24/48 AC & DC - OVR 75 V



OVR Plus N3 20

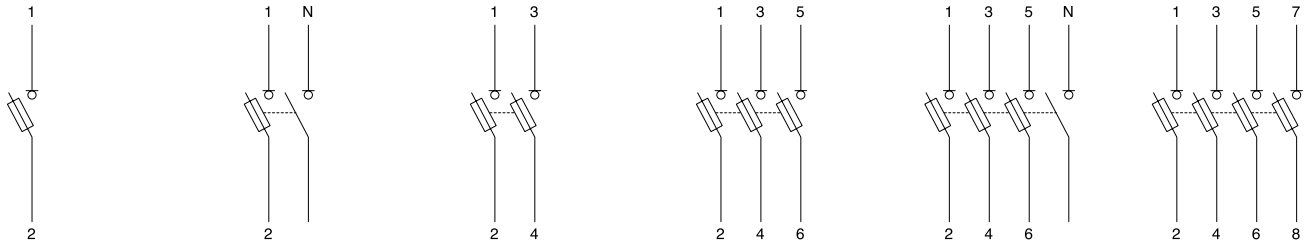


OVR T2 2L 20-75 P

Quick product references

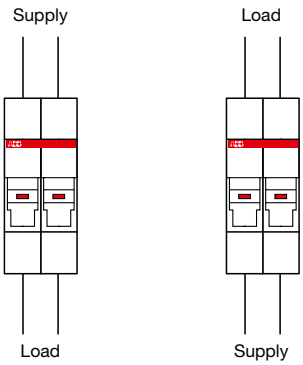
Protection and safety wiring diagrams

E90 fuse switch disconnectors



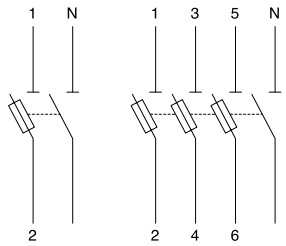
1P **1P+N** **2P** **3P** **3P+N** **4P**

E 90 with blown fuse indicator light in alternate current



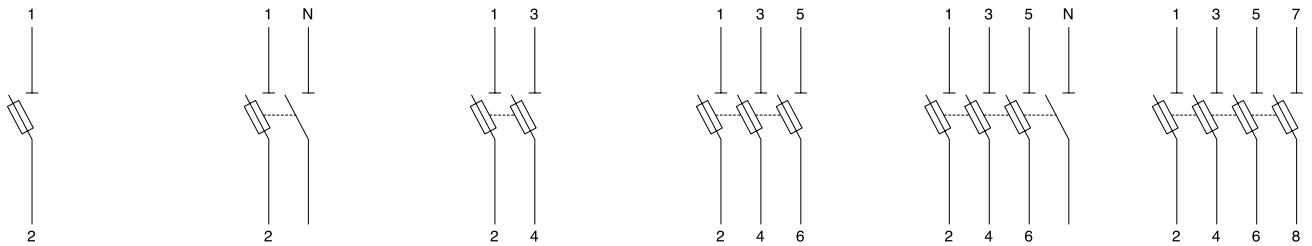
For direct current systems please refer to E 90 PV wiring diagram

E90h fuse holders



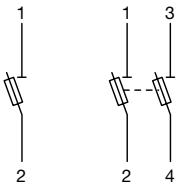
1P+N **3P+N**

E90 fuse disconnectors and E90/30 CC fuse holders

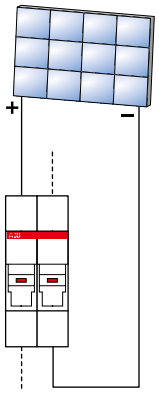


1P **1P+N** **2P** **3P** **3P+N** **4P**

E90 PV fuse disconnectors

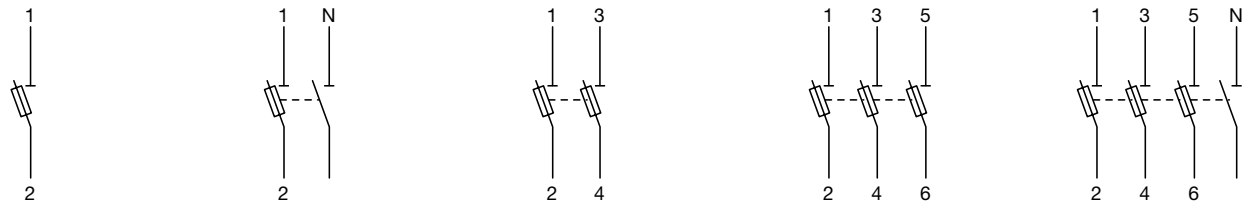


E 90 PV with blown fuse indicator light in direct current

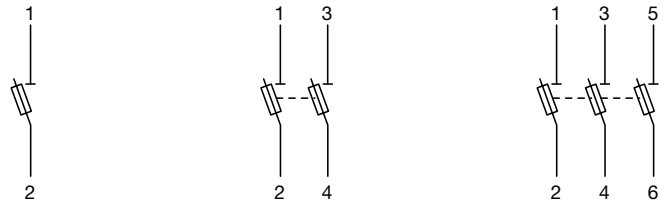


In direct current systems, since the LED allows the current to flow only from positive to negative, the wiring of the blown fuse indicator version should follow the current direction as shown in the diagram

E90 50/125 fuse disconnectors



E90 30/60 J fuse holders

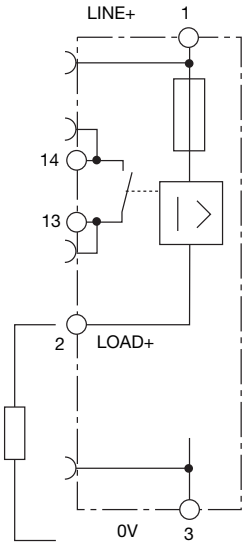


ILTS-E

Quick product references

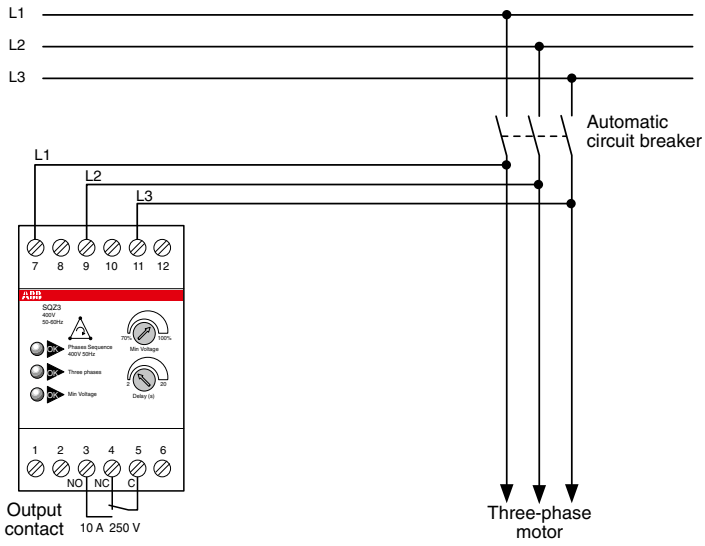
Protection and safety wiring diagrams

EPD24

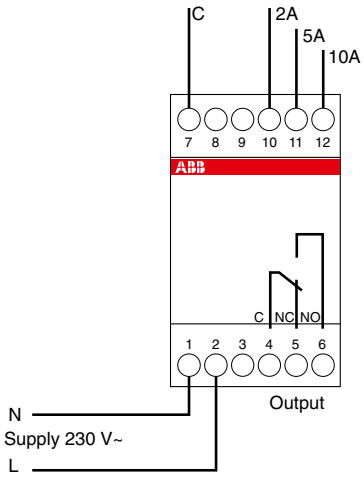


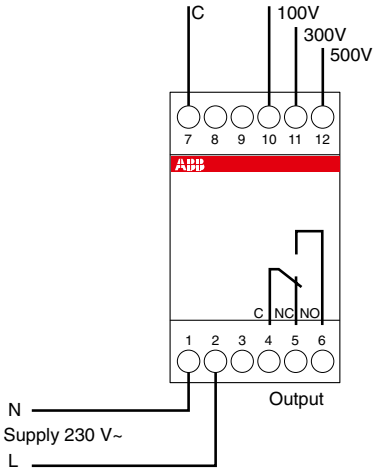
EPD24-TB-101
without signal input
with signal output F
(single signal, NO)
Operating condition: 13-14 closed
Fault condition: 13-14 open

SQZ3

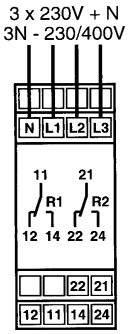


RH/RL

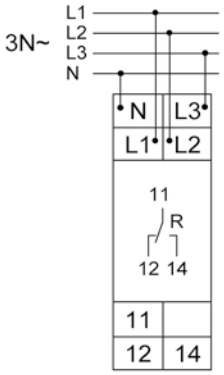


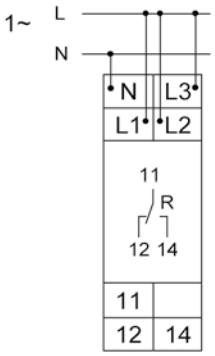


E 236 US 1, E 236 US 2

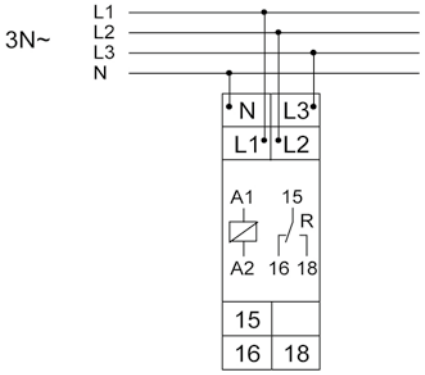


E236-US 1.1 and US 2.1





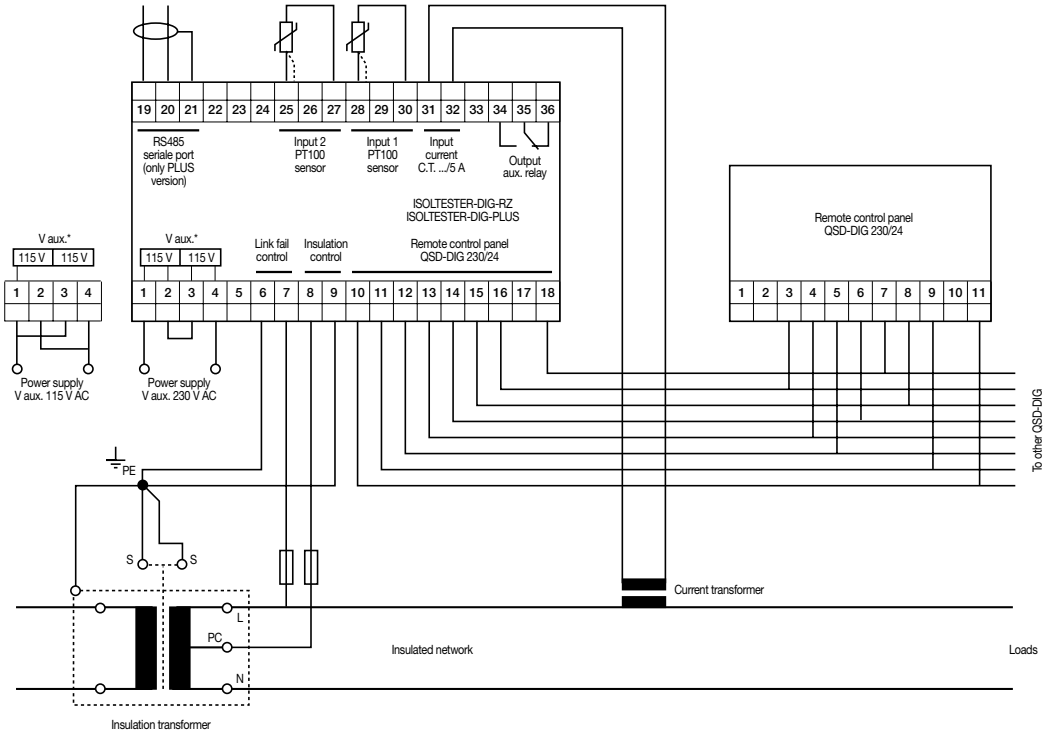
E236-US 1.1D



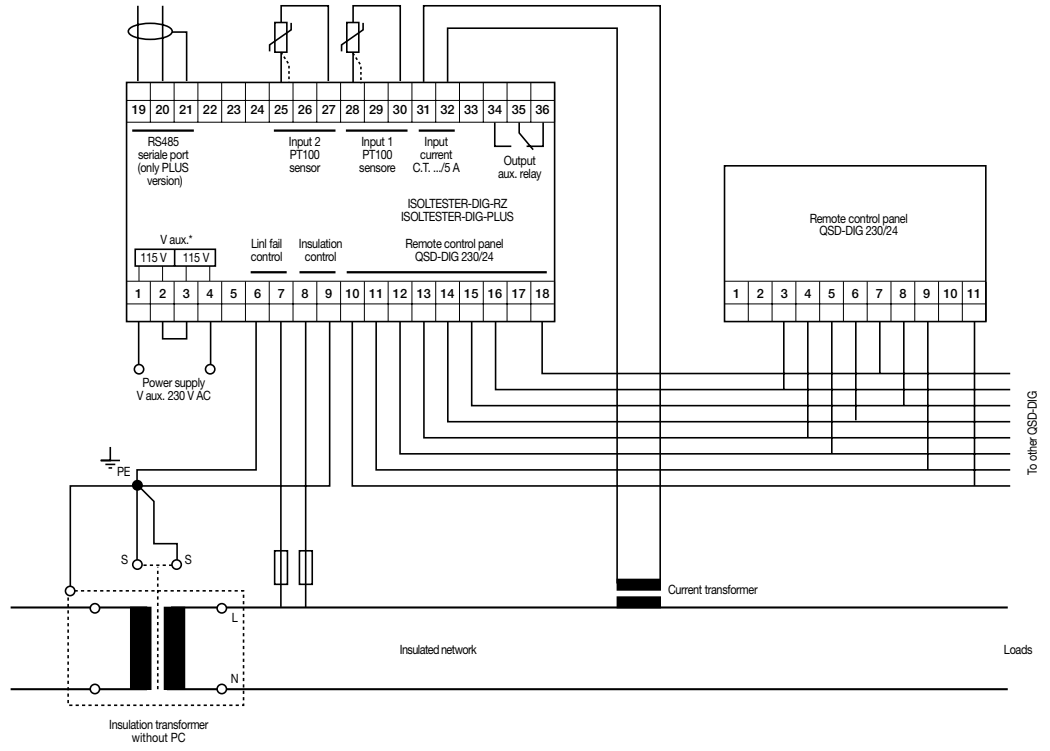
Quick product references

Protection and safety wiring diagrams

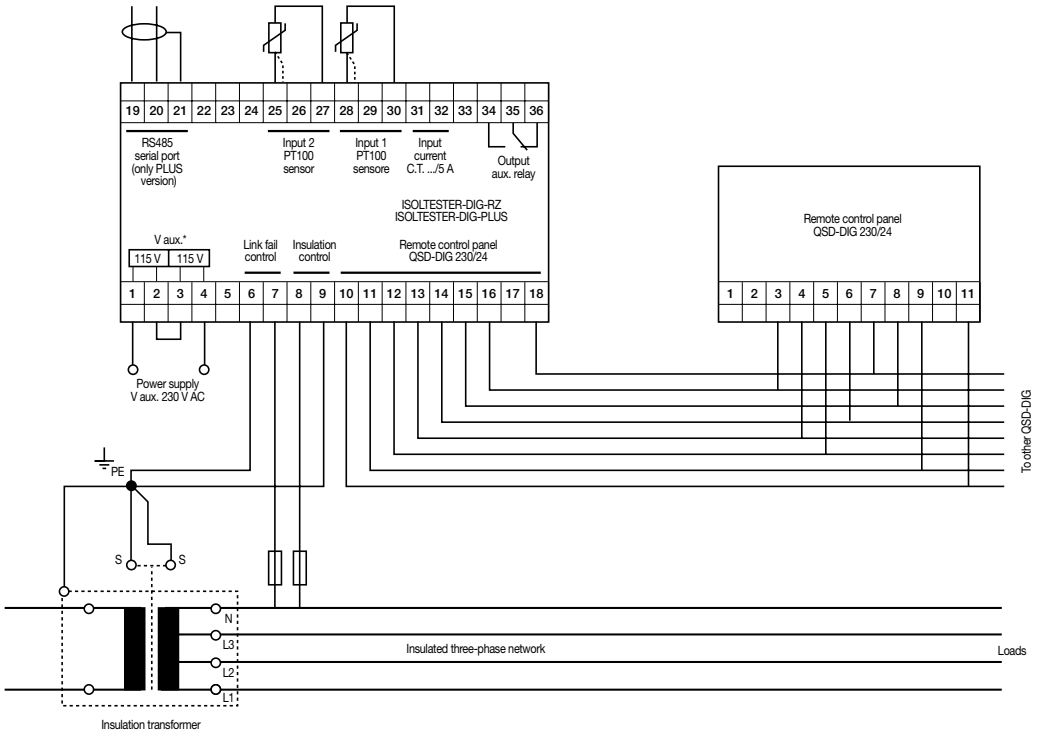
ISOLTESTER-DIG, QSD-DIG and SELVTESTER-24 - with transformer with central socket (PC)



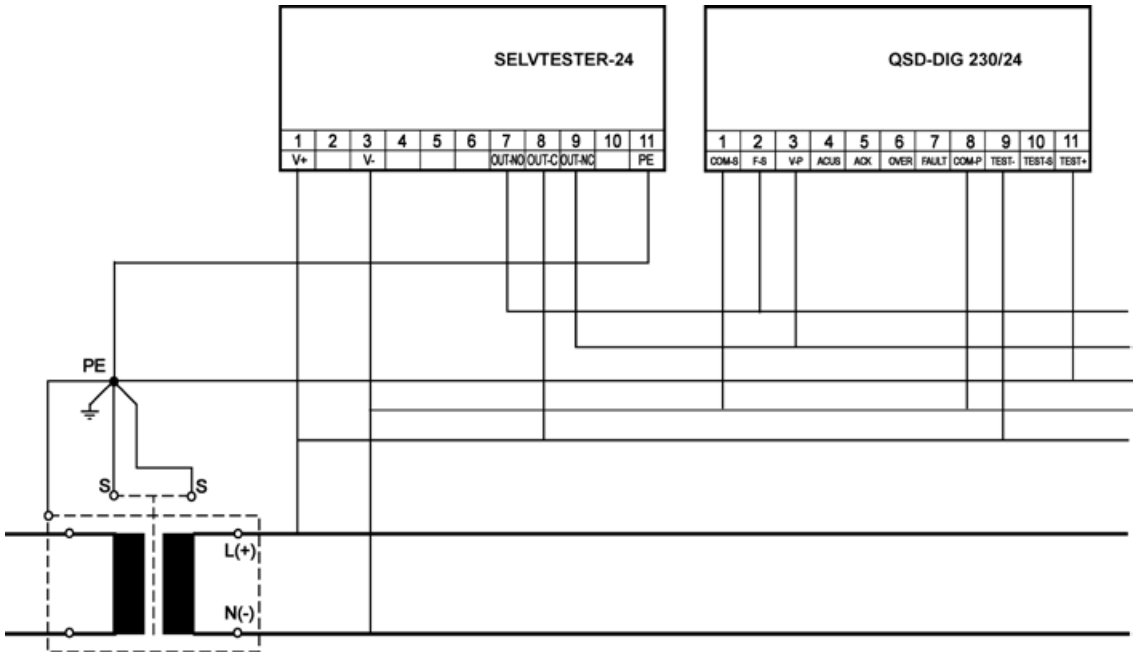
ISOLTESTER-DIG, QSD-DIG and SELVTESTER-24 -



ISOLTESTER-DIG, QSD-DIG and SELVTESTER-24 -



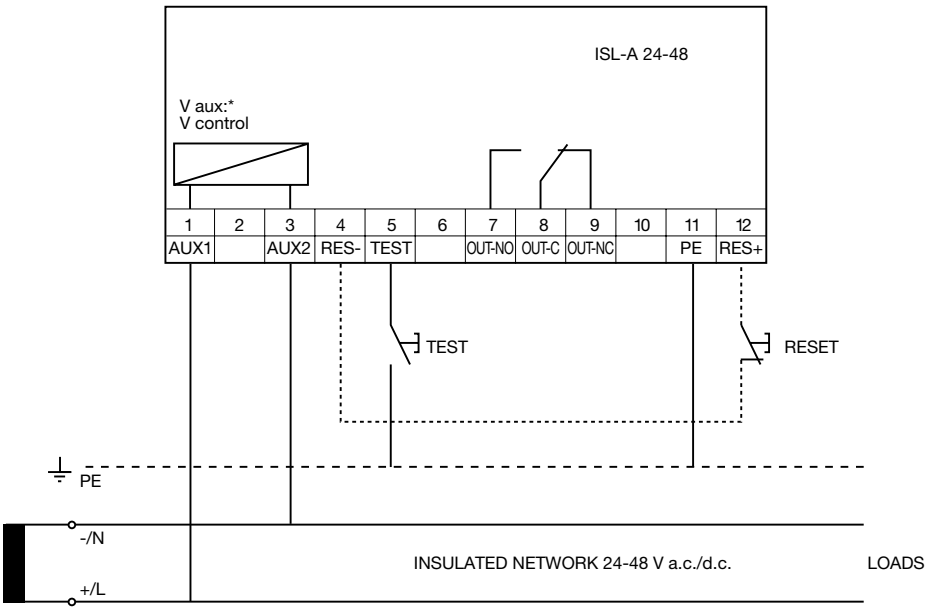
ISOLTESTER-DIG, QSD-DIG and SELVTESTER-24 -



Quick product references

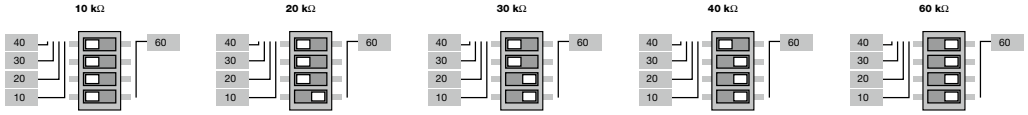
Protection and safety wiring diagrams

ISL-A 24-48

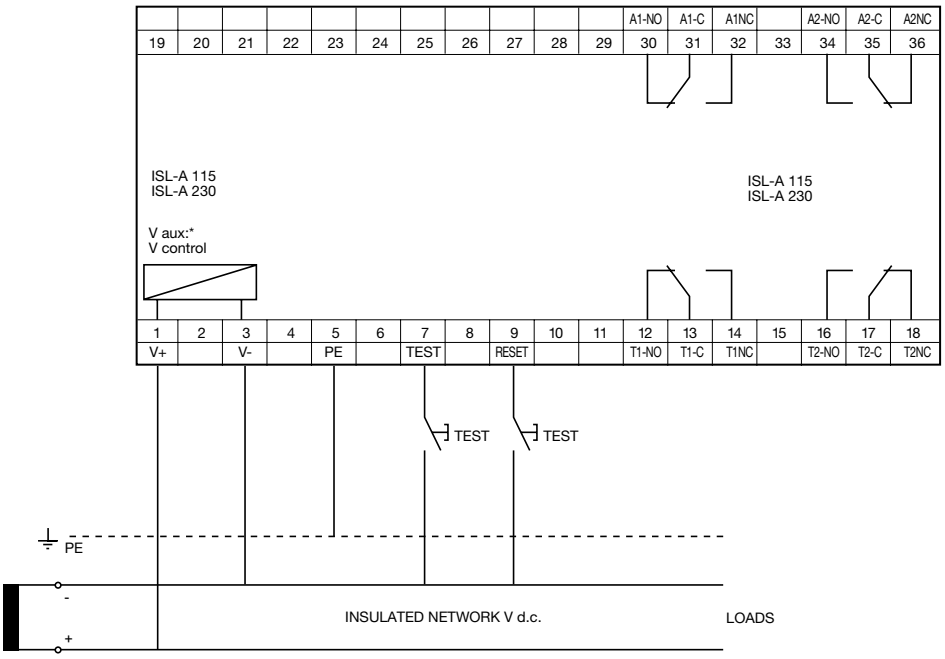


MICROSWITCH SETTINGS

The front microswitches allow the insulation threshold level to be adjusted between 10 and 60 kW, as shown below:



ISL-A 115 and ISL-A 230



MICROSWITCH SETTINGS

The front microswitches are used for adjusting the insulation threshold level, enabling the fail-safe function and configuring the reset mode for both the alarm and trip thresholds.

Microswitches A, B, C, D for programming the trip and alarm thresholds:

ALARM		TRIP	
300 kΩ:	A=0, B=0, C=0, D=0	100 kΩ:	A=0, B=0, C=0, D=0
150 kΩ:	A=1, B=0, C=0, D=0	60 kΩ:	A=1, B=0, C=0, D=0
80 kΩ:	A=1, B=1, C=0, D=0	40 kΩ:	A=1, B=1, C=0, D=0
50 kΩ:	A=1, B=1, C=1, D=0	20 kΩ:	A=1, B=1, C=1, D=0
30 kΩ:	A=1, B=1, C=1, D=1	10 kΩ:	A=1, B=1, C=1, D=1

Microswitch E for configuring the FAIL SAFE mode

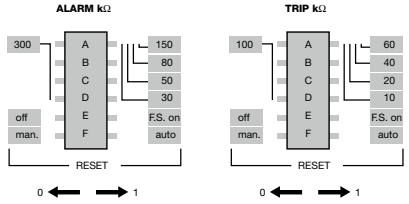
E=0 fail safe mode disabled

E=1 fail safe mode enabled

Microswitch F for configuring the RESET mode

F=0 manual reset

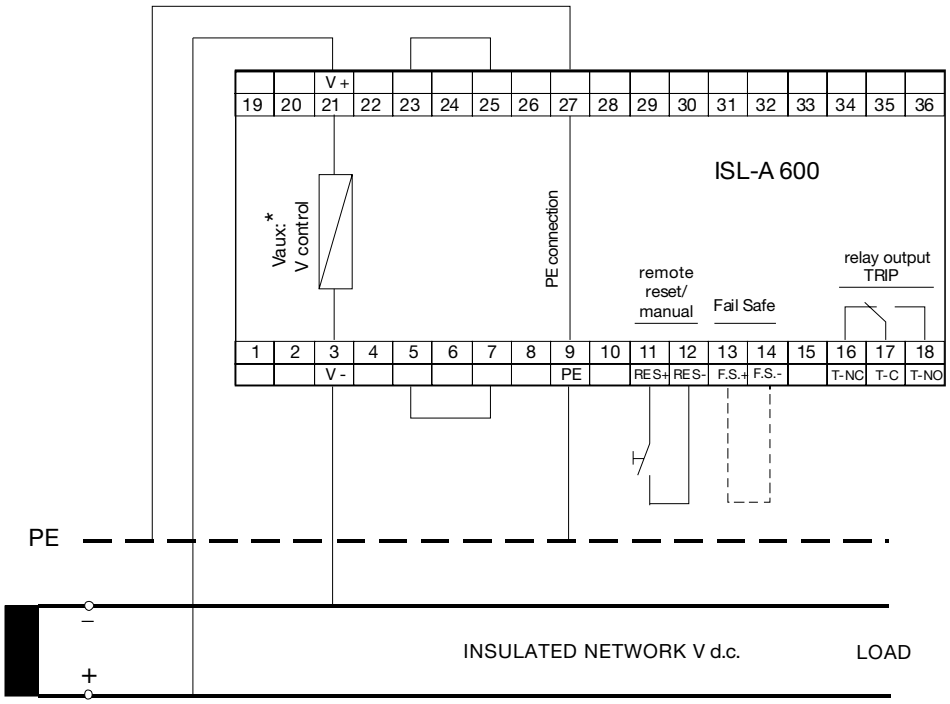
F=1 automatic reset



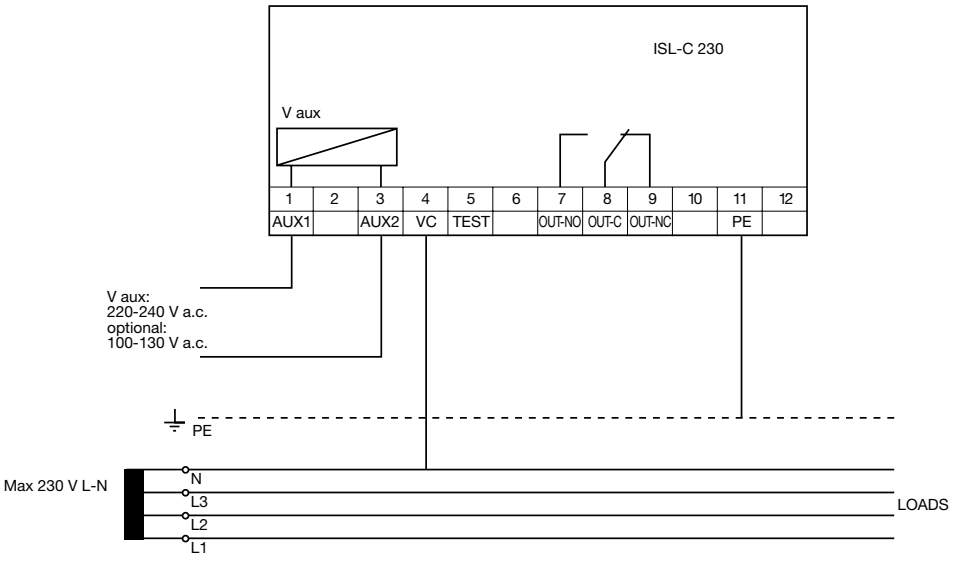
Quick product references

Protection and safety wiring diagrams

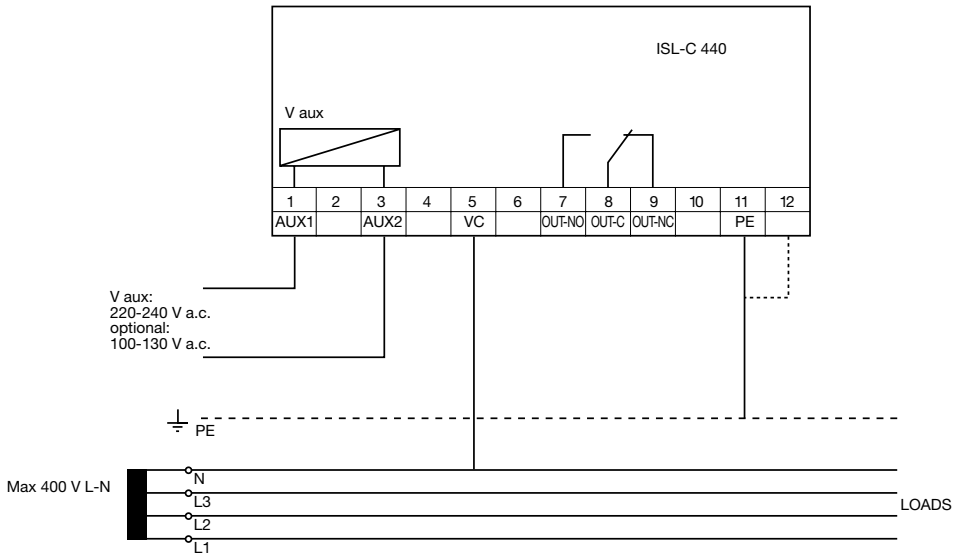
ISL-A 600



ISL-C 230

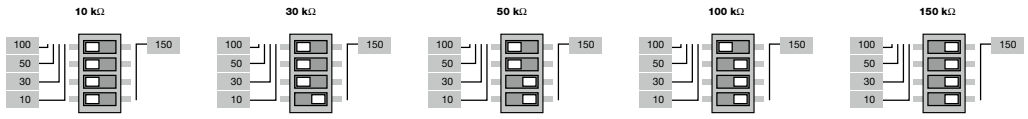


ISL-C 440



MICROSWITCH SETTINGS

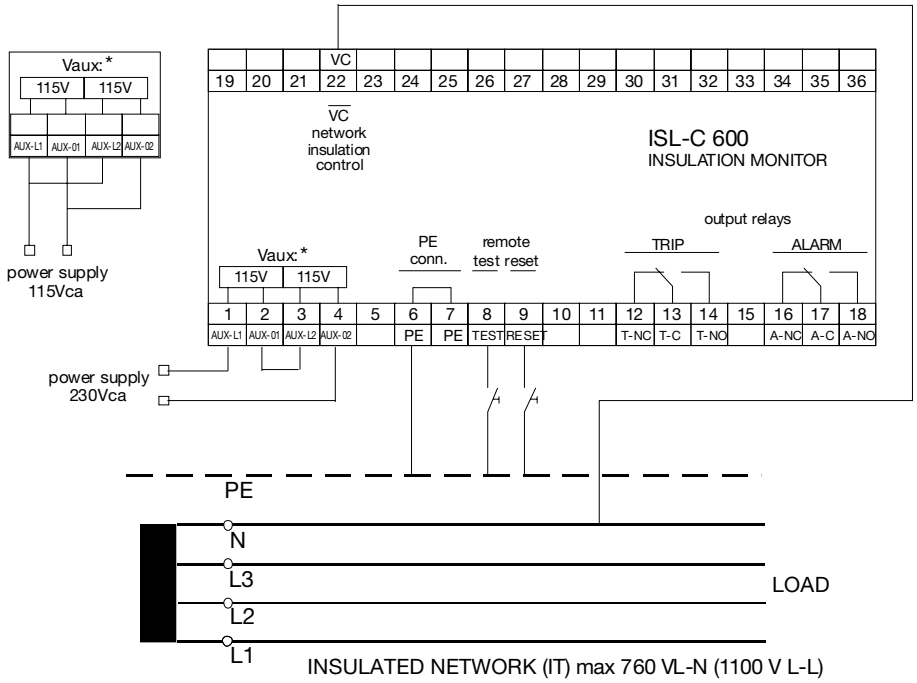
The front microswitches are used for adjusting the insulation threshold level between 10 and 150 kW, as shown below:

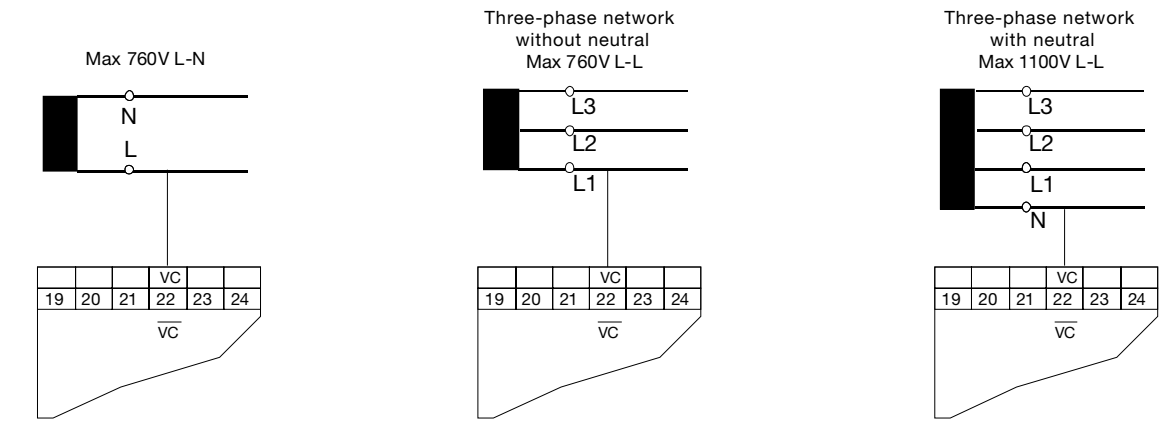


Quick product references

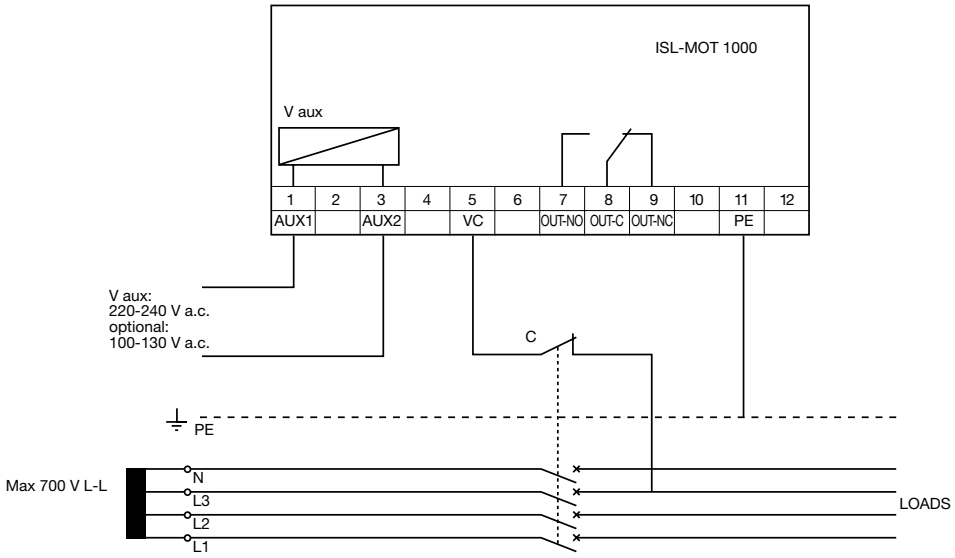
Protection and safety wiring diagrams

ISL-C 600



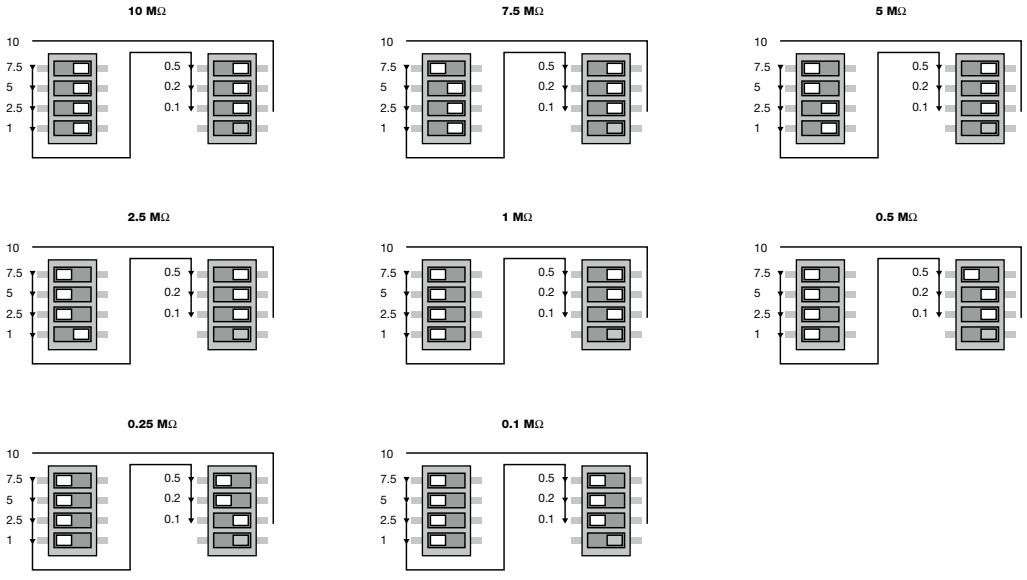


ISL-MOT 1000



MICROSWITCH SETTINGS

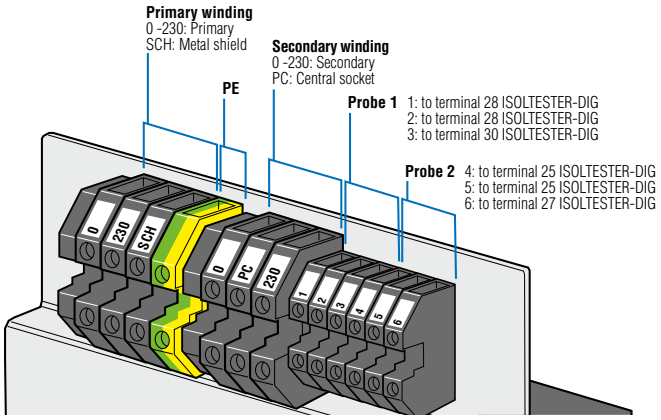
The front microswitches are used for adjusting the insulation threshold level between 0.1 and 10 MW. A total of 7 microswitches are used, divided into two groups as shown below:



Quick product references

Protection and safety wiring diagrams

TI



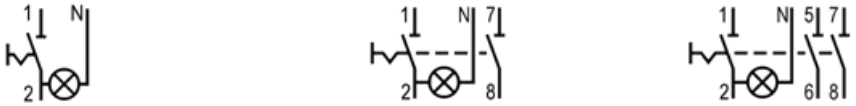
Quick product references

Command and signaling wiring diagrams

E200/SD 200/SHD 200

E210

ON / OFF switch



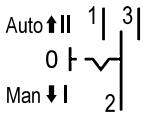
Off switches with indicator lamps

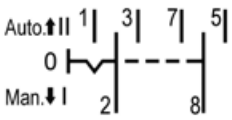
Change-over switches

Quick product references

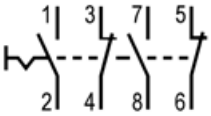
Command and signaling wiring diagrams

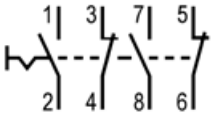
E210 group switches

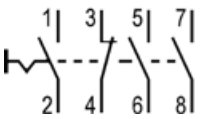




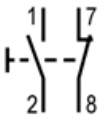
E210 control switches



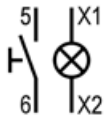


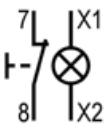


E210 pushbutton

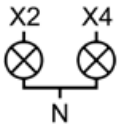


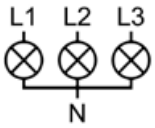
E210 luminous Pushbutton





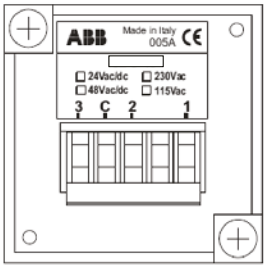
E210 indicator Light



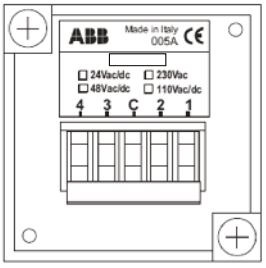


SL

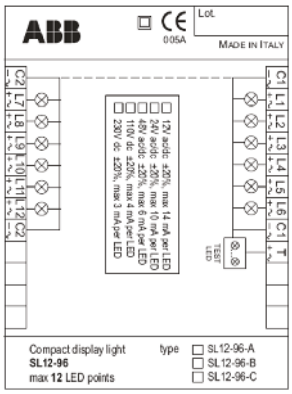
SL-3-48 24Vac/dc
SL-3-48 48Vac/dc
SL-3-48 115Vac
SL-3-48 115Vdc
SL-3-48 230Vac



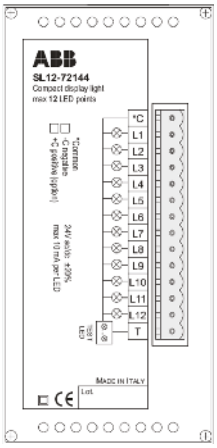
SL-4-48 24Vac/dc
SL-4-48 48Vac/dc
SL-4-48 115Vac
SL-4-48 115Vdc
SL-4-48 230Vac



SL-12-96 24Vac/dc
SL-12-96 48Vac/dc
SL-12-96 115Vac
SL-12-96 115Vdc
SL-12-96 230Vac



SL-12-72144 24Vac/dc
SL-12-72144 48Vac/dc
SL-12-72144 115Vac
SL-12-72144 115Vdc
SL-12-72144 230Vac

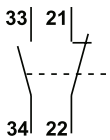


ESB EN

Contact Blocks

EH 04-20

EH 04-11

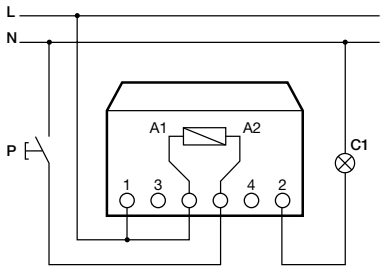


Quick product references

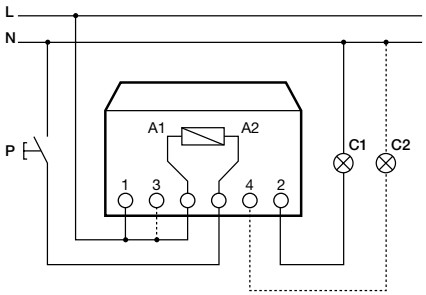
Command and signaling wiring diagrams

FLR

FLR1-12, FLR1-230

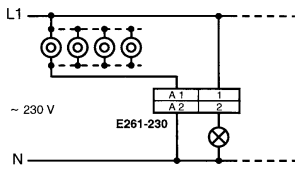


FLR5-12, FLR5-230



E260

E 261-230



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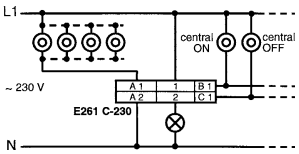
E 261 C-230



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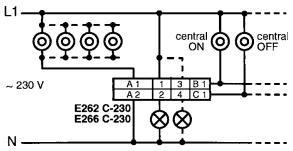

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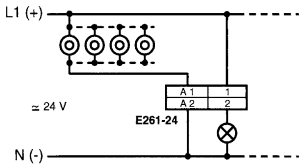
E 261-24



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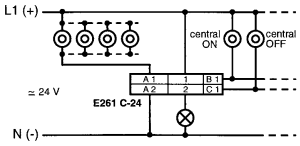
E 261 C-24



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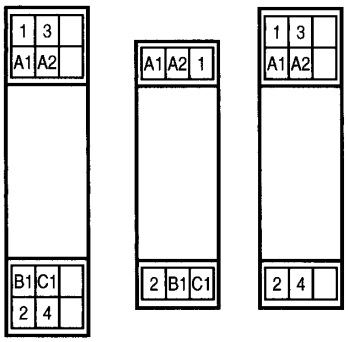
*** E 260 C**
Caution!
The same electr. potential must be applied to terminals A1, B1 and C1.

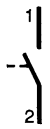
E260



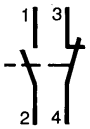
E 266 C
E 262 C

E 261
E 261 C

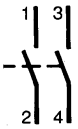
E 266
E 262



E 261-



E 266

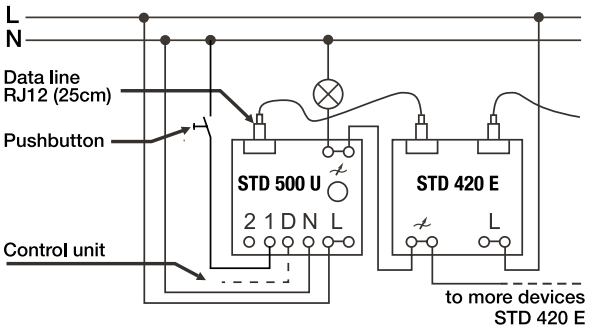


E 262

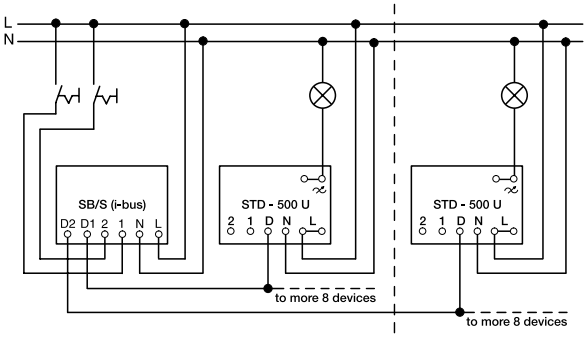
Quick product references

Command and signaling wiring diagrams

STD



STD-500 U

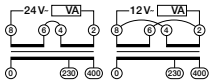


STD-500 U, SB/S or PSB/S

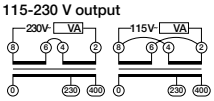
TM-C, TM-S, TM-I

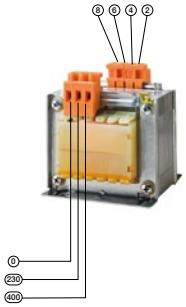
TM-C

Label on product:
12-24 V output



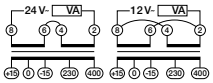
115-230 V output



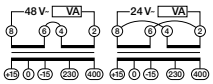


TM-S, TM-I

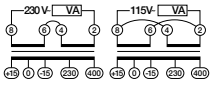
Label on product:
12-24 V output TM-S

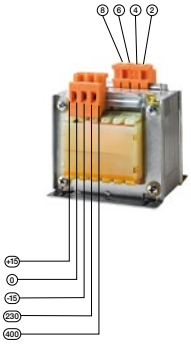


24-48 V output TM-S



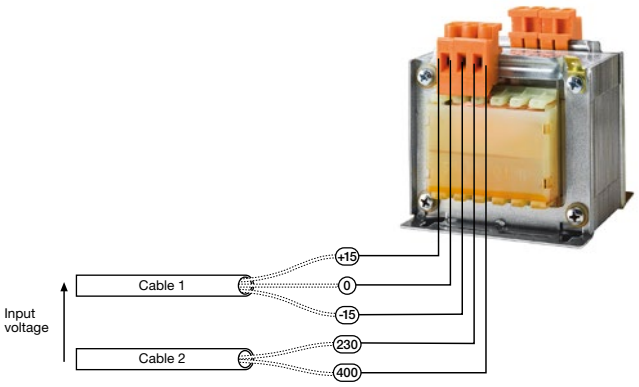
115-230 V output TM-I





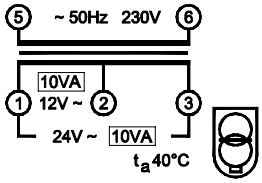
Primary voltage TM-I, TM-S

		Cable 2	
		230	400
Cable 1	-15	215V	385V
	0	230V	400V
	15	245V	415V

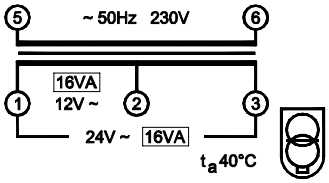


TS-C

TS10/12-24 C



TS16/12-24 C



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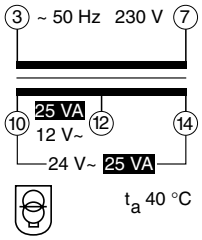

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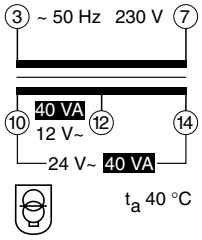

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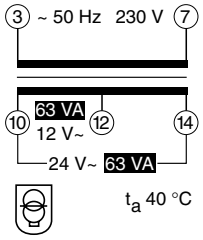
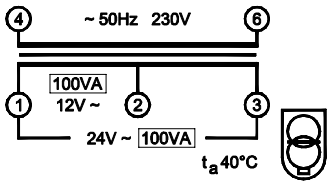
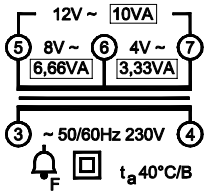


TS100/12-24 C

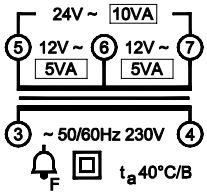


TM

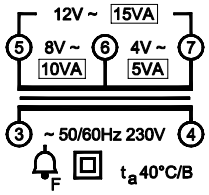
TM10/12



TM10/24



TM15/12



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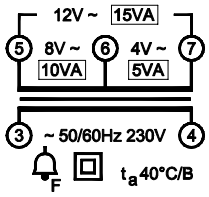
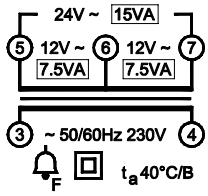
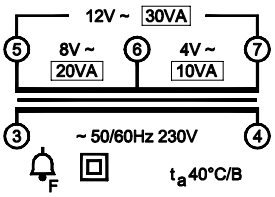


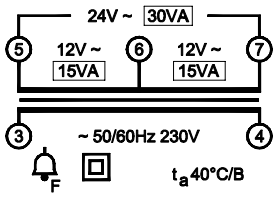
TM15/24



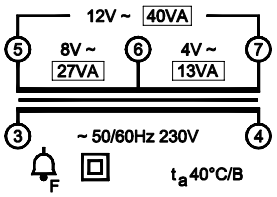
TM30/12



TM30/24



TM40/12



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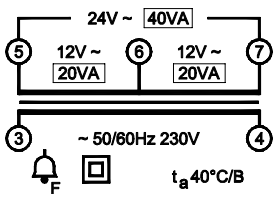
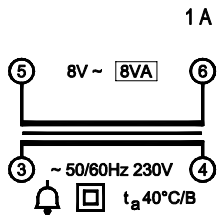


Quick product references

Command and signaling wiring diagrams

TS

TS8/8



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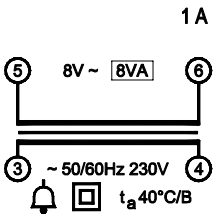

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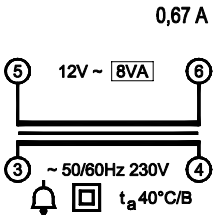

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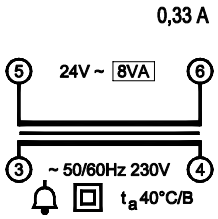

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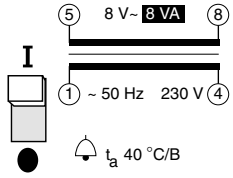

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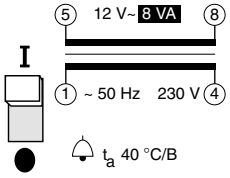

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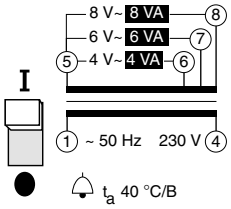

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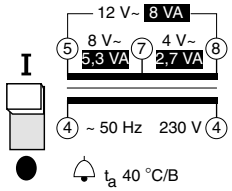
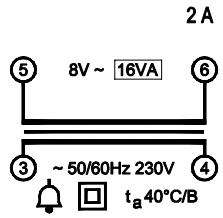


TS16/8



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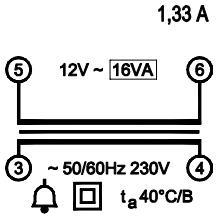

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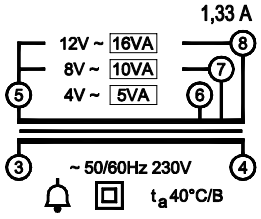

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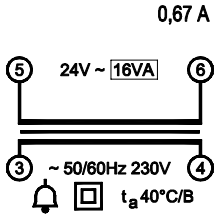

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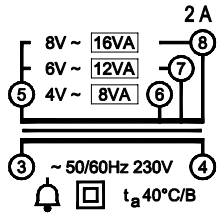

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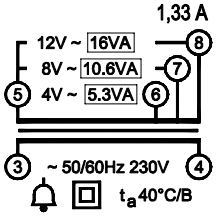
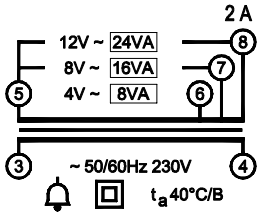
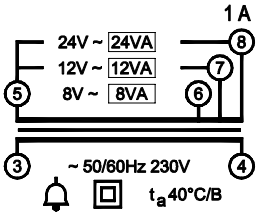


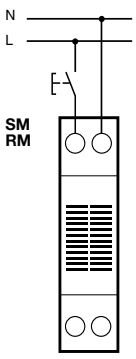
TS24/4-8-12

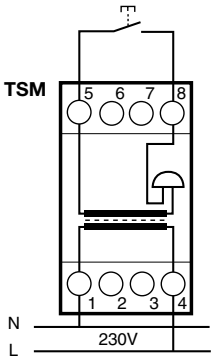


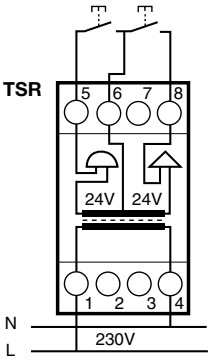
TS24/8-12-24



SM, RM...





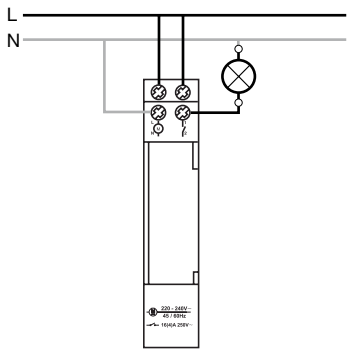


Quick product references

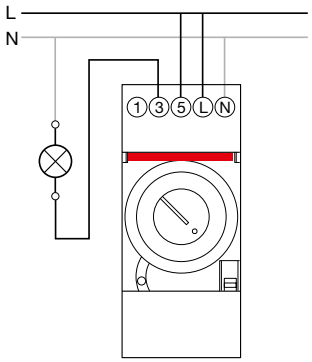
Control and automation wiring diagrams

AT

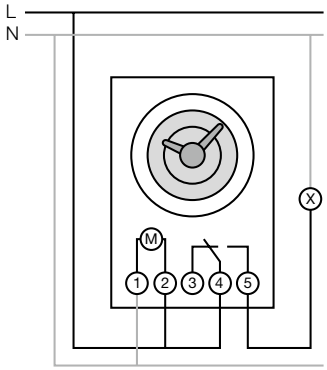
AT1e, AT1e-R



AT2, AT2-R, AT2-7R, AT2e, AT2e-R, AT2e-7R



AT72e, AT72e-R, AT72e-7R

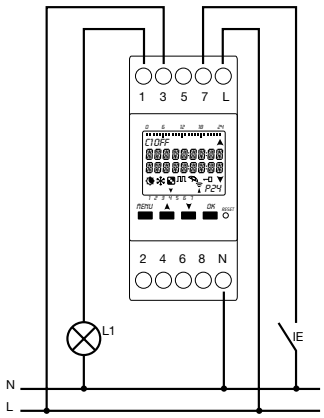


Quick product references

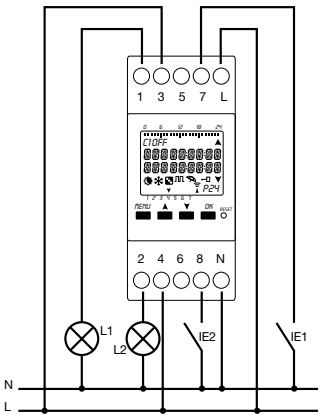
Control and automation wiring diagrams

D Line

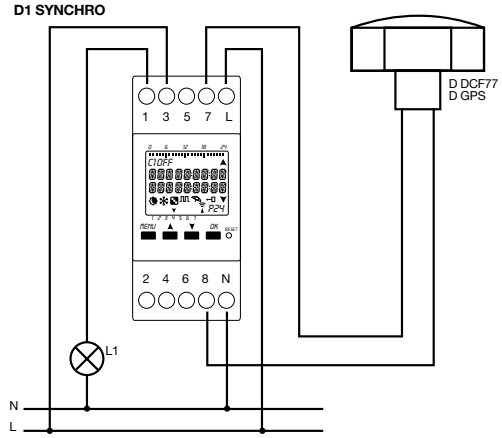
D1 and D1 PLUS



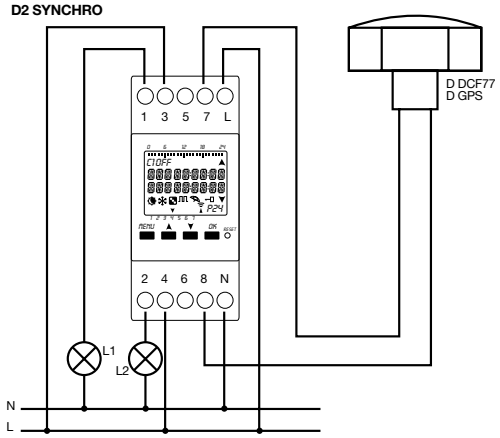
D2 and D2 PLUS



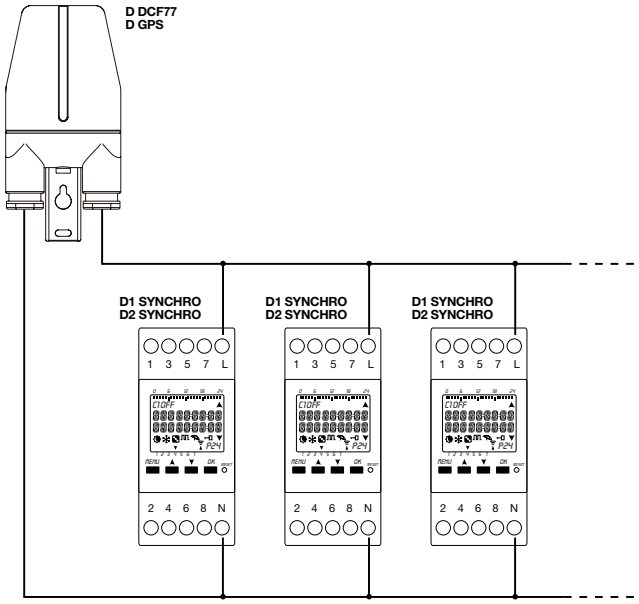
D1 SYNCHRO



D2 SYNCHRO

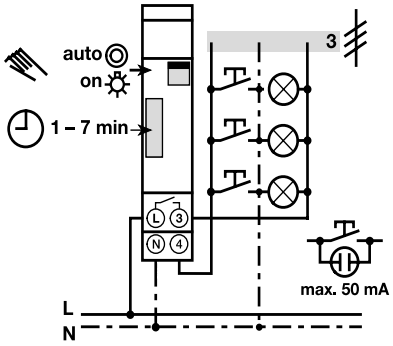


DCF77 and GPS antenna wirings

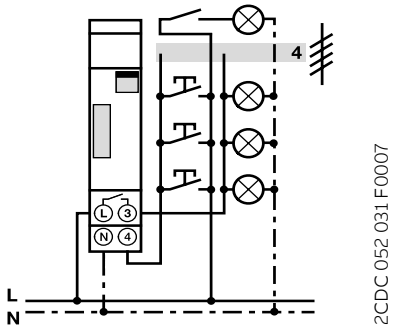


The D DCF77 or D GPS antenna allows you to control up to 10 instruments. The polarity of the first instrument is regardless, while the others have to respect the polarity of the first one.

E 232

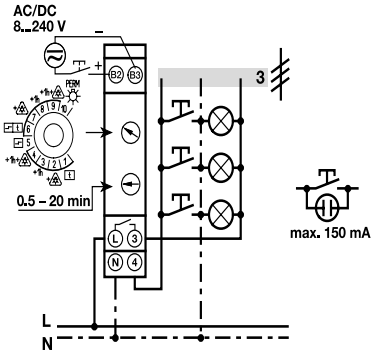


E 232-230 3 conductor

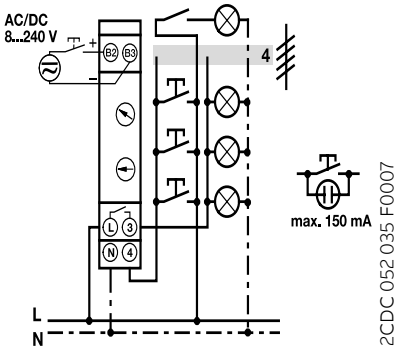


E 232-230 4 conductor

2CDC 052 031 F0007



E 232E-8/230 Multi 10 3 conductor



E 232E-8/230 Multi 10 4 conductor

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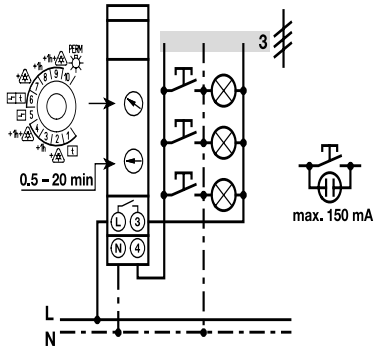
Quick product references

Control and automation wiring diagrams

E 232



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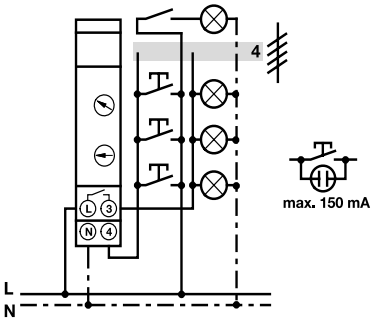
E 232E-230 Multi 10 3 conductor



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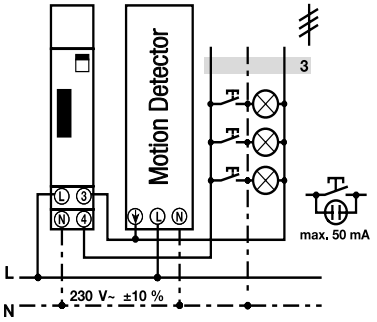
E 232E-230 Multi 10 4 conductor



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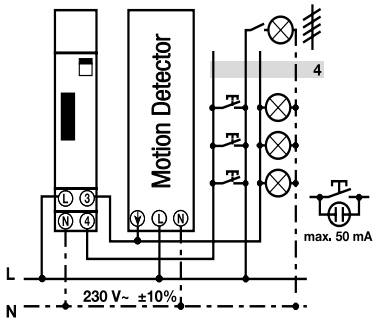
E 232E-8/230 Multi 10 3 conductor
E 232E 8/230 3 conductor
E 232E 230 Multi 10 3 conductor
E 232E 230 N 3 conductor
E 232-230 3 conductor



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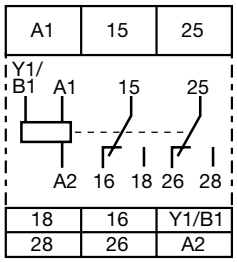
E 232E-8/230 Multi 10 4 conductor
E 232E 8/230 4 conductor
E 232E 230 Multi 10 4 conductor
E 232E 230 N 4 conductor
E 232-230 4 conductor

E 234

CT-MFD.21



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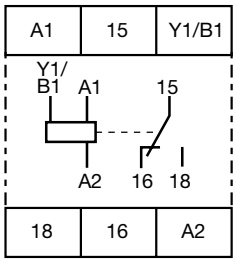
CT-MFD.12



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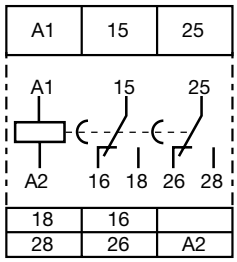
CT-ERD.22



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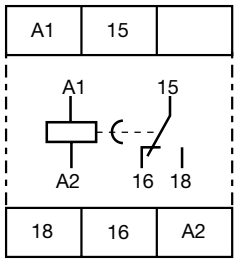

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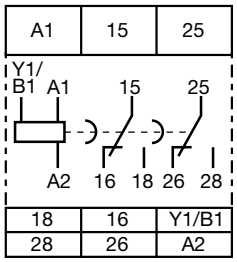
CT-AHD.22



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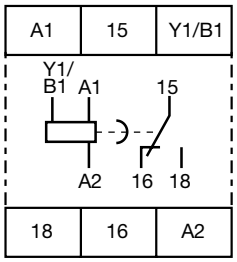

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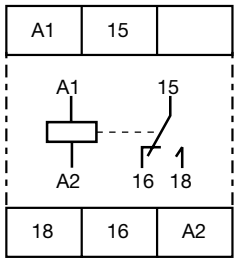

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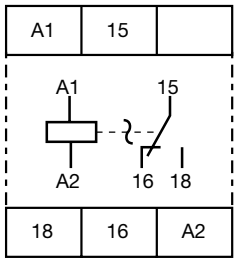

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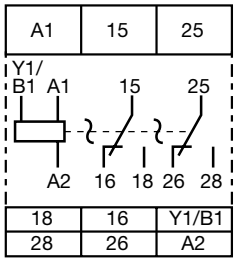

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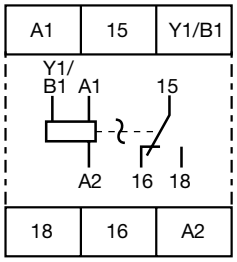

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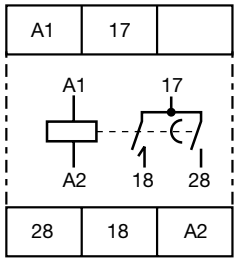

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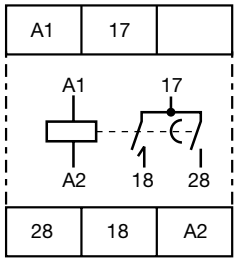

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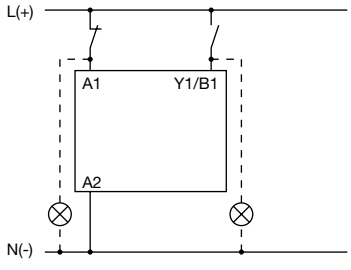
E 234



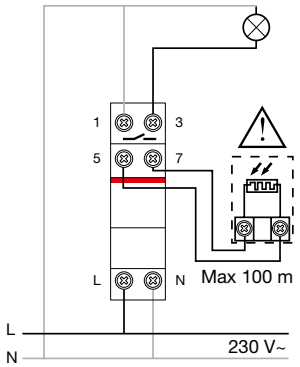
2CDC 252 102 F0b06

Wiring notes for devices with control input
A parallel load to the control input is possible

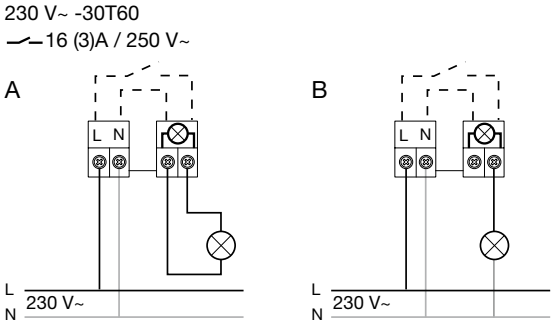
Quick product references

Control and automation wiring diagrams

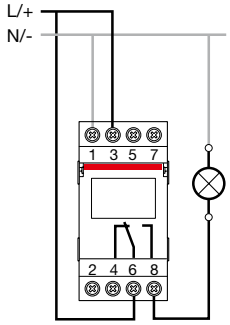
T1, T1 PLUS



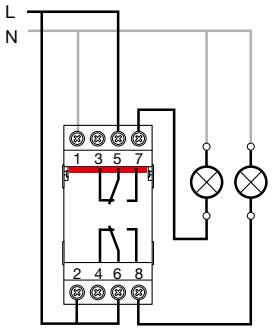
T1 POLE



TWA-1

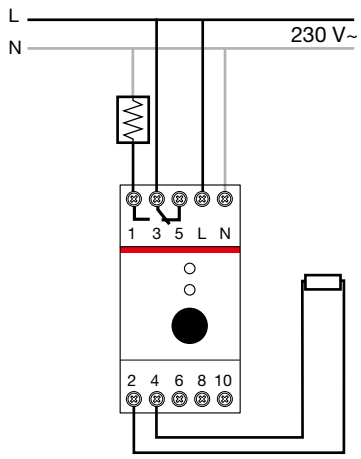


TWA-2

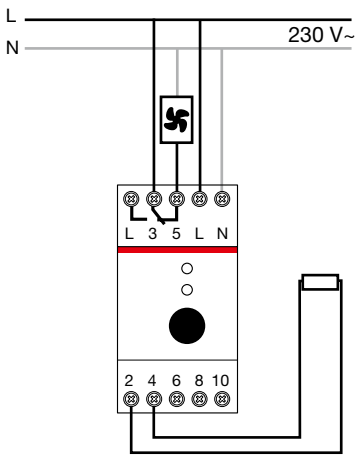


THS-C, THS-W

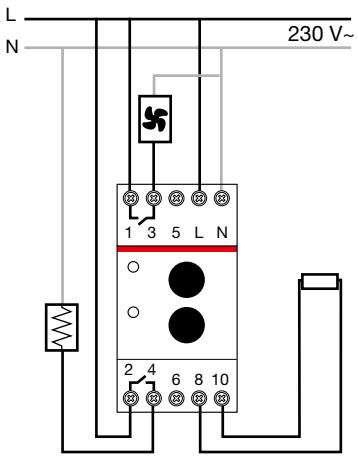
Heating



Cooling

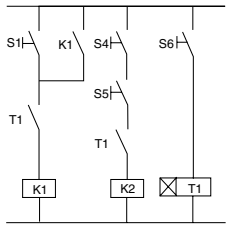


THS-S

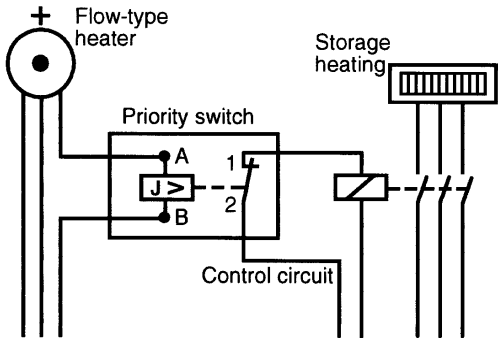


CL

Logic links instead of wiring



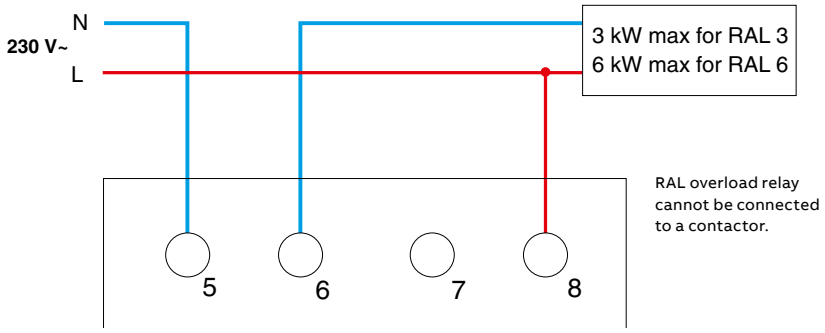
E 450



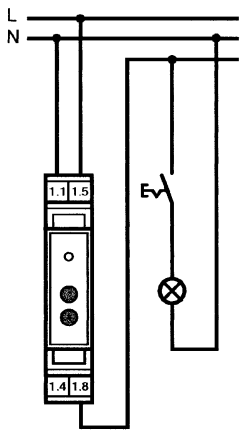
Quick product references

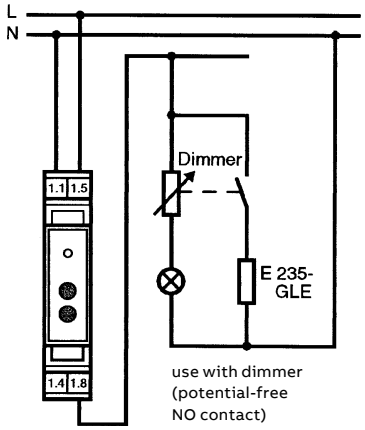
Control and automation wiring diagrams

RAL



E 235



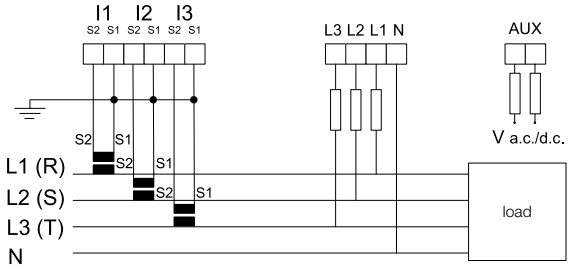


Quick product references

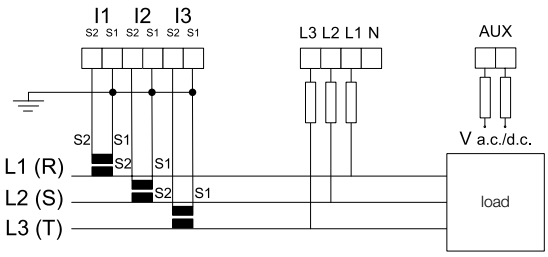
Energy efficiency wiring diagrams

M2M measurement input and auxiliary power supply connections

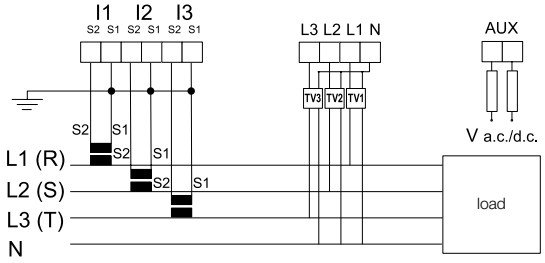
Three-phase + neutral with 3 CT



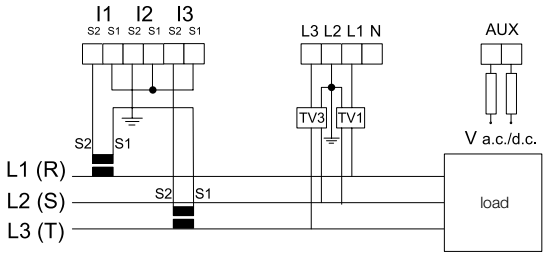
Three-phase with 3 CT



Three-phase + neutral with 3 CT and 3 VT

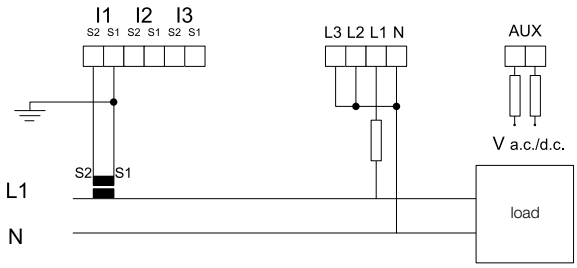


ARON Three-phase with 2 CT and 2 VT

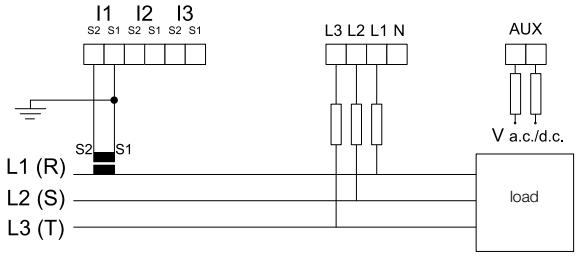


Not suitable for the M2M LV and M2M LV MODBUS models.

Single-phase with 1 CT



Balanced three-phase with 1 CT

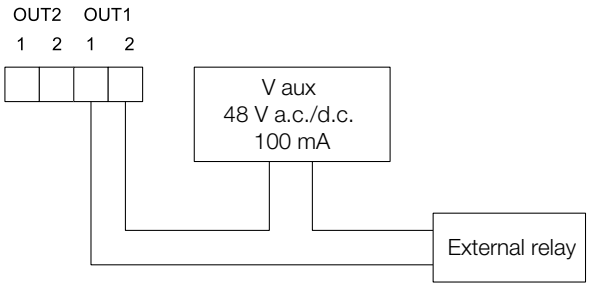


Quick product references

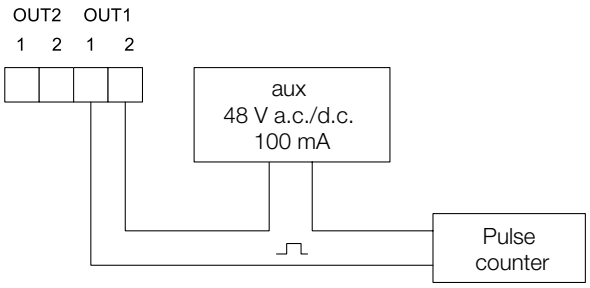
Energy efficiency wiring diagrams

M2M Analogue and digital output connections, digital inputs

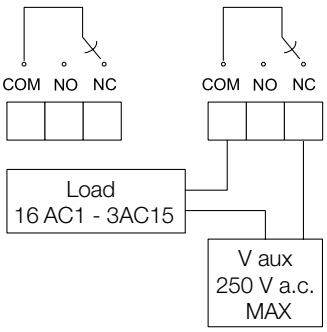
Digital outputs as alarms with external relay for control of loads



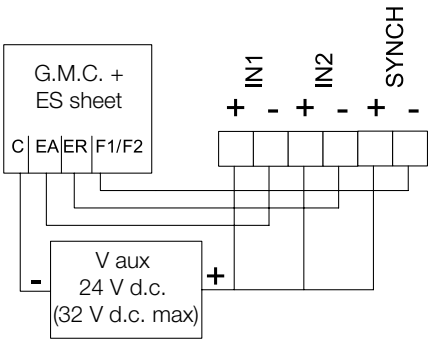
Digital outputs as pulses



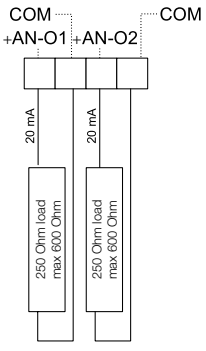
M2M ALARM electromechanical relay outputs



M2M I/O digital inputs (example in NPN mode)

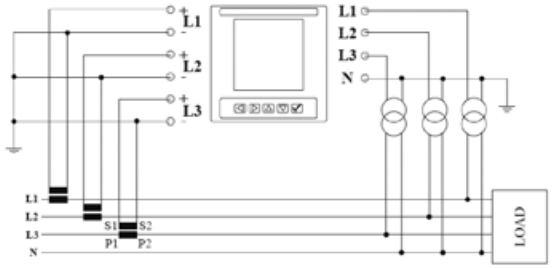


M2M I/O analogue outputs



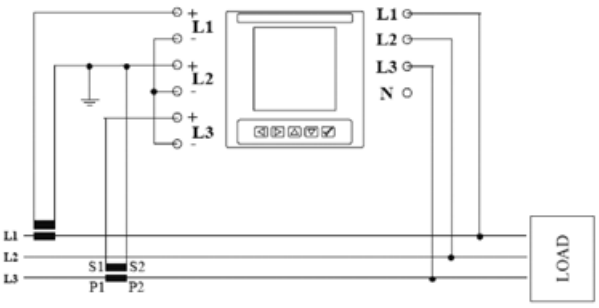
ANR

4 wires insertion

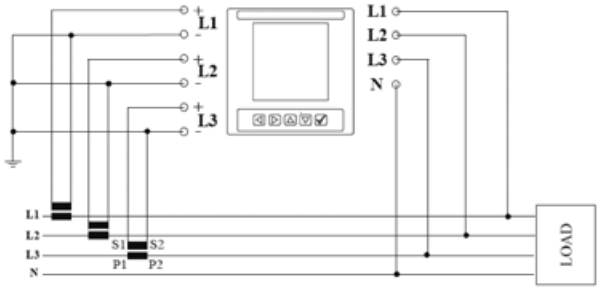


Insertion with 3 CTs and 3 VTs

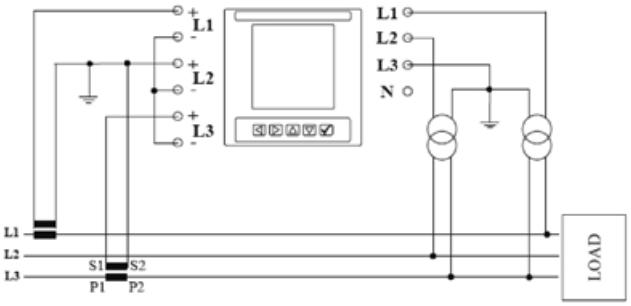
3 wires insertion



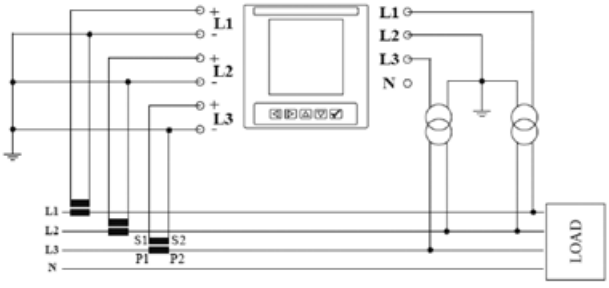
Insertion with 2 CTs



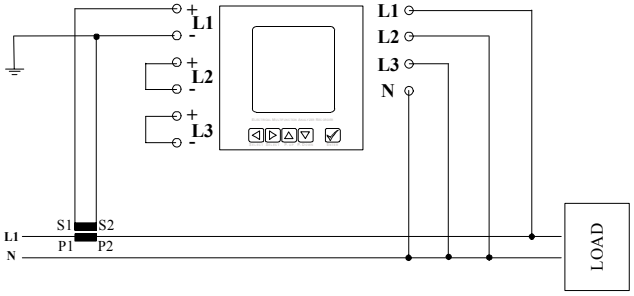
Insertion with 3 CTs



Insertion with 2 CTs and 2 VTs (Aron)



Insertion with 3 CTS and 2 VTs



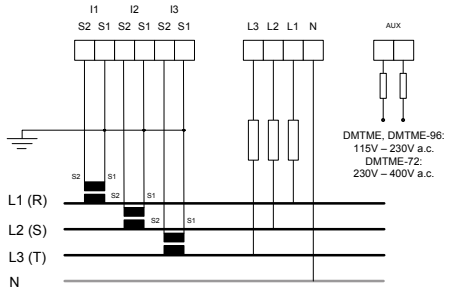
Single phase insertion with 1CT

Quick product references

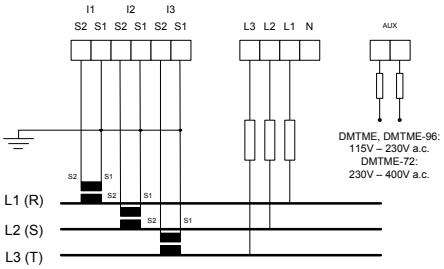
Energy efficiency wiring diagrams

DMTME

Three-phase with neutral and 3 CTs

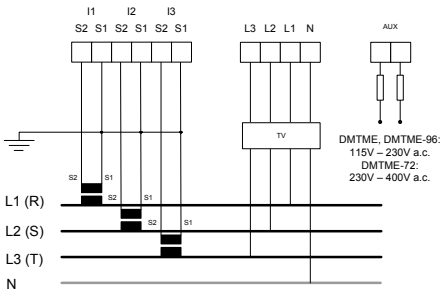


Three-phase with 3 CTs



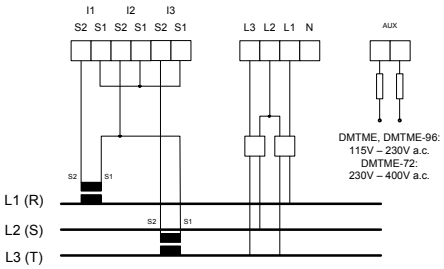
Three-phase with neutral and 3 CTs and 3 VTs

Up to 500 V phase-neutral a direct connection is possible

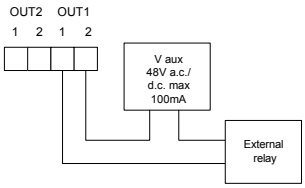


Aron type three-phase with 2 CTs and 2 VTs

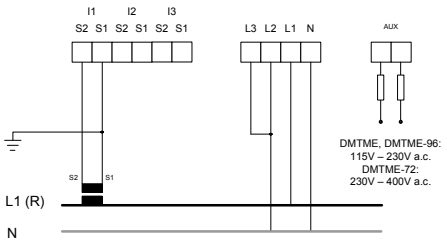
With symmetric and unbalanced network, 3 CTs and up to 800 V, beyond this value must use VT.



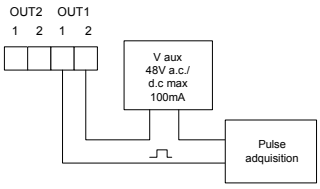
Digital output used as alarm with external relays for load command



Single phase with neutral and 1 CTs

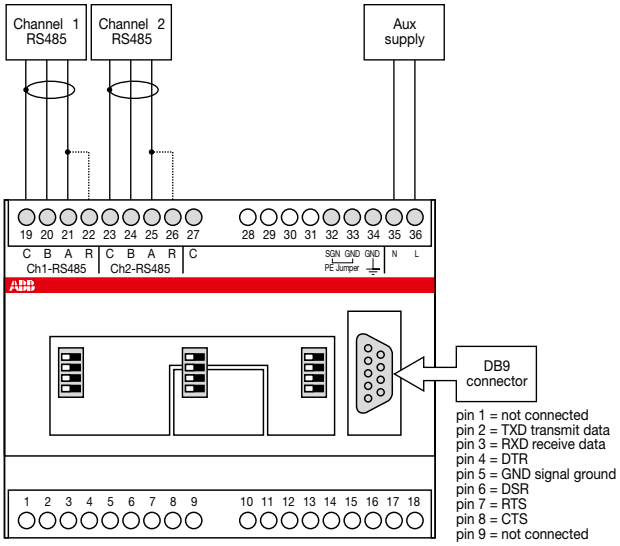


Digital output used as pulses

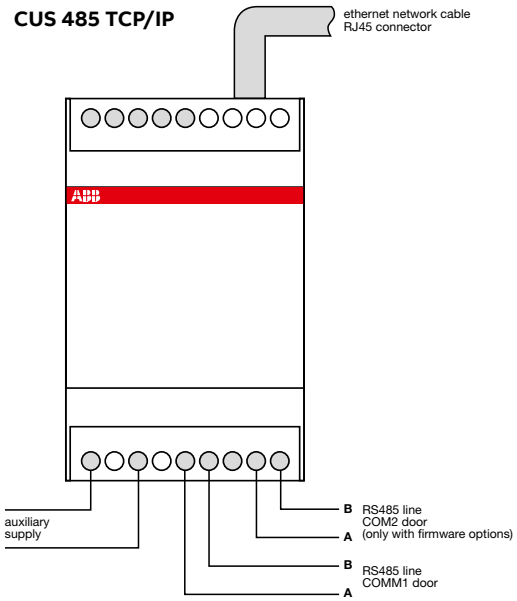


CUS

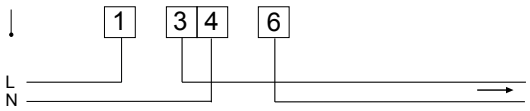
CUS RS485/232



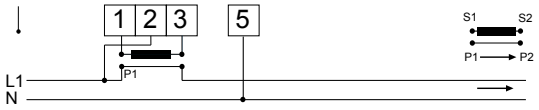
CUS 485 TCP/IP



A series A41

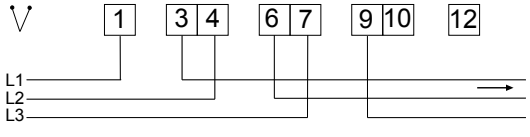


A series A42

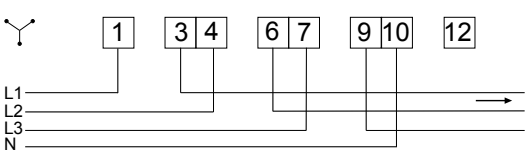


A series A43

3 wire connection, 2 elements



4 wire connection, 3 elements

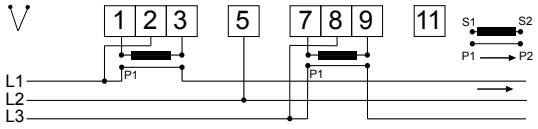


Quick product references

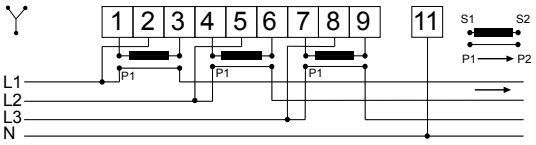
Energy efficiency wiring diagrams

A series A44

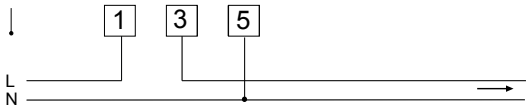
3 wire connection, 2 elements



4 wire connection, 3 elements

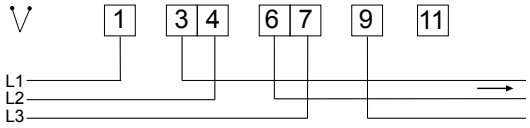


B series B21

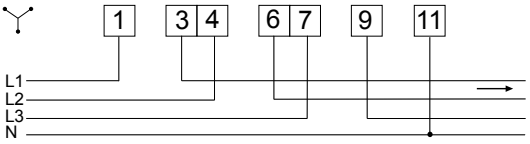


B series B23

3 wire connection, 2 elements

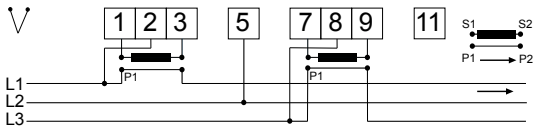


4 wire connection, 3 elements

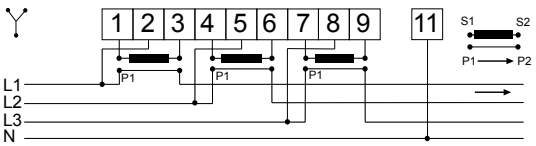


B series B24

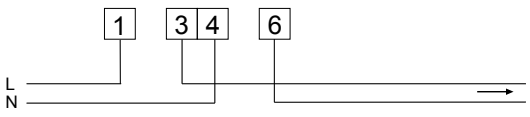
3 wire connection, 2 elements



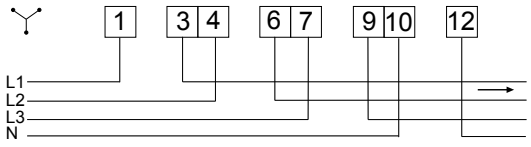
4 wire connection, 3 elements



C series C11

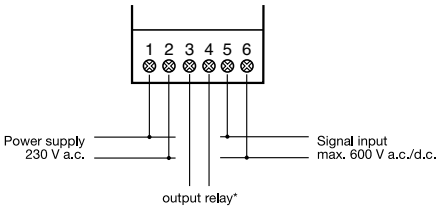


C series C13

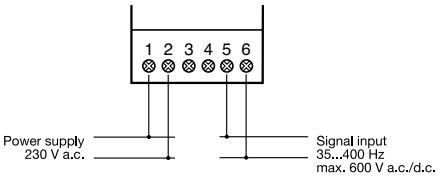


Digital instruments

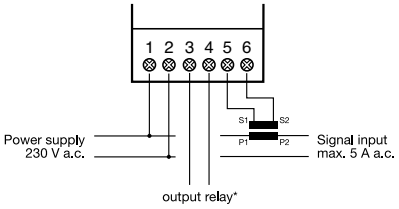
VLMD-1-2 and VLMD-1-2-R
VLMD P and VLMD-R P



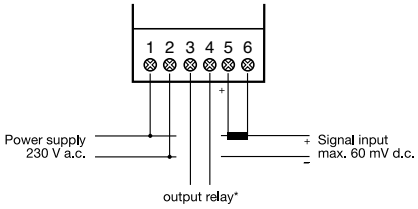
FRZ-DIG



AMTD-1 and AMTD-1-R
AMTD-1 P and AMTD-1-R P

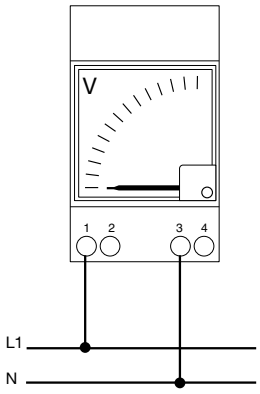


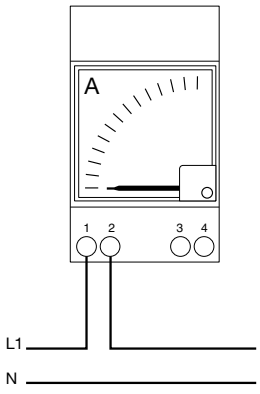
AMTD-2 and AMTD-2-R
AMTD-2 P and AMTD-2-R P



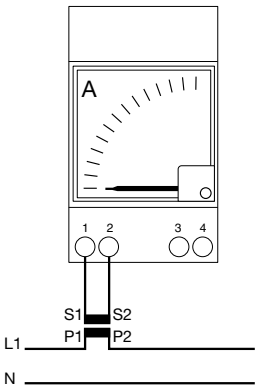
*Only for instruments with output relay

Analogue instruments

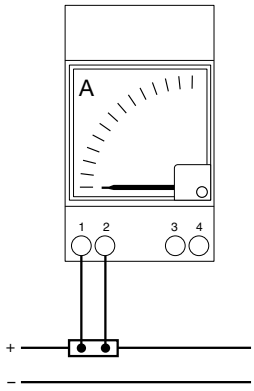




Direct insertion



Indirect insertion using C.T.



Indirect insertion using shunt

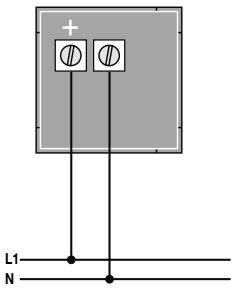
Quick product references

Energy efficiency wiring diagrams

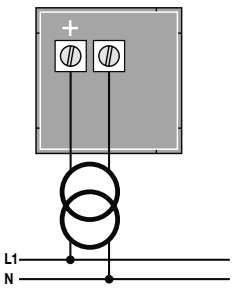
Front panel analogue instruments

Voltmeter for alternating current

Direct insertion

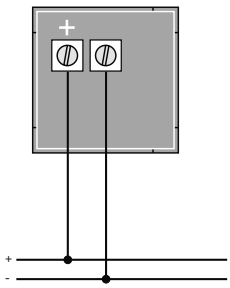


Insertion via VT



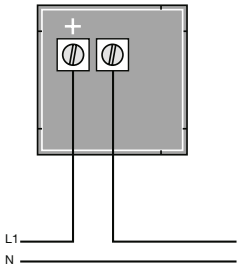
Voltmeter for direct current

Direct insertion

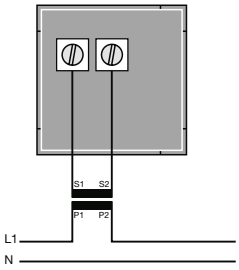


Ammeter for alternating current

Direct insertion

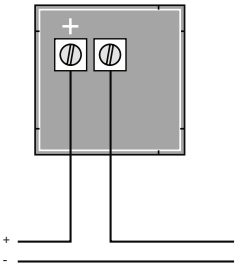


Insertion via CT

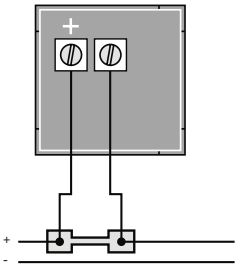


Ammeter for direct current

Direct insertion

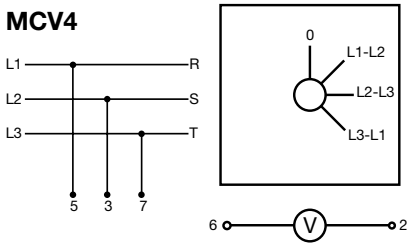


Insertion with Shunt

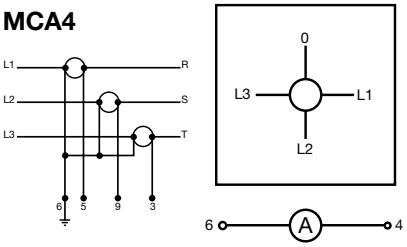


MCV, MCA, QCV and QCA

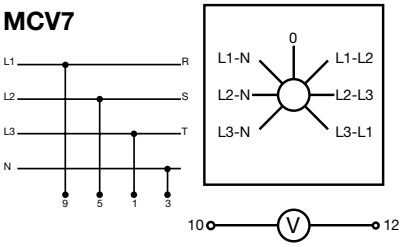
MCV4



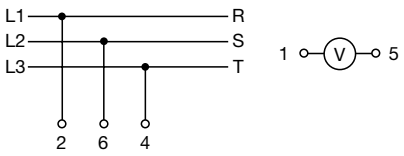
MCA4



MCV7



QCV-4



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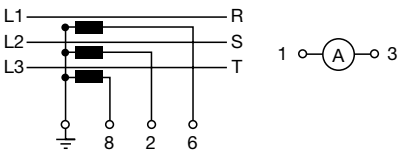

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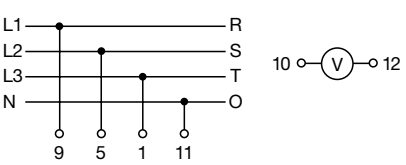
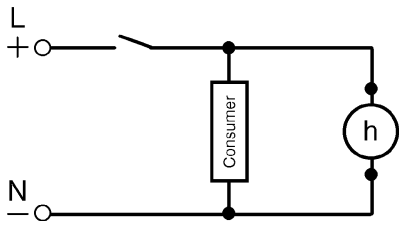


E 233

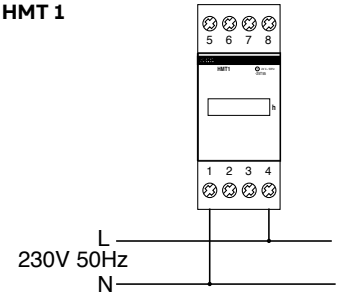


elapsed-time meter

E 233-15/48 DC

HMT

HMT 1



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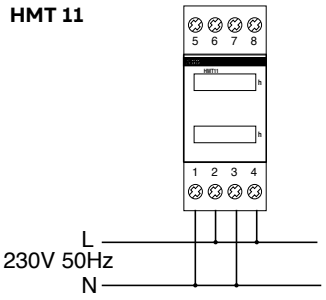
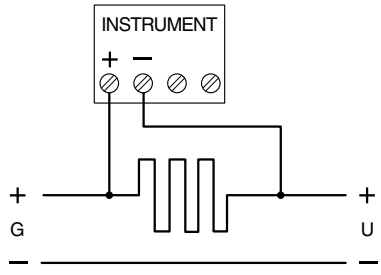


SNT



Quick product references

Overall dimensions

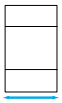
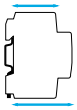
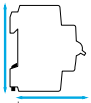
Modular products	Width		Depth		Max. dimensions	
	modules	mm	DIN-rail to door	DIN-rail to front	max depth	max heigth
Miniature circuit breakers						
S 201	1	17.5	44	-	69	88
S 201 Na	2	35				
S 202	2	35				
S 203	3	52.5				
S 203 Na	4	70				
S 204	4	70				
S 200 with bottom aux. cont.	See drawings					
S 201 S	1	17.5	44	-	69	89
S 203 S	3	52.5				
S 201 U	1	17.5	44	-	71	92
S 202 U	2	35				
S 203 U	3	52.5				
S 204 U	4	70				
S 201 UDC	1	17.5	44	-	71	92
S 202 UDC	2	35				
S 203 UDC	3	52.5				
S 204 UDC	4	70				
SU 201 M	1	17.5	49.5	-	69	111
SU 202 M	2	35				
SU 203 M	3	52.5				
SU 204 M	4	70				
SN 201	1	17.6	43.5	58	68.9	91.8
S 201 80-100A	1	17.5	44	58	69	88.8
S 202 80-100A	2	35				
S 203 80-100A	3	52.5				
S 204 80-100A	4	70				
S 291	1.5	26.25	43.5	65	68	90
S 292	3	52.5				
S 293	4.5	78.75				
S 294	6	105				
S 700	See drawings					
S750DR	See drawings					
S 801	1.5	26.5	52	82.5	88.5	95
S 802	3	53				
S 803	4.5	79.5				
S 804	6	106				
S 801_-R	1.5	26.5	52	82.5	88.5	142
S 802_-R	3	53				
S 803_-R	4.5	79.5				
S 804_-R	6	106				

Modular products	Width		Depth		Max. dimensions	
	modules	mm	DIN-rail to door	DIN-rail to front	max depth	max heigth
S 501	1.5	25	56.5	80	92	91
S 502	3	50				
S 503	4.5	75				
S 504	6	100				
Residual current devices						
F 202	2	35	44	-	69	88
F 204	4	70				
F 202 B	2	35	44	-	69	85
F 204 B	4	70				
F 204 B high ratings	4	72	44	60	69.5	85
F 204 125 A	2	72	44	60	69.5	-
DDA 200	See drawings					
DS 202 up to 40 A	4	70	44	-	69	93
DS 203 up to 40 A	5	87.5				
DS 204 up to 40 A	6	105				
DS 202 50, 63 A	4	70	44	-	69	93
DS 203 50, 63 A	7	122.5				
DS 204 50, 63 A	8	140				
DS201	2	35	43	58	69	85
DS202C						
DS203NC	4	70.4	-	-	69	85
DSE201 - DSE201M	1	17.5	-	-	69	100 - 115
DDA 800	See drawings					
RD2	2	35	44	58	-	85
RD3	3.5	58.2	44.2	57.9	57.9	85
ELR	See drawings					
Toroidal transformers	See drawings					
AFDD						
S-ARC1	2	35	-	-	69	85
Auxiliary elements and accessories						
S 2C-A_	1	17.5	44	-	69	85
S 2C-H11L	0.5	8.8				
S 2C-H20L						
S 2C-H02L						
S 2C-S/H 6R						
S 2C-H 6R						
S 2C-UA_	1	17.4	44	-	74	85
F 2C-A_						
S 2C-OVP						
F 2C 125A-SH/S2C-Nt	0.5	8.8	44	-	70	88
Bottom fixing aux. cont.	See drawings					
S 2C-EST	See drawings					
S 2C-BP	1	17.5	44	-	68	85

Quick product references

Overall dimensions

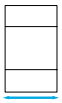
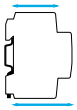
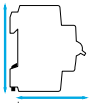
Modular products	Width		Depth		Max. dimensions	
	modules	mm	DIN-rail to door	DIN-rail to front	max depth	max heigth
S 2C-CM	See drawings					
F 2C-ARI	See drawings					
F 2C-CM	See drawings					
F 2C-ARH	See drawings					
F 2C-ARH-T	See drawings					
Aux. elements for SN201	See drawings					
Aux. elements for S280 and S290	0.5	8.75	44	-	73	90
	1	17.5				
S800-AUX	See drawings					
S800-RSU-H	See drawings					
S800-RD+S800-RHE	See drawings					
Terminal covers	See drawings					
Enclosures	See drawings					
Flush frame	See drawings					
Busbars	See drawings					
Me flange	See drawings					
OH_2A_	See drawings					
Protection and safety						
Type 1 SPD 1 pole	1/2	17.8/35	45.5	58	-	85
Type 1 SPD 2 poles	4	70.4	43.5			
Type 1 SPD 2 poles + TS	5	88				
Type 1 SPD 3 poles	6	105				
Type 1 SPD 3 poles + TS	7	122.5				
Type 1 SPD 4 poles	8	140				
Type 1 SPD 4 poles + TS	9	157.5				
Type 1+2 SPD 1 pole	1/2	17.8/35				
E90 20/32 and PV (1000 VDC) 1 pole	1	17.5	-	-	64	85
E90 20/32 1 pole + N	2	35				
E90 20/32 and PV (1000 VDC) 2 poles	2	35				
E90 20/32 3 poles	3	52.5				
E90 20/32 3 poles + N	4	70				
E90 20/32 4 poles	4	70				
E90/32 PV 1500	See drawings					
E90 50 1 pole						
E90 50 1 pole + N						
E90 50 2 poles						
E90 50 3 poles						
E90 50 3 poles + N						
E90 125 1 pole	See drawings					
E90 125 1 pole + N						
E90 125 2 poles						
E90 125 3 poles						
E90 125 3 poles + N						

Modular products	 Width		 Depth		 Max. dimensions	
	modules	mm	DIN-rail to door	DIN-rail to front	max depth	max heigth
E90 30 Class J 1 pole						
E90 30 Class J 2 poles	See drawings					
E90 30 Class J 3 poles						
E90 60 Class J 1 pole						
E90 60 Class J 2 poles	See drawings					
E90 60 Class J 3 poles						
ILTS-E 1 pole	1.5	27	44	70	70	90
ILTS-E 2 poles	3	54				
ILTS-E 3 poles	4.5	81				
ILTS-E 4 poles	6	108				
SQZ3	3	52.5	44	58	58	85
RH/RL	3	52.5	44	58	58	85
E 236 US1	2	35	44	60	65	87
E 236 US2						
E 236 US1.1	1	17.5	44	60	60	87
E 236 US2.1						
E 236 US1.1D						
Isoltester-DIG	6	105	44	56	61	90
Selvtester-24	3	52.5	44	58	58	85.5
QSD	See drawings					
TI	See drawings					
QSO	See drawings					
ISL-A 115	6	105	44	58	65	90
ISL-A 230						
ISL-A 600						
ISL-C 600						
ISL-A 24-28	3	52.5	44	58	65	85.5
ISL-C 230						
ISL-C 440						
ISL-MOT 1000						

Quick product references

Overall dimensions

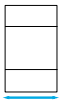
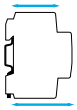
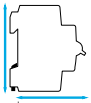
Modular products	Width		Depth		Max. dimensions	
	modules	mm	DIN-rail to door	DIN-rail to front	max depth	max heigth
Command and signaling						
E201	1	17.5	44	58	70	85
E202	2	35				
E203	3	52.5				
E204	4	70				
E463	2.5	44	44	58	70	85
E210	0.5	9	43.5	58	67.9	85
E210	1	18				
ESB 20	1	17.5	44	58	58	85
ESB 24	2	35				
ESB 40	3	54				
ESB 63						
EN 20	1	17.5	44	58	58	85
EN 24	2	35				
EN 40	3	54				
EN 63						
E290	See drawings					
FLR	See drawings					

Modular products	 Width		 Depth		 Max. dimensions	
	modules	mm	DIN-rail to door	DIN-rail to front	max depth	max heigth
E261	1	17.5	43.4	58	58	85
E261C						
E262						
E266						
E262C						
E266C						
STD	See drawings					
E 234 1 concact	1	17.5	43.4	58	58	70
E 234 2 contacts						80
TS 25 C	4	70	44	58	58	85
TS 40 C	4	70				
TS 63 C	5	87.5				
TM10	2	35	44	58	58	85
TM15						
TS8...16						
TM30	3	52.5				
TM40						
TS24						
SM	1	17.5	44	58	58	85
RM						
TSM	2	35				
TSR						
CP-D 15/0.83	1	18	44	58	58	91
CP-D 24/0.42						
CP-D 24/2.5	4	71				
CP-D 15/2.1	3	53				
CP-D 24/1.3						
CP-D 24/4.2	5	89.9				
TM-_	See drawings					
M117_	2.5	44	44	60	60	85
M2071						
M1011	3	53				
M1363						
MA1-8001	See drawings					

Quick product references

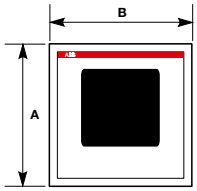
Overall dimensions

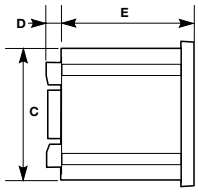
Modular products	Width		Depth		Max. dimensions	
	modules	mm	DIN-rail to door	DIN-rail to front	max depth	max heigth
Control and automation						
AT1e	1	17.8	44	60	60	88.5
AT1e-R						
AT2, AT2e	2	35				
AT2-R, AT2e-R						
AT2-7R, AT2e-7R						
AT72e	See drawings					
D Line	2	35	43.8	60	60	90
E 232-230	1	17.5	44	59	59	88
E 232 E					58	90
TWA-1	2	35.8	43.8	60	60	85
TWA-2						
T1, T1 PLUS	1	17.5	-	-	65	86
THS	2	35	44	60	60	90
CL	See drawings					
E 450	1	17.5	-	60	60	85
RAL	2	35	44	58	58	85
LSS1/2	5	87.5	-	58	58	85
E 235	1	17.5	-	58	58	85
LEE	See drawings					

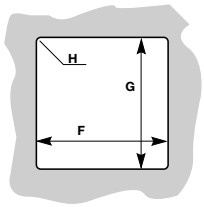
Modular products	 Width		 Depth		 Max. dimensions	
	modules	mm	DIN-rail to door	DIN-rail to front	max depth	max heigth
Energy efficiency						
Modular analogue measurement instruments	3	52.5	44	58	58	85
Modular digital measurement instruments	3	52.2	44	58	58	85
MCV, MCA	See drawings					
QCV, QCA	See drawings					
DMTME	6	105	44	58	58	90
CUS	6	105	44	58	58	90
CUS 485	3	52.5				
TRF M	3	52.5	44	58	58	85.5
TV2	See drawings					
Shunts	See drawings					
E 233	1	17.5	44	58	58	85
HMT	2	35	44	58	58	85
A41	4	70	44	65	65	97
A42						
A43	7	123				
A44						
B21	2	35				
B23	4	70				
B24						
C11	1	17.5				111
C13	3	54				122

Quick product references

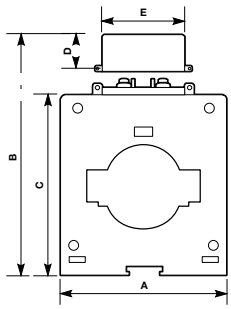
Overall dimensions

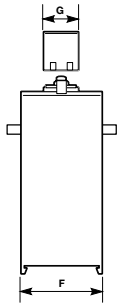


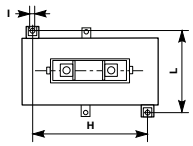




Product without modular profile	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H
Front panel devices								
SL - 48	48	48	44	7	48	45	45	R3
SL - 72	144	72	-	9	55	67	137	R3
Analogue measurement intruments - 48	48	48	43	6	53	45÷0.1	45÷0.1	R3
Analogue measurement intruments - 72	72	72	67	6	53	68÷0.7	68÷0.7	R3
Analogue measurement intruments - 96	96	96	90	6	53	92÷0.8	92÷0.8	R3
Digital measurement instruments	36	72	32	6	51.5	68÷0.8	33÷0.8	R3
M2M	96	96	90	16	61	92	92	R3
ANR 96	96	96	90	14	115	92	92	R3
TMD	96	96	90	14	115	92	92	R3
DMTME - 96	96	96	90	13	90	92	92	R3
DMTME - 72	72	72	-	10	90	68	68	R3





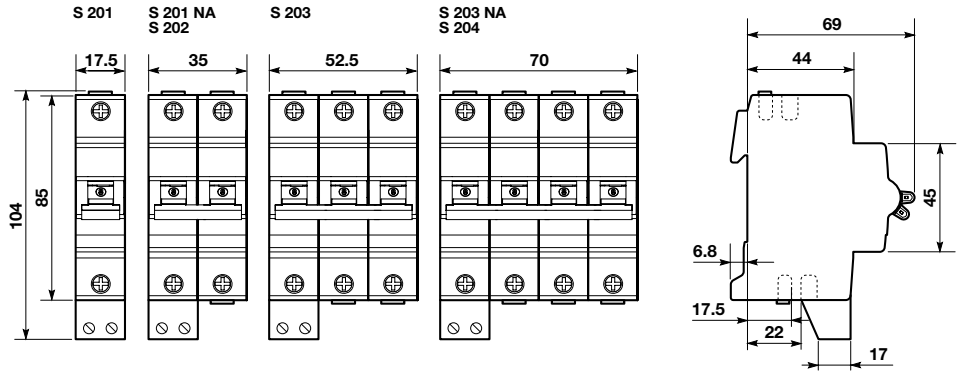


Product without modular profile	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	L [mm]
Measurement current transformers										
CT MAX	see drawings									
CT PRO XT	see drawings									
CTA	see drawings									
CT6	105	121	100	18.5	75	61	21	82	3.7	76.7
CT8	125	142	120	18.5	50	61.5	21	82	3.7	76.7
CT8-V	109	141	119	18.5	50	41	21	-	-	-
CT12 up to 4000 A	180	196	175	18.5	50	68.5	21	156.8	3.7	84
CT12 5000 A, CT12 6000 A	272	290	265	25	50	-	-	-	-	50
CT12-V	109	186	165	18.5	50	41	21	-	-	-
CTO	see drawings									

Quick product references

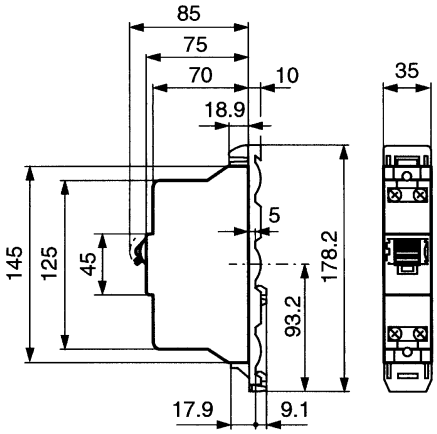
Overall dimensions

S 200 with bottom-fitting auxiliary contact

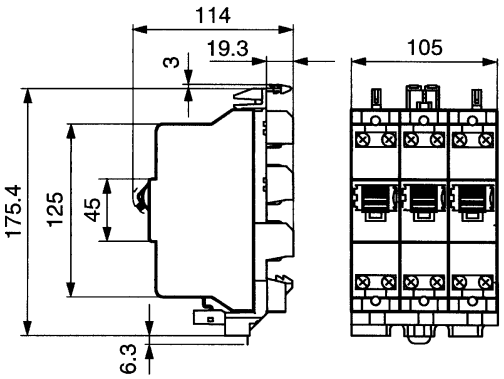


S 700

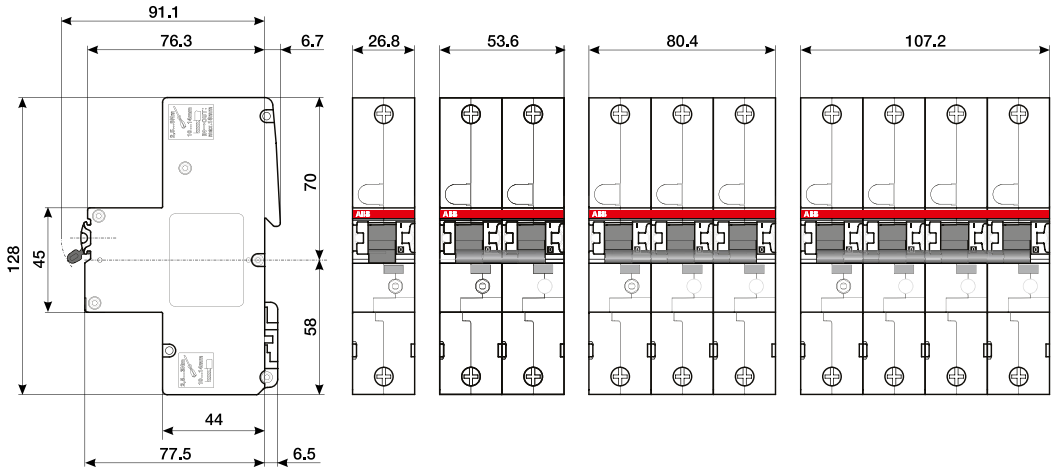
S 701 with DIN rail adapter



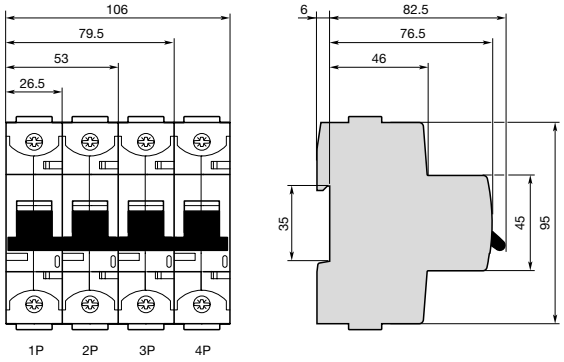
3 x S 701 with busbar adapter



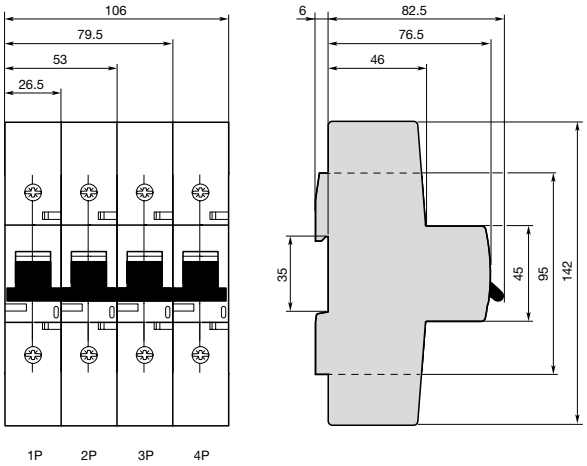
S 750 DR



S800S, S800N, S800C, S800B, S800U, S800PV-SP, S800PV-SD

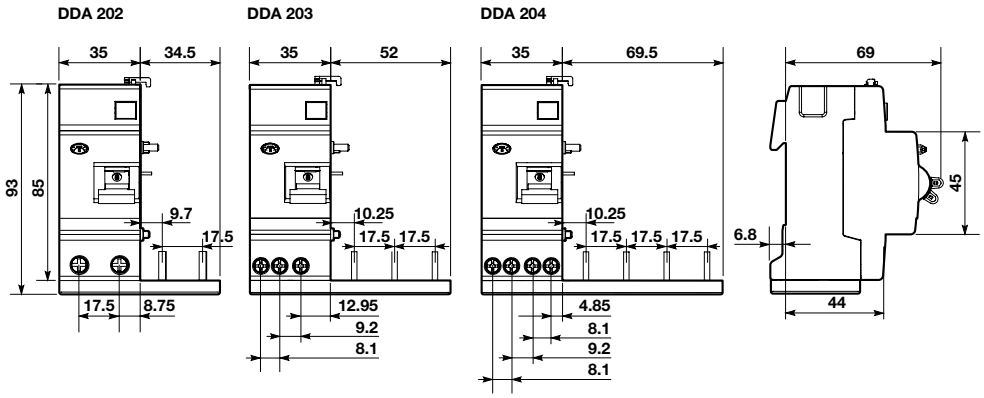


S800 with Ringlug terminals

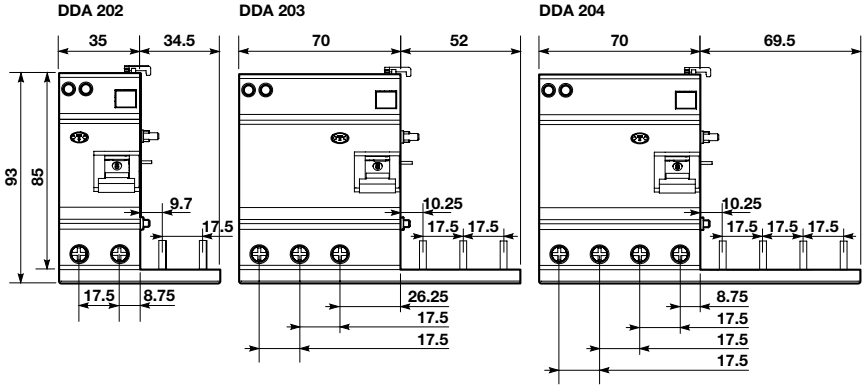


DDA 200

In=25-40 A



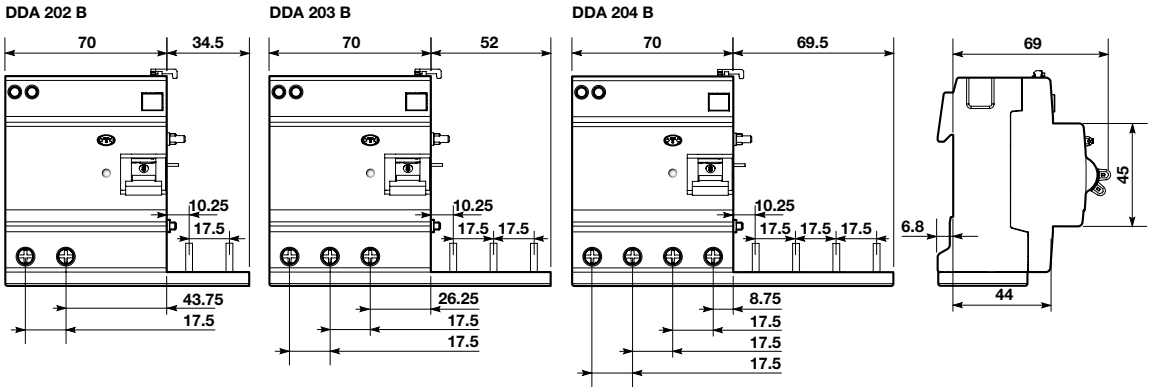
In=63 A



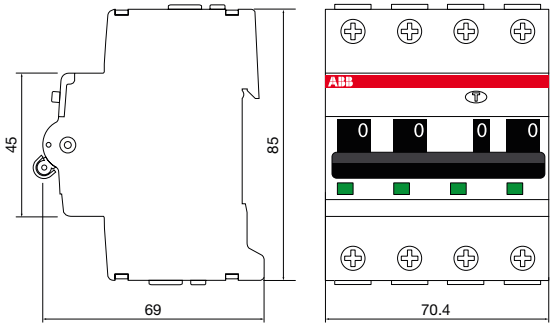
Quick product references

Overall dimensions

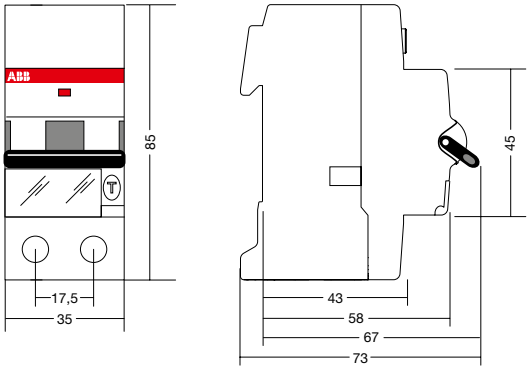
DDA 200 B



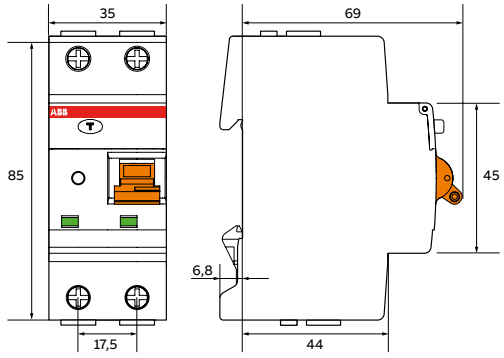
DS203NC



DS201 - DS202C

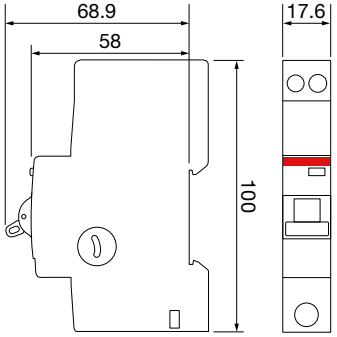


S-ARC1



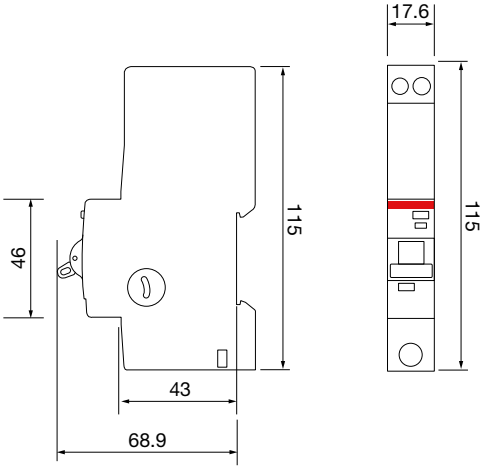
Dimensions in mm

DSE201

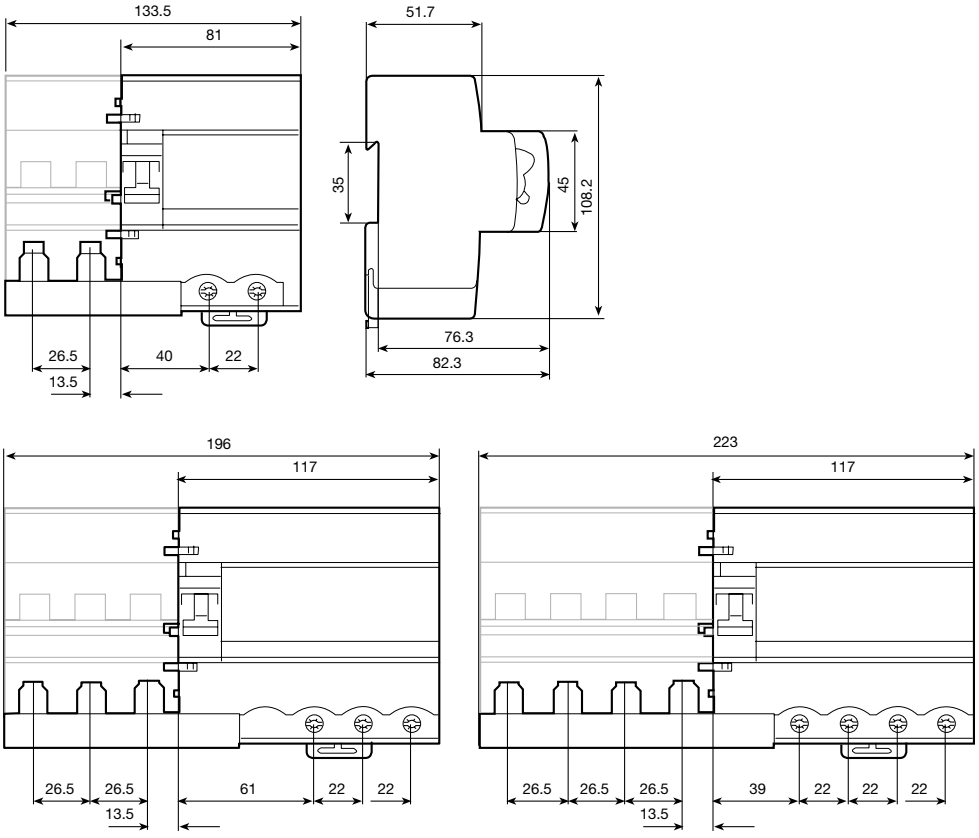


50A version is 115mm height

DSE201M



DDA 800 for S800 and DS800 series



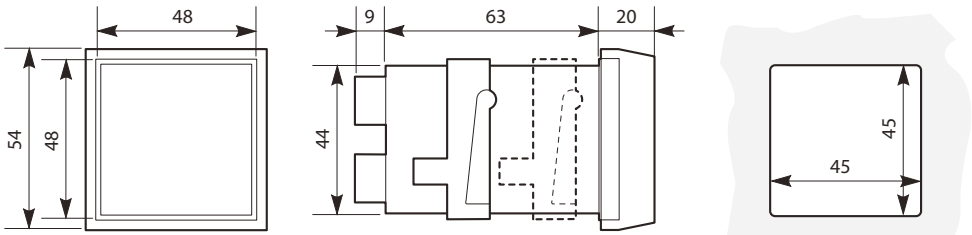
Dimensions in mm

Quick product references

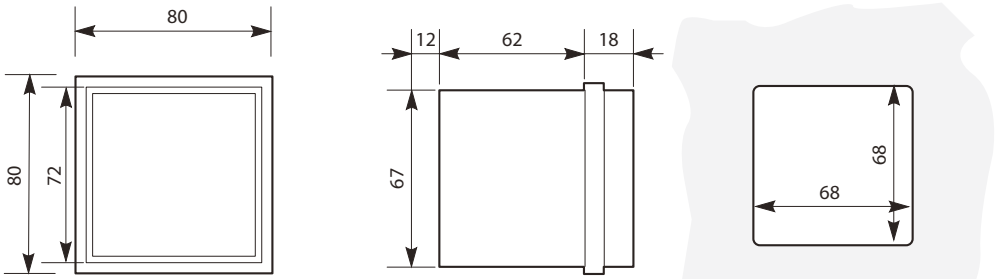
Overall dimensions

ELR front panel residual current relays

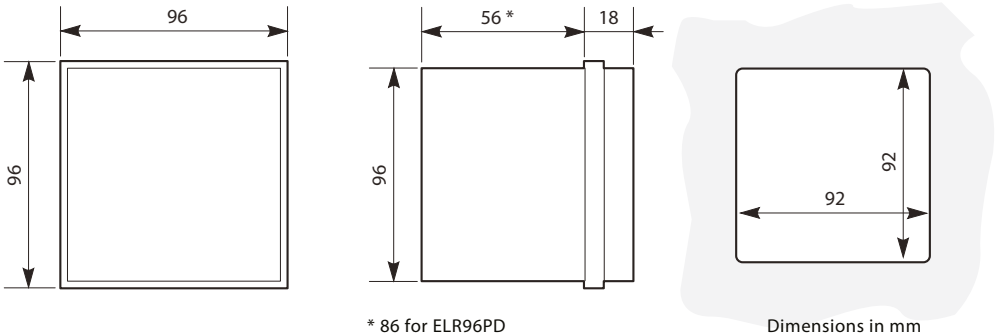
ELR48P



ELR72



ELR96

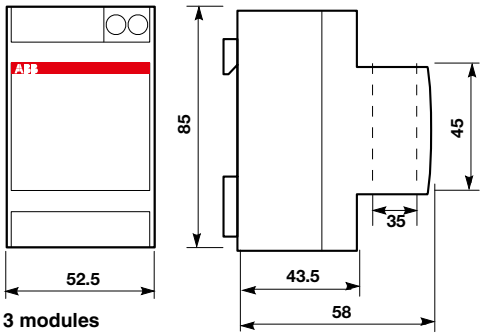


* 86 for ELR96PD

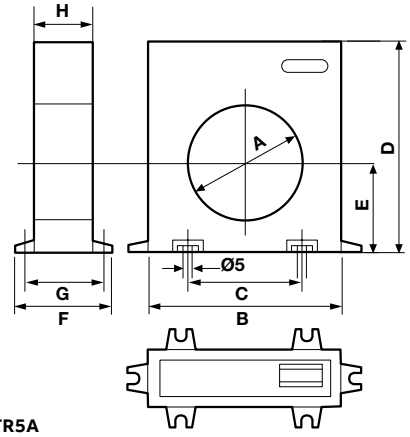
Dimensions in mm

Toroidal transformers

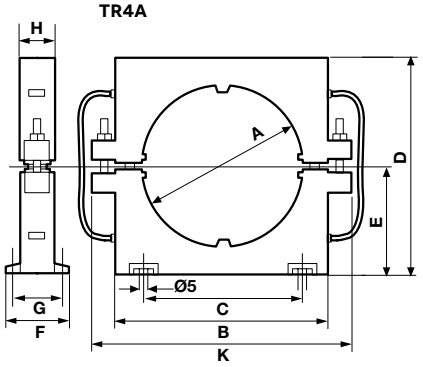
TRM



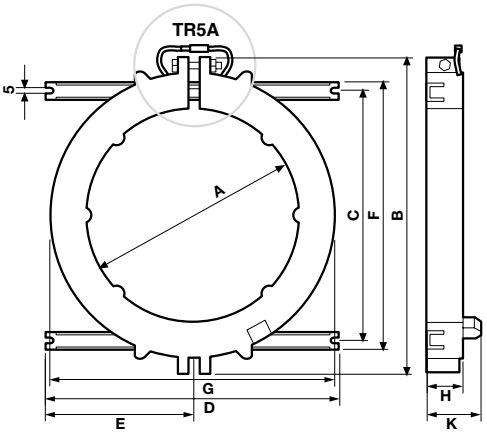
TR1, TR2, TR3, TR4, TR160, TR160A



TR4A



TR5, TR5A

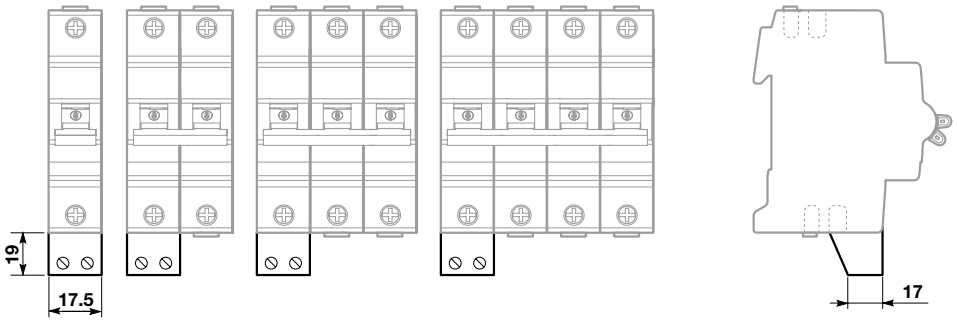


Type	Dimensions (mm)								
	A	B	C	D	E	F	G	H	K
TR1	35	100	60	110	47	50	43	30	–
TR2	60	100	60	110	47	50	43	30	–
TR3	80	150	110	160	70	50	43	30	–
TR4	110	150	110	160	70	50	43	30	–
TR4A	110	145	110	150	75	45	38	25	180
TR160	160	220	156	236	110	64	50	34	–
TR160A	160	220	156	236	110	64	50	34	–
TR5	210	310	240	290	145	260	280	36	55
TR5A	210	310	240	290	145	260	280	36	55

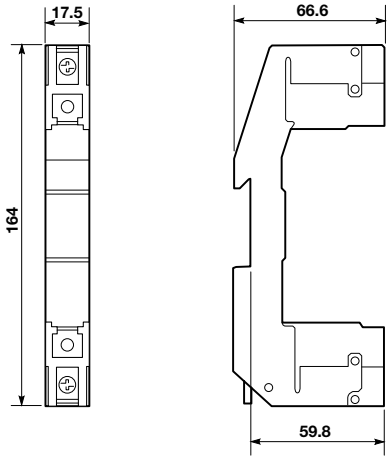
Quick product references

Overall dimensions

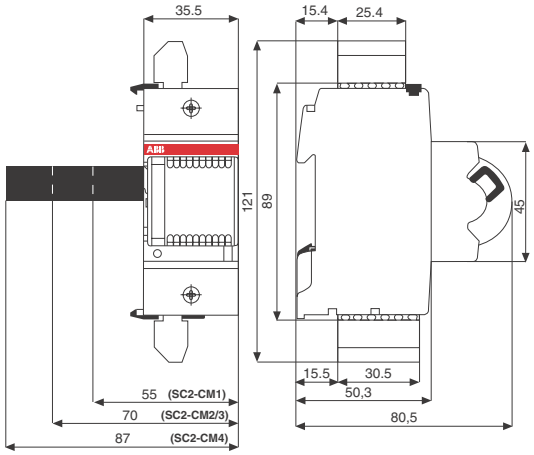
Bottom-fitting auxiliary contact (with S 200 MCB)



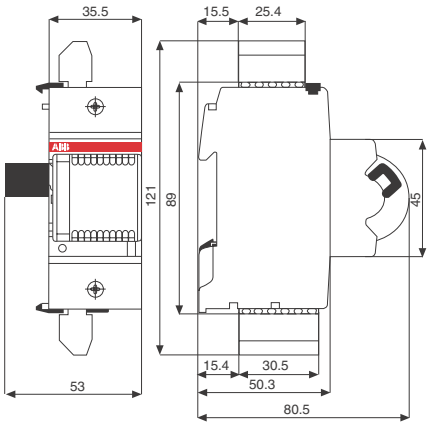
S 2C-EST



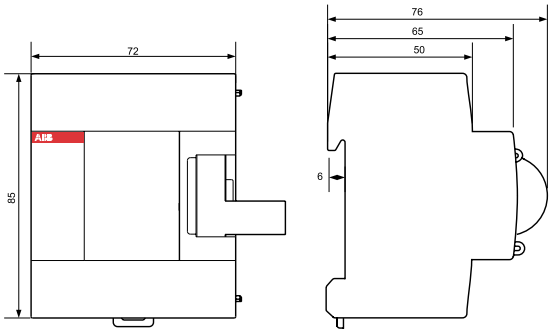
S 2C-CM



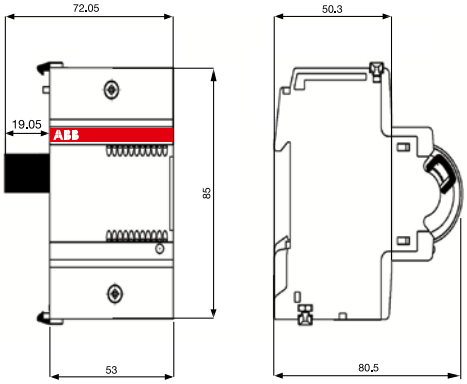
F2C-ARI, F2C-CM



F2 CM4

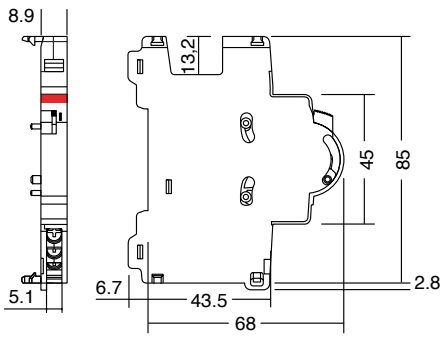


F2C-ARH, F2C-ARH-T

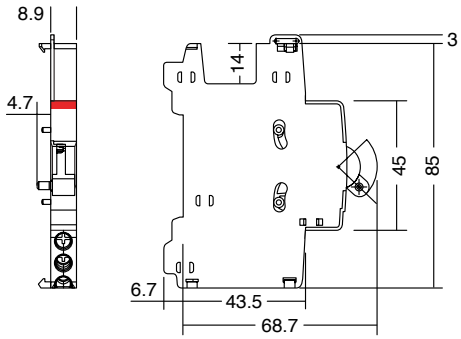


Auxiliary elements for SN 201 series

SN201-S



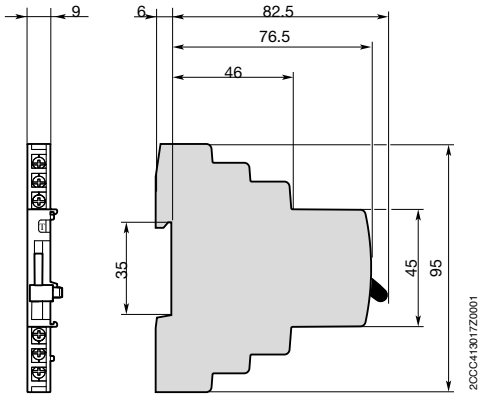
SN201-IH



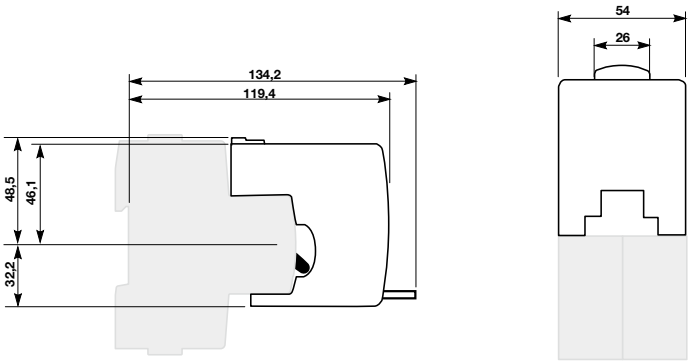
Quick product references

Overall dimensions

S800-AUX, S800-AUX/ALT

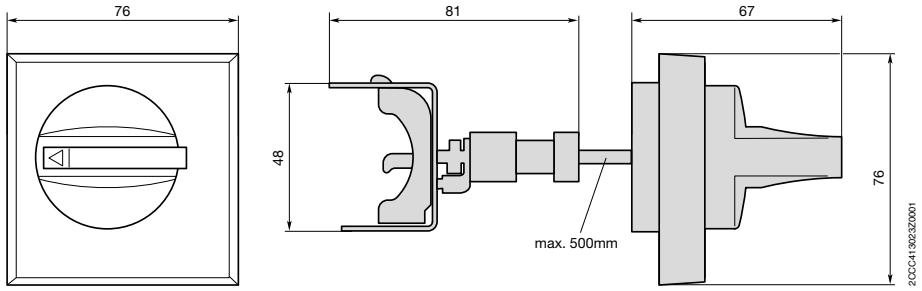


S800-RSU-H, S500-RSU-H

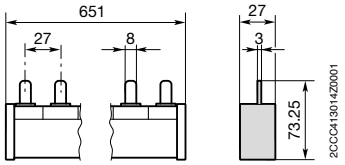


S800-RD+S800-RHE, S800-NT, S800-BB250, S800-BBPC120

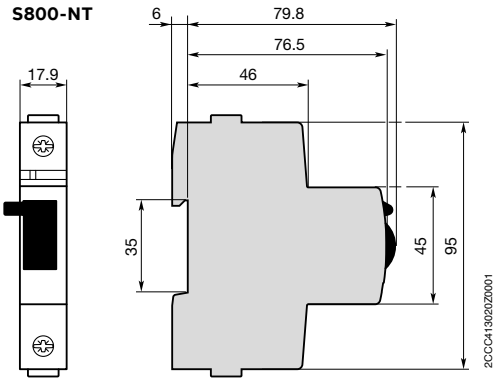
S800-RD+S800-RHE



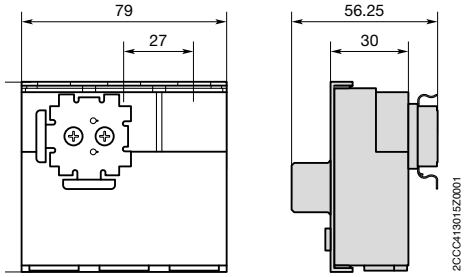
S800-BB250



S800-NT

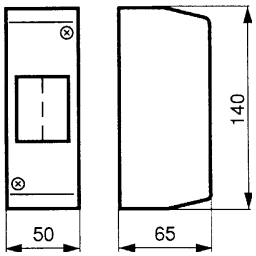


S800-BBPC120

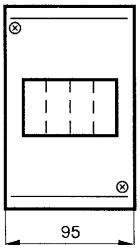


Terminal covers

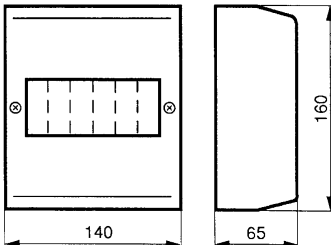
PCD 2 N



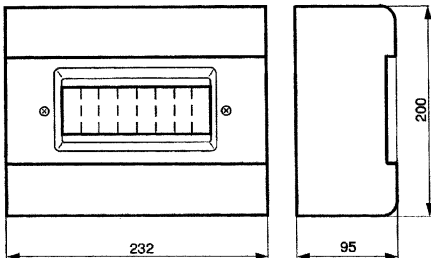
PCD 4 N



PCD 6 N



PCD 8 N



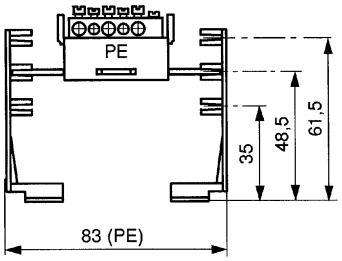
Quick product references

Overall dimensions

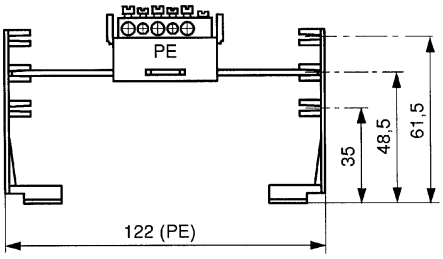
Enclosures of moulded-plastic

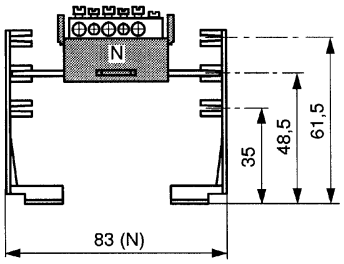
N + PE common terminals for QES

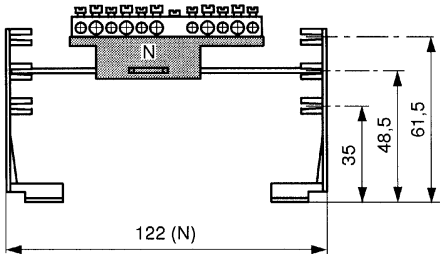
SMO 4



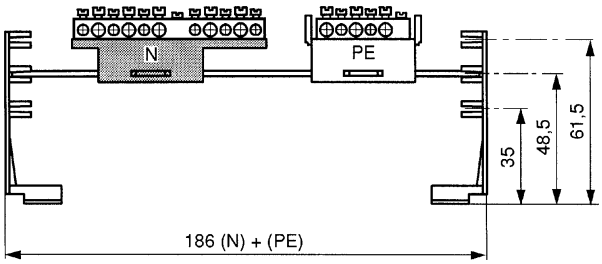
SMO 6



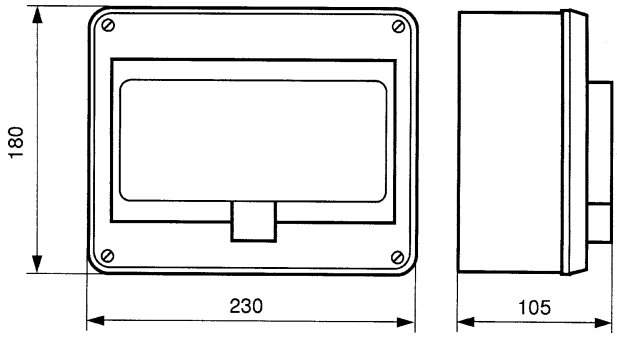




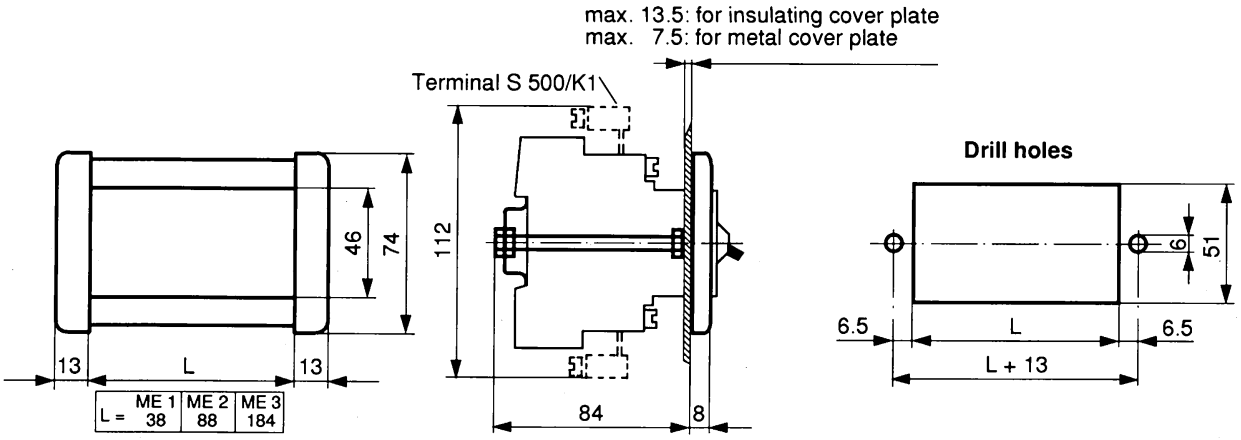
SMO 10



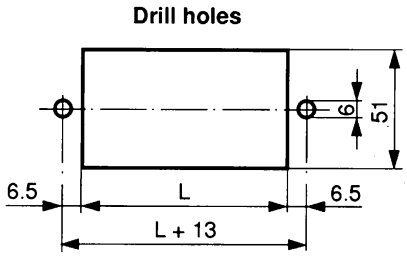
QES 10/3 N



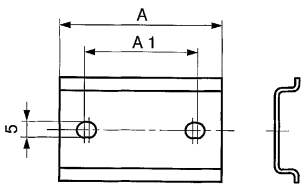
Flush frame



Type	Dim. L	Max. No. of modules (1 module=17.5 mm)
S 500 - ME 1	38 mm	for 2 module
S 500 - ME 2	88 mm	for 5 module
S 500 - ME 3	184 mm	for 10 module



① **In the case of DSW 1, the drill holes are vertical**



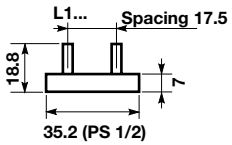
Name	A	A1
DSW	17.5	15
DSW 2	35	20
DSW 3	52.5	37.5
DSW 4	70	55
DSW 6	105	90

Quick product references

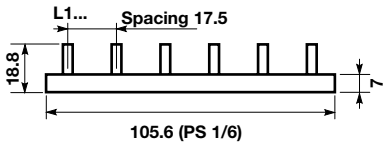
Overall dimensions

Busbars

PS 1/2



PS 1/6



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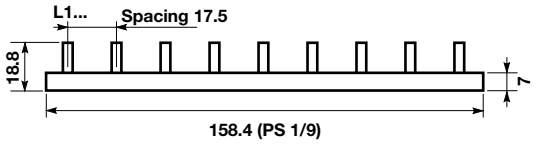

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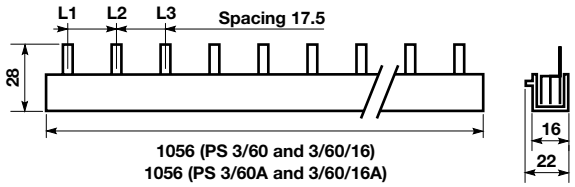
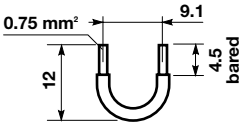
PS 3/60



Auxiliary contact bridge HKB



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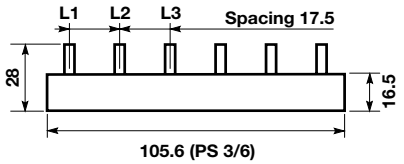

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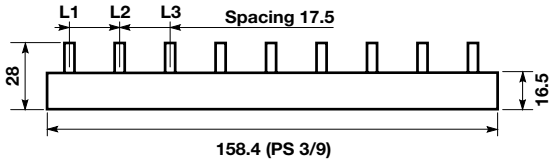

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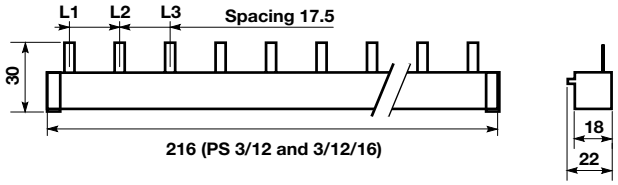

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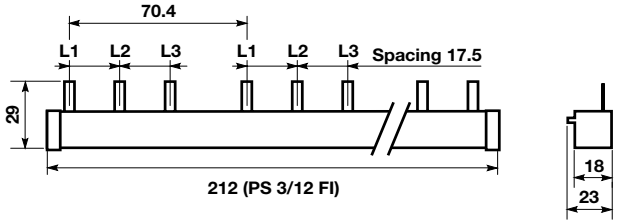
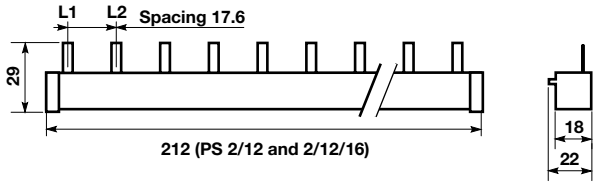


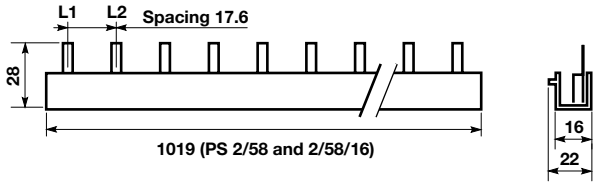
Quick product references

Overall dimensions

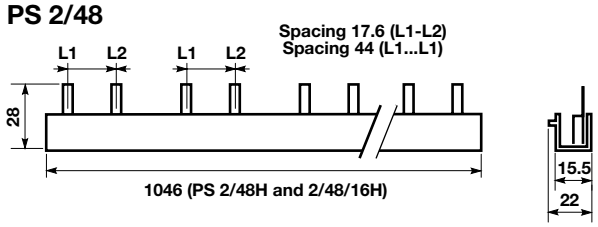
PS 2/12



PS 2/58



PS 2/48



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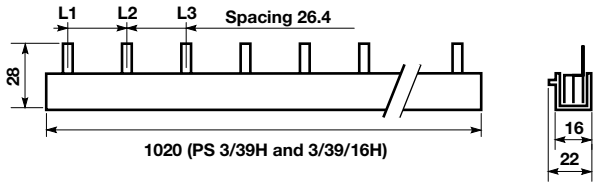

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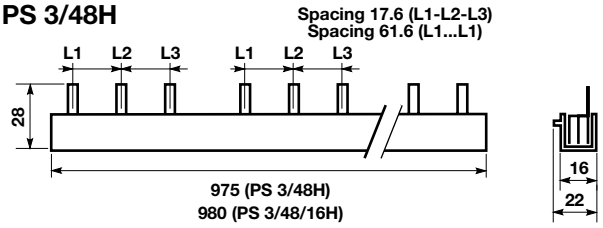
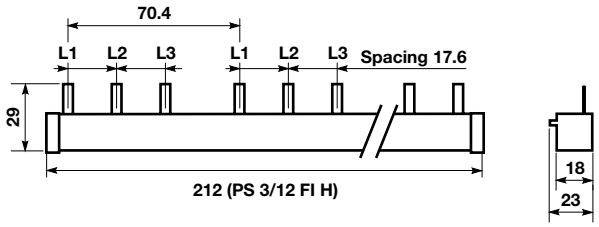
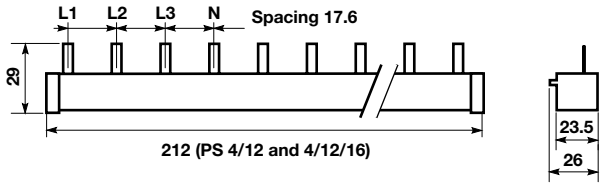


PS 3/12 FI H



PS 4/12



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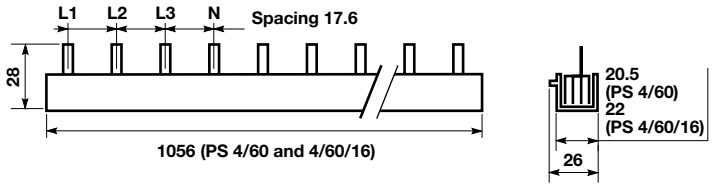

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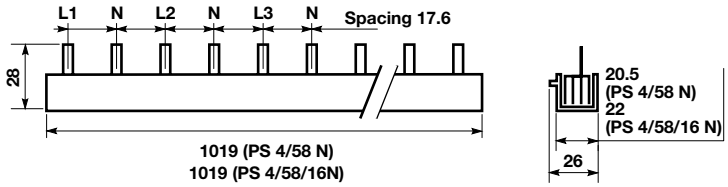
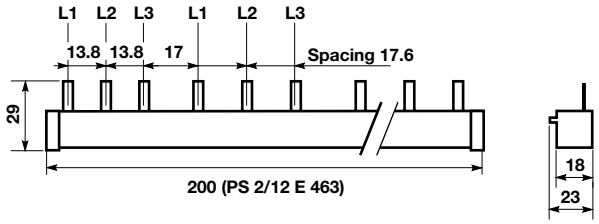


PS 3/12 E 463



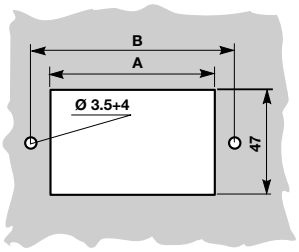
Quick product references

Overall dimensions

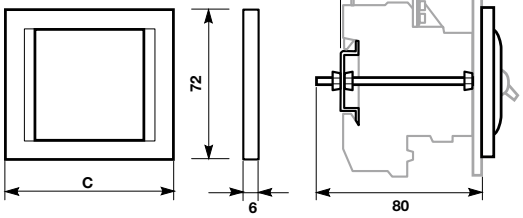
ME flange for rear board mounting

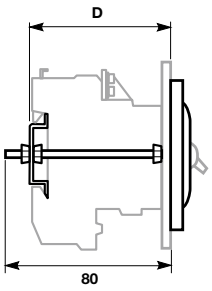
DEPHT D
57 mm for S 240-S 250-
S 270-S 280 circuit-breakers

72 mm for S 210 circuit-breakers

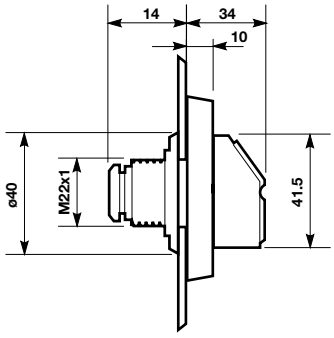


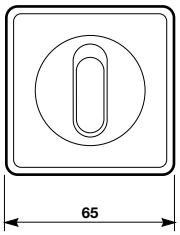
TYPE	A	B	C
ME 1 - 1 module	18	40	50
ME 2 - 2 modules	36	57.5	67
ME 3 - 3 modules	54	75.5	85
ME 4 - 4 modules	72	93	103
ME 6 - 6 modules	108	129	139
ME 8 - 8 modules	144	164	172

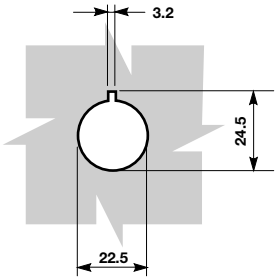




OH_2A_



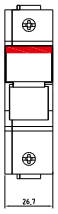




E90 50/125

E 90/50

1P



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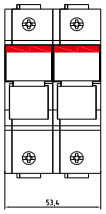

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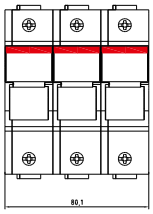

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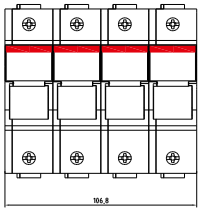

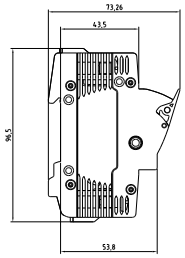

E 90/125

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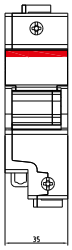

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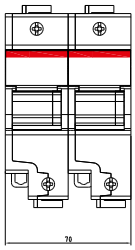

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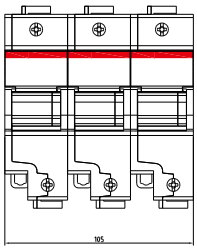

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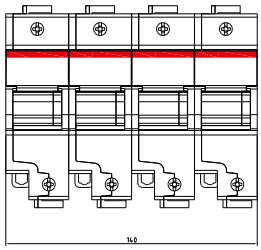

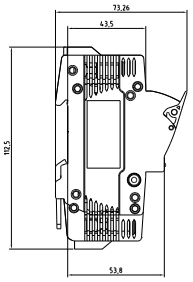

E90 30/60 J class

E 90/30 classJ

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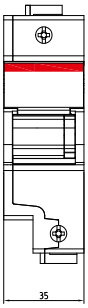

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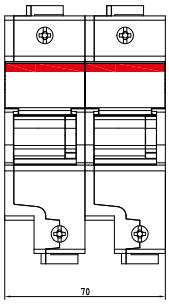

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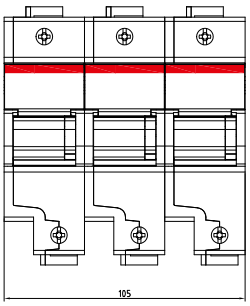

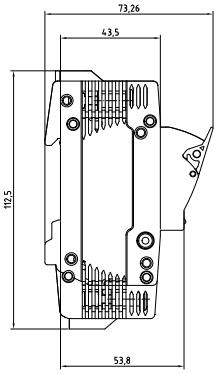

E 90/60 classJ

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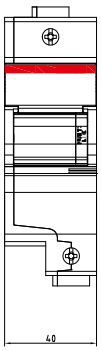

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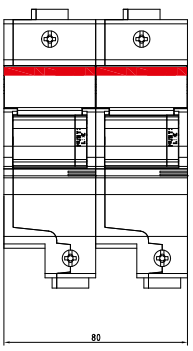

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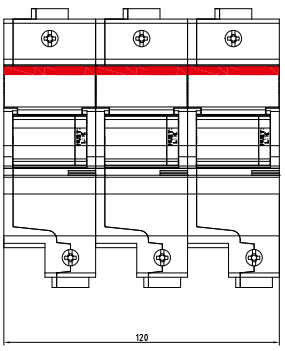
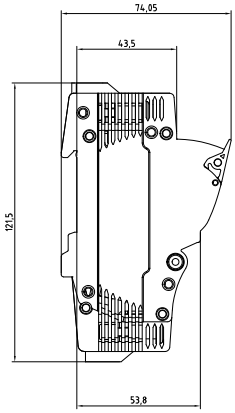
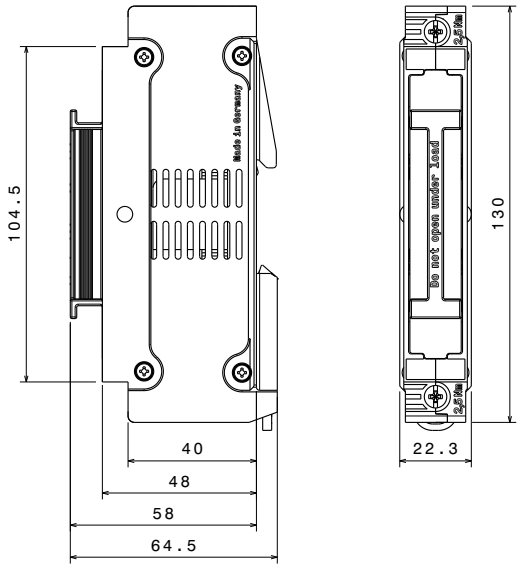




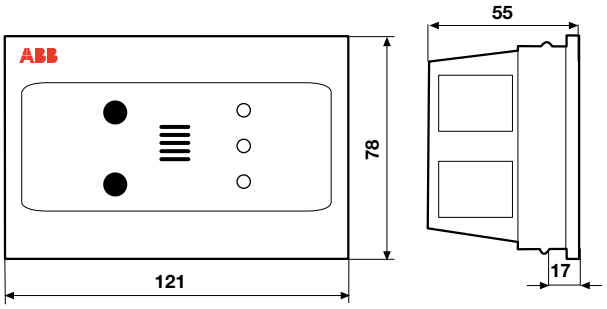
Quick product references

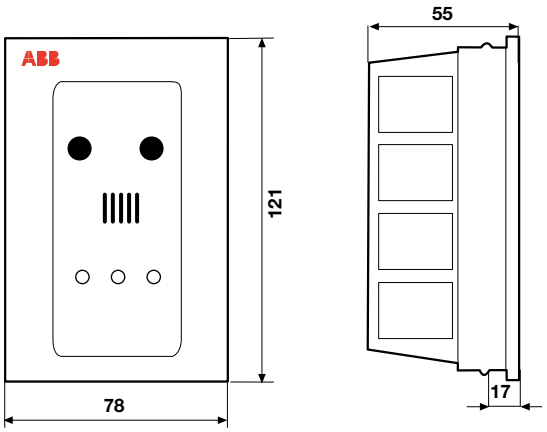
Overall dimensions

E90/32 PV 1500



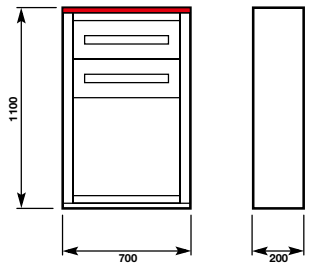
QSD remote signaling panels



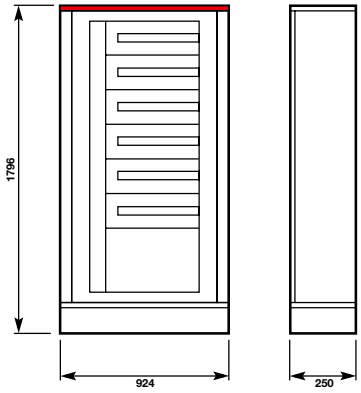


QSO electrical switchboard for medical locations

QSO S



QSO M



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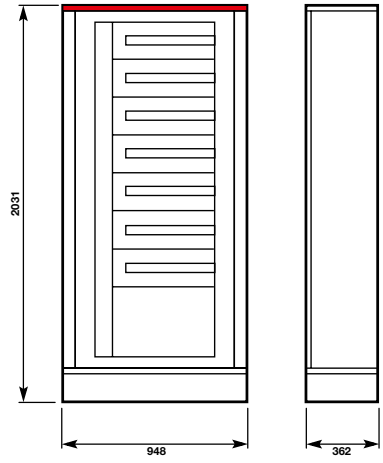

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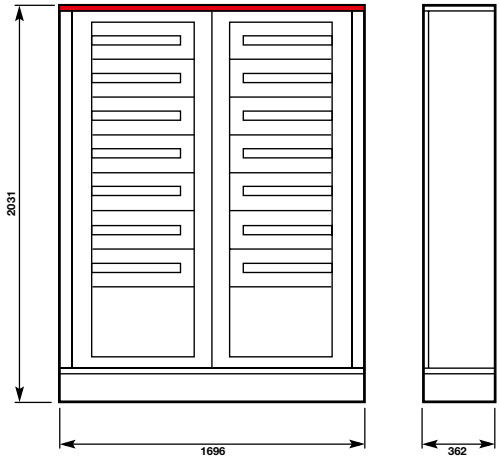
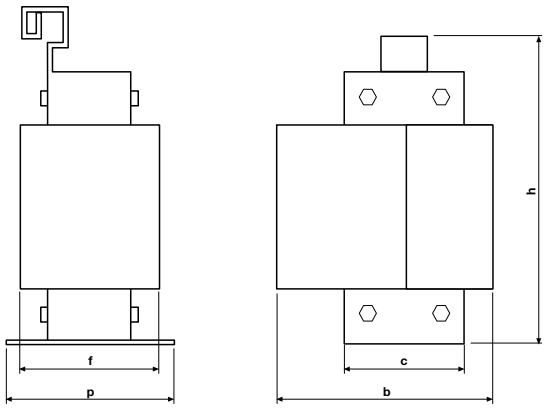


Quick product references

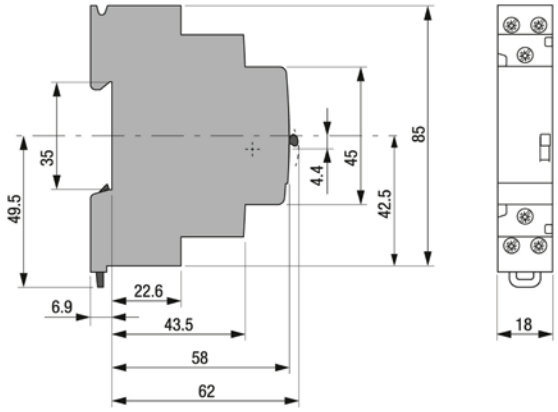
Overall dimensions

TI insulating transformers

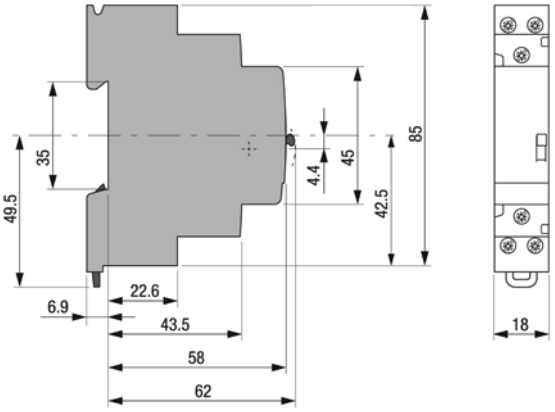


	Rated output [KVA]			
Dimensions	**3**	**5**	**7,5**	**10**
b [mm]	205	240	240	280
c [mm]	170	170	170	176
f [mm]	115	115	115	173
h [mm]	340	380	380	380
p [mm]	150	150	160	203
Weight [kg]	29,5	44	50,5	73

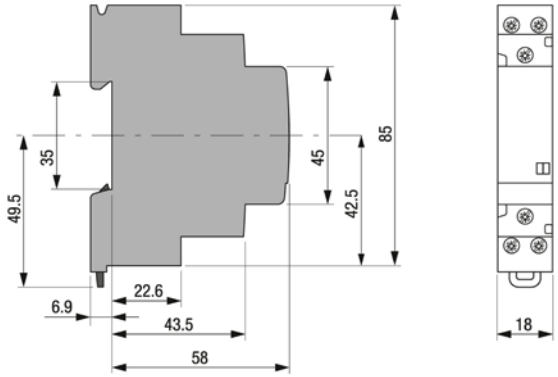
E290 Latching Relays



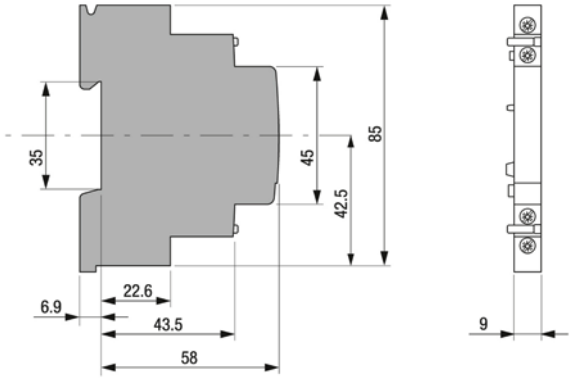
E297 Installation Relays



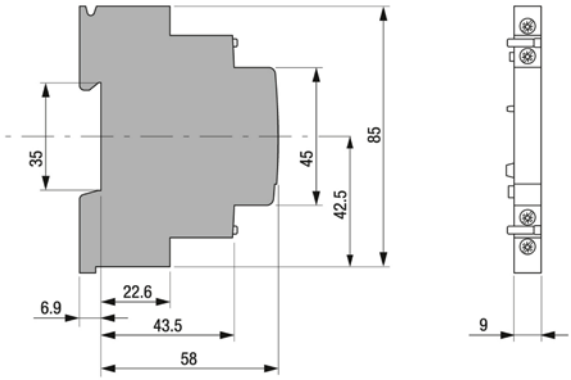
E291S Sequential Latching Relay



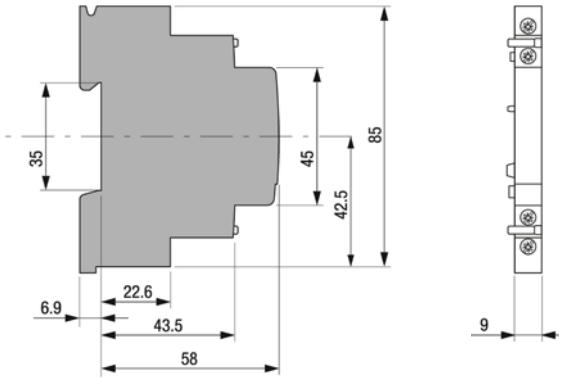
E298 Main Contact Module



E292 Main Contact Module



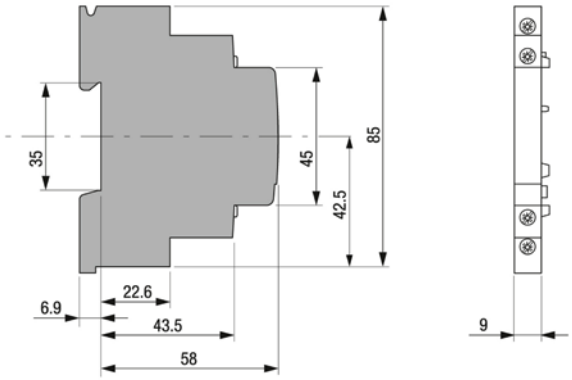
E299-11 Auxiliary Contact



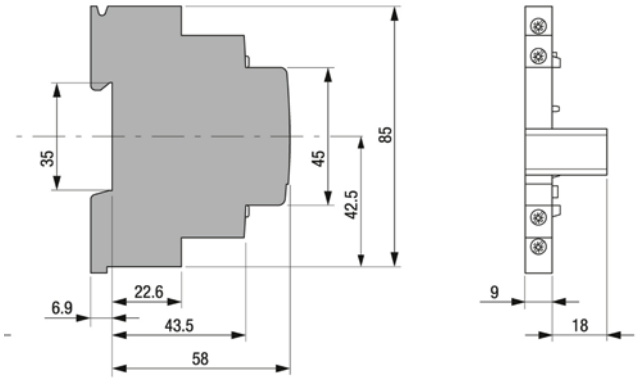
Quick product references

Overall dimensions

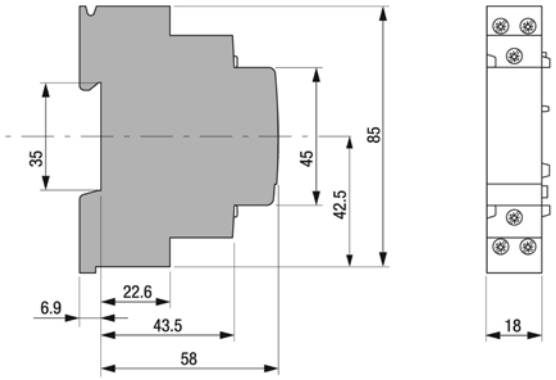
E293/X Central On-Off Control Module
(for same control voltage potential)



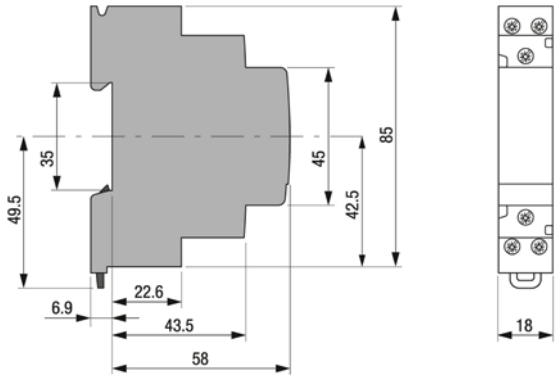
E295-PS Permanent Signal Module



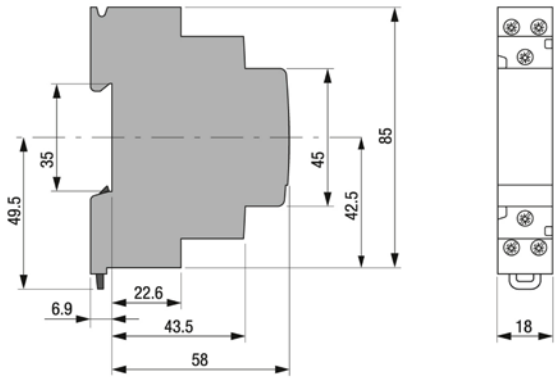
E294 Central On-Off Control Module
(for different control voltage potential)



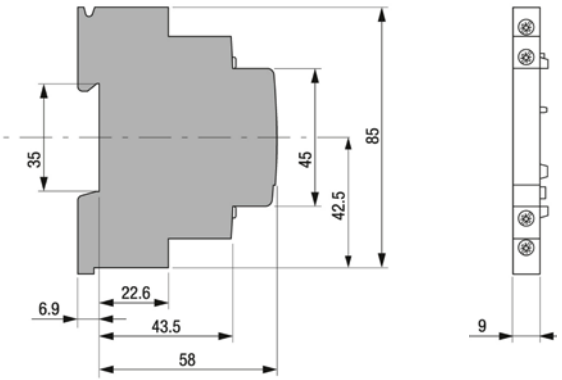
E296-CP Compensator



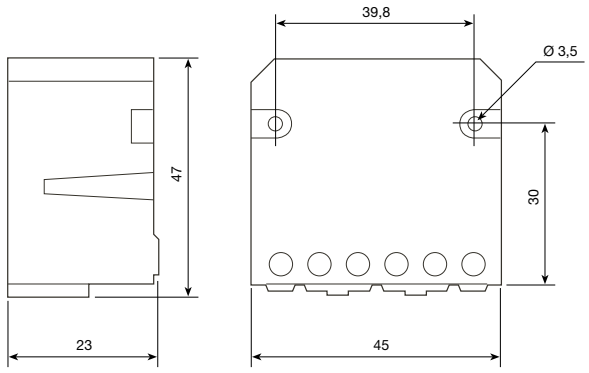
E295-GM Group Module



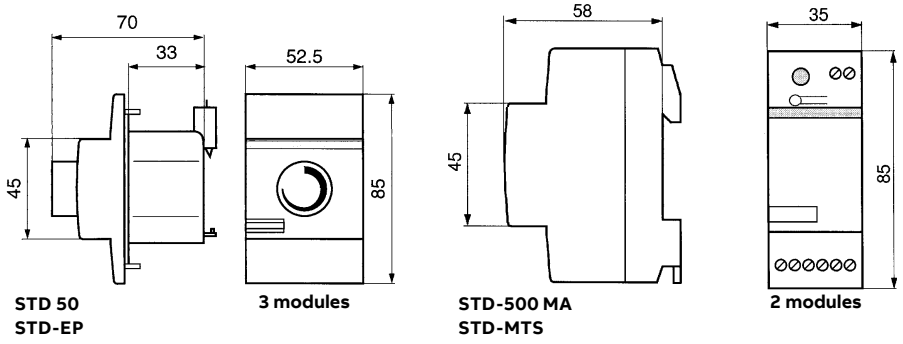
E299-11 Auxiliary Contact



FLR pulse relays



STD dimmers



STD 50
STD-EP

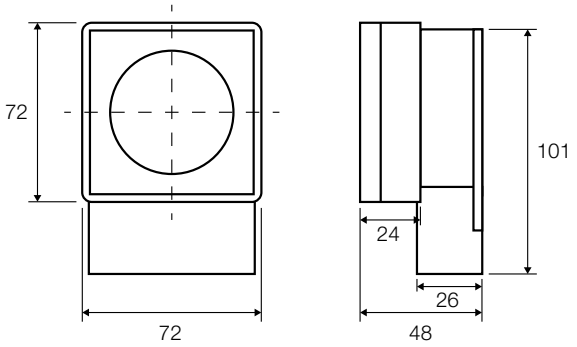
3 modules

STD-500 MA
STD-MTS

2 modules

AT72e electro-mechanical time switches

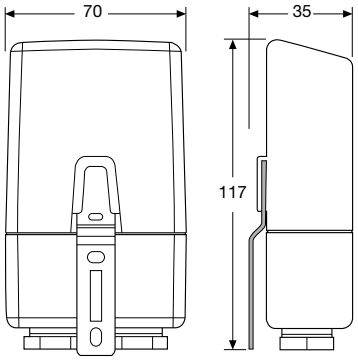
AT72e, AT72e-R, AT72e-7R



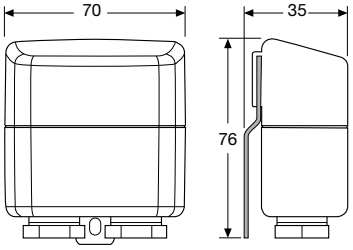
Quick product references

Overall dimensions

T1 POLE

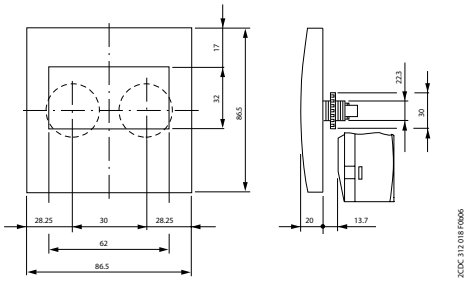


LS-D

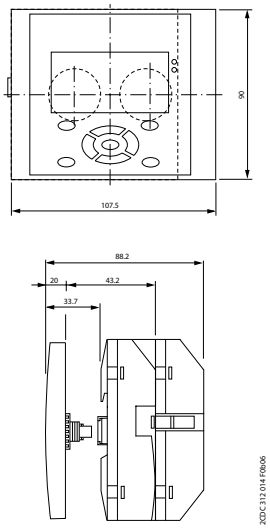


CL logic relays

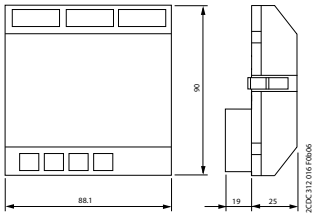
CL-LDD



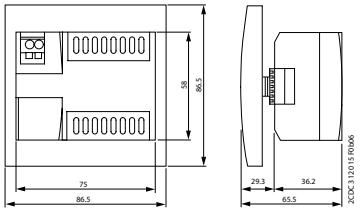
CL-LDD.K + CL-LDC.L.. + (CL-LDR or CL-LDT)



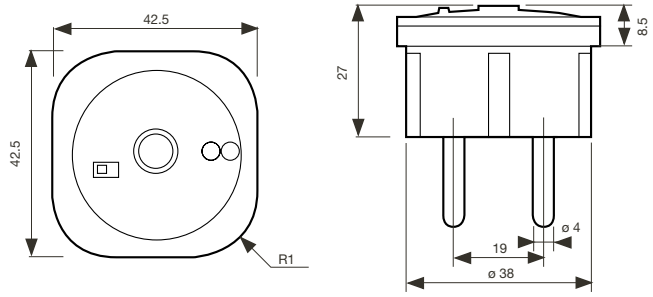
CL-LDR, CL-LDT



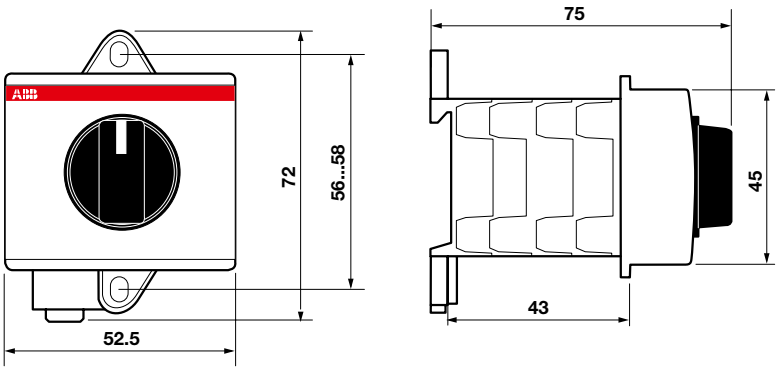
CL-LDC.S..



LEE 230 power failure signaling lamp

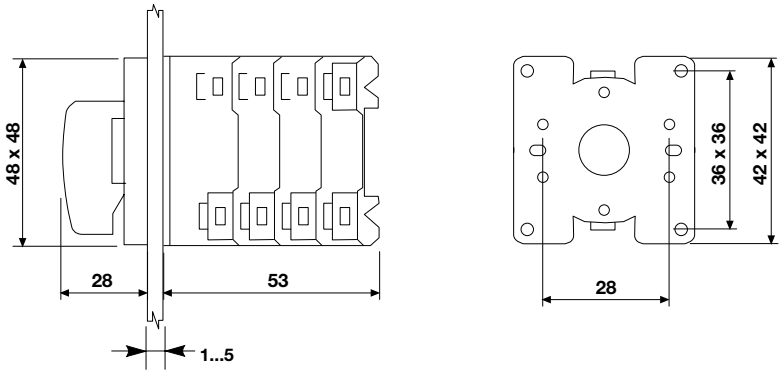


MCV - MCA voltmetric and ammetric switches



3 modules

QCV - QCA front panel voltmetric and ammetric switches

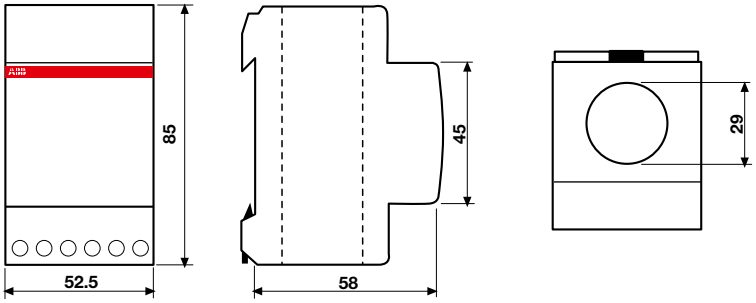


Quick product references

Overall dimensions

Modular current transformers with through primary

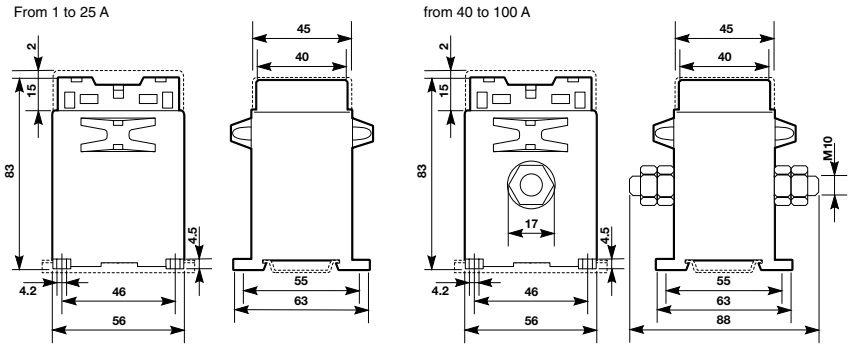
TRF M



3 modules

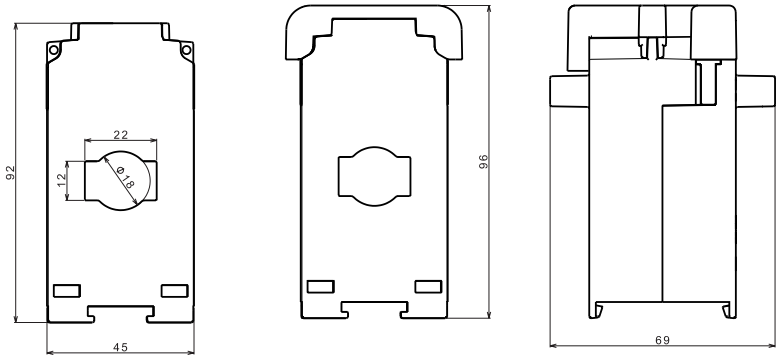
Standard type current transformers.../5 A with wound primary

CTA

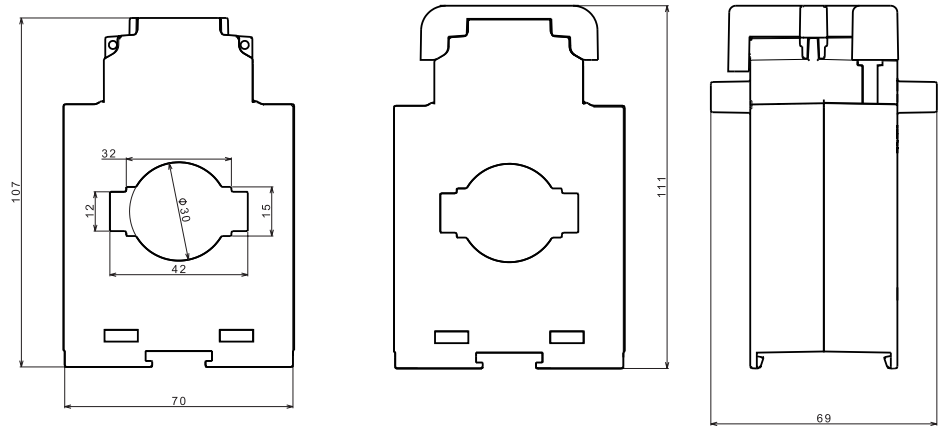


Standard type current transformers...5 A with through primary

CT PRO XT



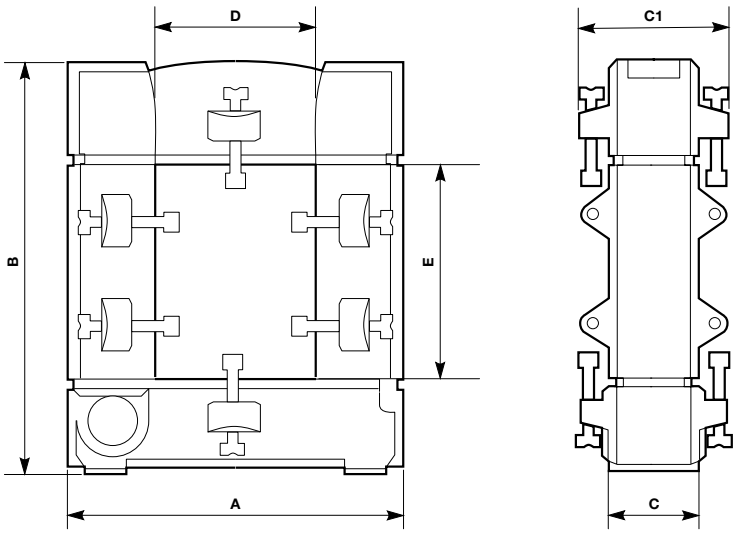
CT MAX



Quick product references

Overall dimensions

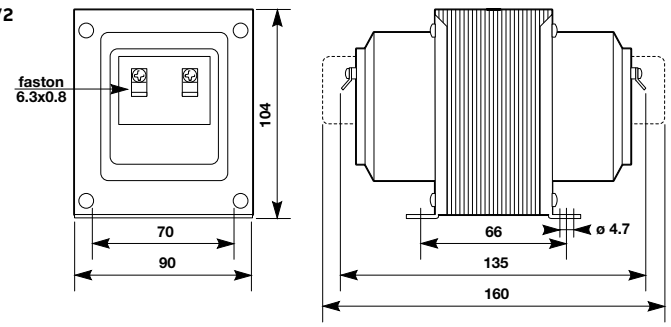
CTO



Tipo	A	B	C	C1	D	E
CT30...	93	106	34	58	20	30
CT80...	125	152	34	58	50	80
CT120...	155	198	34	58	80	120

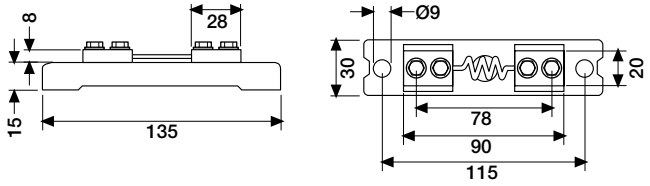
Voltage transformers

TV2

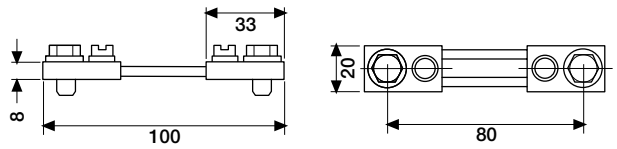


Shunts

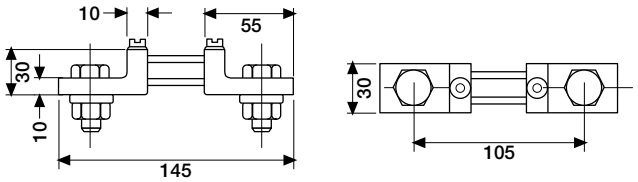
SNT1 ÷ 25 A/60 mV



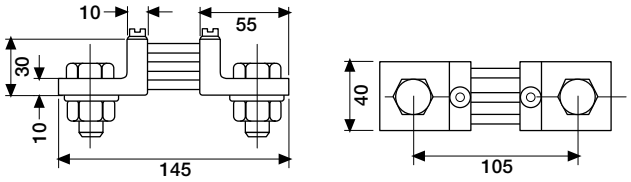
SNT30 ÷ 150 A/60 mV



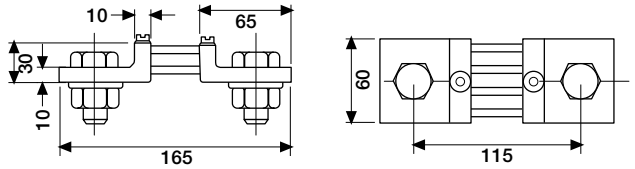
SNT200 ÷ 250 A/60 mV



SNT400 ÷ 600 A/60 mV



SNT800 ÷ 1000 A/60 mV

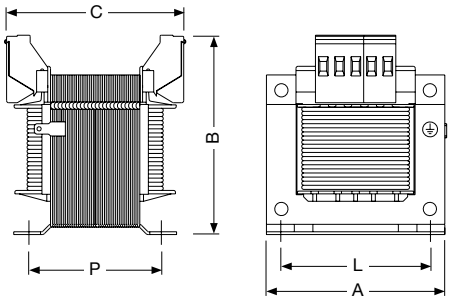


Quick product references

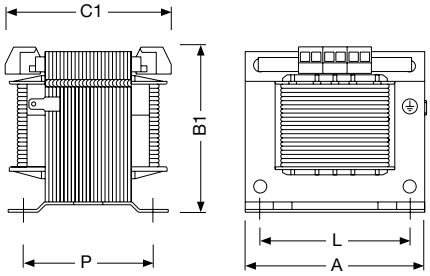
Overall dimensions

TM-C. TM-S, TM-I

from 50 up to 400 VA



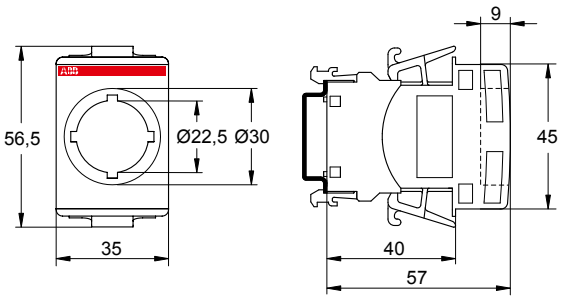
from 630 up to 2500 VA



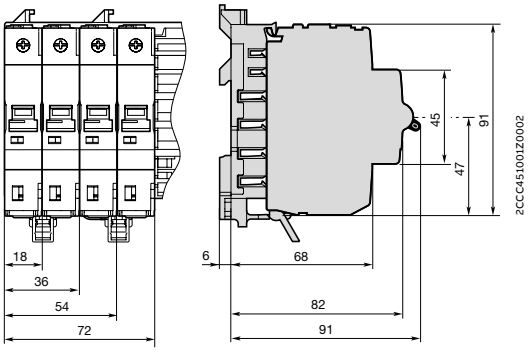
TM-C, TM-S and TM-I Control, Safety and Insolating transformers

Power (VA)	Picture	Dimensions							Screw	Wheigth (Kg)
		A	B	B1	C	C1	P	L		
50	1	80	90	-	74	-	46	56	M4	1.1
100	1	86	96	-	87	-	63	64	M4	2
160	1	100	110	-	90	-	73	84	M5	3
200	1	100	110	-	90	-	73	84	M5	3.2
250	1	100	110	-	110	-	89	84	M5	3.6
320	1	123	122	-	102	-	73	90	M5	4.4
400	1	123	122	-	112	-	85	90	M5	5.5
630	2	154	-	150	-	126	90	122	M6	7.8
1000	2	155	-	150	-	168	133	122	M6	13.2
1600	2	200	-	195	-	200	125	155	M8	21.2
2000	2	200	-	195	-	230	143	155	M8	25.5
2500	2	200	-	195	-	230	153	155	M8	26.8

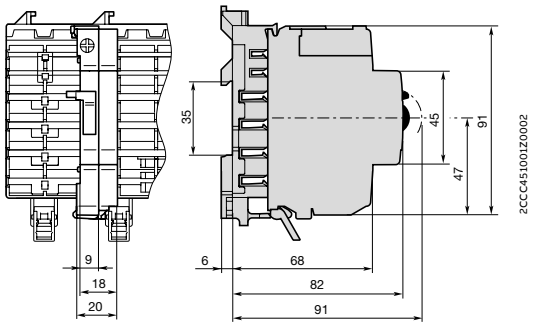
MA1-8001 DIN rail adapter



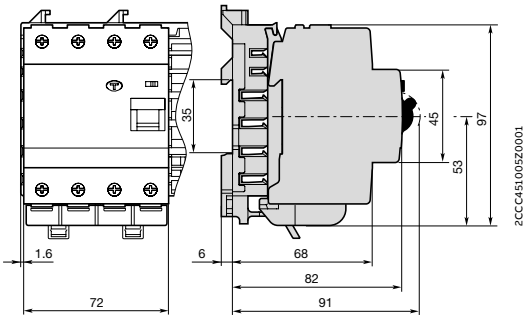
1-, 2-, 3- and 4-pole miniature circuit breakers S400



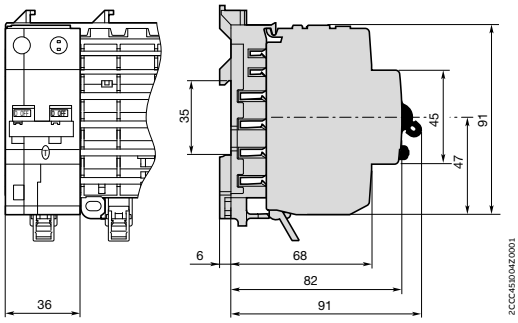
Neutral disconnector



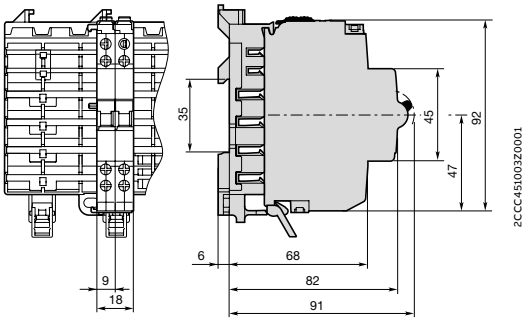
4-pole residual current operated circuit breaker, switch disconnector and surge arrester



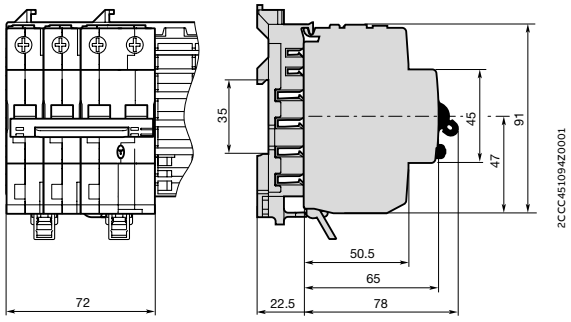
2-pole residual current operated circuit breaker



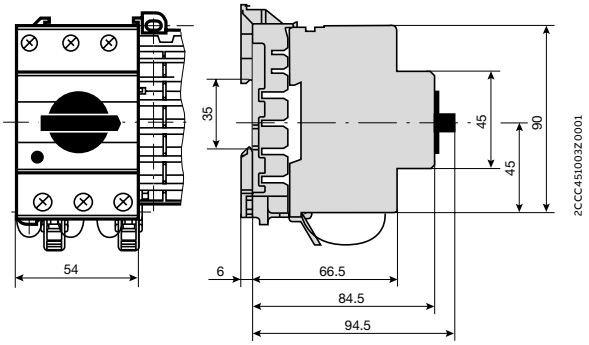
Auxiliary switch and signal contact



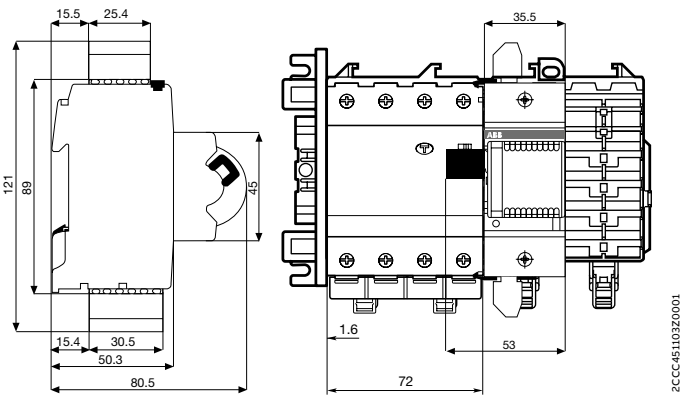
4-pole residual current operated circuit breaker



High performance manual motor starter MS325



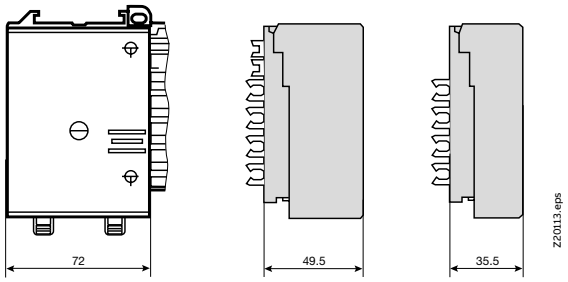
F4C-C M and F4C-AR I



Quick product references

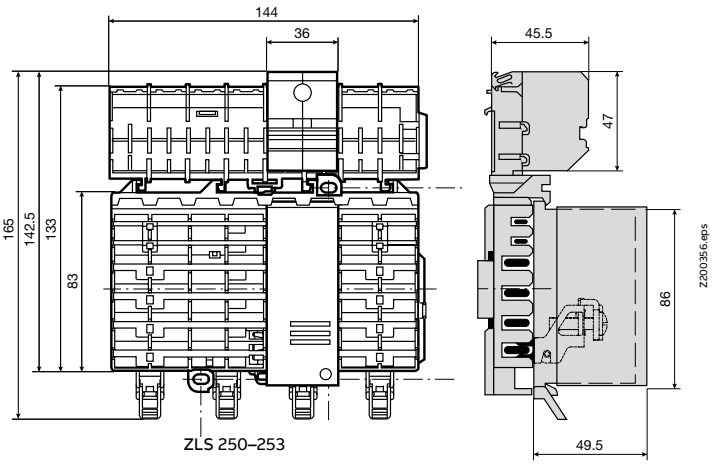
Overall dimensions

Incoming terminal blocks 100 A/160 A

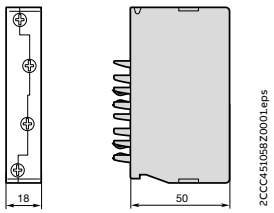


ZLS 224, 225 ZLS 228, 229

Incoming terminal component 200 A

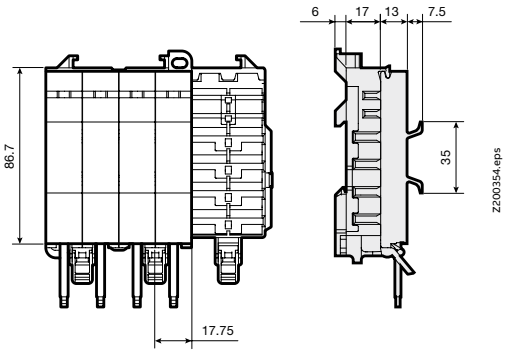


Incoming terminal blocks 63 A
Incoming terminal block LA, LB



ZLS 260-262

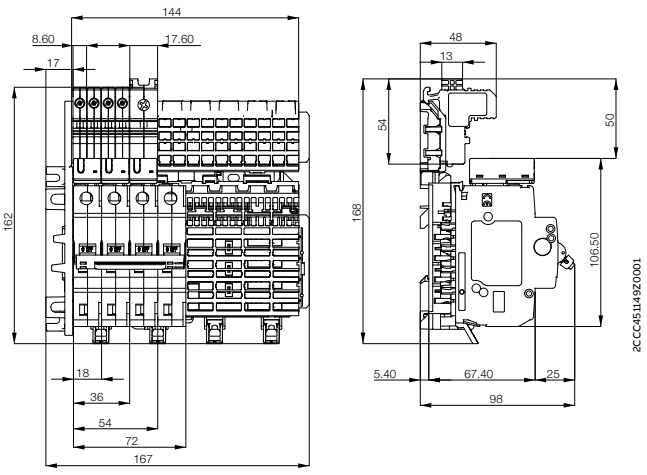
Universal adapter
32 A, 63 A



Socket base Z LS908

Receptacle

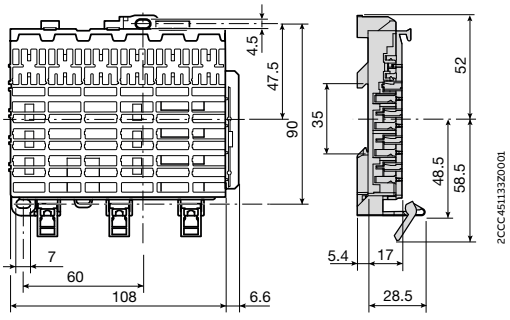
– 8 dimensional units



Socket base Z LS906

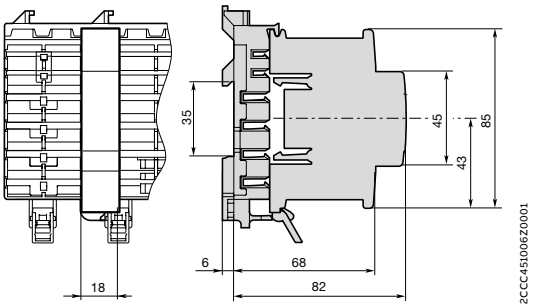
Receptacle

– 6 dimensional units

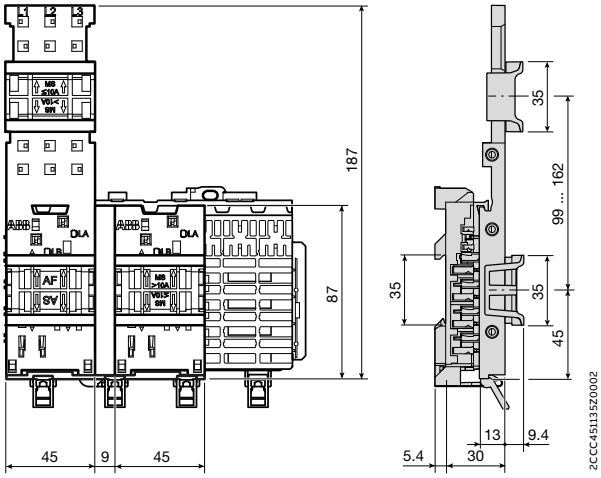


ZLS906

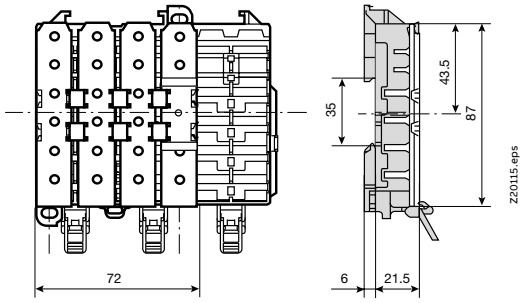
Intermediate piece ZLS 725



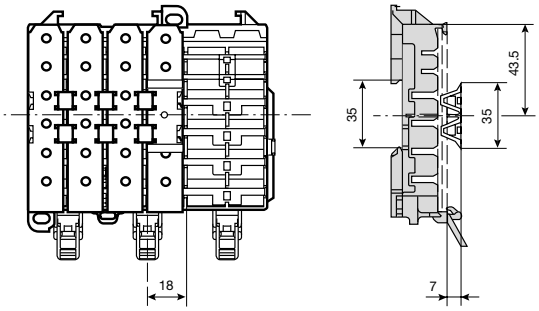
Combi module ZMS132, Adapter MS116/132



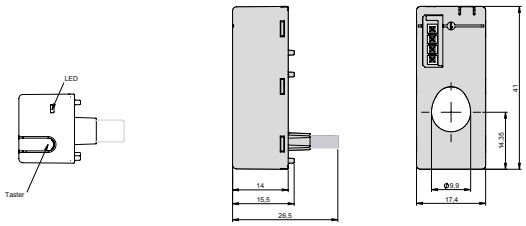
Busbar cover ZLS100



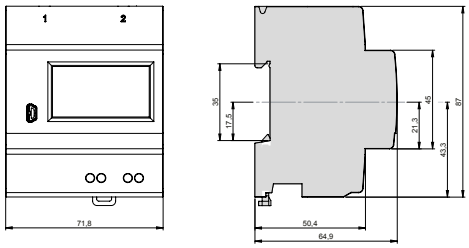
Extension adapter ZLS101



Sensor (CMS-100PS)



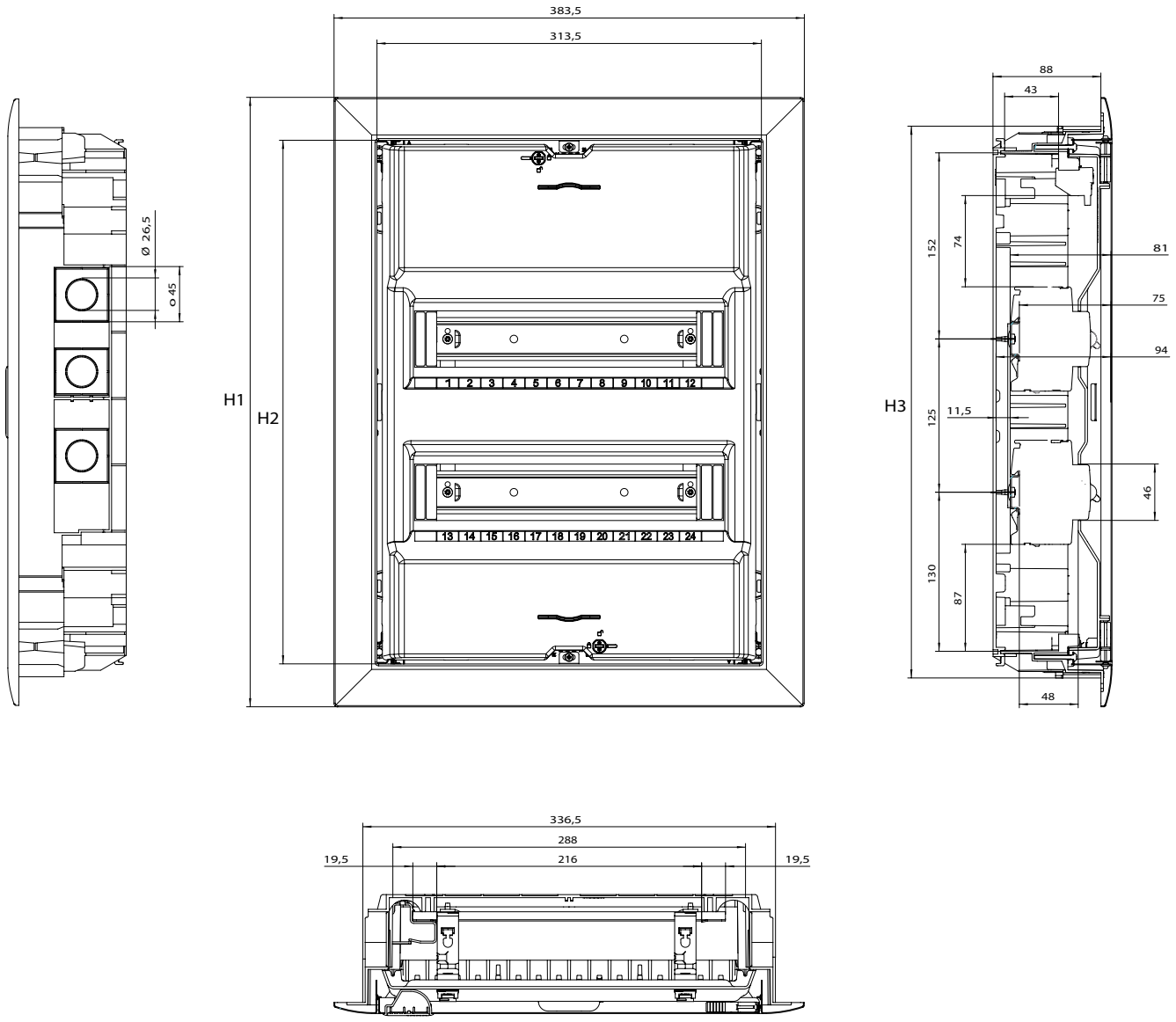
Control Unit (600)



Quick product references

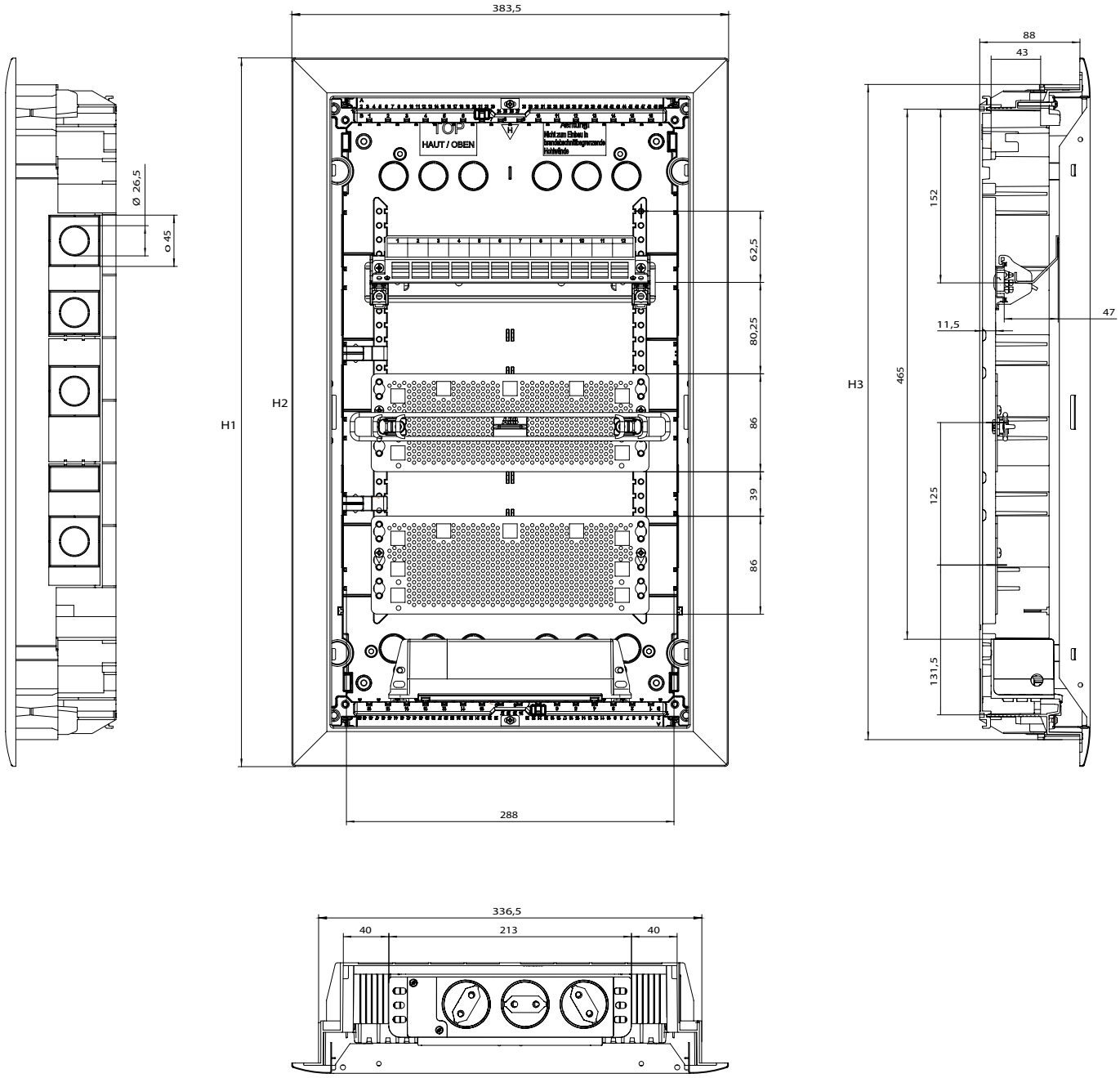
Overall dimensions

UK600 Flush-mounting series – Consumer unit



Type	Allowed power loss Pzul according to DIN 43671 (W)			Max. output capacity P de in accordance with DIN VDE 60670-24 (W)			Dimensions in mm		
	20K	25K	30K	20K	25K	30K	H1	H2	H3
UK61..	10.0	13.0	16.0	27.8	34.1	41.0	372	302	325
UK62..	11.5	15.0	19.0	38.0	46.5	56.0	497	427	450
UK63..	14.5	19.0	24.0	40.7	49.8	60.0	622	552	575
UK64..	16.5	21.5	27.0	47.7	58.8	71.0	747	677	700
UK66..				56.0	69.0	83.0	872	802	825

UK600 Flush-mounting series – Media enclosure

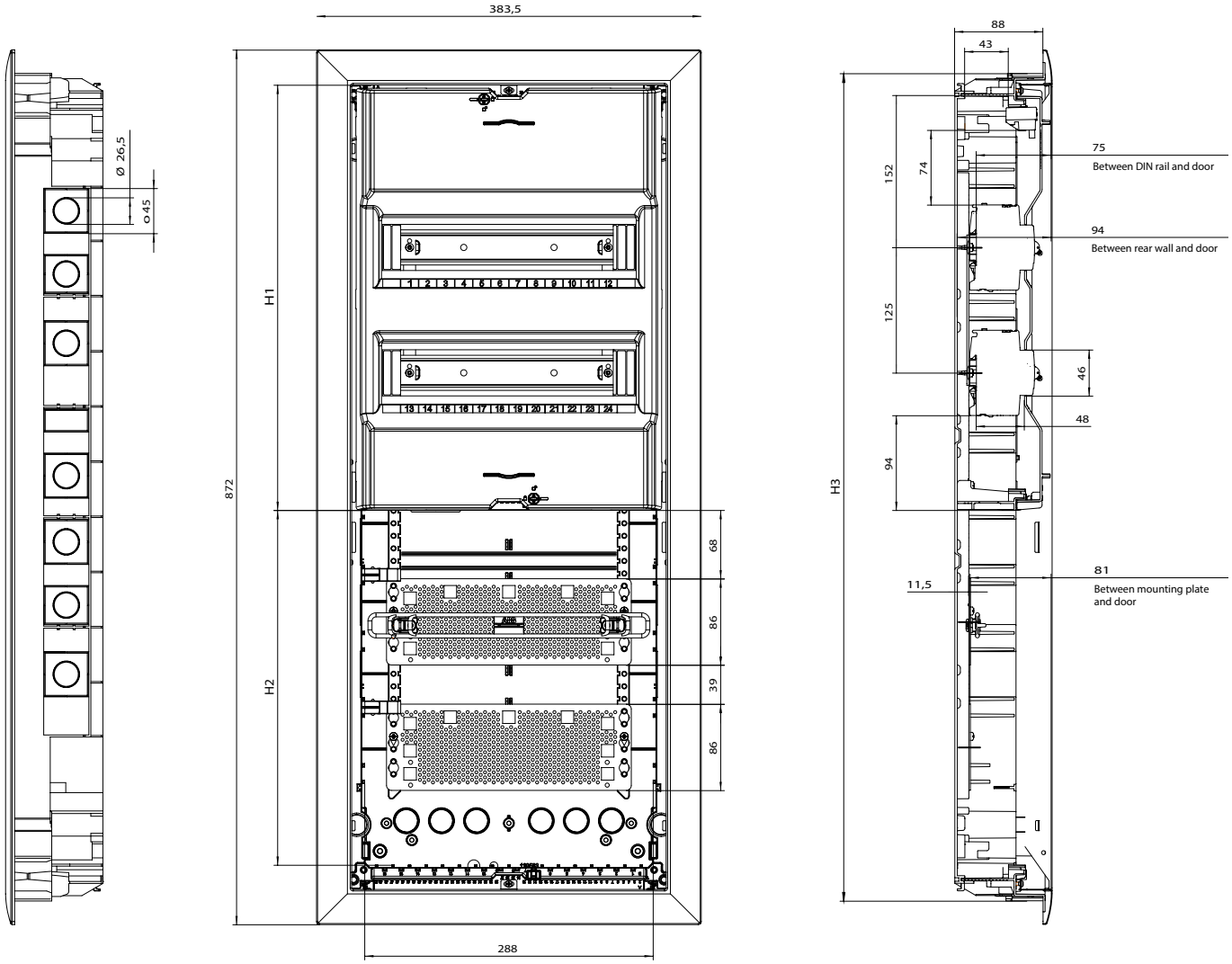


Type	Allowed power loss Pzul according to DIN 43671 (W)			Max. output capacity P de in accordance with DIN VDE 60670-24 (W)			Dimensions in mm		
	20K	25K	30K	20K	25K	30K	H1	H2	H3
UK62..	11.5	15.0	19.0	38.0	46.5	56.0	497	427	450
UK63..	14.5	19.0	24.0	40.7	49.8	60.0	622	552	575
UK64..	16.5	21.5	27.0	47.7	58.8	71.0	747	677	700
UK66..				56.0	69.0	83.0	872	802	825

Quick product references

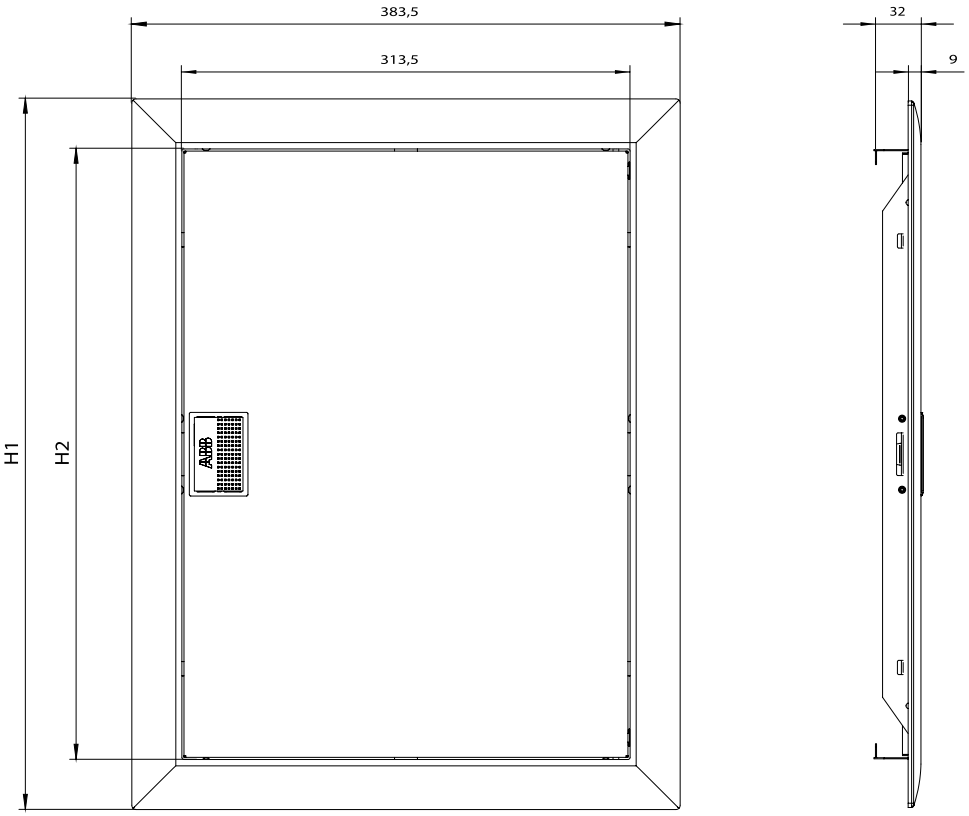
Overall dimensions

UK600 Flush-mounting series – Combi enclosure



Type	Allowed power loss Pzul according to DIN 43671 (W)			Max. output capacity P de in accordance with DIN VDE 60670-24 (W)			Dimensions in mm	
	20K	25K	30K	20K	25K	30K	H1	H2
UK662..				56.0	69.0	83.0	424	353
UK663..				56.0	69.0	83.0	549	228

UK600 Flush-mounting series – Trim frame and door

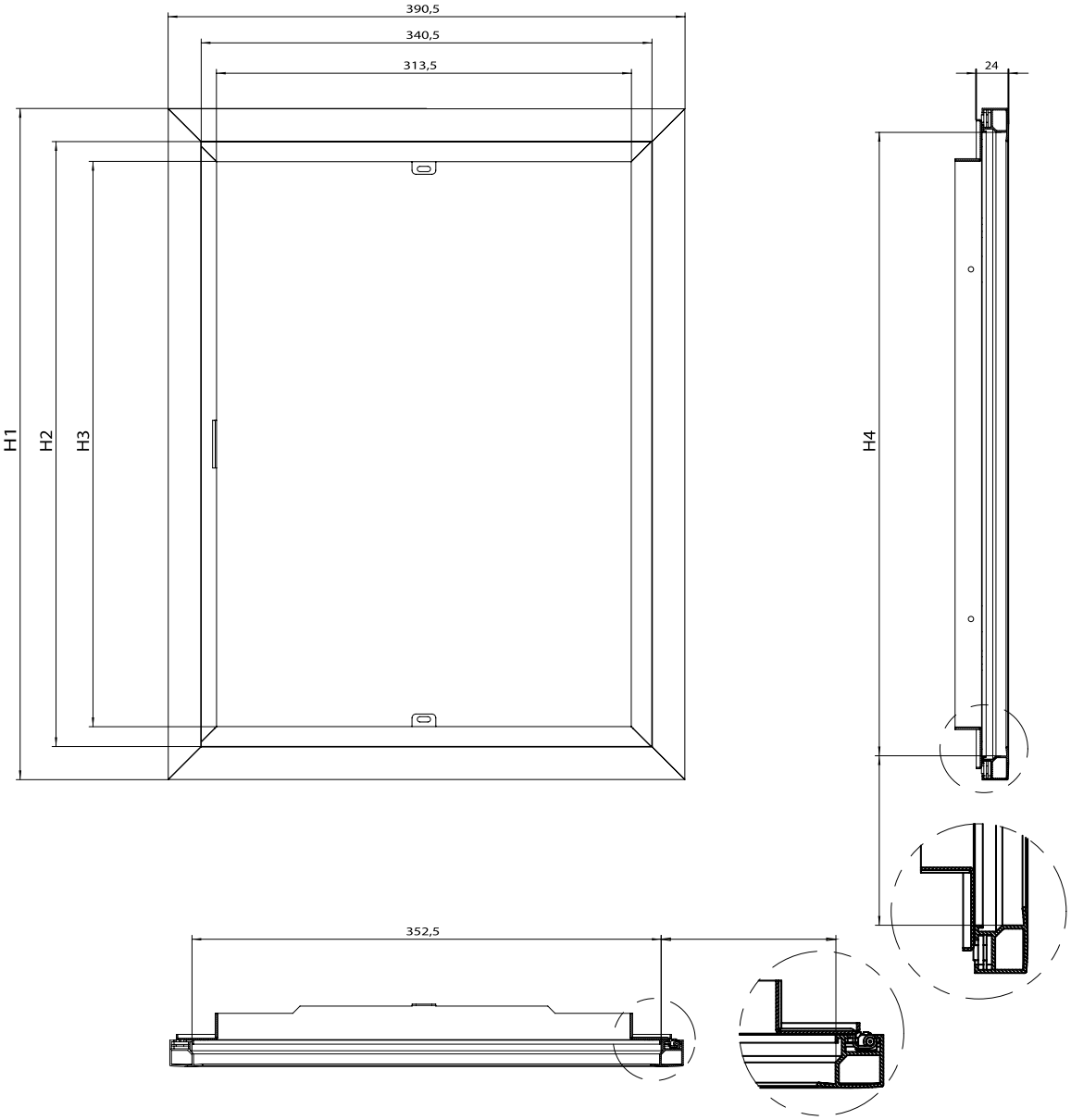


	Dimensions in mm	
Type	**H1**	**H2**
BL610	**302**	**372**
BL620	497	427
BL630	622	552
BL630	622	552
BL640	747	677
BL650	872	802

Quick product references

Overall dimensions

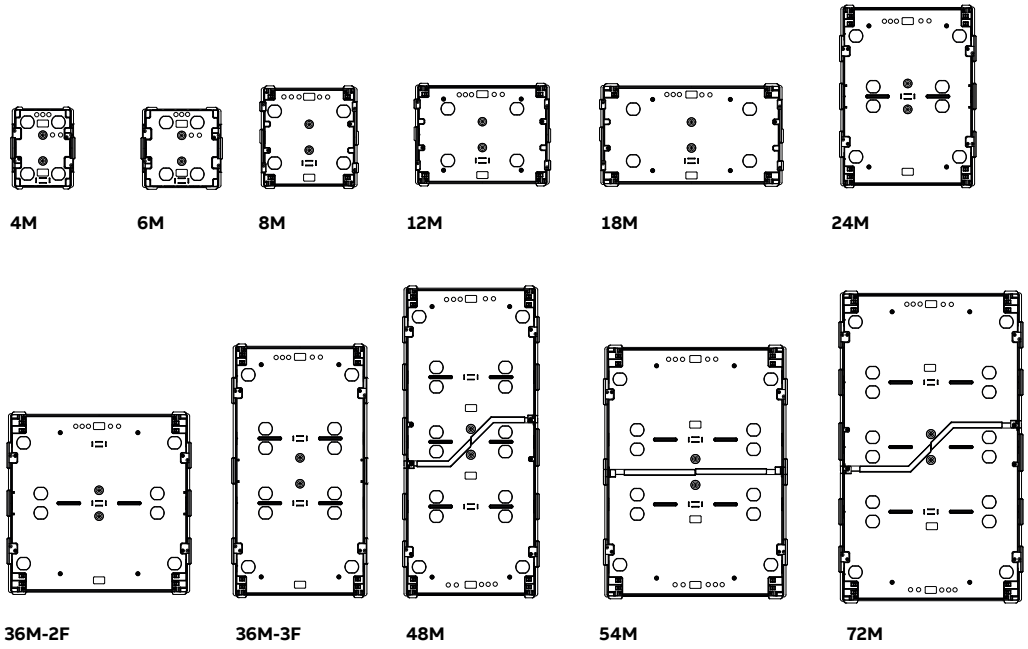
UK600 Flush-mounting series – Interchangeable design frame



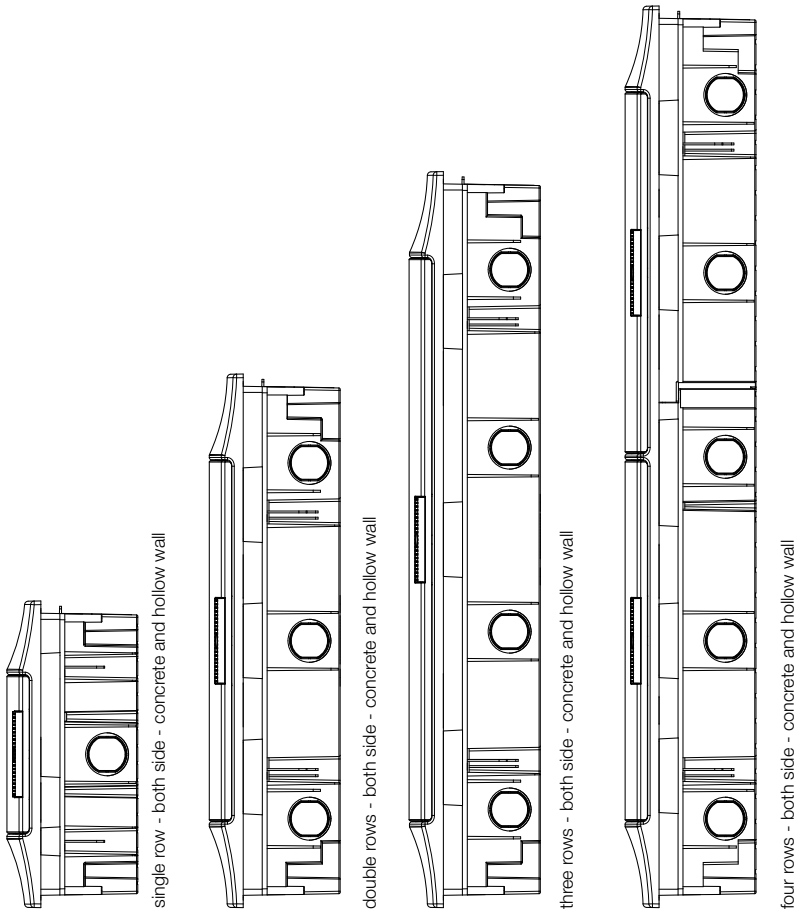
	Dimensions in mm				Technical specifications LED panel			
Type	**H1**	**H2**	**H3**	**H4**	**Type**	**U**	**P**	**Colour temperature**
BL520D	507	457	427	469	UZD624	12V DC	9.60 W	4200 K
BL630D	632	582	552	594	UZD634	12V DC	13.20W	4200 K
BL640D	757	707	677	719	UZD644	12V DC	15.60W	4200 K
BL650D	882	832	802	844	UZD654	12V DC	19.60W	4200 K

System pro E comfort MISTRAL41F

Box	
Modules	**diam. 32**
4M	4
6M	4
8M	4
12M	4
18M	4
24M	8
36M – 2F	8
36M – 3F	12
48M	16
54M	12
72M	16



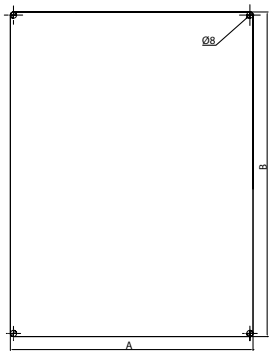
Site	
Modules	**diam. 32**
4M	1
6M	1
8M	1
12M	1
18M	1
24M	3
36M – 2F	3
36M – 3F	4
48M	5
54M	4
72M	5



Quick product references

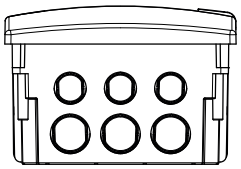
Overall dimensions

Hollow wall holes dimensions

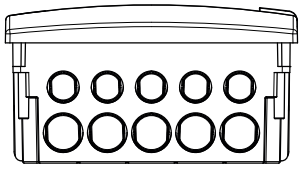


	A	B
4 M	143	183
6 M	183	183
8 M	223	231
12 M	311	231
18 M	421	231
24 M	311	416
36 M - 2F	421	416
36 M - 3F	311	581
48 M	311	716
54 M	421	581
72 M	421	716

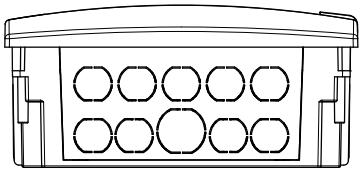
Cable entry					
Modules	**diam. 40**	**diam. 32**	**diam. 25**	**diam. 20**	**Flange**
4	-	-	3	3	///
6	-	-	5	5	///
8	-	1	9	-	150x55
12	1	8	4	-	240x55
18	1	12	2	-	330x55



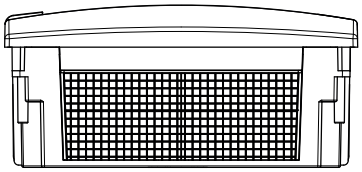
4 modules - top and bottom - concrete and hollow wall



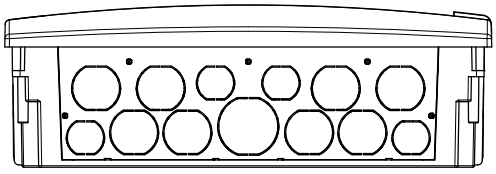
6 modules - top and bottom - concrete and hollow wall



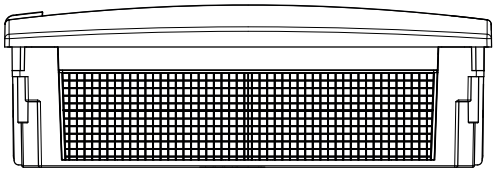
8 modules - top and bottom - hollow wall



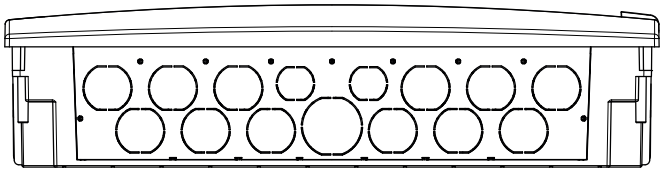
8 modules - top and bottom - concrete wall



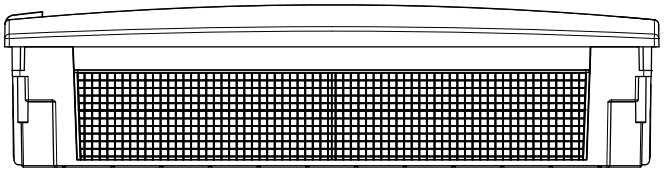
12 modules - top and bottom - hollow wall



12 modules - top and bottom - concrete wall

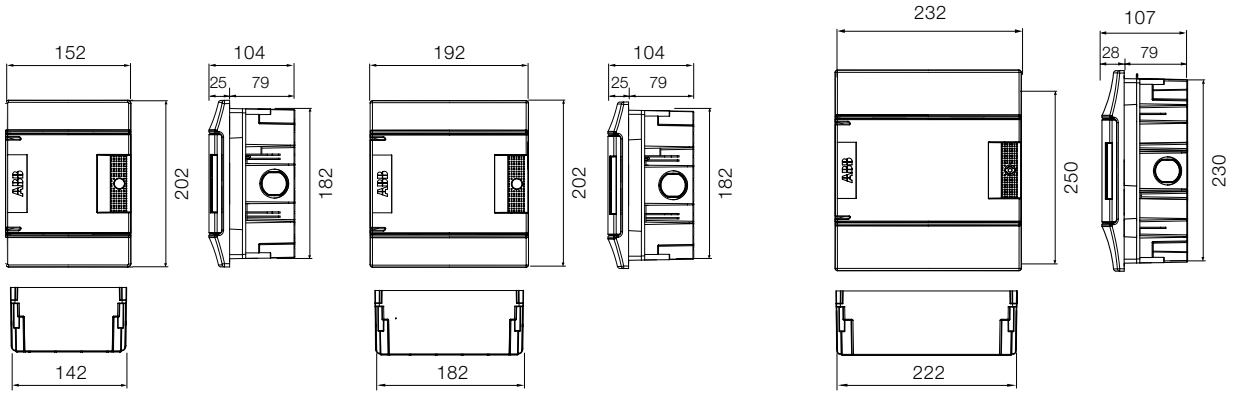


18 modules - top and bottom - hollow wall

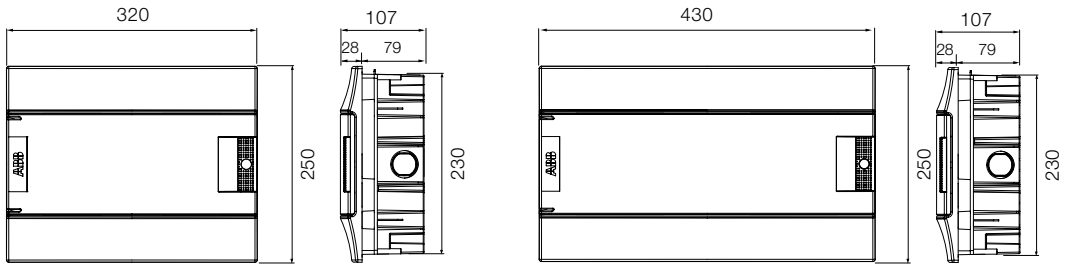


18 modules - top and bottom - concrete wall

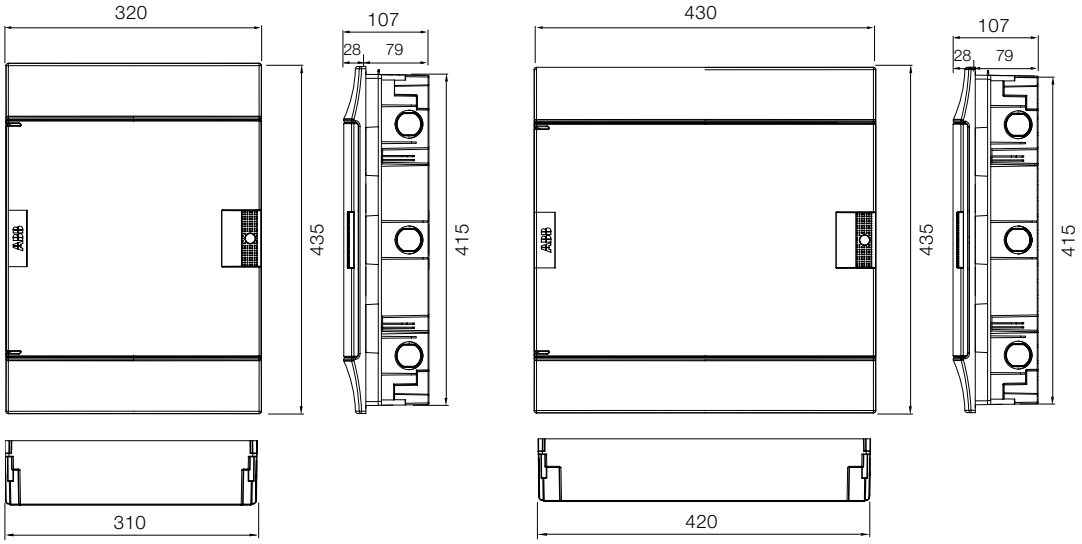
System pro E comfort MISTRAL41F



4 modules **6 modules** **8 modules**



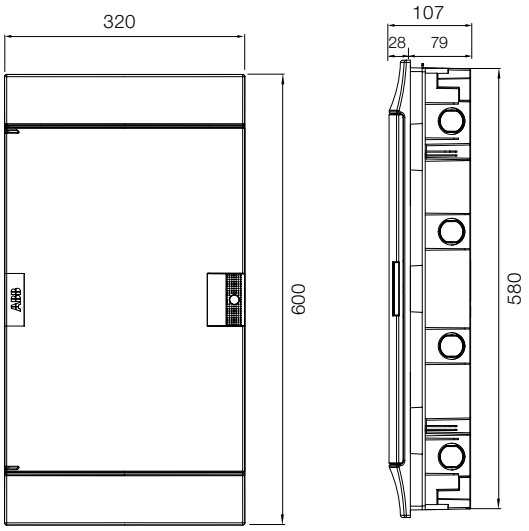
12 modules **18 modules**



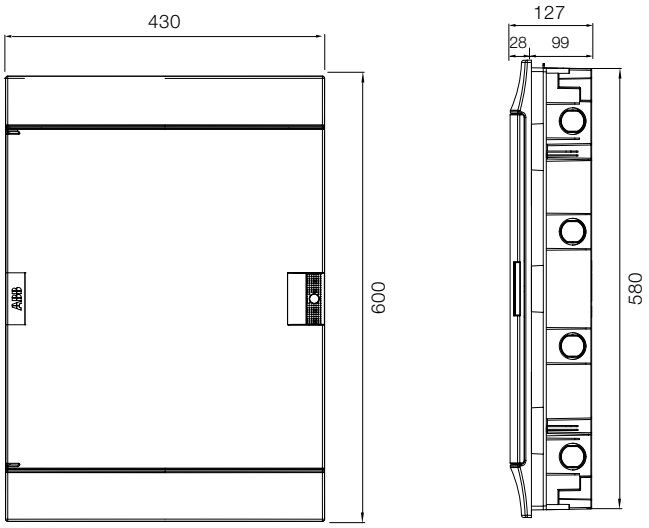
24 modules **36 modules**

Quick product references

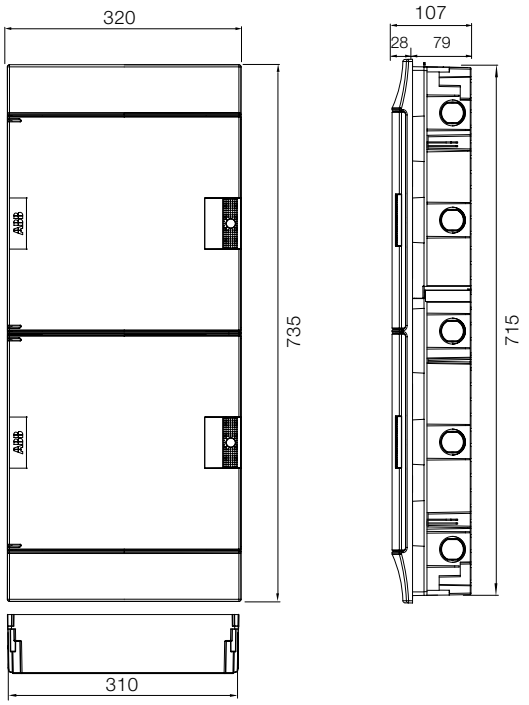
Overall dimensions



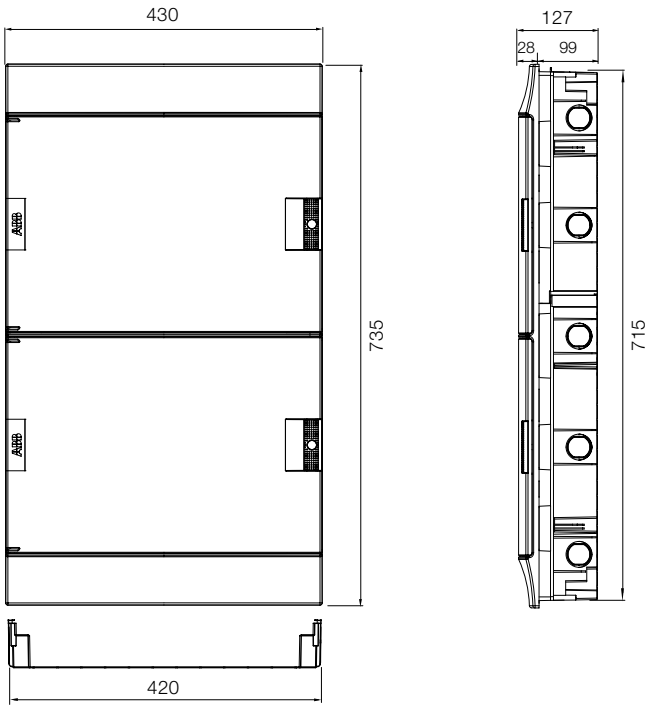
36 modules



54 modules

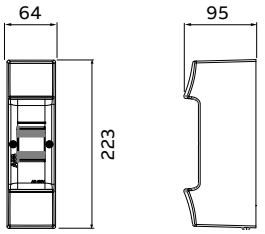


48 modules

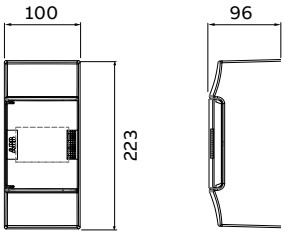


72 modules

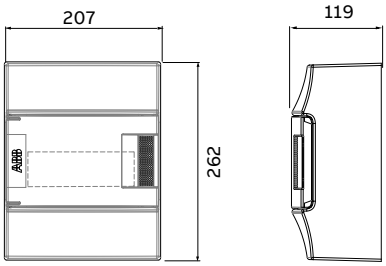
System pro E comfort MISTRAL41W



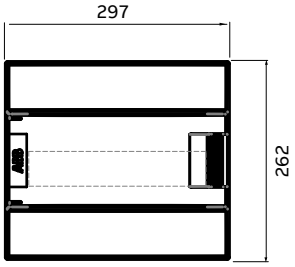
1 module



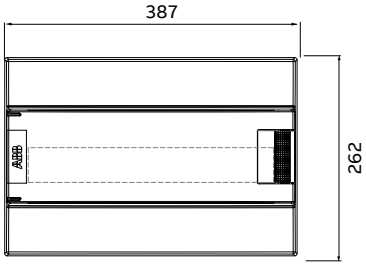
4 modules



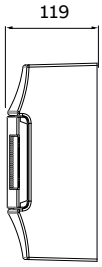
8 modules

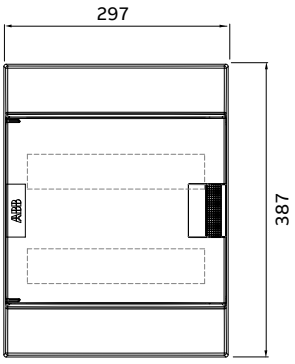


12 modules

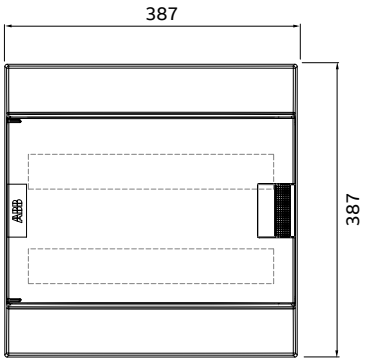


18 modules





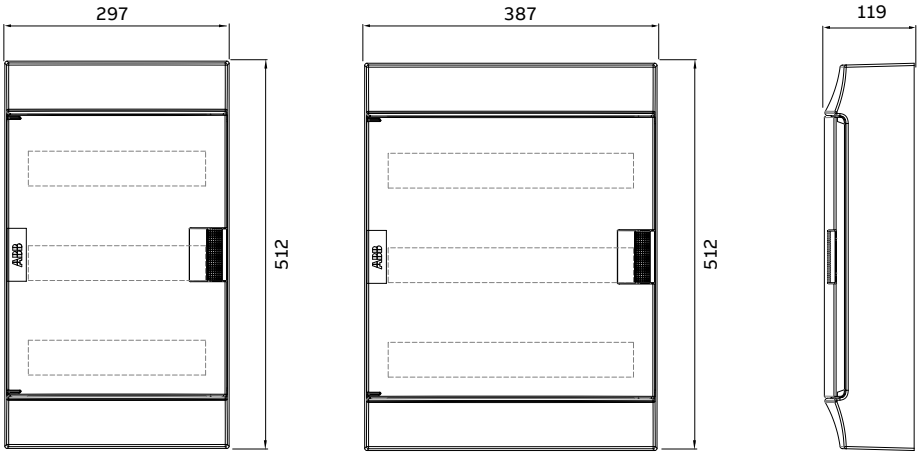
24 modules



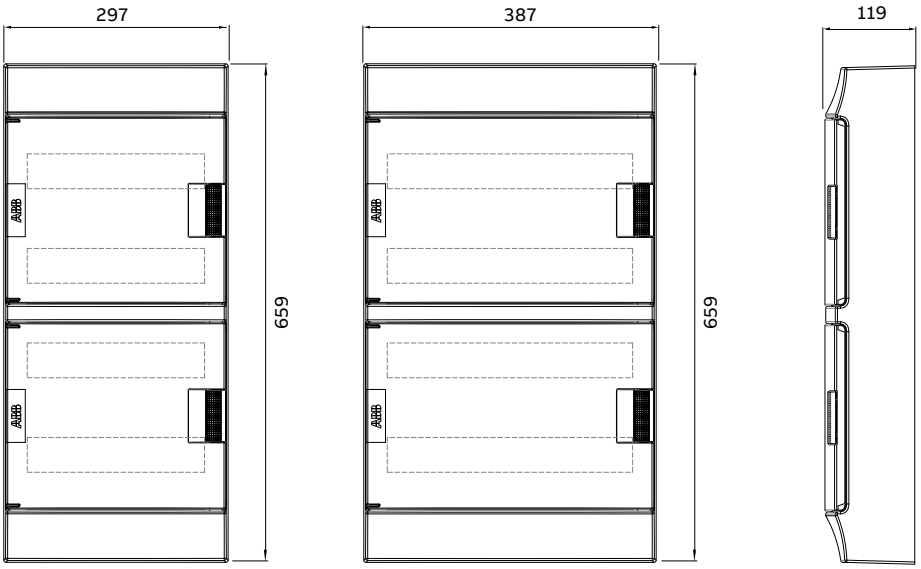
36 modules

Quick product references

Overall dimensions



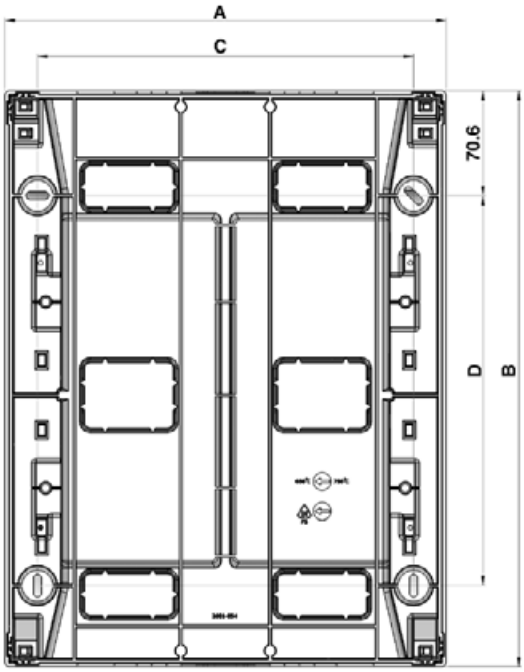
36 modules **54 modules**



48 modules **72 modules**

System pro E comfort MISTRAL41W

Consumer unit fixing template System pro E comfort MISTRAL41W



	A	B	C	D
8 Modules	206,5	262	163	137
12 Modules	297	262	253	137
18 Modules	387	262	343	137
24 Modules	297	387	253	262
36 Modules 18x2	387	387	343	262
36 Modules 12x3	297	512	253	387
48 Modules	297	659	253	518
54 Modules	387	512	343	387
72 Modules	387	659	343	518

Quick product references

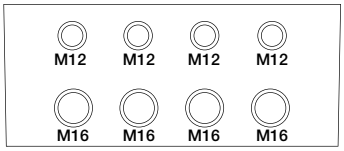
Overall dimensions

System pro E comfort MISTRAL65

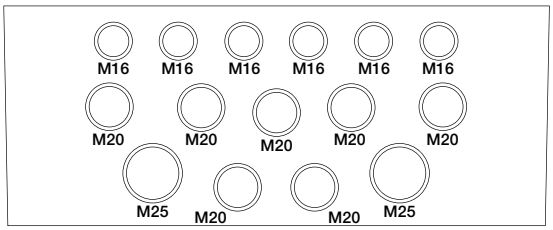
Cable gland table

		Cable Glands		
Modules		**diam. 16**	**diam. 20**	**diam. 25**
4	04x1	2	-	-
8	08x1	3	3	-
12	12x1	2	2	2
24	12x2	5	5	2
36	12x3	5	5	2
48	12x4	5	5	2
18	18x1	2	2	2
36	18x2	5	5	2
54	18x3	5	5	2
72	18x4	5	5	2

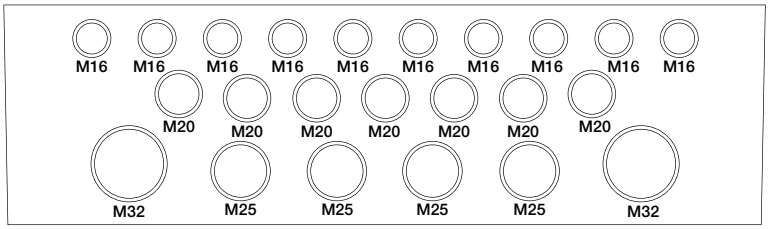
		Holes				
Modules		**diam. 12**	**diam. 16**	**diam. 20**	**diam. 25**	**diam. 32**
4	04x1	4	4	-	-	-
8	08x1	-	6	7	2	-
12	12x1	-	10	7	4	2
24	12x2	-	10	7	4	2
36	12x3	-	10	7	4	2
48	12x4	-	10	7	4	2
18	18x1	-	14	9	4	2
36	18x2	-	14	9	4	2
54	18x3	-	14	9	4	2
72	18x4	-	14	9	4	2



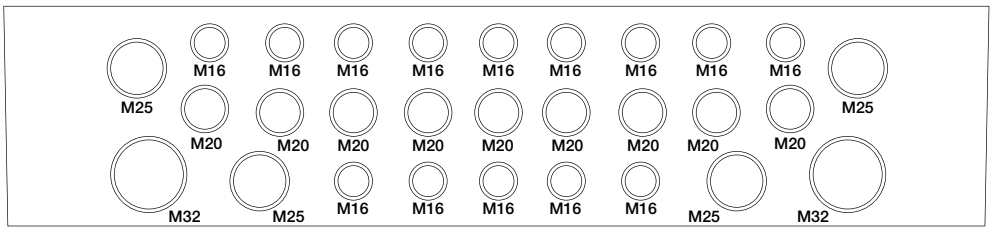
4 modules - top and bottom



8 modules - top and bottom

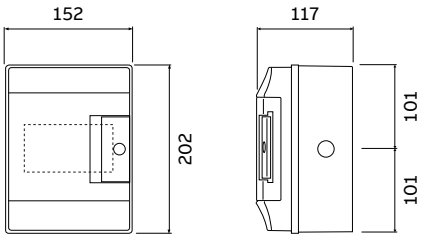


12 modules - top and bottom

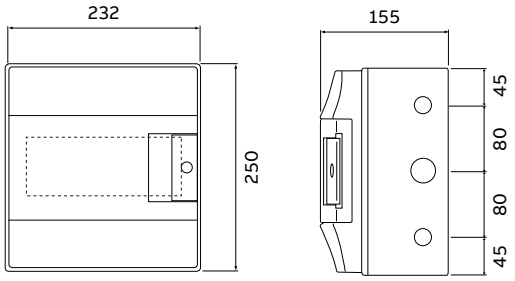


18 modules - top and bottom

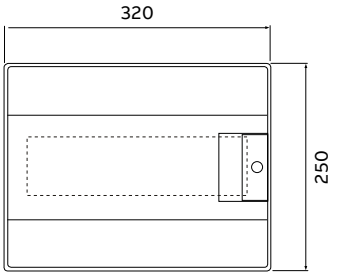
System pro E comfort MISTRAL65



4 modules



8 modules



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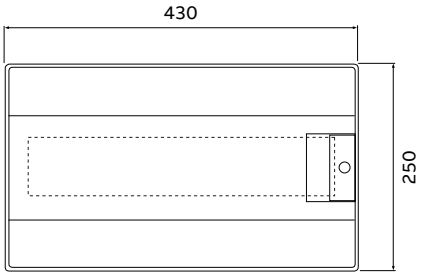
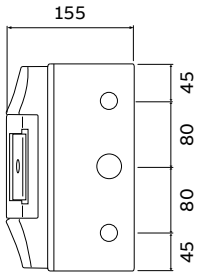
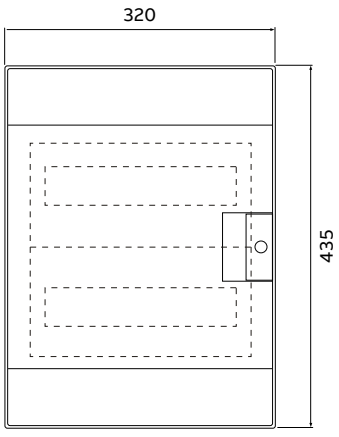
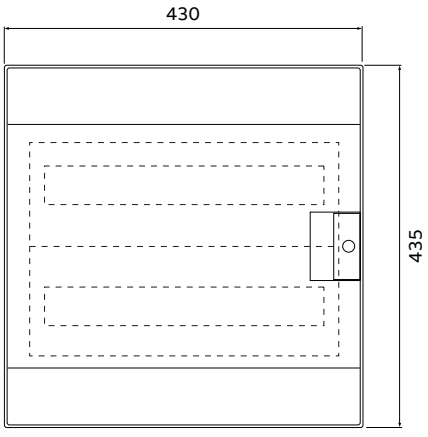


18 modules

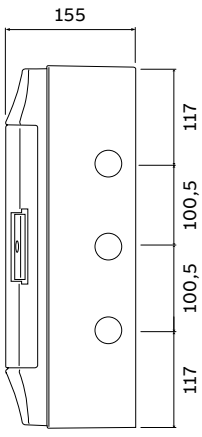




24 modules

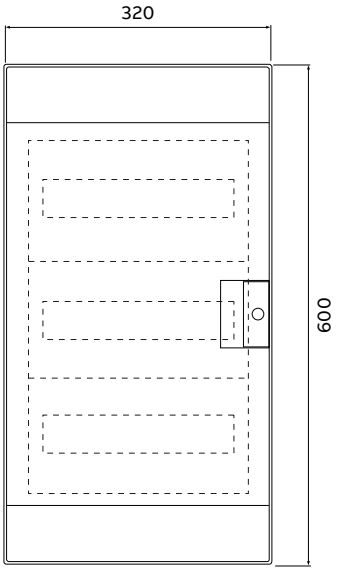


36 modules

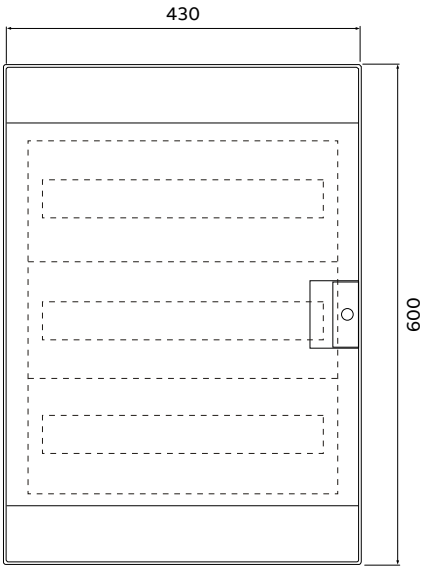


Quick product references

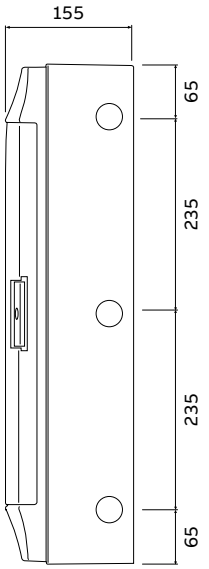
Overall dimensions

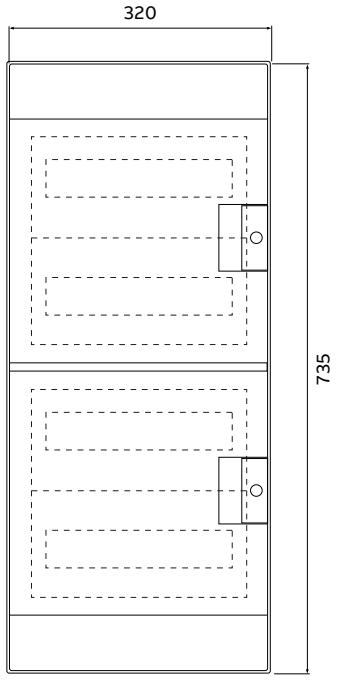


36 modules

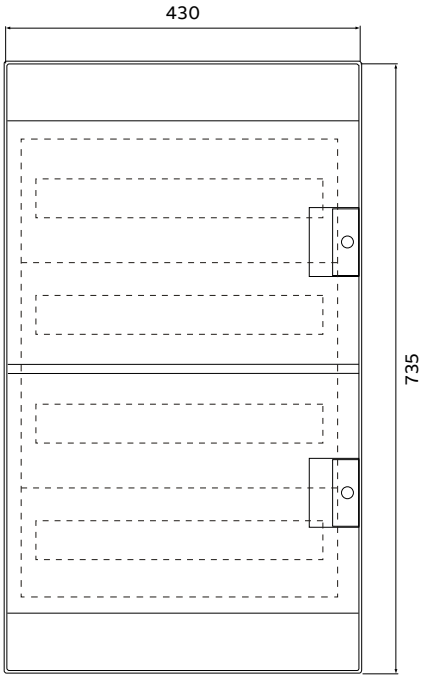


54 modules

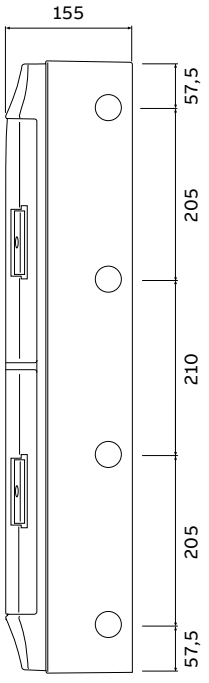




48 modules

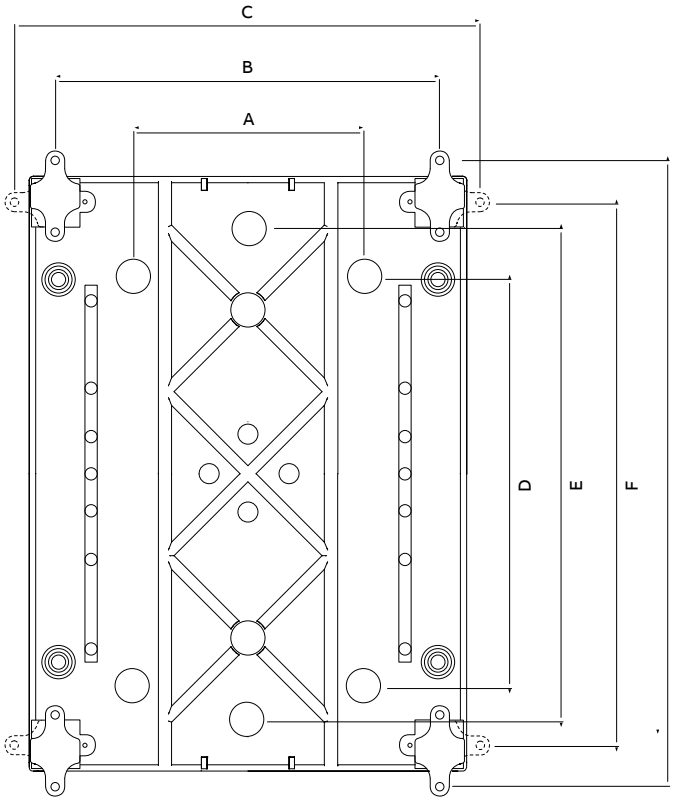


72 modules



System pro E comfort MISTRAL65

Consumer unit fixing template



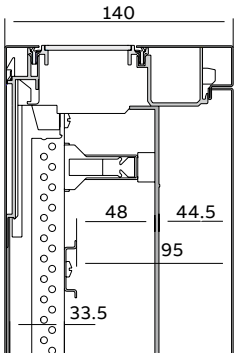
	A	B	C	D	E	F	G
4 Modules		113	173		140	163	223,5
8 Modules	90	194	254,5	180		212	272,5
12 Modules	170	282,5	343	180		212	272,5
18 Modules	280	392	452,5	125	175	212	272,5
24 Modules	170	282,5	343	310	360	397	457,5
36 Modules - 2 F	280	392	452,5	310	360	397	457,5
36 Modules - 3 F	170	282,5	343	475	525	562	622,5
48 Modules	170	282,5	343	610	660	697	757,5
54 Modules	280	392	452,5	475	525	562	622,5
72 Modules	280	392	452,5	610	660	697	757,5

Quick product references

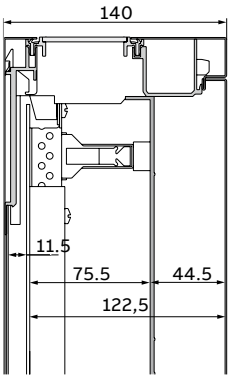
Overall dimensions

AT/U Series

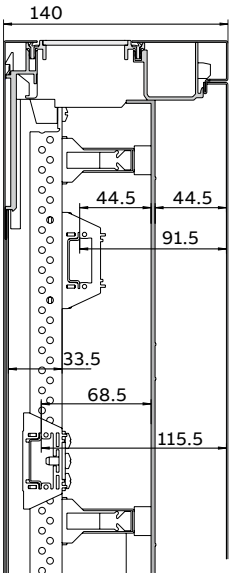
Wall-mounting with door, AT series



Compact distribution board panel

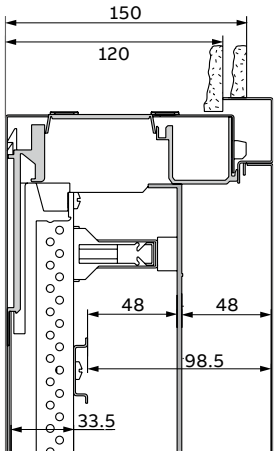


Panel with mounting plate

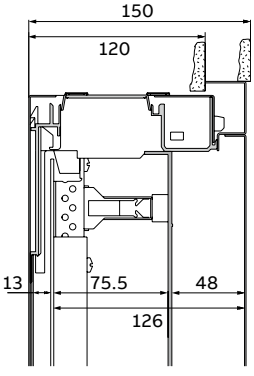


Panel for terminals

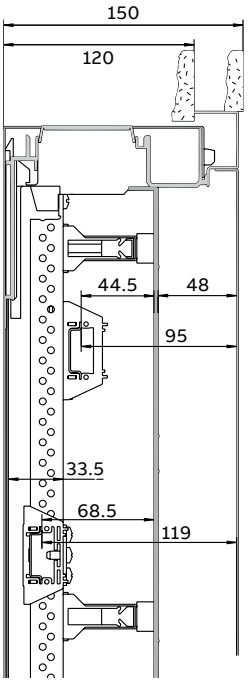
Flush-mounting with door, U series



Compact distribution board panel



Panel with mounting plate

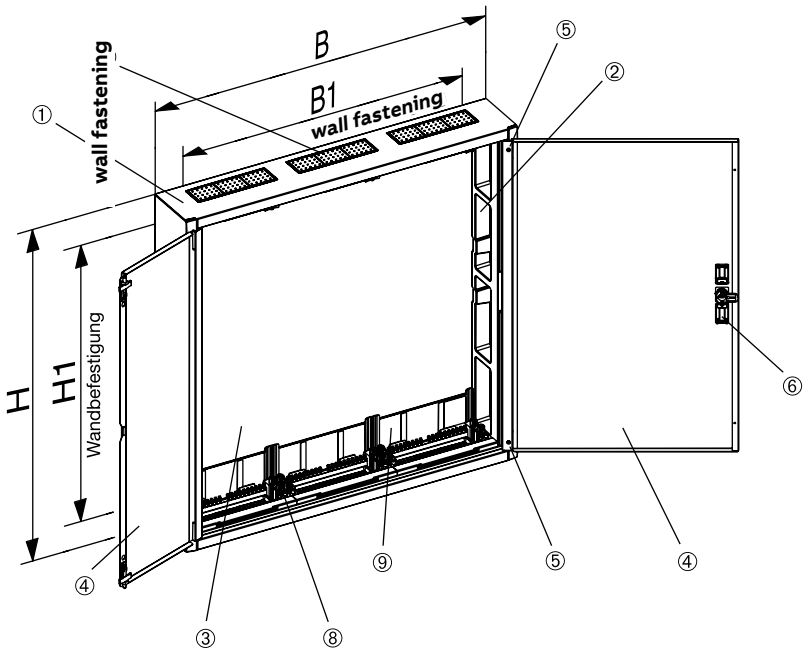


Panel for terminals

Compact distribution boards

Type	H	W	H1	W1
AT22E	374	574	235	417
AT31	524	324	385	167
AT32, AT32TE, AT32R2, AT32TR2	524	574	385	417
AT41, AT41TE, AT41R3, AT41TR3	674	324	535	167
AT42, AT42TE, AT42M, AT42/2, AT42R3, AT42TR3	674	574	535	417
AT43, AT43R3, AT43TR3	674	824	535	667
AT51, AT51TE, AT51R4, AT51TR4	824	324	685	167
AT52, AT52TE, AT52K, AT52/2, AT52R4, AT52TR4	824	574	685	417
AT53, AT53M,AT53K, AT53R4, AT53TR4	824	824	685	667
AT54K, AK54E, AT54R4	824	1074	685	917
AT61, AT61TE, AT61R5, AT61TR5	974	324	835	167
AT62, AT62TE, AT62K, AT62R5, AT62TR5	974	574	835	417
AT63E, AT63K, AT63R5, AT63TR5	974	824	835	667
AT64K	974	1074	835	917
AT72, AT72K, AT72R6, AT72TR6	1124	574	985	417
AT73K, AT73R6, AT73TR6	1124	824	985	667

Dimensions in mm

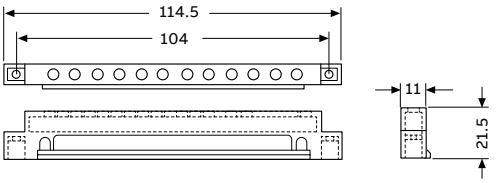


Quick product references

Overall dimensions

Terminal blocks for MISTRAL series

Terminal holders – dimensions



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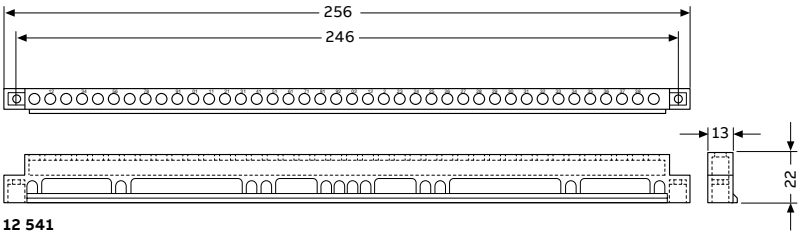

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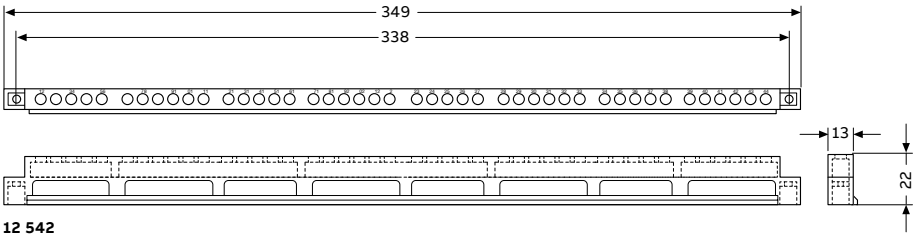
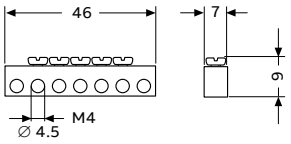


12 542

Terminal blocks for MISTRAL series

Terminal bars – dimensions



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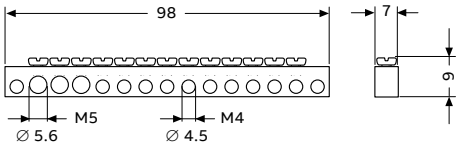

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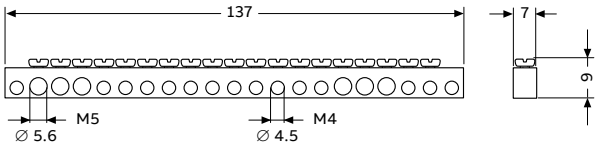

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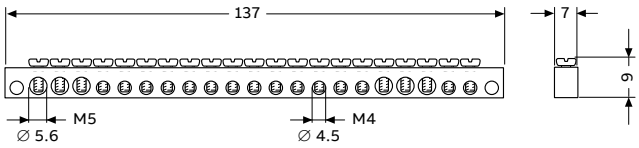

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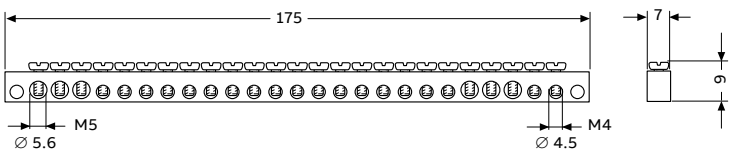


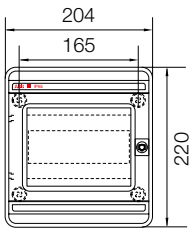
12 535

Quick product references

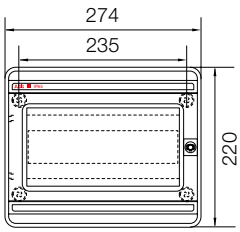
Overall dimensions

EUROPA65 Series wall-mounting consumer units

Front view



8 modules



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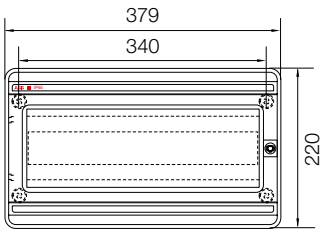
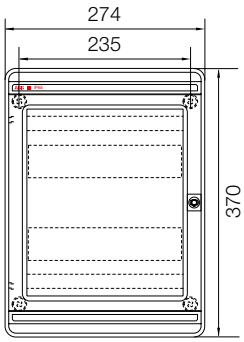
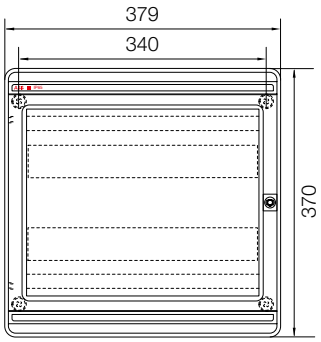


18 modules

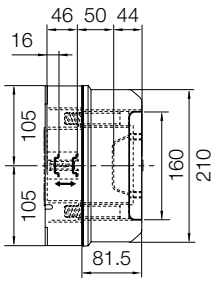


24 modules

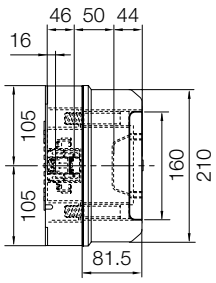


36 modules

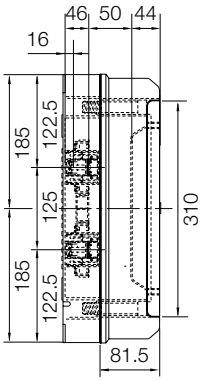
Side view



8 - 12 modules



18 modules

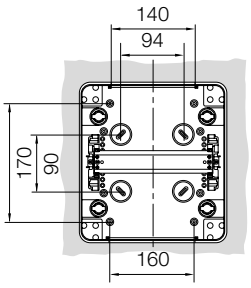


24 -36 modules

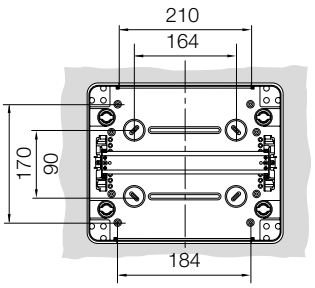
Dimensions mm

EUROPA65 Series wall-mounting consumer units

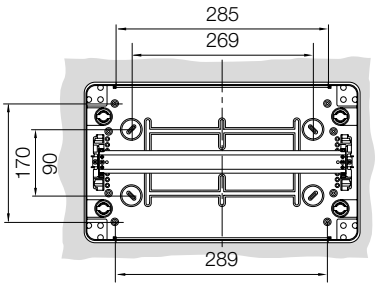
Drilling sheets



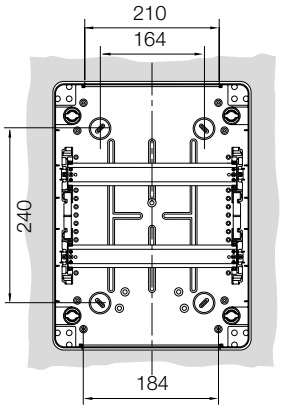
8 modules



12 modules



18 modules



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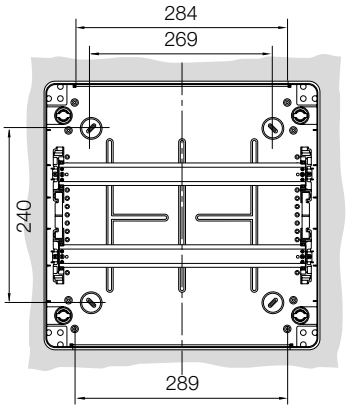

36 modules

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12	1SL2752A01
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24	1SL2754A01
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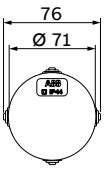
Quick product references

Overall dimensions

IP44, IP55 and IP65 junction boxes

Front view



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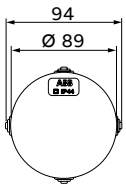

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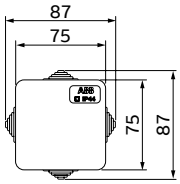

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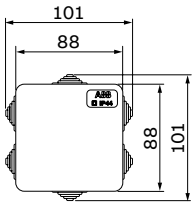

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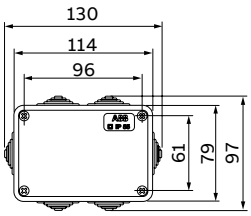

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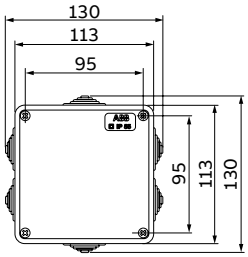

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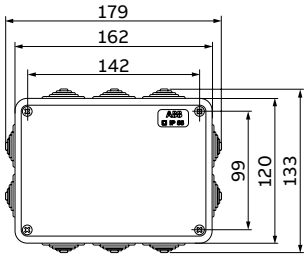

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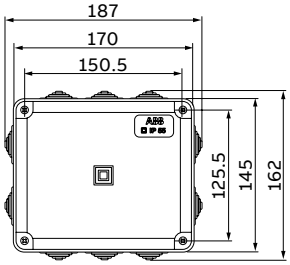

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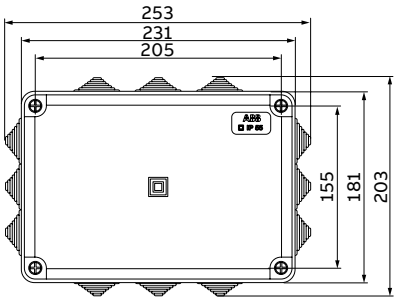

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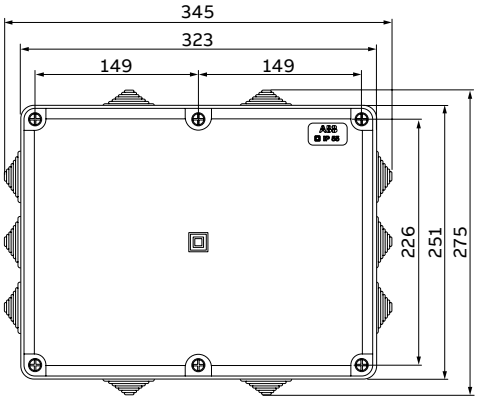

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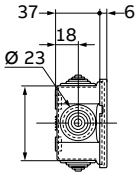
IP44, IP55 and IP65 junction boxes

Side view



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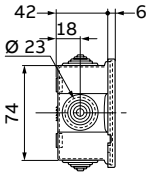

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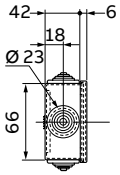

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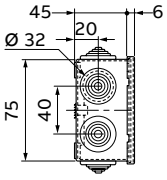

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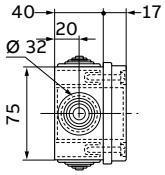

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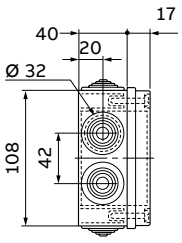

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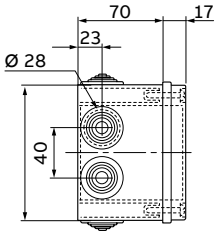

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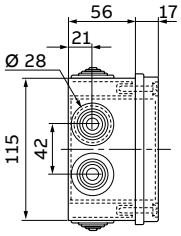

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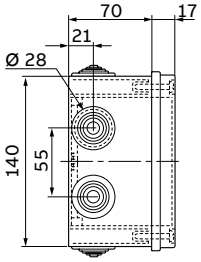

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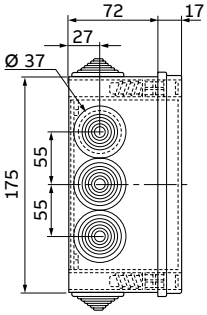

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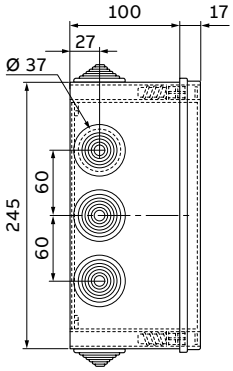

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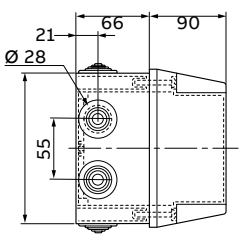

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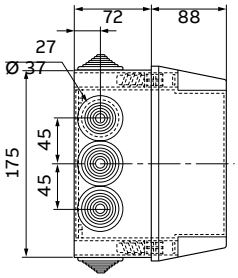

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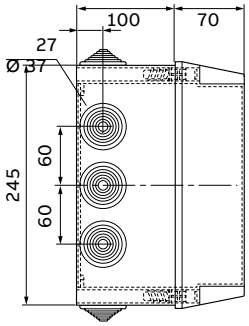

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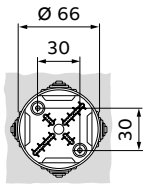
Quick product references

Overall dimensions

Drilling sheets and internal dimensions



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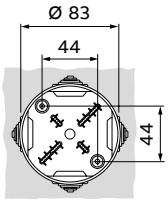

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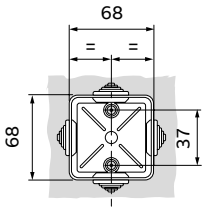

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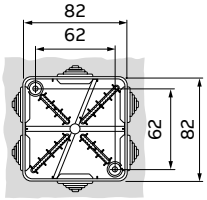

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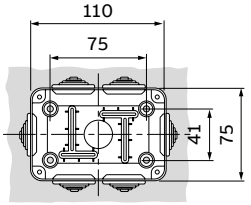

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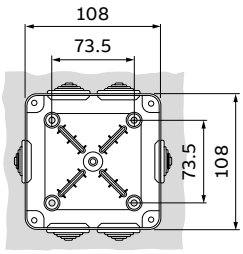

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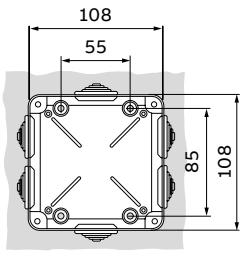

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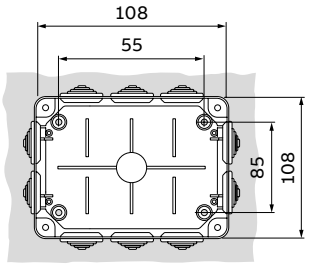

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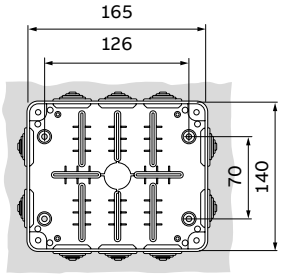

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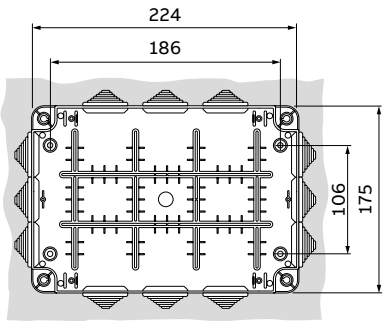

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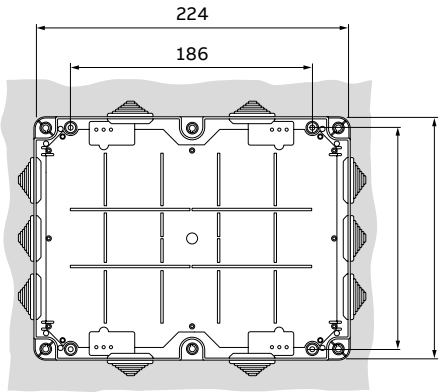

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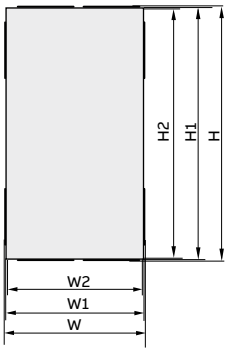
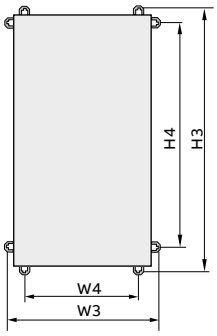
TwinLine S 43

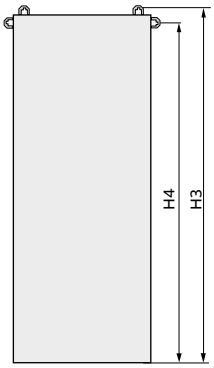
Front view
Wall-mounting and floor-standing cabinet
External/internal dimensions



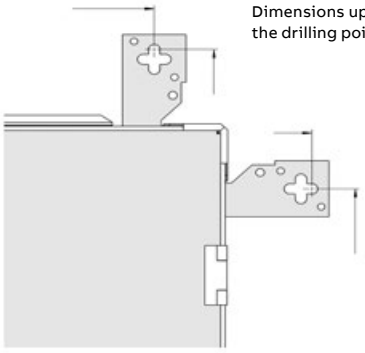
Front view
Wall-mounting cabinet
Wall fastening dimensions



Front view
Floor-standing cabinet
Wall fastening dimensions



Front view
External fastening
Detail



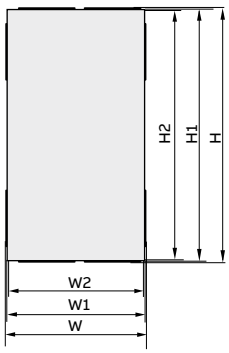
Cabinet types H x W x D	External dimensions in mm			Internal dimensions in mm		External dimensions with embossing in mm		Wall fastening dimensions in mm			
	H1	W1	D1	H2	W2	H	W	H3	W3	H4	W4
400 x 300 x 225	450	390	225	402	342	454	394	578.5	518.5	345	285
600 x 300 x 225	650	390	225	602	342	654	394	778.5	518.5	545	285
800 x 300 x 225	850	390	225	802	342	854	394	978.5	518.5	745	285
1000 x 300 x 225	1050	390	225	1002	342	1054	394	1178.5	518.5	945	285
1200 x 300 x 225	1250	390	225	1202	342	1254	394	1378.5	518.5	1145	285
1400 x 300 x 225	1450	390	225	1402	342	1454	394	1514	518.5	1292.5	285
1600 x 300 x 225	1650	390	225	1602	342	1654	394	1714	518.5	1492.5	285
1800 x 300 x 225	1850	390	225	1802	342	1854	394	1914	518.5	1692.5	285
2000 x 300 x 225	2050	390	225	2002	342	2054	394	2114	518.5	1892.5	285
400 x 600 x 225	450	660	225	402	612	454	664	578.5	788.5	345	555
600 x 600 x 225	650	660	225	602	612	654	664	778.5	788.5	545	555
800 x 600 x 225	850	660	225	802	612	854	664	978.5	788.5	745	555
1000 x 600 x 225	1050	660	225	1002	612	1054	664	1178.5	788.5	945	555
1200 x 600 x 225	1250	660	225	1202	612	1254	664	1378.5	788.5	1145	555
1400 x 600 x 225	1450	660	225	1402	612	1454	664	1514	788.5	1292.5	555
1600 x 600 x 225	1650	660	225	1602	612	1654	664	1714	788.5	1492.5	555
1800 x 600 x 225	1850	660	225	1802	612	1854	664	1914	788.5	1692.5	555
2000 x 600 x 225	2050	660	225	2002	612	2054	664	2114	788.5	1892.5	555
400 x 800 x 225	450	875	225	402	827	454	879	578.5	1003.5	345	770
600 x 800 x 225	650	875	225	602	827	654	879	778.5	1003.5	545	770
800 x 800 x 225	850	875	225	802	827	854	879	978.5	1003.5	745	770
1000 x 800 x 225	1050	875	225	1002	827	1054	879	1178.5	1003.5	945	770
1200 x 800 x 225	1250	875	225	1202	827	1254	879	1378.5	1003.5	1145	770
1400 x 800 x 225	1450	875	225	1402	827	1454	879	1514	1003.5	1292.5	770
1600 x 800 x 225	1650	875	225	1602	827	1654	879	1714	1003.5	1492.5	770
1800 x 800 x 225	1850	875	225	1802	827	1854	879	1914	1003.5	1692.5	770
2000 x 800 x 225	2050	875	225	2002	827	2054	879	2114	1003.5	1892.5	770

Quick product references

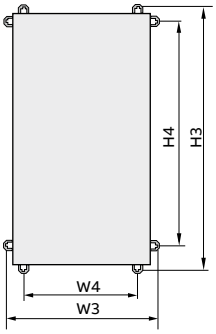
Overall dimensions

TwinLine S 43

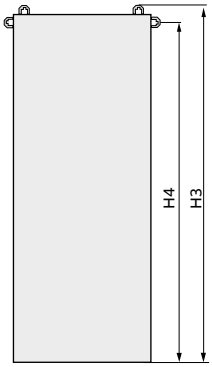
Front view
Wall-mounting and floor-standing cabinet
External/internal dimensions



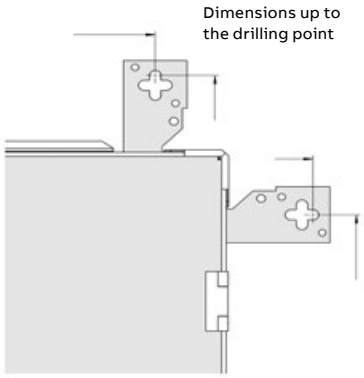
Front view
Wall-mounting cabinet
Wall fastening dimensions



Front view
Floor-standing cabinet
Wall fastening dimensions



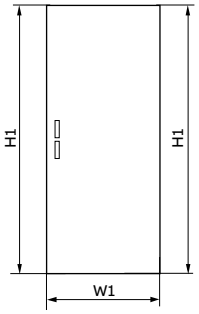
Front view
External fastening
Detail



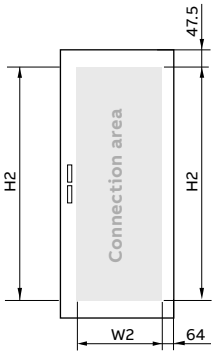
Cabinet types H x W x D	External dimensions in mm			Internal dimensions in mm		External dimensions with embossing in mm		Wall fastening dimensions in mm			
	H1	W1	D1	H2	W2	H	W	H3	W3	H4	W4
400 x 300 x 275	450	390	275	402	342	454	394	578.5	518.5	345	285
600 x 300 x 275	650	390	275	602	342	654	394	778.5	518.5	545	285
800 x 300 x 275	850	390	275	802	342	854	394	978.5	518.5	745	285
1000 x 300 x 275	1050	390	275	1002	342	1054	394	1178.5	518.5	945	285
1200 x 300 x 275	1250	390	275	1202	342	1254	394	1378.5	518.5	1145	285
1400 x 300 x 275	1450	390	275	1402	342	1454	394	1514	518.5	1292.5	285
1600 x 300 x 275	1650	390	275	1602	342	1654	394	1714	518.5	1492.5	285
1800 x 300 x 275	1850	390	275	1802	342	1854	394	1914	518.5	1692.5	285
2000 x 300 x 275	2050	390	275	2002	342	2054	394	2114	518.5	1892.5	285
400 x 600 x 275	450	660	275	402	612	454	664	578.5	788.5	345	555
600 x 600 x 275	650	660	275	602	612	654	664	778.5	788.5	545	555
800 x 600 x 275	850	660	275	802	612	854	664	978.5	788.5	745	555
1000 x 600 x 275	1050	660	275	1002	612	1054	664	1178.5	788.5	945	555
1200 x 600 x 275	1250	660	275	1202	612	1254	664	1378.5	788.5	1145	555
1400 x 600 x 275	1450	660	275	1402	612	1454	664	1514	788.5	1292.5	555
1600 x 600 x 275	1650	660	275	1602	612	1654	664	1714	788.5	1492.5	555
1800 x 600 x 275	1850	660	275	1802	612	1854	664	1914	788.5	1692.5	555
2000 x 600 x 275	2050	660	275	2002	612	2054	664	2114	788.5	1892.5	555
400 x 800 x 275	450	875	275	402	827	454	879	578.5	1003.5	345	770
600 x 800 x 275	650	875	275	602	827	654	879	778.5	1003.5	545	770
800 x 800 x 275	850	875	275	802	827	854	879	978.5	1003.5	745	770
1000 x 800 x 275	1050	875	275	1002	827	1054	879	1178.5	1003.5	945	770
1200 x 800 x 275	1250	875	275	1202	827	1254	879	1378.5	1003.5	1145	770
1400 x 800 x 275	1450	875	275	1402	827	1454	879	1514	1003.5	1292.5	770
1600 x 800 x 275	1650	875	275	1602	827	1654	879	1714	1003.5	1492.5	770
1800 x 800 x 275	1850	875	275	1802	827	1854	879	1914	1003.5	1692.5	770
2000 x 800 x 275	2050	875	275	2002	827	2054	879	2114	1003.5	1892.5	770

TwinLine S 43

External dimensions



Dimensions of usable connection area



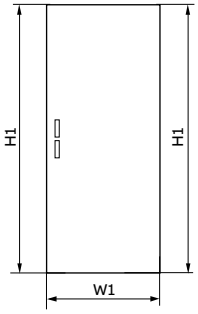
Sheet steel doors	External dimensions Height x width in mm		Internal dimensions Height x width in mm		Weight	max. installation weight
Type	**H1**	**W1**	**H2**	**W2**	**in kg**	**in kg**
ESAS0304	443	379	348	213	4.75	5
ESAS0306	643	379	548	213	6.62	5
ESAS0308	843	379	748	213	7.81	5
ESAS0310	1043	379	948	213	9.72	5
ESAS0312	1243	379	1148	213	11.49	5
ESAS0314	1443	379	1348	213	13.50	5
ESAS0316	1643	379	1548	213	15.05	5
ESAS0318	1843	379	1748	213	16.58	5
ESAS0320	2043	379	1948	213	18.14	5
ESAS0604	443	649	348	483	6.95	5
ESAS0606	643	649	548	483	9.46	5
ESAS0608	843	649	748	483	11.64	5
ESAS0610	1043	649	948	483	13.83	5
ESAS0612	1243	649	1148	483	16.24	5
ESAS0614	1443	649	1348	483	18.88	5
ESAS0616	1643	649	1548	483	21.07	5
ESAS0618	1843	649	1748	483	23.25	5
ESAS0620	2043	649	1948	483	25.43	5
ESAS0804	443	864	348	698	8.70	7.5
ESAS0806	643	864	548	698	11.72	7.5
ESAS0808	843	864	748	698	14.41	7.5
ESAS0810	1043	864	948	698	17.10	7.5
ESAS0810	1243	864	1148	698	20.02	7.5
ESAS0814	1443	864	1348	698	23.17	7.5
ESAS0816	1643	864	1548	698	25.86	7.5
ESAS0818	1843	864	1748	698	28.54	7.5
ESAS0820	2043	864	1948	698	31.23	7.5

Quick product references

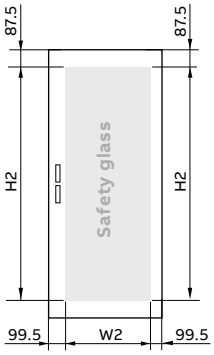
Overall dimensions

TwinLine S 43

External dimensions



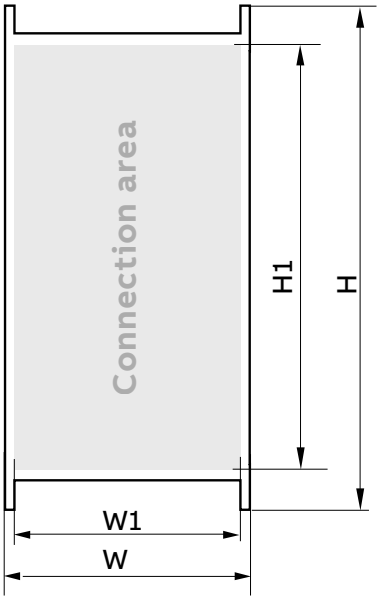
Dimensions of viewing area



Transparent doors	External dimensions Height x width in mm		Viewing area Height x width in mm		Weight
Type	**H1**	**W1**	**H2**	**W2**	**in kg**
ESAT0606	643	649	468	450	9.63
ESAT0608	843	649	668	450	11.67
ESAT0610	1043	649	868	450	13.7
ESAT0612	1243	649	1068	450	15.96
ESAT0614	1443	649	1268	450	18.36
ESAT0616	1643	649	1468	450	20.4
ESAT0618	1843	649	1668	450	22.43
ESAT0620	2043	649	1868	450	24.46
ESAT0806	643	864	468	665	11.85
ESAT0808	843	864	668	665	14.3
ESAT0810	1043	864	868	665	16.74
ESAT0812	1243	864	1068	665	19.4
ESAT0814	1443	864	1268	665	22.23
ESAT0816	1643	864	1468	665	24.67
ESAT0818	1843	864	1668	665	27.12
ESAT0820	2043	864	1868	665	29.56
ESAT2606	643	864	468	450	11.66
ESAT2608	843	864	668	450	14.2
ESAT2610	1043	864	868	450	16.47
ESAT2612	1243	864	1068	450	19.5
ESAT2614	1443	864	1268	450	22.42
ESAT2616	1643	864	1468	450	24.96
ESAT2618	1843	864	1668	450	27.5
ESAT2620	2043	864	1868	450	30

TwinLine S 43 mounting plate

External dimensions / Usable connection area
Mounting plate



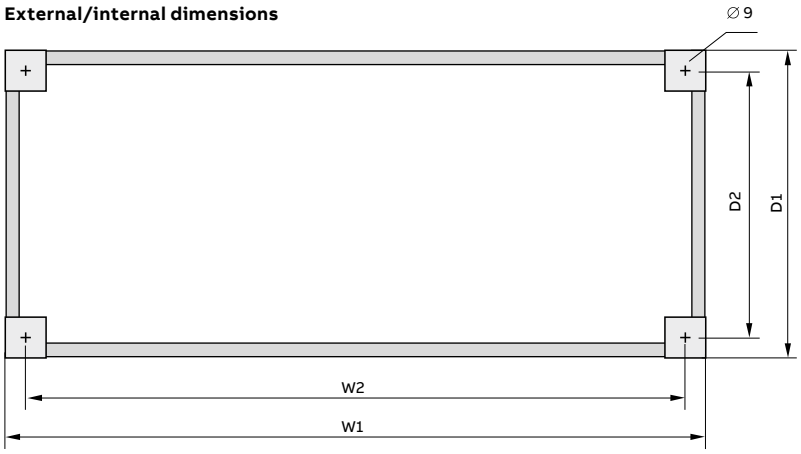
	External dimensions Width x depth in mm		Internal dimensions Width x depth in mm		Weight
Type	**H**	**W**	**H1**	**W1**	**in kg**
TZM204	600	496	522	410	3.51
TZM304	600	746	522	660	8.07
TZM208	1200	496	1122	410	11.82
TZM308	1200	746	1122	660	16.45
RM28	1800	496	1722	410	17.8
RM38	1800	746	1722	660	21

Quick product references

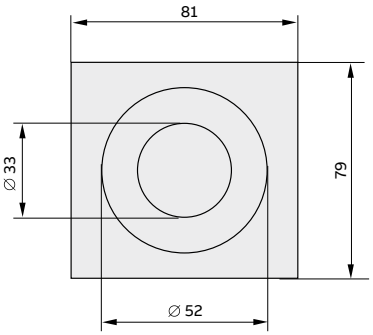
Overall dimensions

TwinLine S 43 plinth

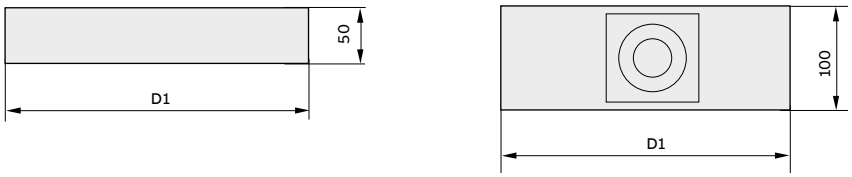
External/internal dimensions



Detail view for side knockout

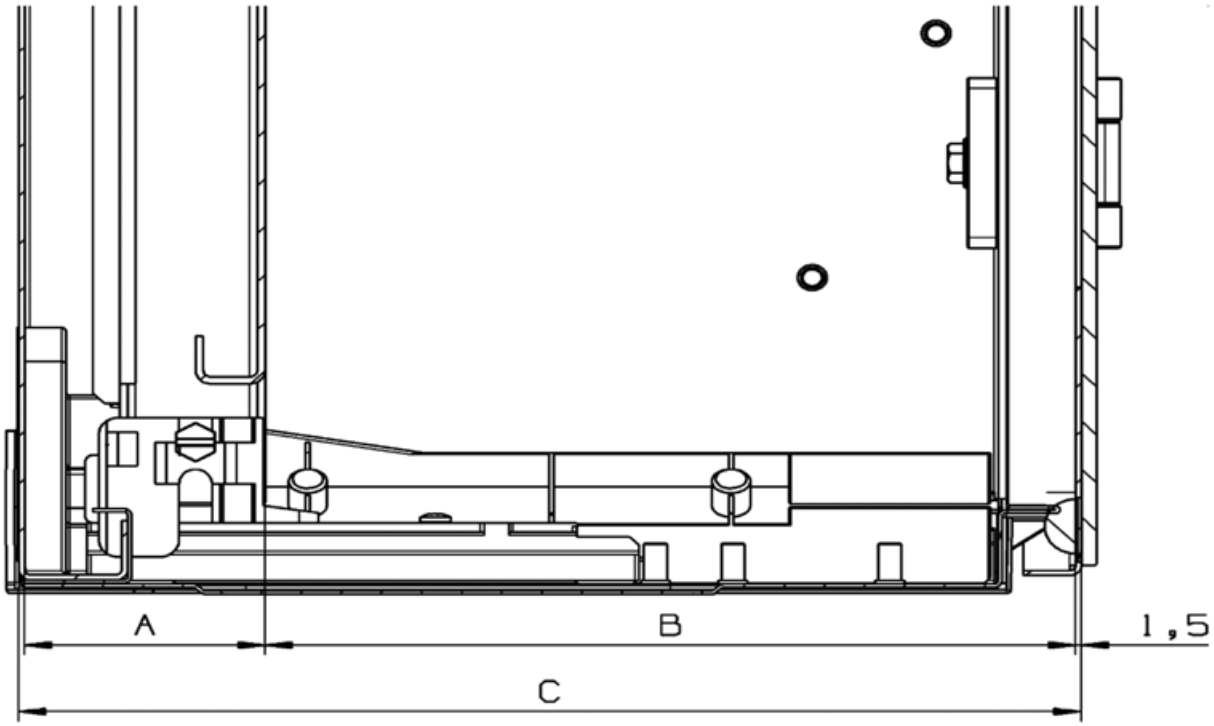


View side knockout TwinLine-G and -L



	External dimensions Width x depth in mm		Internal dimensions Width x depth in mm		Weight
Type	**W1**	**D1**	**W2**	**D2**	**in kg**
Plinth height 50 mm					
ESAL0305	390	253.5	360	223.5	1.57
ESAL0605	660	253.5	630	223.5	2.10
ESAL0805	875	253.5	845	223.5	2.53
ESAG0305	390	203.5	360	173.5	1.44
ESAG0605	660	203.5	630	173.5	1.98
ESAG0805	875	203.5	845	173.5	2.41
Plinth height 100 mm					
ESAL0310	390	253.5	360	223.5	2.59
ESAL0610	660	253.5	630	223.5	3.45
ESAL0810	875	253.5	845	223.5	4.13
ESAG0310	390	203.5	360	173.5	2.41
ESAG0610	660	203.5	630	173.5	3.27
ESAG0810	875	203.5	845	173.5	3.95

TwinLine S 43 Side view assembly with mounting plate

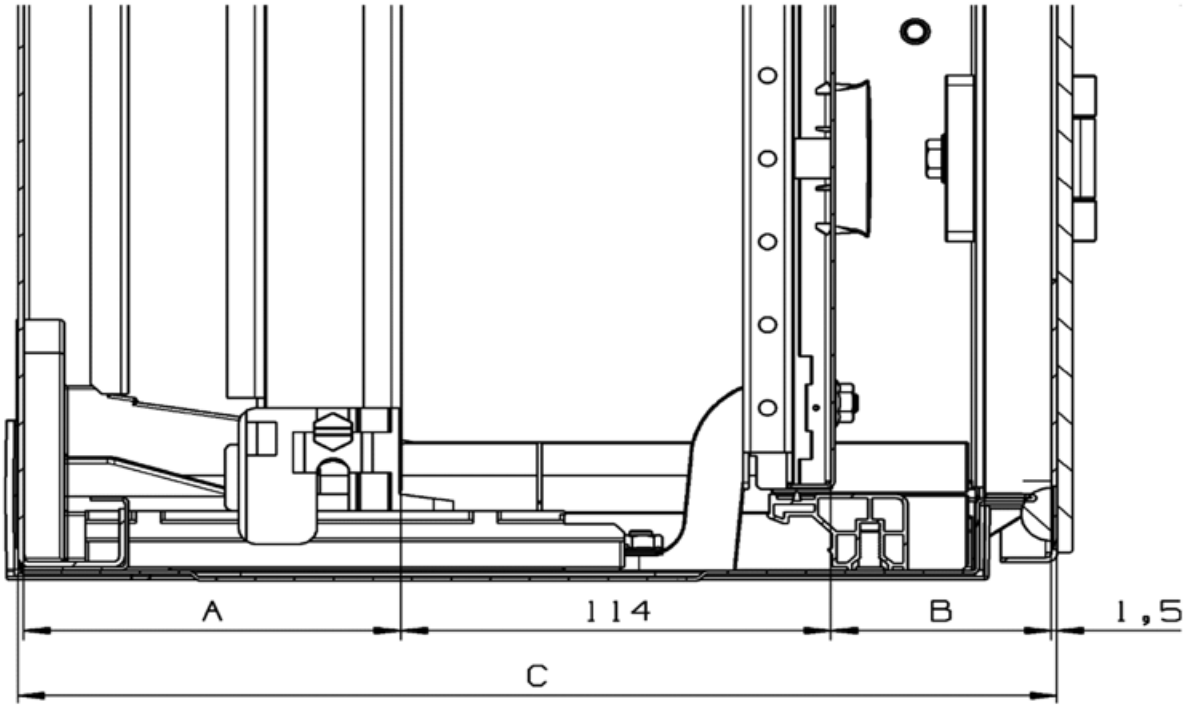


		A in mm for installation position					
Cabinet series	**Depth (C) in mm**	**Pos 3**	**Pos 2**	**Pos 1**	**Pos 0**	**Pos -1**	**Pos -2**
TwinLine G	225	63	75.5	88	100.5	113	125.5
TwinLine L	275	63	75.5	88	100.5	113	125.5
Cabinet series	**Depth (C) in mm**	**B in mm for installation position**					
TwinLine G	225	159	146.5	134	121.5	109	96.5
TwinLine L	275	209	196.5	184	171.5	159	146.5

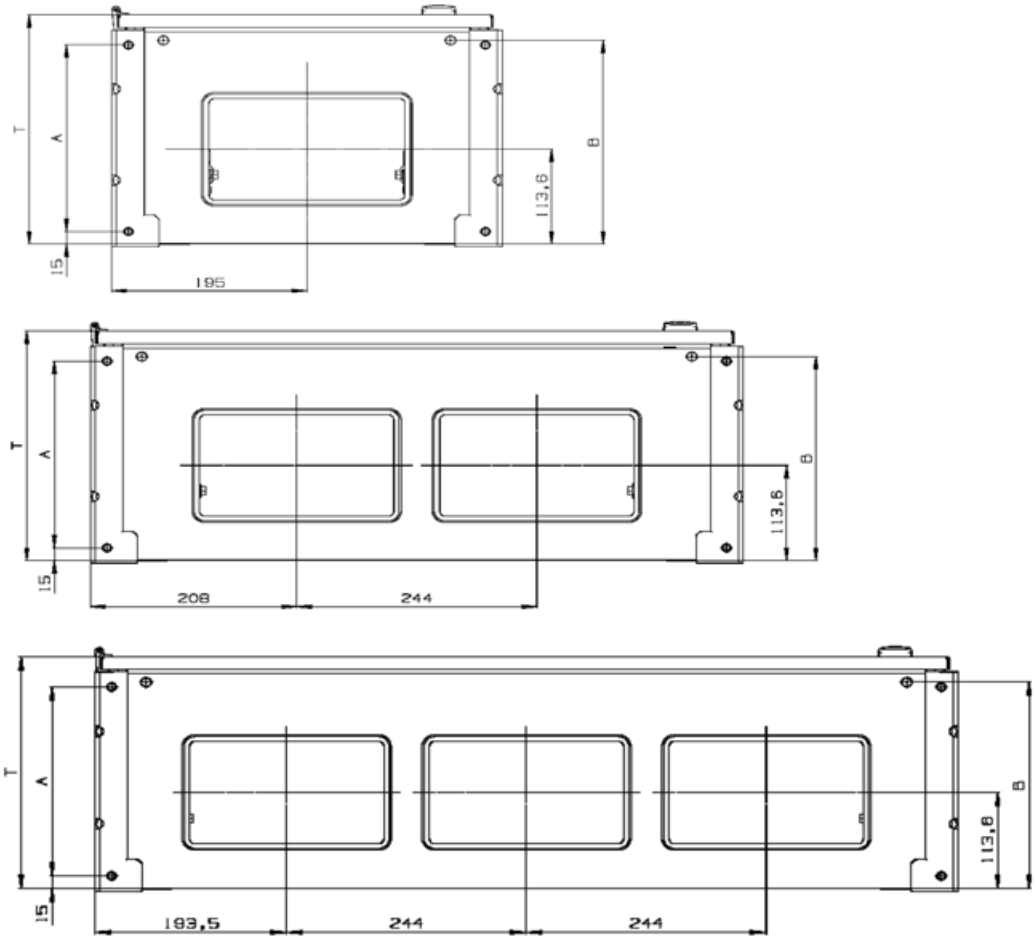
Quick product references

Overall dimensions

TwinLine S 43 Side view with FlexiLIne for 225 mm und 275 mm depth



	Depth (C) in mm	A in mm	B in mm
TwinLine G	225	62	46
TwinLine L	275	100	58



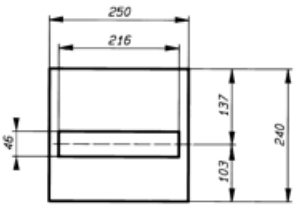
Depth in mm	A in mm	B in mm
225	173.5	170
275	223.5	244

Quick product references

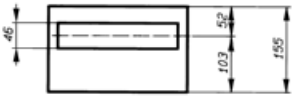
Overall dimensions

Modular consumer units AI10N / AI11N

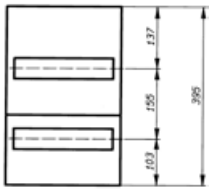
Basic enclosure



Modular enclosure

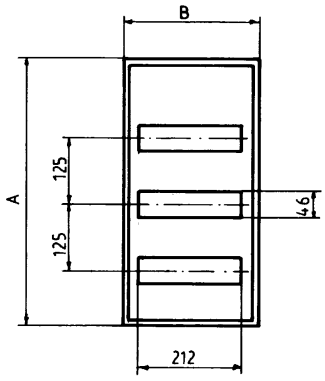


AI10N + AI11N



2-row combination

Hood-type consumer units A300



Allowed power loss hood-type consumer units A300

DIN 43871 with over temperature △T*

Type	Power loss (W)		
	△T 20 K	△T 25 K	△T 30 K
A31...	12.5	16.5	21.0
A32...	15.0	20.0	25.0
A33...	17.0	22.0	28.0
A34...	20.5	27.0	34.0

*T is the temperature difference between upper temperature rise limit, mounted devices and ambient.

Type	A	B	C
A31...	245	295	110
A32...	385	295	110
A33...	510	295	110
A34...	635	295	110

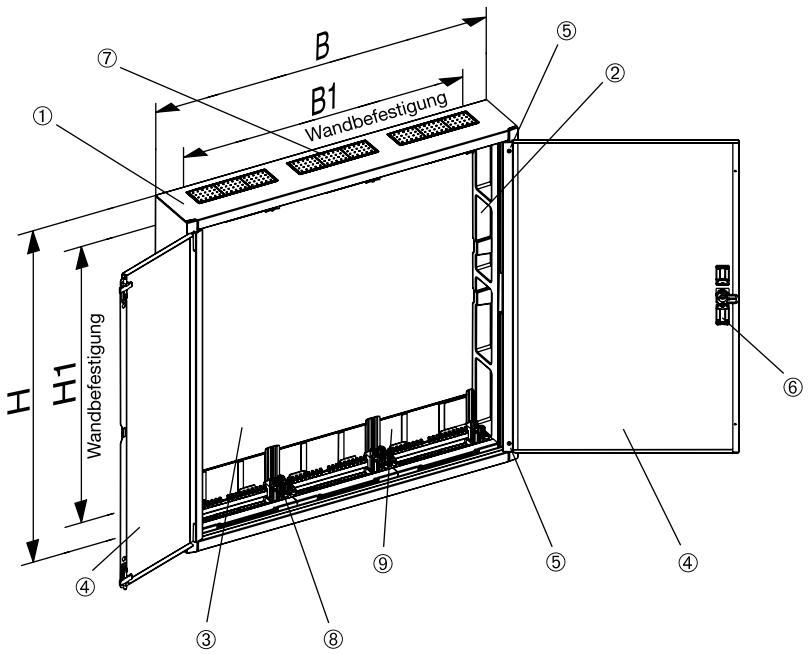
Quick product references

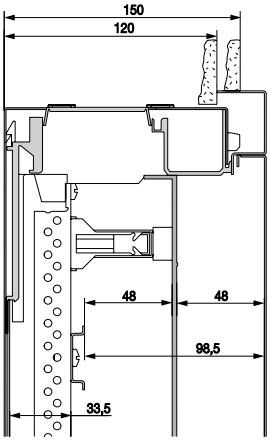
Overall dimensions

Compact distribution boards

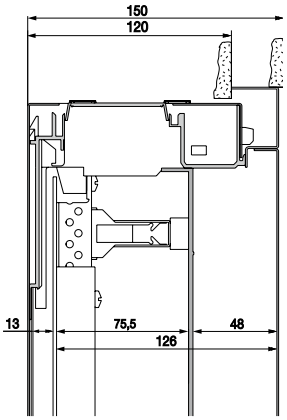
Type	H	W	H1	W1
AT22E, AL22	374	574	235	417
AT31, AL31	524	324	385	167
AT32, AT32TE, AT32R2, AT32TR2, AL32	524	574	385	417
AT41, AT41TE, AT41R3, AT41TR3, AL41	674	324	535	167
AT42, AT42TE, AT42M, AT42/2, AT42R3, AT42TR3,AL42	674	574	535	417
AT43, AT43R3, AT43TR3, AL43	674	824	535	667
AT51, AT51TE, AT51R4, AT51TR4, AL51	824	324	685	167
AT52, AT52TE, AT52K, AT52/2, AT52R4, AT52TR4, AL52	824	574	685	417
AT53, AT53M,AT53K, AT53R4, AT53TR4, AL53	824	824	685	667
AT54K, AK54E, AT54R4, AL54	824	1074	685	917
AT61, AT61TE, AT61R5, AT61TR5, AL61	974	324	835	167
AT62, AT62TE, AT62K, AT62R5, AT62TR5, AL62	974	574	835	417
AT63E, AT63K, AT63R5, AT63TR5, AL63	974	824	835	667
AT64K, AL64	974	1074	835	917
AT72, AT72K, AT72R6, AT72TR6, AL72	1124	574	985	417
AT73K, AT73R6, AT73TR6, AL73	1124	824	985	667

Dimensions in mm

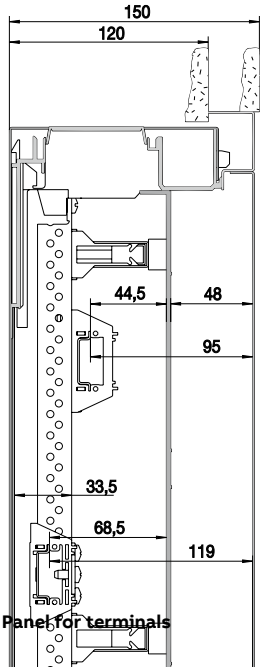




Distribution board panel



Mounting plate



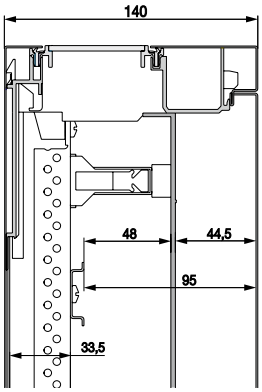
Panel for terminals

Flush-mounting with door. U		
Type	**Weight in kg**	**Power loss in Watts $\triangle t_{1.0}$ 20K**
U32	13.50	33.10
U32R2	13.00	33.10
U32TE	12.50	33.10
U32TR2	11.00	33.10
U41	10.50	24.30
U41R3	10.50	24.30
U41TE	9.00	24.30
U41TR3	9.50	24.30
U42	15.50	40.10
U42/2	16.50	40.10
U42D	16.50	40.10
U42FPT	17.00	40.10
U42M	18.50	40.10
U42R3	16.00	40.10
U42TE	14.00	40.10
U42TR3	14.00	40.10
U43	22.50	57.40
U43R3	23.00	57.40
U43TR3	19.50	57.40
U51	12.50	28.40
U51R4	12.00	28.40
U51TE	12.00	28.40
U51TR4	10.50	28.40
U52	18.50	46.30
U52/2	19.00	46.30
U52K	18.50	46.30
U52R4	18.00	46.30
U52TE	16.00	46.30
U52TR4	16.00	46.30
U53	26.50	65.60
U53K	26.00	65.60
U53M	29.00	65.60
U53R4	26.50	65.60
U53TR4	22.00	65.60
U54E	33.00	61.80
U54K	32.50	61.80
U54R4	33.50	61.80
U61	14.50	32.90
U61R5	14.50	32.90
U61TE	12.50	32.90
U61TR5	12.50	32.90
U62	22.00	53.10
U62K	22.00	53.10
U62R5	22.00	53.10
U62TE	19.00	53.10
U62TR5	19.00	53.10
U63E	31.00	53.30
U63K	30.50	53.30
U63R5	31.50	53.30
U63TR5	26.00	53.30
U64K	38.00	68.30
U72	25.00	59.80
U72K	25.00	59.80
U72R6	26.00	59.80
U72TR6	21.50	59.80
U73K	35.00	62.30
U73R6	35.50	62.30
U73TR6	28.50	62.30

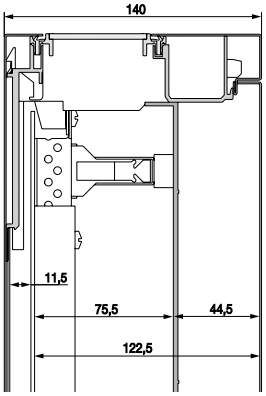
> Dimensions in mm

Quick product references

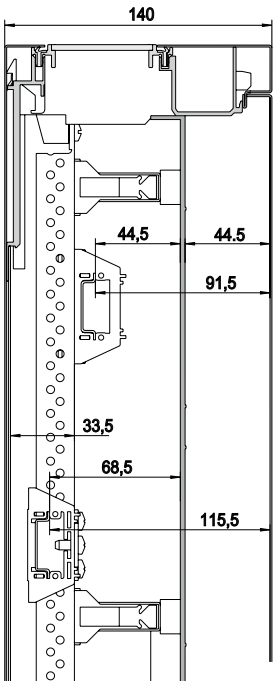
Overall dimensions



Distribution board panel



Mounting plate

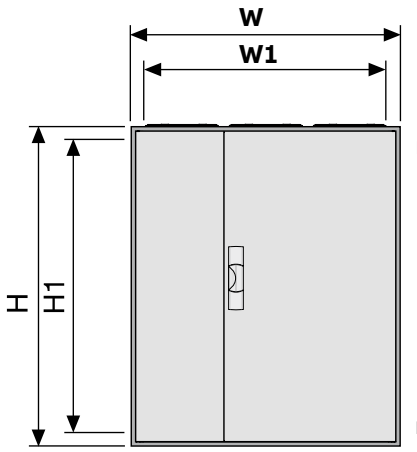


Panel for terminals

Wall-mounting with door. AT		
Type	**Weight in kg**	**Power loss in Watts $\triangle t_{1.0}$ 20K**
AT22E	9.70	36.30
AT31	7.50	27.30
AT32	12.50	45.30
AT32R2	12.00	45.30
AT32TE	12.00	45.30
AT32TR2	11.50	45.30
AT41	9.50	33.30
AT41R3	10.00	33.30
AT41TE	9.00	33.30
AT41TR3	9.00	33.30
AT42	15.00	53.90
AT42/2	15.50	53.90
AT42M	17.50	53.90
AT42R3	15.00	53.90
AT42TE	13.00	53.90
AT42TR3	13.50	53.90
AT43	21.50	76.30
AT43R3	21.50	76.30
AT43TR3	18.00	76.30
AT51	11.50	39.20
AT51R4	11.50	39.20
AT51TE	11.50	39.20
AT51TR4	11.00	39.20
AT52	17.00	62.60
AT52/2	18.00	62.60
AT52K	17.50	62.60
AT52R4	18.00	62.60
AT52TE	18.00	62.60
AT52TR4	16.00	62.60
AT53	25.00	59.50
AT53K	25.00	59.50
AT53M	28.00	59.50
AT53R4	25.50	59.50
AT53TR4	21.50	59.50
AT54E	32.00	85.10
AT54K	31.00	85.10
AT54R4	32.50	85.10
AT54TR4	26.50	85.10
AT61	13.50	45.40
AT61R5	13.50	45.40
AT61TE	11.50	45.40
AT61TR5	12.00	45.40
AT62	21.00	49.60
AT62K	20.50	49.60
AT62R5	20.00	49.60
AT62TE	20.00	49.60
AT62TR5	20.00	49.60
AT63E	29.50	70.00
AT63K	29.00	70.00
AT63R5	29.00	70.00
AT63TR5	24.00	70.00
AT64K	36.00	100.10
AT72	23.50	57.30
AT72K	23.50	57.30
AT72R6	23.50	57.30
AT72TR6	20.00	57.30
AT73K	33.50	83.60
AT73R6	34.00	83.60
AT73TR6	30.50	83.60

> Dimensions in mm

A wall-mounting cabinets IP43



Door on the right-hand side*

Depth 215

					Ext. dimensions		Int. dimensions		Door on the left-hand side*	Door on the right-hand side*	Weight	Power loss
Type	**OH**	**PW**	**SU**	**GU**	**H**	**W**	**H1**	**W1**	**H x W**	**H x W**	**in kg**	**in watts $\triangle t_{1,0}$ 20K**
1/00A	00	1	36	3	500	300	452	252		471.4 x 272	6.20	28.80
2/00A		2	72		500	550	452	502		471.4 x 522	8.40	47.40
3/00A		3	108		500	800	452	752	471.4 x 260	471.4 x 510	12.20	67.10
4/00A		4	144		500	1050	452	1002	471.4 x 510	471.4 x 510	15.80	66.20
5/00A		5	180		500	1300	452	1252	471.4 x 510	471.4 x 760	19.60	83.60
1/0A	0	1	48	4	650	300	602	252		621.4 x 272	7.80	35.20
2/0A		2	96		650	550	602	502		621.4 x 522	11.40	56.20
3/0A		3	144		650	800	602	752	621.4 x 260	621.4 x 510	15.60	59.80
4/0A		4	192		650	1050	602	1002	621.4 x 510	621.4 x 510	16.80	80.90
5/0A		5	240		650	1300	602	1252	621.4 x 510	621.4 x 760	24.00	105.60
1/1A	1	1	60	5	800	300	752	252		771.4 x 272	9.80	41.60
2/1A		2	120		800	550	752	502		771.4 x 522	13.40	65.30
3/1A		3	180		800	800	752	752	771.4 x 260	771.4 x 510	18.00	69.70
4/1A		4	240		800	1050	752	1002	771.4 x 510	771.4 x 510	23.80	96.80
5/1A		5	300		800	1300	752	1252	771.4 x 510	771.4 x 760	28.00	128.40
1/2A	2	1	72	6	950	300	902	252		921.4 x 272	10.80	48.10
2/2A		2	144		950	550	902	502		921.4 x 522	15.60	51.90
3/2A		3	216		950	800	902	752	921.4 x 260	921.4 x 510	21.00	79.20
4/2A		4	288		950	1050	902	1002	921.4 x 510	921.4 x 510	26.80	112.60
5/2A		5	360		950	1300	902	1252	921.4 x 510	921.4 x 760	31.20	150.90
1/3A	3	1	84	7	1100	300	1052	252		1071.4 x 272	12.00	54.50
2/3A		2	168		1100	550	1052	502		1071.4 x 522	17.60	60.70
3/3A		3	252		1100	800	1052	752	1071.4 x 260	1071.4 x 510	23.60	87.50
4/3A		4	336		1100	1050	1052	1002	1071.4 x 510	1071.4 x 510	30.00	131.30
5/3A		5	420		1100	1300	1052	1252	1071.4 x 510	1071.4 x 760	35.20	171.20
1/4A	4	1	96	8	1250	300	1202	252		1221.4 x 272	14.00	60.80
2/4A		2	192		1250	550	1202	502		1221.4 x 522	19.20	68.30
3/4A		3	288		1250	800	1202	752	1221.4 x 260	1221.4 x 510	26.00	101.50
4/4A		4	384		1250	1050	1202	1002	1221.4 x 510	1221.4 x 510	32.40	147.40
5/4A		5	480		1250	1300	1202	1252	1221.4 x 510	1221.4 x 760	40.20	190.50
1/5A	5	1	108	9	1400	300	1352	252		1371.4 x 272	15.00	67.20
2/5A		2	216		1400	550	1352	502		1371.4 x 522	22.40	77.80
3/5A		3	324		1400	800	1352	752	1371.4 x 260	1371.4 x 510	29.20	118.10
4/5A		4	432		1400	1050	1352	1002	1371.4 x 510	1371.4 x 510	35.20	156.00
5/5A		5	540		1400	1300	1352	1252	1371.4 x 510	1371.4 x 760	44.00	205.60

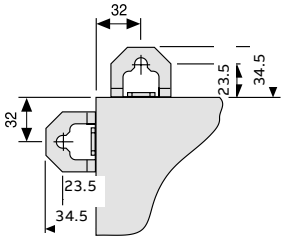
> Dimensions in mm

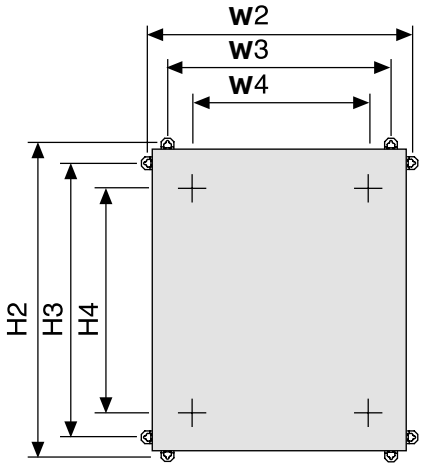
* Double-wing doors on cabinets with three or more panel widths

Quick product references

Overall dimensions

A wall-mounting cabinets IP43



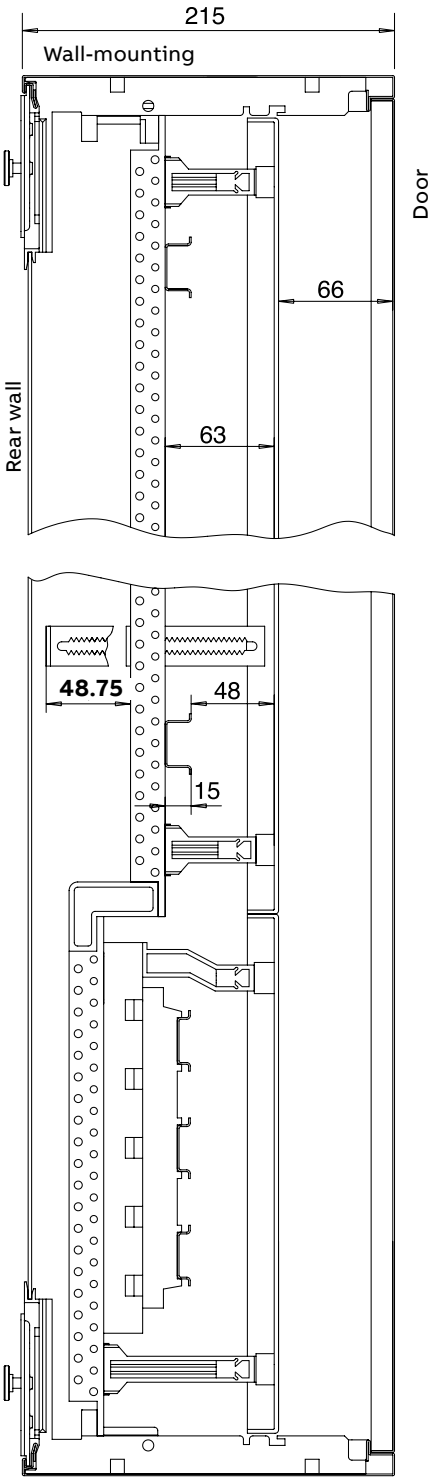


					Ext. fastening				Int. fastenning		Weight	Power loss
Type	**OH**	**PW**	**SU**	**GU**	**H2**	**H3**	**W2**	**W3**	**H4**	**W4**	**in kg**	**in watts $\triangle t_{1.0}$ 20K**
1/00A	00	1	36	3	547	436	347	236	402	170	6.20	28.80
2/00A		2	72		547	436	597	486	402	420	8.40	47.40
3/00A		3	108		547	436	847	736	402	670	12.20	67.10
4/00A		4	144		547	436	1097	986	402	920	15.80	66.20
5/00A		5	180		547	436	1347	1236	402	1170	19.60	83.60
1/0A	0	1	48	4	697	586	347	236	552	170	7.80	35.20
2/0A		2	96		697	586	597	486	552	420	11.40	56.20
3/0A		3	144		697	586	847	736	552	670	15.60	59.80
4/0A		4	192		697	586	1097	986	552	920	16.80	80.90
5/0A		5	240		697	586	1347	1236	552	1170	24.00	105.60
1/1A	1	1	60	5	847	736	347	236	702	170	9.80	41.60
2/1A		2	120		847	736	597	486	702	420	13.40	65.30
3/1A		3	180		847	736	847	736	702	670	18.00	69.70
4/1A		4	240		847	736	1097	986	702	920	23.80	96.80
5/1A		5	300		847	736	1347	1236	702	1170	28.00	128.40
1/2A	2	1	72	6	997	886	347	236	852	170	10.80	48.10
2/2A		2	144		997	886	597	486	852	420	15.60	51.90
3/2A		3	216		997	886	847	736	852	670	21.00	79.20
4/2A		4	288		997	886	1097	986	852	920	26.80	112.60
5/2A		5	360		997	886	1347	1236	852	1170	31.20	150.90
1/3A	3	1	84	7	1147	1036	347	236	1002	170	12.00	54.50
2/3A		2	168		1147	1036	597	486	1002	420	17.60	60.70
3/3A		3	252		1147	1036	847	736	1002	670	23.60	87.50
4/3A		4	336		1147	1036	1097	986	1002	920	30.00	131.30
5/3A		5	420		1147	1036	1347	1236	1002	1170	35.20	171.20
1/4A	4	1	96	8	1297	1186	347	236	1152	170	14.00	60.80
2/4A		2	192		1297	1186	597	486	1152	420	19.20	68.30
3/4A		3	288		1297	1186	847	736	1152	670	26.00	101.50
4/4A		4	384		1297	1186	1097	986	1152	920	32.40	147.40
5/4A		5	480		1297	1186	1347	1236	1152	1170	40.20	190.50
1/5A	5	1	108	9	1447	1336	347	236	1302	170	15.00	67.20
2/5A		2	216		1447	1336	597	486	1302	420	22.40	77.80
3/5A		3	324		1447	1336	847	736	1302	670	29.20	118.10
4/5A		4	432		1447	1336	1097	986	1302	920	35.20	156.00
5/5A		5	540		1447	1336	1347	1236	1302	1170	44.00	205.60

> Dimensions in mm

A wall-mounting cabinets IP43 Interior configuration

Cross section with distribution boards panels and combination sets

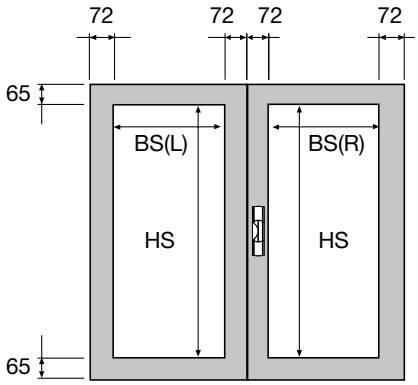


> Dimensions in mm

Quick product references

Overall dimensions

A wall-mounting cabinets IP43 transparent doors

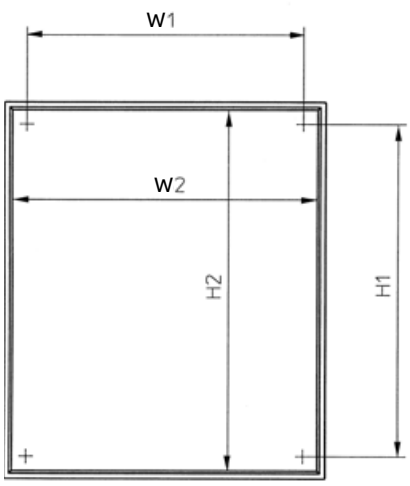


	Cabinet				Door on the left	Door on the right	Window on the left	Window on the right
Type	A Cabinet	OH	PW	GU	H x W	H x W	HW x WW(L)	HW x WW(R)
TTS100	1/00A	00	1	3	-	471.4 x 272	-	341.4 x 128
TTS200	2/00A		2		-	471.4 x 522	-	341.4 x 378
TTS300	3/00A		3		471.4 x 260	471.4 x 510	341.4 x 116	341.4 x 366
TTS400	4/00A		4		471.4 x 510	471.4 x 510	341.4 x 366	341.4 x 366
TTS500	5/00A		5		471.4 x 510	471.4 x 760	341.4 x 366	341.4 x 616
TTS10	1/0A	0	1	4	-	621.4 x 272	-	491.4 x 128
TTS20	2/0A		2		-	621.4 x 522	-	491.4 x 378
TTS30	3/0A		3		621.4 x 260	621.4 x 510	491.4 x 116	491.4 x 366
TTS40	4/0A		4		621.4 x 510	621.4 x 510	491.4 x 366	491.4 x 366
TTS50	5/0A		5		621.4 x 510	621.4 x 760	491.4 x 366	491.4 x 616
TTS11	1/1A	1	1	5	-	771.4 x 272	-	641.4 x 128
TTS21	2/1A		2		-	771.4 x 522	-	641.4 x 378
TTS31	3/1A		3		771.4 x 260	771.4 x 510	641.4 x 116	641.4 x 366
TTS41	4/1A		4		771.4 x 510	771.4 x 510	641.4 x 366	641.4 x 366
TTS51	5/1A		5		771.4 x 510	771.4 x 760	641.4 x 366	641.4 x 616
TTS12	1/2A	2	1	6	-	921.4 x 272	-	791.4 x 128
TTS22	2/2A		2		-	921.4 x 522	-	791.4 x 378
TTS32	3/2A		3		921.4 x 260	921.4 x 510	791.4 x 116	791.4 x 366
TTS42	4/2A		4		921.4 x 510	921.4 x 510	791.4 x 366	791.4 x 366
TTS52	5/2A		5		921.4 x 510	921.4 x 760	791.4 x 366	791.4 x 616
TTS13	1/3A	3	1	7	-	1071.4 x 272	-	941.4 x 128
TTS23	2/3A		2		-	1071.4 x 522	-	941.4 x 378
TTS33	3/3A		3		1071.4 x 260	1071.4 x 510	941.4 x 116	941.4 x 366
TTS43	4/3A		4		1071.4 x 510	1071.4 x 510	941.4 x 366	941.4 x 366
TTS53	5/3A		5		1071.4 x 510	1071.4 x 760	941.4 x 366	941.4 x 616
TTS14	1/4A	4	1	8	-	1221.4 x 272	-	1091.4 x 128
TTS24	2/4A		2		-	1221.4 x 522	-	1091.4 x 378
TTS34	3/4A		3		1221.4 x 260	1221.4 x 510	1091.4 x 116	1091.4 x 366
TTS44	4/4A		4		1221.4 x 510	1221.4 x 510	1091.4 x 366	1091.4 x 366
TTS54	5/4A		5		1221.4 x 510	1221.4 x 760	1091.4 x 366	1091.4 x 616
TTS15	1/5A	5	1	9	-	1371.4 x 272	-	1241.4 x 128
TTS25	2/5A		2		-	1371.4 x 522	-	1241.4 x 378
TTS35	3/5A		3		1371.4 x 260	1371.4 x 510	1241.4 x 116	1241.4 x 366
TTS45	4/5A		4		1371.4 x 510	1371.4 x 510	1241.4 x 366	1241.4 x 366
TTS55	5/5A		5		1371.4 x 510	1371.4 x 760	1241.4 x 366	1241.4 x 616

> Dimensions in mm

*Double-wing doors on cabinets with three or more panel widths

B wall-mounting cabinets IP43



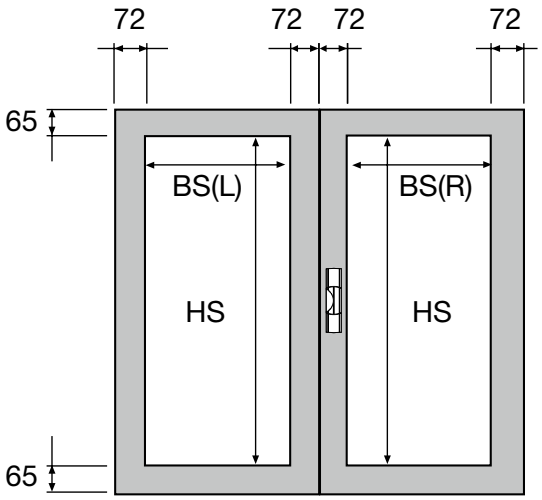
					Ext. dimensions			Int. dimensions		Int. fastening dimensions		Weight	Power loss
Type	**OH**	**PW**	**SU**	**GU**	**H**	**W**	**D**	**H2**	**W2**	**H1**	**W1**	**in kg**	**in watts $\triangle t_{1,0}$ 20K**
1/00B	00	1	36	3	500	300	215	452	252	388	188	7,40	28,80
2/00B		2	72		500	550	215	452	502	388	438	9,60	47,40
3/00B		3	108		500	800	215	452	752	388	688	13,40	67,10
1/0B	0	1	48	4	650	300	215	602	252	538	188	9,00	35,20
2/0B		2	96		650	550	215	602	502	538	438	12,60	56,20
3/0B		3	144		650	800	215	602	752	538	688	16,80	59,80
4/0B		4	192		650	1050	215	602	1002	538	938	18,00	80,90
5/0B		5	240		650	1300	215	602	1252	538	1188	25,20	105,60
1/1B	1	1	60	5	800	300	215	752	252	688	188	10,80	41,60
2/1B		2	120		800	550	215	752	502	688	438	14,60	65,30
3/1B		3	180		800	800	215	752	752	688	688	19,20	69,70
4/1B		4	240		800	1050	215	752	1002	688	938	24,80	96,80
5/1B		5	300		800	1300	215	752	1252	688	1188	29,20	128,40
1/2B	2	1	72	6	950	300	215	902	252	838	188	12,00	48,10
2/2B		2	144		950	550	215	902	502	838	438	16,80	51,90
3/2B		3	216		950	800	215	902	752	838	688	22,20	79,20
4/2B		4	288		950	1050	215	902	1002	838	938	28,00	112,60
5/2B		5	360		950	1300	215	902	1252	838	1188	32,40	150,90
1/3B	3	1	84	7	1100	300	215	1052	252	988	188	13,20	54,50
2/3B		2	168		1100	550	215	1052	502	988	438	18,80	60,70
3/3B		3	252		1100	800	215	1052	752	988	688	24,80	87,50
4/3B		4	336		1100	1050	215	1052	1002	988	938	31,20	131,30
5/3B		5	420		1100	1300	215	1052	1252	988	1188	36,40	171,20
1/4B	4	1	96	8	1250	300	215	1202	252	1138	188	15,00	60,80
2/4B		2	192		1250	550	215	1202	502	1138	438	20,40	68,30
3/4B		3	288		1250	800	215	1202	752	1138	688	27,20	101,50
4/4B		4	384		1250	1050	215	1202	1002	1138	938	33,60	147,40
5/4B		5	480		1250	1300	215	1202	1252	1138	1188	41,40	190,50
1/5B	5	1	108	9	1400	300	215	1352	252	1288	188	16,20	67,20
2/5B		2	216		1400	550	215	1352	502	1288	438	23,60	77,80
3/5B		3	324		1400	800	215	1352	752	1288	688	30,40	118,10
4/5B		4	432		1400	1050	215	1352	1002	1288	938	36,40	156,00
5/5B		5	540		1400	1300	215	1352	1252	1288	1188	45,20	205,60

> Dimensions in mm

Quick product references

Overall dimensions

B wall-mounting cabinets IP43



Type	B wall-mounting cabinet	OH	PW	GU	Door on the left-hand side* H x W	Door on the right-hand side* H x W	Window on the left-hand side HW x WW(L)	Window on the right-hand side HW x WW(R)
TTS100	1/00B	00	1	3	-	471.4 x 272	-	341.4 x 128
TTS200	2/00B		2		-	471.4 x 522	-	341.4 x 378
TTS300	3/00B		3		471.4 x 260	471.4 x 510	341.4 x 116	341.4 x 366
TTS400	-		4		471.4 x 510	471.4 x 510	341.4 x 366	341.4 x 366
TTS500	-		5		471.4 x 510	471.4 x 760	341.4 x 366	341.4 x 616
TTS10	1/0B	0	1	4	-	621.4 x 272	-	491.4 x 128
TTS20	2/0B		2		-	621.4 x 522	-	491.4 x 378
TTS30	3/0B		3		621.4 x 260	621.4 x 510	491.4 x 116	491.4 x 366
TTS40	4/0B		4		621.4 x 510	621.4 x 510	491.4 x 366	491.4 x 366
TTS50	5/0B		5		621.4 x 510	621.4 x 760	491.4 x 366	491.4 x 616
TTS11	1/1B	1	1	5	-	771.4 x 272	-	641.4 x 128
TTS21	2/1B		2		-	771.4 x 522	-	641.4 x 378
TTS31	3/1B		3		771.4 x 260	771.4 x 510	641.4 x 116	641.4 x 366
TTS41	4/1B		4		771.4 x 510	771.4 x 510	641.4 x 366	641.4 x 366
TTS51	5/1B		5		771.4 x 510	771.4 x 760	641.4 x 366	641.4 x 616
TTS12	1/2B	2	1	6	-	921.4 x 272	-	791.4 x 128
TTS22	2/2B		2		-	921.4 x 522	-	791.4 x 378
TTS32	3/2B		3		921.4 x 260	921.4 x 510	791.4 x 116	791.4 x 366
TTS42	4/2B		4		921.4 x 510	921.4 x 510	791.4 x 366	791.4 x 366
TTS52	5/2B		5		921.4 x 510	921.4 x 760	791.4 x 366	791.4 x 616
TTS13	1/3B	3	1	7	-	1071.4 x 272	-	941.4 x 128
TTS23	2/3B		2		-	1071.4 x 522	-	941.4 x 378
TTS33	3/3B		3		1071.4 x 260	1071.4 x 510	941.4 x 116	941.4 x 366
TTS43	4/3B		4		1071.4 x 510	1071.4 x 510	941.4 x 366	941.4 x 366
TTS53	5/3B		5		1071.4 x 510	1071.4 x 760	941.4 x 366	941.4 x 616
TTS14	1/4B	4	1	8	-	1221.4 x 272	-	1091.4 x 128
TTS24	2/4B		2		-	1221.4 x 522	-	1091.4 x 378
TTS34	3/4B		3		1221.4 x 260	1221.4 x 510	1091.4 x 116	1091.4 x 366
TTS44	4/4B		4		1221.4 x 510	1221.4 x 510	1091.4 x 366	1091.4 x 366
TTS54	5/4B		5		1221.4 x 510	1221.4 x 760	1091.4 x 366	1091.4 x 616
TTS15	1/5B	5	1	9	-	1371.4 x 272	-	1241.4 x 128
TTS25	2/5B		2		-	1371.4 x 522	-	1241.4 x 378
TTS35	3/5B		3		1371.4 x 260	1371.4 x 510	1241.4 x 116	1241.4 x 366
TTS45	4/5B		4		1371.4 x 510	1371.4 x 510	1241.4 x 366	1241.4 x 366
TTS55	5/5B		5		1371.4 x 510	1371.4 x 760	1241.4 x 366	1241.4 x 616

> Dimensions in mm

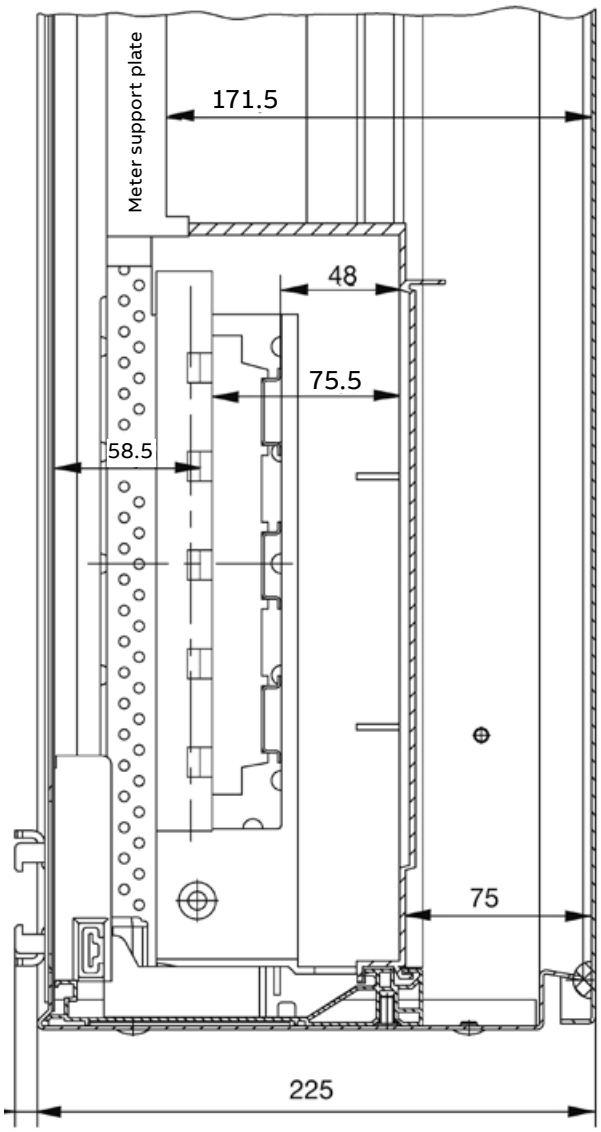
*Double-wing doors on cabinets with three or more panel widths

H and HS floor-standing cabinets IP43

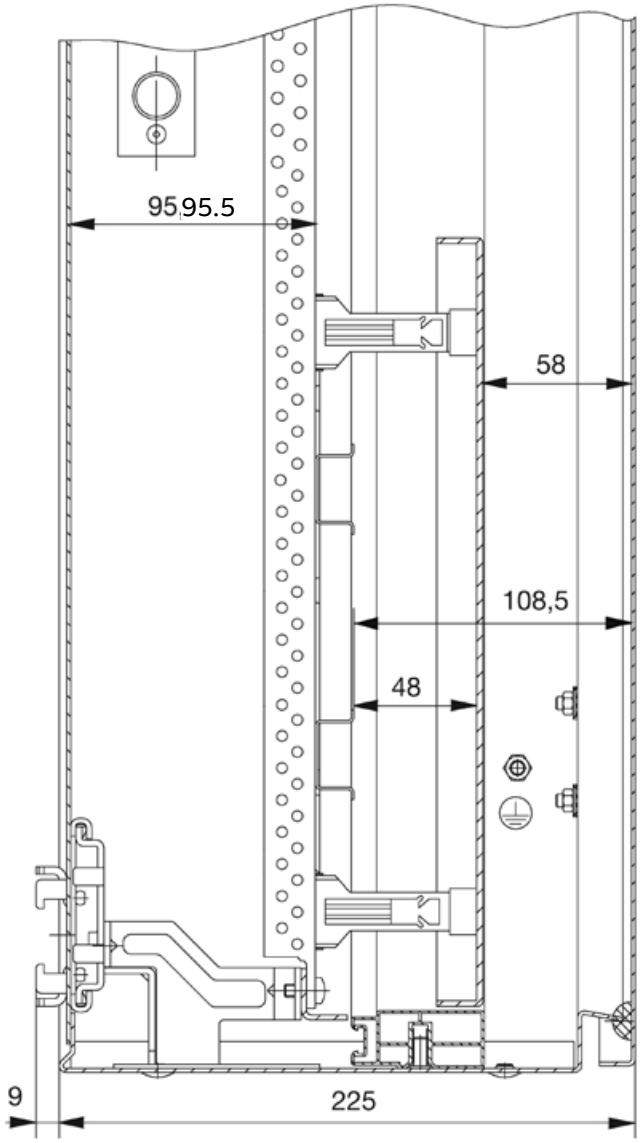
	Type	Weight (kg) with plinth	Power loss (W) $\triangle t_{1,0}$ 20K	Ext. dimensions with plinth H x W x D	Int. dimensions H1 x W1
HS floor-standing cabinets With mounted EDF installation set for installing distribution board panels, combination sets and modules on the EDF mounting frame, using the ZB15 assembly set, it is also possible to incorporate meter panels.	1/8HS	30.33	67,40	1900 x 300 x 225	1802 x 252
	2/8HS	44.62	119,20	1900 x 550 x 225	1802 x 502
	3/8HS	57.20	170,90	1900 x 800 x 225	1802 x 752
	4/8HS	73.41	206,80	1900 x 1050 x 225	1802 x 1002
H floor-standing cabinets With mounted EDF installation set for installing distribution board panels, combination sets and modules on the EDF mounting frame.	1/8H	29.63	67,40	1900 x 300 x 225	1802 x 252
	2/8H	43.88	119,20	1900 x 550 x 225	1802 x 502
	3/8H	56.06	170,90	1900 x 800 x 225	1802 x 752
	4/8H	70.83	206,80	1900 x 1050 x 225	1802 x 1002

> Dimensions in mm

Cross section, HS cabinet with meter panel



Cross section H-cabinet with distribution board panels/modules on the EDF mounting frame

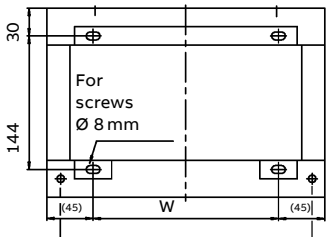


Quick product references

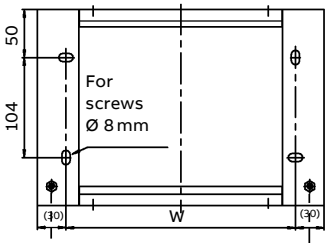
Overall dimensions

H and HS floor-standing cabinets IP43 Plinth dimensions

50 mm plinth



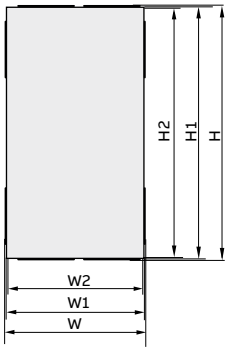
150 mm plinth



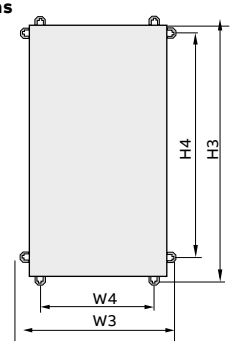
	Type	Fixing the plinth on the cabinet A in mm	Fixing the plinth on the floor B in mm
Hole spacing for fixing the plinth on the floor Plinth, height 50 mm	GSR1	270 mm	210 mm
	GSR2	520 mm	460 mm
	GSR3	770 mm	710 mm
	GSR4	1020 mm	960 mm
Hole spacing for fixing the plinth on the floor Plinth, height 150 mm	GRG1	270 mm	240 mm
	GRG2	520 mm	490 mm
	GRG3	770 mm	740 mm
	GRG4	1020 mm	990 mm

TwinLine-G, cabinet depth 225 mm,

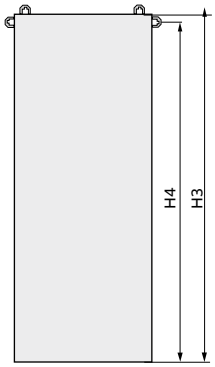
Front view
Wall-mounting and floor-standing cabinet
External/internal dimensions



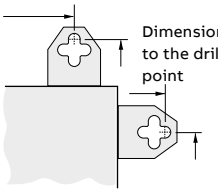
Front view
Wall-mounting cabinet
Wall fastening dimensions



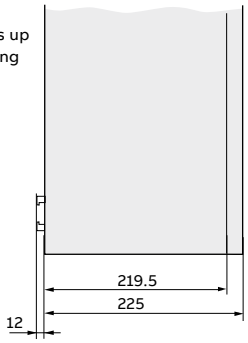
Front view
Floor-standing cabinet
Wall fastening dimensions



Front view
External fastening
Detail



Side view
With/without door



Height		Width	Type	External dimensions in mm		Internal dimensions in mm		External dimensions with flange knockout in mm		Wall fastening dimensions in mm			
GU	**OH**	**PW**		**H1**	**W1**	**H2**	**W2**	**H**	**W**	**H3**	**W3**	**H4**	**W4**
TwinLine-G wall-mounting cabinets ⏚ ⧈													
4	0	1	TG104	650	300	602	252	654	304	693.5	328	542	192
		2	TG204	650	550	602	502	654	554	693.5	578	542	442
		3	TG304	650	800	602	752	654	804	693.5	828	542	692
		4	TG404	650	1050	602	1002	654	1054	693.5	1078	542	942
		5	TG504	650	1300	602	1252	654	1304	693.5	1328	542	1192
5	1	1	TG105	800	300	752	252	804	304	843.5	328	692	192
		2	TG205	800	550	752	502	804	554	843.5	578	692	442
		3	TG305	800	800	752	752	804	804	843.5	828	692	692
		4	TG405	800	1050	752	1002	804	1054	843.5	1078	692	942
		5	TG505	800	1300	752	1252	804	1304	843.5	1328	692	1192
6	2	1	TG106	950	300	902	252	954	304	993.5	328	842	192
		2	TG206	950	550	902	502	954	554	993.5	578	842	442
		3	TG306	950	800	902	752	954	804	993.5	828	842	692
		4	TG406	950	1050	902	1002	954	1054	993.5	1078	842	942
		5	TG506	950	1300	902	1252	954	1304	993.5	1328	842	1192
7	3	1	TG107	1100	300	1052	252	1104	304	1143.5	328	992	192
		2	TG207	1100	550	1052	502	1104	554	1143.5	578	992	442
		3	TG307	1100	800	1052	752	1104	804	1143.5	828	992	692
		4	TG407	1100	1050	1052	1002	1104	1054	1143.5	1078	992	942
		5	TG507	1100	1300	1052	1252	1104	1304	1143.5	1328	992	1192
8	4	1	TG108	1250	300	1202	252	1254	304	1293.5	328	1142	192
		2	TG208	1250	550	1202	502	1254	554	1293.5	578	1142	442
		3	TG308	1250	800	1202	752	1254	804	1293.5	828	1142	692
		4	TG408	1250	1050	1202	1002	1254	1054	1293.5	1078	1142	942
		5	TG508	1250	1300	1202	1252	1254	1304	1293.5	1328	1142	1192
9	5	1	TG109	1400	300	1352	252	1404	304	1443.5	328	1292	192
		2	TG209	1400	550	1352	502	1404	554	1443.5	578	1292	442
		3	TG309	1400	800	1352	752	1404	804	1443.5	828	1292	692
		4	TG409	1400	1050	1352	1002	1404	1054	1443.5	1078	1292	942
		5	TG509	1400	1300	1352	1252	1404	1304	1443.5	1328	1292	1192
TwinLine-G floor-standing cabinets ⏚ ⧈													
12	8	1	TG112	1850	300	1802	252	1854	304	1872	328	1796	192
		2	TG212	1850	550	1802	502	1854	554	1872	578	1796	442
		3	TG312	1850	800	1802	752	1854	804	1872	828	1796	692
		4	TG412	1850	1050	1802	1002	1854	1054	1872	1078	1796	942
		5	TG512	1850	1300	1802	1252	1854	1304	1872	1328	1796	1192

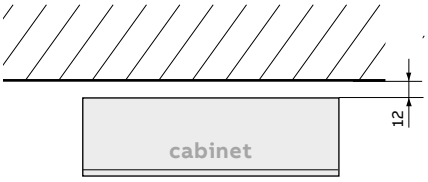
> Dimensions in mm

Quick product references

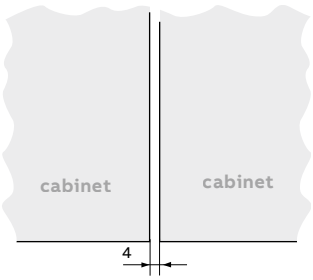
Overall dimensions

TwinLine-G, cabinet depth 225 mm, .,

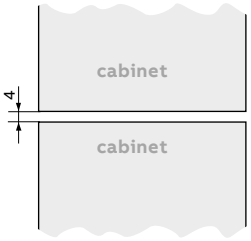
Type of installation
Cabinet to the wall



Type of installation
Cabinet combination in series



Type of installation
Cabinet combination on top of each other

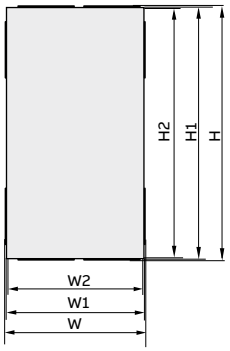


Height		Width		⏚/⧈ Power loss in Watt*	⏚ Cabinet weight in kg		⧈ Cabinet weight in kg		max. installation weight
GU	OH	PW	Type	$\triangle t_{1.0}$ 20K	With door	Without door	With door	Without door	in kg
TwinLine-G wall-mounting cabinets ⏚⧈									
4	0	1	TG104	35.80	11.40	7.43	12.89	8.92	15.00
		2	TG204	57.00	16.17	9.95	17.80	11.59	30.00
		3	TG304	61.00	21.02	12.47	22.80	14.25	45.00
		4	TG404	82.30	28.03	15.54	29.95	17.46	60.00
		5	TG504	107.80	32.86	18.07	34.92	20.13	75.00
5	1	1	TG105	42.30	13.17	8.40	14.86	10.10	20.50
		2	TG205	66.10	18.72	11.22	20.60	13.11	41.00
		3	TG305	71.00	24.29	14.03	26.37	16.11	61.50
		4	TG405	99.00	32.45	17.40	34.71	19.67	82.50
		5	TG505	131.20	38.03	20.22	40.49	22.68	103.00
6	2	1	TG106	48.80	14.89	9.37	16.78	11.26	26.00
		2	TG206	52.60	21.23	12.43	23.36	14.61	52.50
		3	TG306	80.90	27.55	15.59	29.92	17.37	78.50
		4	TG406	115.10	36.84	19.25	39.46	21.86	105.00
		5	TG506	153.70	43.18	22.36	46.03	25.09	131.00
7	3	1	TG107	55.40	17.14	10.72	19.23	12.81	31.50
		2	TG207	61.40	24.36	14.25	26.74	16.64	63.50
		3	TG307	93.50	31.56	17.79	34.23	20.46	95.50
		4	TG407	133.70	42.23	21.87	45.19	24.83	127.50
		5	TG507	174.30	49.44	25.41	52.69	28.66	159.00
8	4	1	TG108	61.80	18.90	11.68	21.20	13.98	37.50
		2	TG208	69.30	26.87	15.51	29.50	18.15	75.00
		3	TG308	102.90	34.82	19.34	37.80	22.31	112.50
		4	TG408	150.30	46.64	23.72	50.01	27.10	150.00
		5	TG508	193.30	54.59	27.55	58.31	31.27	187.50
9	5	1	TG109	68.20	20.66	12.65	23.15	15.14	43.00
		2	TG209	79.10	29.38	16.77	32.23	19.65	86.00
		3	TG309	119.30	38.08	20.89	41.35	24.16	129.00
		4	TG409	157.50	51.04	25.57	54.77	29.31	172.50
		5	TG509	208.80	59.74	29.69	63.87	33.82	215.50
TwinLine-G floor-standing cabinets ⏚⧈									
		1	TG112	64.00	26.17	15.78	28.89	18.50	60.00
		2	TG212	113.00	40.22	23.81	43.73	27.31	120.00
12	8	3	TG312	162.60	51.87	29.54	56.17	33.84	180.00
		4	TG412	202.10	69.40	36.27	74.59	41.46	240.00
		5	TG512	230.80	80.19	41.11	86.17	47.09	300.00

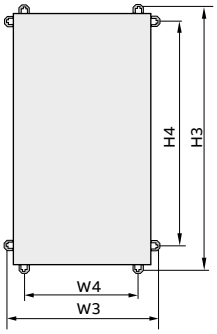
* General remarks on the determination of the power loss: Values according to DIN EN 61439-1 section 10.10.4.2.2; ambient temperature 35°C, internal temperature 55°C, the allowed device temperature must not be exceeded, levelling of the place of installation ≤ 2000 m altitude; internal form of separation = 1; side walls not covered

TwinLine-L, cabinet depth 275 mm .,

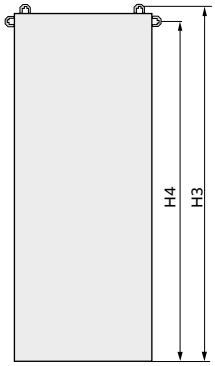
Front view
Wall-mounting and floor-standing cabinet
External/internal dimensions



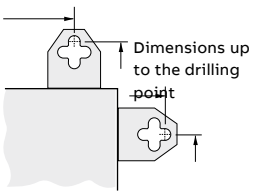
Front view
Wall-mounting cabinet
Wall fastening dimensions



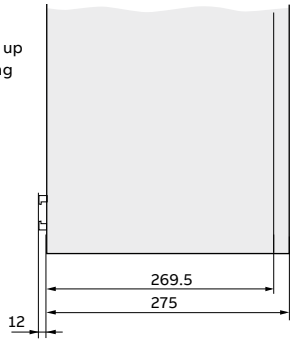
Front view
Floor-standing cabinet
Wall fastening dimensions



Front view
External fastening
Detail



Side view
With/without door



Height		Width		External dimensions in mm		Internal dimensions in mm		External dimensions with flange knockout in mm		Wall fastening dimensions in mm			
GU	**OH**	**PW**	**Type**	**H1**	**W1**	**H2**	**W2**	**H**	**W**	**H3**	**W3**	**H4**	**W4**
TwinLine-L wall-mounting cabinets ⏚▣													
4	0	1	TL104	650	300	602	252	654	304	693.5	328	542	192
		2	TL204	650	550	602	502	654	554	693.5	578	542	442
		3	TL304	650	800	602	752	654	804	693.5	828	542	692
		4	TL404	650	1050	602	1002	654	1054	693.5	1078	542	942
		5	TL504	650	1300	602	1252	654	1304	693.5	1328	542	1192
5	1	1	TL105	800	300	752	252	804	304	843.5	328	692	192
		2	TL205	800	550	752	502	804	554	843.5	578	692	442
		3	TL305	800	800	752	752	804	804	843.5	828	692	692
		4	TL405	800	1050	752	1002	804	1054	843.5	1078	692	942
		5	TL505	800	1300	752	1252	804	1304	843.5	1328	692	1192
6	2	1	TL106	950	300	902	252	954	304	993.5	328	842	192
		2	TL206	950	550	902	502	954	554	993.5	578	842	442
		3	TL306	950	800	902	752	954	804	993.5	828	842	692
		4	TL406	950	1050	902	1002	954	1054	993.5	1078	842	942
		5	TL506	950	1300	902	1252	954	1304	993.5	1328	842	1192
7	3	1	TL107	1100	300	1052	252	1104	304	1143.5	328	992	192
		2	TL207	1100	550	1052	502	1104	554	1143.5	578	992	442
		3	TL307	1100	800	1052	752	1104	804	1143.5	828	992	692
		4	TL407	1100	1050	1052	1002	1104	1054	1143.5	1078	992	942
		5	TL507	1100	1300	1052	1252	1104	1304	1143.5	1328	992	1192
8	4	1	TL108	1250	300	1202	252	1254	304	1293.5	328	1142	192
		2	TL208	1250	550	1202	502	1254	554	1293.5	578	1142	442
		3	TL308	1250	800	1202	752	1254	804	1293.5	828	1142	692
		4	TL408	1250	1050	1202	1002	1254	1054	1293.5	1078	1142	942
		5	TL508	1250	1300	1202	1252	1254	1304	1293.5	1328	1142	1192
9	5	1	TL109	1400	300	1352	252	1404	304	1443.5	328	1292	192
		2	TL209	1400	550	1352	502	1404	554	1443.5	578	1292	442
		3	TL309	1400	800	1352	752	1404	804	1443.5	828	1292	692
		4	TL409	1400	1050	1352	1002	1404	1054	1443.5	1078	1292	942
		5	TL509	1400	1300	1352	1252	1404	1304	1443.5	1328	1292	1192
TwinLine-L floor-standing cabinets ⏚▣													
12	8	1	TL112	1850	300	1802	252	1854	304	1872	328	1796	192
		2	TL212	1850	550	1802	502	1854	554	1872	578	1796	442
		3	TL312	1850	800	1802	752	1854	804	1872	828	1796	692
		4	TL412	1850	1050	1802	1002	1854	1054	1872	1078	1796	942
		5	TL512	1850	1300	1802	1252	1854	1304	1872	1328	1796	1192

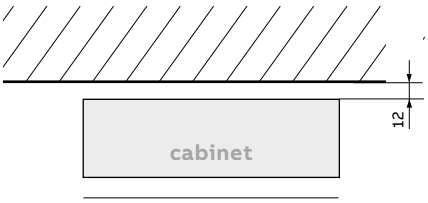
> Dimensions in mm

Quick product references

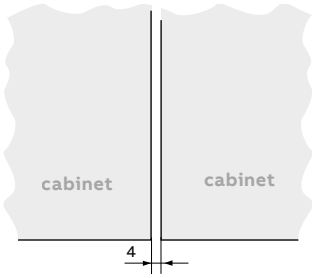
Overall dimensions

TwinLine-L, cabinet depth 275 mm .,

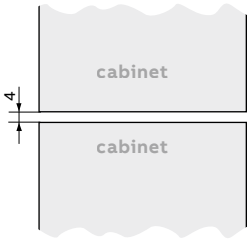
Type of installation
Cabinet to the wall



Type of installation
Cabinet combination
in series



Type of installation
Cabinet combination
on top of each other

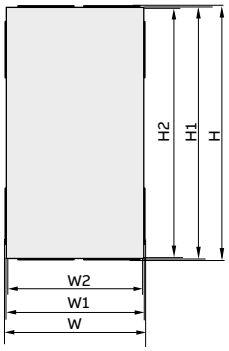


Height		Width	Type	⏚/⧈ Power loss in Watt* $\triangle t_{1.0}$ 20K	⏚ Cabinet weight in kg		⧈ Cabinet weight in kg		max. installation weight
GU	OH	PW			With door	Without door	With door	Without door	in kg
TwinLine-L wall-mounting cabinets ⏚⧈									
4	0	1	TL104	38.80	12.25	8.28	13.80	9.83	15.00
		2	TL204	60.80	17.23	10.97	18.94	12.72	30.00
		3	TL304	67.10	22.30	13.75	24.16	15.61	45.00
		4	TL404	89.70	29.54	17.06	31.54	19.08	60.00
		5	TL504	116.80	34.59	19.79	36.76	21.97	75.00
5	1	1	TL105	45.80	14.13	9.37	15.89	11.13	20.50
		2	TL205	70.20	19.90	12.40	21.86	14.36	41.00
		3	TL305	78.00	25.68	15.43	27.86	17.60	61.50
		4	TL405	108.90	34.08	19.03	36.45	21.38	82.50
		5	TL505	145.10	39.87	22.06	42.46	24.64	103.00
6	2	1	TL106	52.80	15.97	10.45	17.94	12.35	26.00
		2	TL206	59.90	22.53	13.78	24.75	16.00	52.50
		3	TL306	89.80	29.06	17.10	31.54	19.58	78.50
		4	TL406	128.10	38.59	21.00	41.32	23.73	105.00
		5	TL506	168.00	45.14	24.32	48.09	27.28	131.00
7	3	1	TL107	59.80	18.34	11.89	20.51	14.09	31.50
		2	TL207	65.20	25.77	15.67	28.25	18.15	63.50
		3	TL307	102.80	33.19	19.41	35.97	22.20	95.50
		4	TL407	145.70	44.10	23.74	47.19	27.14	127.50
		5	TL507	189.20	51.51	27.48	54.91	30.88	159.00
8	4	1	TL108	66.70	20.22	13.00	22.61	15.39	37.50
		2	TL208	74.40	28.40	17.04	31.14	19.78	75.00
		3	TL308	117.80	36.57	21.09	39.66	24.18	112.50
		4	TL408	163.70	48.62	25.70	52.14	29.22	150.00
		5	TL508	207.70	56.79	29.75	60.65	33.61	187.50
9	5	1	TL109	52.20	22.39	14.09	24.69	16.68	43.00
		2	TL209	86.00	31.03	18.42	34.03	21.42	86.00
		3	TL309	126.00	39.95	22.76	43.35	26.16	129.00
		4	TL409	179.10	53.14	27.68	57.02	31.55	172.50
		5	TL509	222.10	62.05	32.01	66.34	36.29	215.50
TwinLine-L floor-standing cabinets ⏚⧈									
12	8	1	TL112	69.60	27.96	17.57	30.84	20.45	60.00
		2	TL212	120.90	42.23	25.81	45.91	29.49	120.00
		3	TL312	171.90	54.09	31.76	58.58	36.24	180.00
		4	TL412	207.00	71.86	38.72	77.25	44.12	240.00
		5	TL512	250.30	83.46	44.37	89.66	50.57	300.00

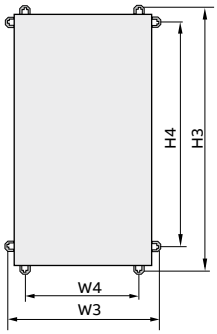
* General remarks on the determination of the power loss: Values according to DIN EN 61439-1, section 10.10.4.2.2; ambient temperature 35°C, internal temperature 55°C, the allowed device temperature must not be exceeded, levelling of the place of installation ≤ 2000 m altitude; internal form of separation = 1; side walls not covered

TwinLine-W, cabinet depth 350 mm .,

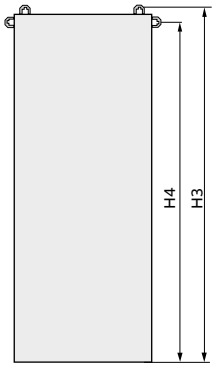
Front view
Wall-mounting and floor-standing cabinet
External/internal dimensions



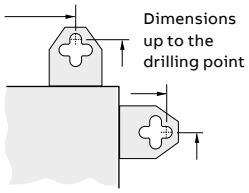
Front view
Wall-mounting cabinet
Wall fastening dimensions



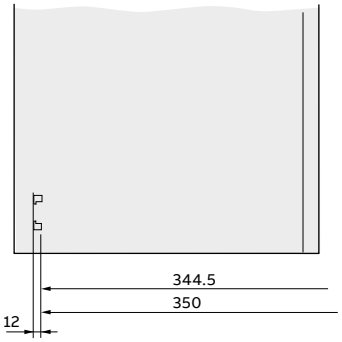
Front view
Floor-standing cabinet
Wall fastening dimensions



Front view
External fastening
Detail



Side view
With/without door



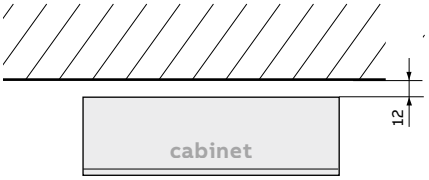
Height		Width		External dimensions in mm		Internal dimensions in mm		External dimensions with flange knockout in mm		Wall fastening dimensions in mm			
GU	**OH**	**PW**	**Type**	**H1**	**W1**	**H2**	**W2**	**H**	**W**	**H3**	**W3**	**H4**	**W4**
TwinLine-W wall-mounting cabinets ⏚▣													
4	0	1	TW104	650	300	602	252	654	304	693.5	328	542	192
		2	TW204	650	550	602	502	654	554	693.5	578	542	442
		3	TW304	650	800	602	752	654	804	693.5	828	542	692
		4	TW404	650	1050	602	1002	654	1054	693.5	1078	542	942
		5	TW504	650	1300	602	1252	654	1304	693.5	1328	542	1192
5	1	1	TW105	800	300	752	252	804	304	843.5	328	692	192
		2	TW205	800	550	752	502	804	554	843.5	578	692	442
		3	TW305	800	800	752	752	804	804	843.5	828	692	692
		4	TW405	800	1050	752	1002	804	1054	843.5	1078	692	942
		5	TW505	800	1300	752	1252	804	1304	843.5	1328	692	1192
6	2	1	TW106	950	300	902	252	954	304	993.5	328	842	192
		2	TW206	950	550	902	502	954	554	993.5	578	842	442
		3	TW306	950	800	902	752	954	804	993.5	828	842	692
		4	TW406	950	1050	902	1002	954	1054	993.5	1078	842	942
		5	TW506	950	1300	902	1252	954	1304	993.5	1328	842	1192
7	3	1	TW107	1100	300	1052	252	1104	304	1143.5	328	992	192
		2	TW207	1100	550	1052	502	1104	554	1143.5	578	992	442
		3	TW307	1100	800	1052	752	1104	804	1143.5	828	992	692
		4	TW407	1100	1050	1052	1002	1104	1054	1143.5	1078	992	942
		5	TW507	1100	1300	1052	1252	1104	1304	1143.5	1328	992	1192
8	4	1	TW108	1250	300	1202	252	1254	304	1293.5	328	1142	192
		2	TW208	1250	550	1202	502	1254	554	1293.5	578	1142	442
		3	TW308	1250	800	1202	752	1254	804	1293.5	828	1142	692
		4	TW408	1250	1050	1202	1002	1254	1054	1293.5	1078	1142	942
		5	TW508	1250	1300	1202	1252	1254	1304	1293.5	1328	1142	1192
9	5	1	TW109	1400	300	1352	252	1404	304	1443.5	328	1292	192
		2	TW209	1400	550	1352	502	1404	554	1443.5	578	1292	442
		3	TW309	1400	800	1352	752	1404	804	1443.5	828	1292	692
		4	TW409	1400	1050	1352	1002	1404	1054	1443.5	1078	1292	942
		5	TW509	1400	1300	1352	1252	1404	1304	1443.5	1328	1292	1192
TwinLine-W floor-standing cabinets ⏚▣													
12	8	1	TW112	1850	300	1802	252	1854	304	1872	328	1796	192
		2	TW212	1850	550	1802	502	1854	554	1872	578	1796	442
		3	TW312	1850	800	1802	752	1854	804	1872	828	1796	692
		4	TW412	1850	1050	1802	1002	1854	1054	1872	1078	1796	942
		5	TW512	1850	1300	1802	1252	1854	1304	1872	1328	1796	1192
		6	TW612	1850	1550	1802	1502	1854	1554	1872	1578	1796	1442

Quick product references

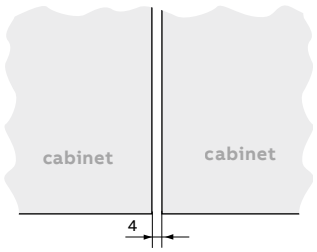
Overall dimensions

TwinLine-W, cabinet depth 350 mm

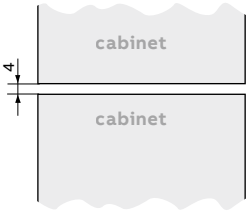
Type of installation
Cabinet to the wall



Type of installation
Cabinet combination in series



Type of installation
Cabinet combination on top of each other

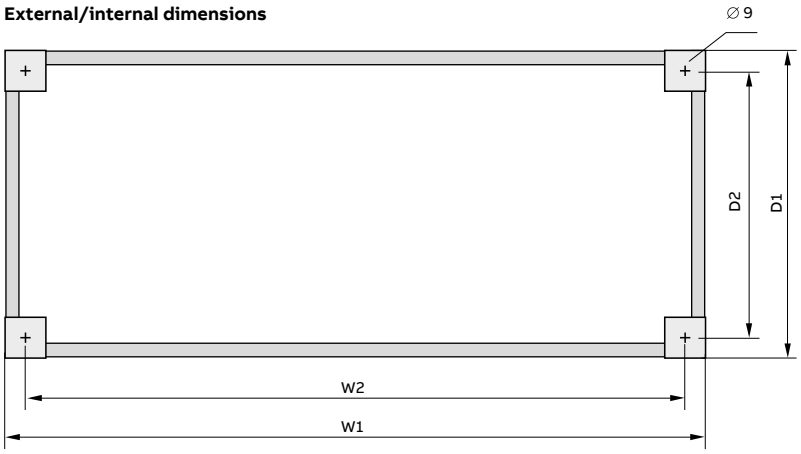


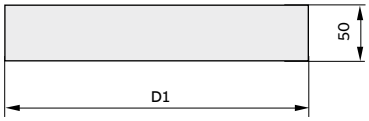
Height		Width		⏚/⧈ Power loss in Watt*	⏚ Cabinet weight in kg		⧈ Cabinet weight in kg		max. installation weight
GU	OH	PW	Type	$\triangle t_{1.0}$ 20K	With door	Without door	With door	Without door	in kg
TwinLine-W wall-mounting cabinets ⏚⧈									
4	0	1	TW104	43.00	13.50	9.47	15.13	11.16	15.00
		2	TW204	65.90	18.79	12.58	20.60	14.38	30.00
		3	TW304	75.90	24.17	15.62	26.16	17.61	45.00
		4	TW404	100.10	31.76	19.27	33.92	21.44	60.00
		5	TW504	129.30	37.12	22.32	39.46	24.66	75.00
5	1	1	TW105	50.50	15.56	10.80	17.41	12.65	20.50
		2	TW205	59.80	21.64	14.14	23.72	16.21	41.00
		3	TW305	87.70	27.74	17.48	30.04	19.78	61.50
		4	TW405	121.30	36.47	21.42	39.00	23.95	82.50
		5	TW505	158.90	42.58	24.77	45.33	27.52	103.00
6	2	1	TW106	58.20	17.58	12.06	19.65	14.13	26.00
		2	TW206	68.20	24.44	15.69	26.79	18.04	52.50
		3	TW306	102.80	31.29	19.33	33.91	21.95	78.50
		4	TW406	144.80	41.16	23.57	44.06	26.46	105.00
		5	TW506	185.80	48.02	27.20	51.19	30.07	131.00
7	3	1	TW107	65.80	20.12	13.70	22.41	15.99	31.50
		2	TW207	75.70	27.87	17.76	30.48	20.38	63.50
		3	TW307	116.50	35.59	21.82	38.53	24.76	95.50
		4	TW407	163.60	46.84	26.48	50.11	29.75	127.50
		5	TW507	209.30	54.58	30.55	58.16	34.13	159.00
8	4	1	TW108	52.00	22.18	14.96	24.81	17.48	37.50
		2	TW208	82.70	30.67	19.32	33.56	22.20	75.00
		3	TW308	132.60	39.15	23.67	42.42	26.93	112.50
		4	TW408	180.80	51.55	28.63	55.25	32.33	150.00
		5	TW508	227.50	60.03	32.98	64.10	37.06	187.50
9	5	1	TW109	58.60	24.23	16.22	26.96	18.95	43.00
		2	TW209	93.90	33.48	20.87	36.63	24.03	86.00
		3	TW309	146.40	42.71	25.52	46.29	29.10	129.00
		4	TW409	197.10	56.24	30.77	60.32	34.85	172.50
		5	TW509	238.20	65.47	35.42	69.97	39.93	215.50
TwinLine-W floor-standing cabinets ⏚⧈									
12	8	1	TW112	78.90	30.62	20.24	33.72	23.33	60.00
		2	TW212	131.70	45.10	28.69	49.02	32.60	120.00
		3	TW312	181.50	57.38	35.05	62.12	39.79	180.00
		4	TW412	226.00	75.29	42.15	80.95	47.82	240.00
		5	TW512	269.40	87.20	48.12	93.70	54.61	300.00
		6	TW612	354.50	99.02	53.98	106.34	61.30	360.00

* General remarks on the determination of the power loss: Values according to DIN EN 61439-1, section 10.10.4.2.2; ambient temperature 35°C, internal temperature 55°C, the allowed device temperature must not be exceeded, levelling of the place of installation ≤ 2000 m altitude; internal form of separation = 1; side walls not covered

TwinLine plinth, height 50 mm

External/internal dimensions





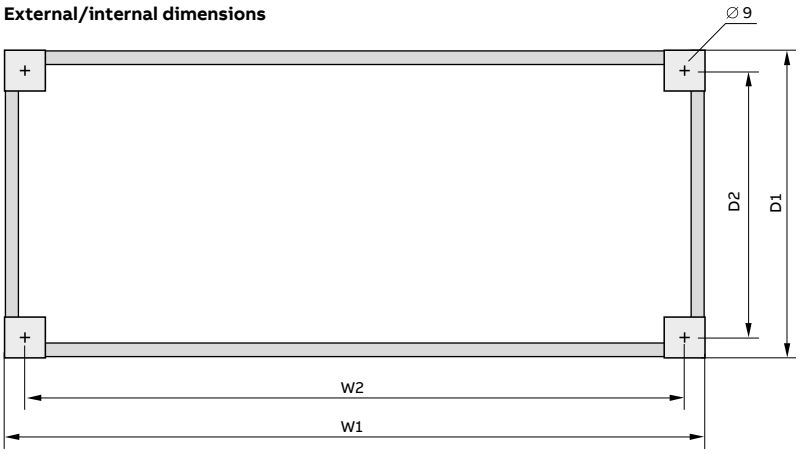
Height	Depth	Width		External dimensions Width x depth in mm		Internal dimensions Width x depth in mm		Weight
mm	mm	PW	Type	W1	D1	W2	D2	in kg
TwinLine-G, plinth 50 mm								
50	225	1	TZG105	300	203.5	270	173.5	1.37
		2	TZG205	550	203.5	520	173.5	1.91
		3	TZG305	800	203.5	770	173.5	3.14
		4	TZG405	1050	203.5	1020	173.5	2.93
		5	TZG505	1300	203.5	1270	173.5	3.44
TwinLine-L, plinth 50 mm								
50	275	1	TZL105	300	253.5	270	223.5	1.49
		2	TZL205	550	253.5	520	223.5	2.03
		3	TZL305	800	253.5	770	223.5	2.54
		4	TZL405	1050	253.5	1020	223.5	3.34
		5	TZL505	1300	253.5	1270	223.5	5.78
TwinLine-W, plinth 50 mm								
50	350	1	TZW105	300	328.5	270	298.5	1.67
		2	TZW205	550	328.5	520	298.5	2.21
		3	TZW305	800	328.5	770	298.5	2.72
		4	TZW405	1050	328.5	1020	298.5	5.03
		5	TZW505	1300	328.5	1270	298.5	5.97
		6	TZW605	1550	328.5	1520	298.5	6.90

Quick product references

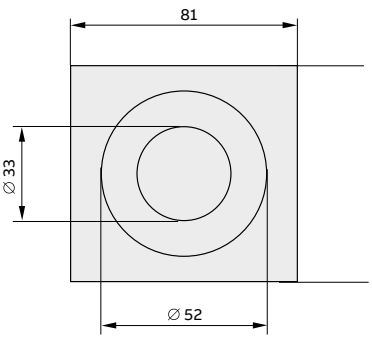
Overall dimensions

TwinLine plinth, height 100 mm

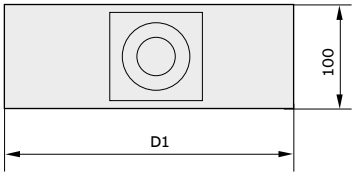
External/internal dimensions



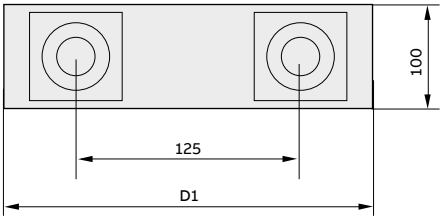
Detail view for side knockout



View side knockout TwinLine-G and -L



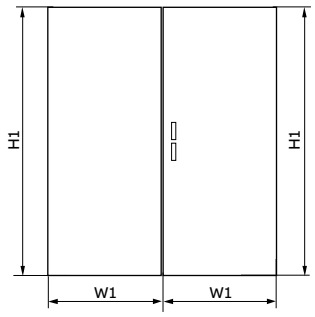
View side knockout TwinLine-W



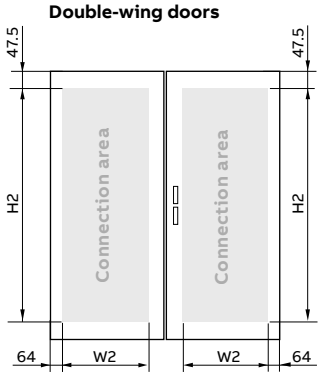
Height	Depth	Width		External dimensions Width x depth in mm		Internal dimensions Width x depth in mm		Weight
mm	mm	PW	Type	W1	D1	W2	D2	in kg
TwinLine-G, plinth 100 mm								
100	225	1	TZG110	300	203.5	270	173.5	2.22
		2	TZG210	550	203.5	520	173.5	3.06
		3	TZG310	800	203.5	770	173.5	3.87
		4	TZG410	1050	203.5	1020	173.5	4.67
		5	TZG510	1300	204.5	1270	173.5	5.47
TwinLine-L, plinth 100 mm								
100	275	1	TZL110	300	253.5	270	223.5	2.41
		2	TZL210	550	253.5	520	223.5	3.24
		3	TZL310	800	253.5	770	223.5	4.05
		4	TZL410	1050	253.5	1020	223.5	6.71
		5	TZL510	1300	254.5	1270	223.5	7.95
TwinLine-W, plinth 100 mm								
100	350	1	TZW110	300	328.5	270	298.5	2.68
		2	TZW210	550	328.5	520	298.5	3.52
		3	TZW310	800	328.5	770	298.5	4.32
		4	TZW410	1050	328.5	1020	298.5	6.98
		5	TZW510	1300	329.5	1270	298.5	8.22
		6	TZW610	1550	329.5	1520	298.5	9.45

TwinLine doors, height 4 up to 7 GU

External dimensions
For all cabinets of a width of 4 panels and more
Double-wing doors



Usable connection area
For all cabinets of a width of 4 panels and more
Double-wing doors



Height		Width			External dimensions Height x width in mm		External dimensions Height x width in mm		Weight
GU	**OH**	**PW**	**Type**	**Remark**	**H1**	**W1**	**H2**	**W2**	**in kg**
TwinLine wall-mounting cabinets, doors									
4	0	1	TZB104		643	289	548	123	5.46
		2	TZB204		643	539	548	373	7.75
		3	TZB304		643	789	548	623	10.11
		4*[1]	TZB204L	Door left	643	526 *[2]	548	373	7.77
			TZB204R	Door right	643	539	548	373	7.78
		5*[1]	TZB304L	Door left	643	776 *[2]	548	623	10.11
			TZB204R	Door right	643	539	548	373	7.78
5	1	1	TZB105		793	289	698	123	6.27
		2	TZB205		793	539	698	373	9.05
		3	TZB305		793	789	698	623	11.85
		4*[1]	TZB205L	Door left	793	526 *[2]	698	373	9.10
			TZB205R	Door right	793	539	698	373	9.05
		5*[1]	TZB305L	Door left	793	776 *[2]	698	623	11.89
			TZB205R	Door right	793	539	698	373	9.05
6	2	1	TZB106		943	289	848	123	7.03
		2	TZB206		943	539	848	373	10.32
		3	TZB306		943	789	848	623	13.58
		4*[1]	TZB206L	Door left	943	526 *[2]	848	373	10.41
			TZB206R	Door right	943	539	848	373	10.32
		5*[1]	TZB306L	Door left	943	776 *[2]	848	623	13.68
			TZB206R	Door right	943	539	848	373	10.32
7	3	1	TZB107		1093	289	998	123	7.94
		2	TZB207		1093	539	998	373	11.69
		3	TZB307		1093	789	998	623	15.42
		4*[1]	TZB207L	Door left	1093	526 *[2]	998	373	11.85
			TZB207R	Door right	1093	539	998	373	11.69
		5*[1]	TZB307L	Door left	1093	776 *[2]	998	623	15.57
			TZB207R	Door right	1093	539	998	373	11.69

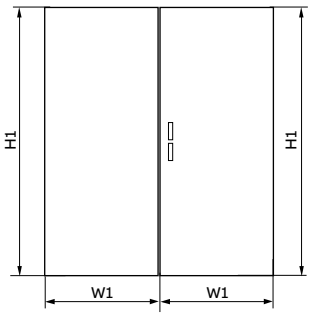
[1] 4 or more panels wide: double-wing doors
*[2] Dimensions incl. central door bar

Quick product references

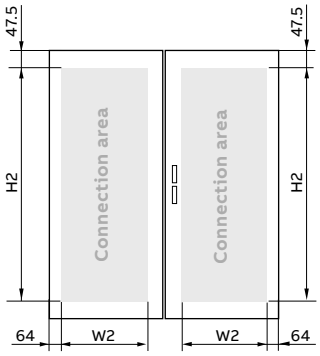
Overall dimensions

TwinLine doors, height 8 up to 12 GU

External dimensions
For all cabinets of a width of 4 panels and more
Double-wing doors



Usable connection area
For all cabinets of a width of 4 panels and more
Double-wing doors

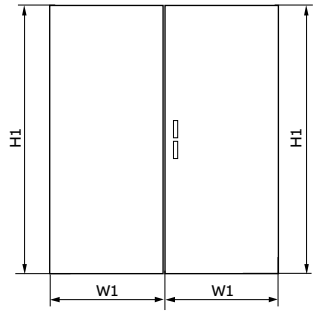


Height		Width			External dimensions Height x width in mm		External dimensions Height x width in mm		Weight
GU	OH	PW	Type	Remark	H1	W1	H2	W2	in kg
TwinLine wall-mounting cabinets, doors									
8	4	1	TZB108		1243	289	1148	123	8.75
		2	TZB208		1243	539	1148	373	12.96
		3	TZB308		1243	789	1148	623	17.15
		4*	TZB208L	Door left	1243	526 *2	1148	373	13.17
			TZB208R	Door right	1243	539	1148	373	12.96
		5*	TZB308L	Door left	1243	776 *2	1148	623	17.36
			TZB208R	Door right	1243	539	1148	373	12.96
9	5	1	TZB109		1393	289	1298	123	9.55
		2	TZB209		1393	539	1298	373	14.23
		3	TZB309		1393	789	1298	623	18.88
		4*	TZB209L	Door left	1393	526 *2	1298	373	14.49
			TZB209R	Door right	1393	539	1298	373	14.23
		5*	TZB309L	Door left	1393	776 *2	1298	623	19.14
			TZB209R	Door right	1393	539	1298	373	14.23
TwinLine floor-standing cabinets, doors									
12	8	1	TZB112		1843	289	1748	123	11.96
		2	TZB212		1843	539	1748	373	18.07
		3	TZB312		1843	789	1748	623	24.08
		4*	TZB212L	Door left	1843	526 *2	1748	373	18.45
			TZB212R	Door right	1843	539	1748	373	18.03
		5*	TZB312L	Door left	1843	776 *2	1748	623	24.49
			TZB212R	Door right	1843	539	1748	373	18.03
		6*	TZB312L	Door left	1843	776 *2	1748	623	24.49
			TZB312R	Door right	1843	789	1748	623	24.08

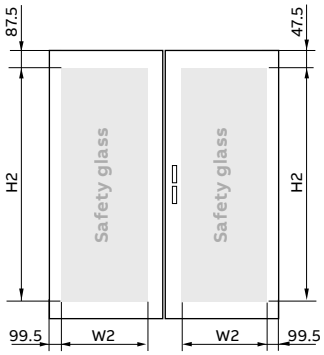
*Double-wing doors for all cabinets of a width of 4 panels and more
*2 Dimensions incl. central door bar

TwinLine Transparent doors, height 4 up to 7 GU

External dimensions
For all cabinets of a width of 4 panels and more
Double-wing doors



Dimensions of vewing area
For all cabinets of a width of 4 panels and more
Double-wing doors



Height		Width			External dimensions Height x width in mm		Vewing area Height x width in mm		Weight
GU	**OH**	**PW**	**Type**	**Remark**	**H1**	**W1**	**H2**	**W2**	**in kg**
TwinLine wall-mounting cabinets, doors									
4	0	2	TZT204		643	539	468	340	6.40
		3	TZT304		643	789	468	590	8.70
		4*[1]	TZT204L	Door left	643	526 *[2]	468	340	6.50
			TZT204R	Door right	643	539	468	340	6.50
		5*[1]	TZT304L	Door left	643	776 *[2]	468	590	8.40
			TZT204R	Door right	643	539	468	340	6.50
5	1	2	TZT205		793	539	618	340	7.60
		3	TZT305		793	789	618	590	10.20
		4*[1]	TZT205L	Door left	793	526 *[2]	618	340	7.40
			TZT205R	Door right	793	539	618	340	7.50
		5*[1]	TZT305L	Door left	793	776 *[2]	618	590	9.90
			TZT205R	Door right	793	539	618	340	7.50
6	2	2	TZT206		943	539	768	340	8.70
		3	TZT306		943	789	768	590	11.50
		4*[1]	TZT206L	Door left	943	526 *[2]	768	340	8.50
			TZT206R	Door right	943	539	768	340	8.60
		5*[1]	TZT306L	Door left	943	776 *[2]	768	590	11.40
			TZT206R	Door right	943	539	768	340	8.60
7	3	2	TZT207		1093	539	918	340	10.00
		3	TZT307		1093	789	918	590	13.00
		4*[1]	TZT207L	Door left	1093	526 *[2]	918	340	9.70
			TZT207R	Door right	1093	539	918	340	9.80
		5*[1]	TZT307L	Door left	1093	776 *[2]	918	590	13.00
			TZT207R	Door right	1093	539	918	340	9.80

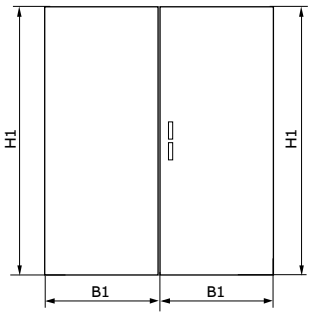
*[1] *4 or more panels wide: double-wing doors
*[2] Dimensions incl. central door bar

Quick product references

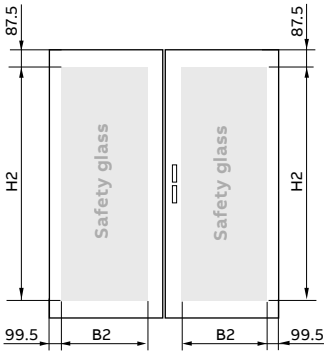
Overall dimensions

TwinLine Transparent doors, height 8 up to 12 GU

External dimensions
For all cabinets of a width of 4 panels and more Double-wing doors



Dimensions of vewing area
For all cabinets of a width of 4 panels and more Double-wing doors

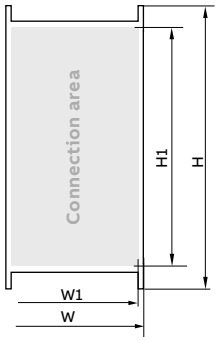


Height		Width			External dimensions Height x width in mm		Vewing area Height x width in mm		Weight
GU	OH	PW	Type	Remark	H1	W1	H2	W2	in kg
TwinLine wall-mounting cabinets, doors									
8	4	2	TZB208		1243	539	1068	340	11.10
		3	TZB308		1243	789	1068	590	14.60
		4*	TZB208L	Door left	1243	526 *²	1068	340	10.90
			TZB208R	Door right	1243	539	1068	340	11.10
		5*	TZB308L	Door left	1243	776 *²	1068	590	14.60
			TZB208R	Door right	1243	539	1068	340	11.10
9	5	2	TZB209		1393	539	1218	340	12.20
		3	TZB309		1393	789	1218	590	16.10
		4*	TZB209L	Door left	1393	526 *²	1218	340	12.00
			TZB209R	Door right	1393	539	1218	340	11.50
		5*	TZB309L	Door left	1393	776 *²	1218	590	16.00
			TZB209R	Door right	1393	539	1218	340	11.50
TwinLine floor-standing cabinets, doors									
12	8	2	TZB212		1843	539	1668	340	15.60
		3	TZB312		1843	789	1668	590	20.70
		4*	TZB212L	Door left	1843	526 *²	1668	340	15.60
			TZB212R	Door right	1843	539	1668	340	15.40
		5*	TZB312L	Door left	1843	776 *²	1668	590	20.70
			TZB212R	Door right	1843	539	1668	340	15.40
		6*	TZB312L	Door left	1843	776 *²	1668	590	20.70
			TZB312R	Door right	1843	789	1668	590	19.90

*Double-wing doors for all cabinets of a width of 4 panels and more
*² Dimensions incl. central door bar

TwinLine mounting plates

External dimensions / Usable connection area
Mounting plate

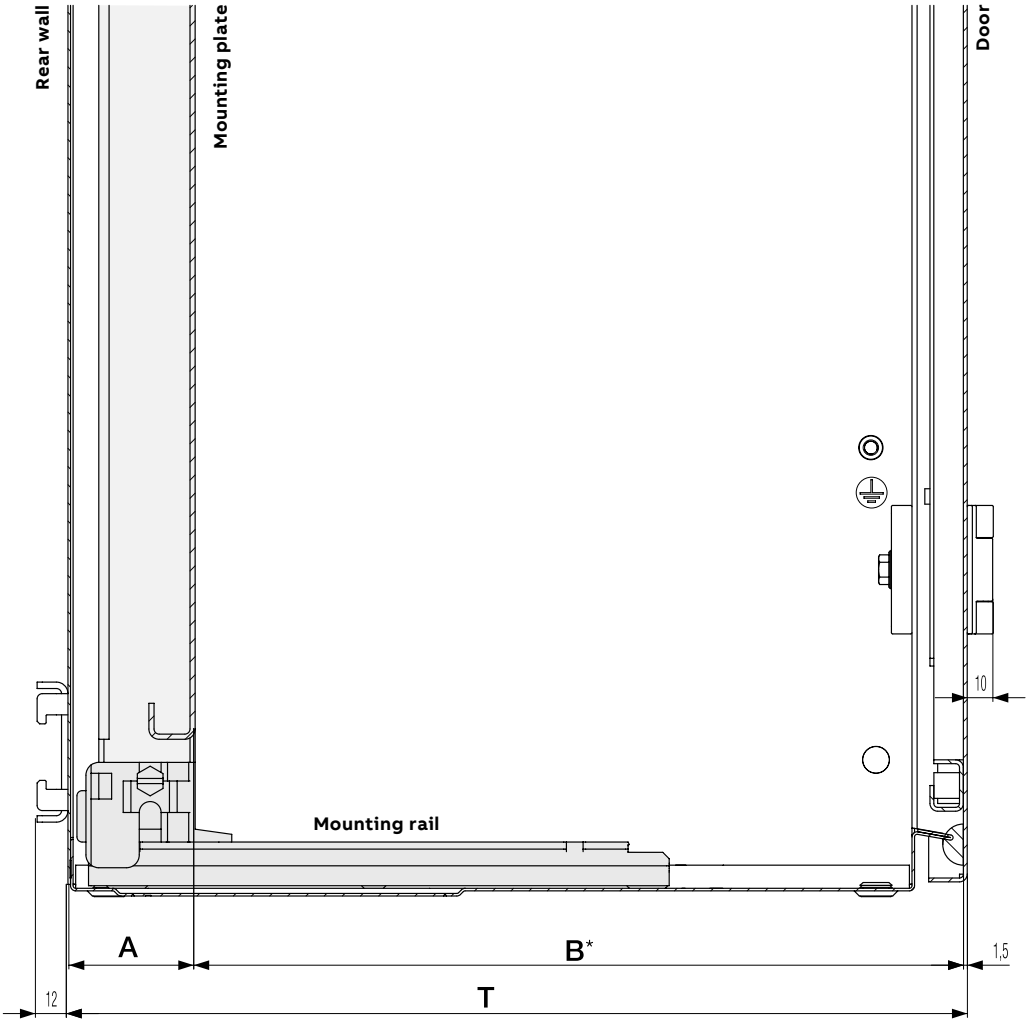


Height		Width		External dimensions in mm		Connection area in mm		Weight
GU	OH	PW	Type	H	W	H1	W1	in kg
Mounting plates for TwinLine wall-mounting cabinets ⏚								
4	0	1	TZM104	600	246	522	160	3.51
		2	TZM204	600	496	522	410	5.79
		3	TZM304	600	746	522	660	8.07
		4	TZM404	600	996	522	910	10.35
		5	TZM504	600	1246	522	1160	12.62
5	1	1	TZM105	750	246	672	160	4.43
		2	TZM205	750	496	672	410	7.30
		3	TZM305	750	746	672	660	10.17
		4	TZM405	750	996	672	910	13.03
		5	TZM505	750	1246	672	1160	15.90
6	2	1	TZM106	900	246	822	160	5.35
		2	TZM206	900	496	822	410	8.80
		3	TZM306	900	746	822	660	12.26
		4	TZM406	900	996	822	910	15.72
		5	TZM506	900	1246	822	1160	19.20
7	3	1	TZM107	1050	246	972	160	6.26
		2	TZM207	1050	496	972	410	10.31
		3	TZM307	1050	746	972	660	14.36
		4	TZM407	1050	996	972	910	18.40
		5	TZM507	1050	1246	972	1160	22.45
8	4	1	TZM108	1200	246	1122	160	7.18
		2	TZM208	1200	496	1122	410	11.82
		3	TZM308	1200	746	1122	660	16.45
		4	TZM408	1200	996	1122	910	21.09
		5	TZM508	1200	1246	1122	1160	25.72
9	5	1	TZM109	1350	246	1272	160	8.10
		2	TZM209	1350	496	1272	410	13.33
		3	TZM309	1350	746	1272	660	18.55
		4	TZM409	1350	996	1272	910	23.77
		5	TZM509	1350	1246	1272	1160	29.00
Mounting plates for TwinLine floor-standing cabinets ⏚								
12	8	1	RM18	1800	246	1722	160	10.80
		2	RM28	1800	496	1722	410	17.80
		3	RM38	1800	746	1722	660	21.00
		4	RM48	1800	996	1722	910	31.80

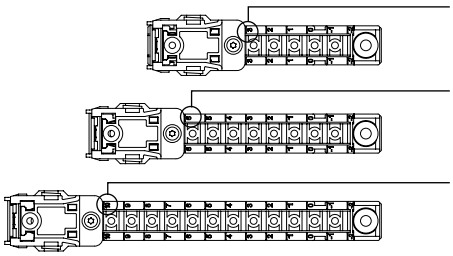
Quick product references

Overall dimensions

TwinLine Assembly with mounting plate



Mounting rail
Top view



Mounting rail for TwinLine-G
Position 3 / Installation position

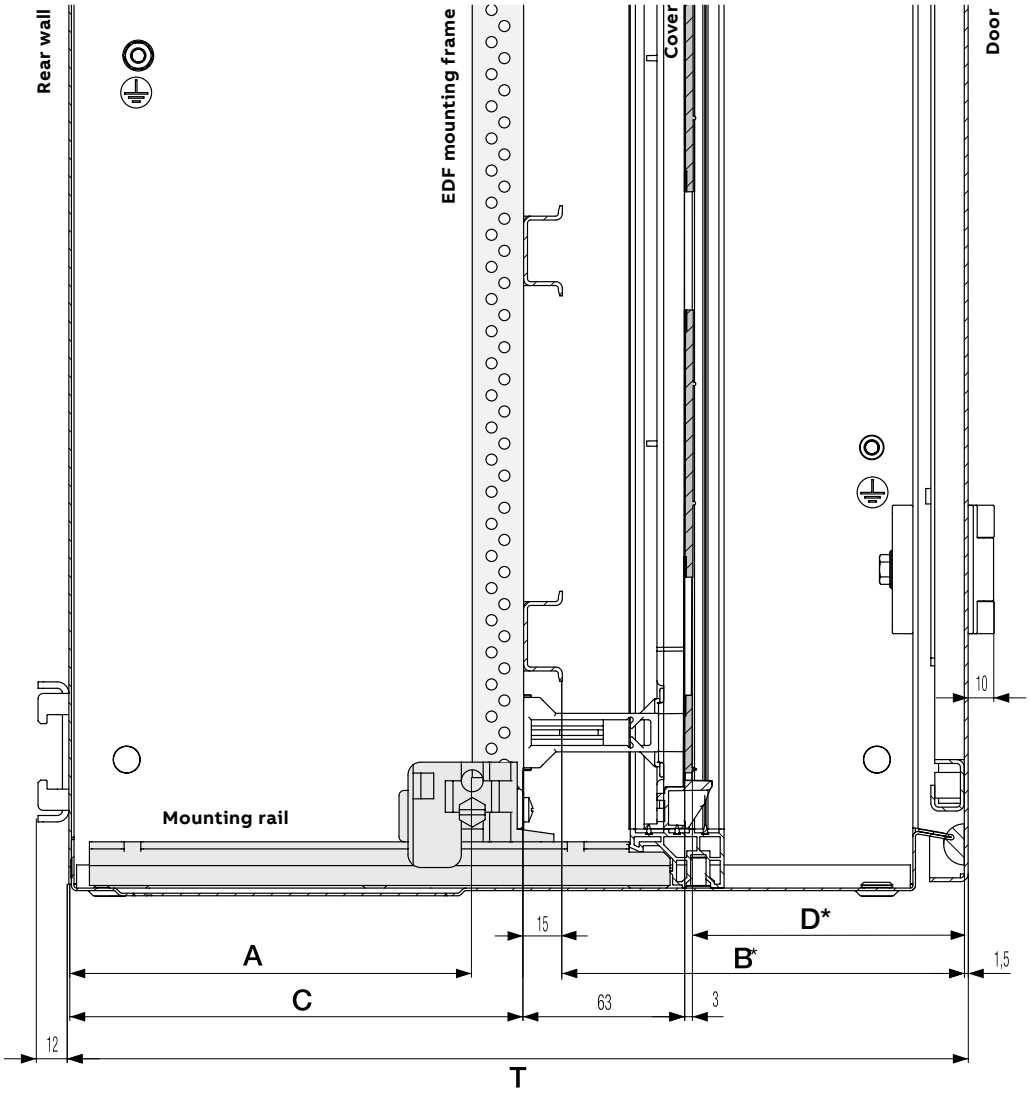
Mounting rail for TwinLine-L
Position 6 / Installation position

Mounting rail for TwinLine-W
Position 10 / Installation position

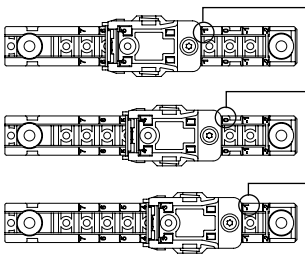
		A in mm for installation position												
Cabinet series	**Depth in mm**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**	**0**	**-1**	**-2**
TwinLine G	225	-	-	-	-	-	-	-	52.5	65	77.5	90	102.5	115
TwinLine L	275	-	-	-	-	50	62.5	75	87.5	100	112.5	125	137.5	150
TwinLine W	350	48.5	61	73.5	86	98.5	111	123.5	136	148.5	161	173.5	186	198.5
Cabinet series	**Depth in mm**	**B* in mm for installation position**												
TwinLine G	225	-	-	-	-	-	-	-	170	157.5	145	132.5	120	107.5
TwinLine L	275	-	-	-	-	222.5	210	197.5	185	172.5	160	147.5	135	122.5
TwinLine w	350	299	286.5	274	261.5	249	236.5	224	211.5	199	186.5	174	161.5	149

* Referred to the surface of the connection area; (see page155); outside the connection area this dimension is reduced by 35 mm
> Dimensions in mm

CombiLine modules on EDF mounting frame



Mounting rail
Top view



Mounting rail
Position 1

Mounting rail
Position 0 / as delivered / Installation position

Mounting rail
Position -1

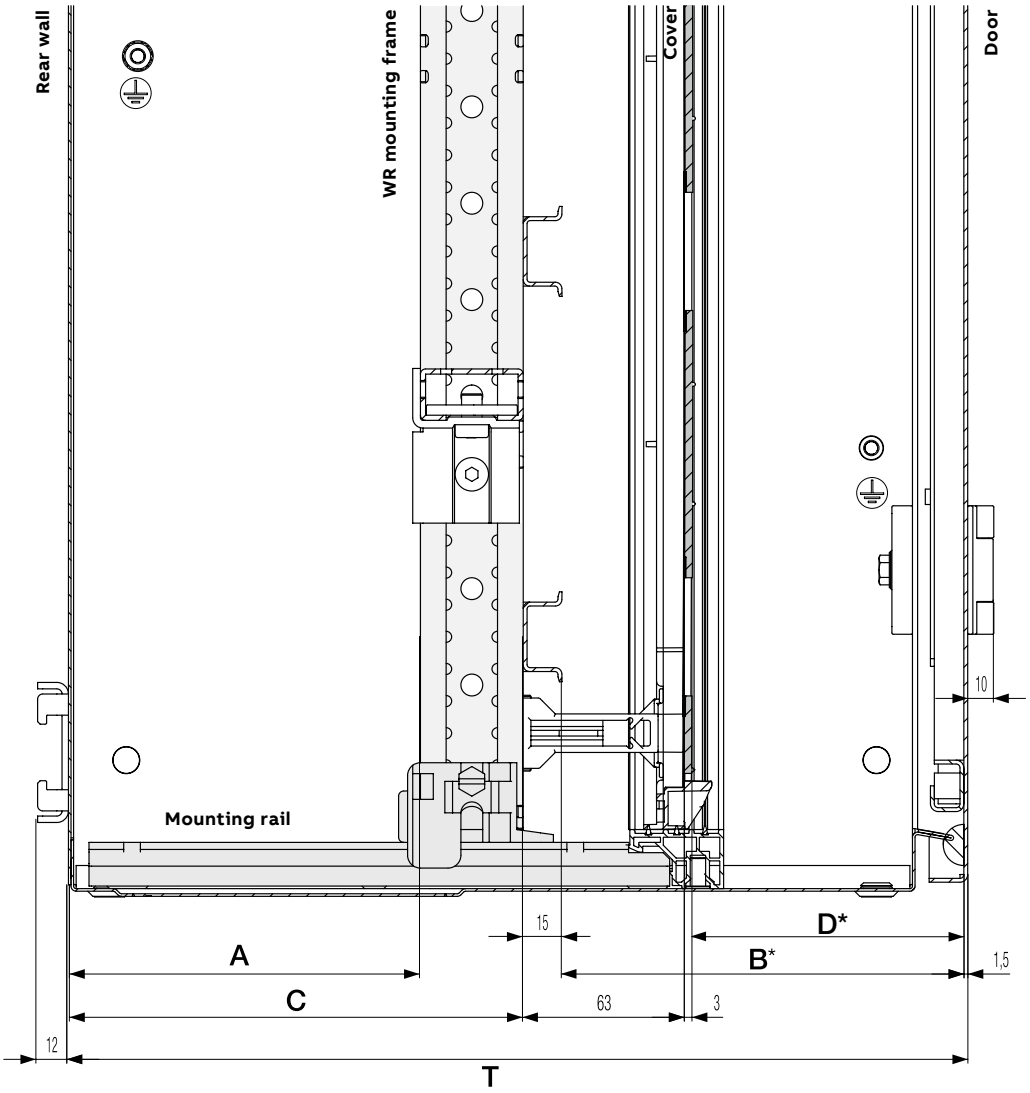
Cabinet series	Depth in mm	A in mm for installation part position			B in mm for installation position*			C in mm for installation position			D in mm for installation position*		
		1	0	-1	1	0	-1	1	0	-1	1	0	-1
TwinLine-G	225	60	72.5	85	127.5	115	102.5	80	92.5	105	76.5	64	51.5
TwinLine-L	275	95	107.5	120	142.5	130	117.5	115	127.5	140	91.5	79	66.5
TwinLine-W	350	143.5	156	168.5	169	156.5	144	163.5	176	188.5	117.5	105	92.5

* Referred to the surface of the connection area (see page 156); outside the connection area this dimension is reduced by 35 mm
> Dimensions in mm

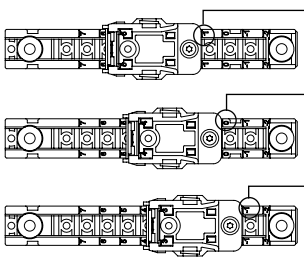
Quick product references

Overall dimensions

CombiLine modules on WR mounting frame



Mounting rail
Top view



Mounting rail
Position 1

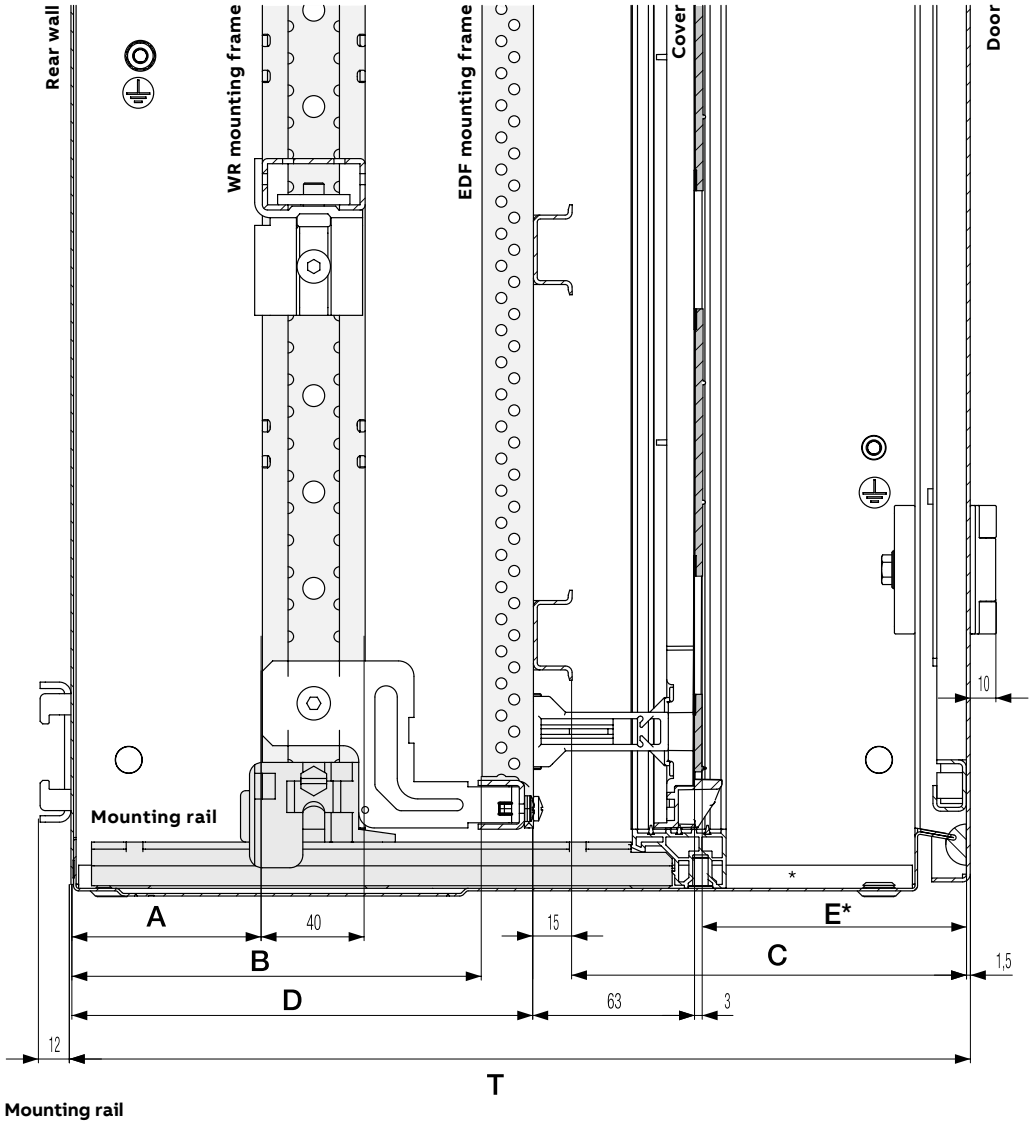
Mounting rail
Position 0 / as delivered / Installation position

Mounting rail
Position -1

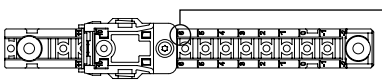
Schrankserie	Depth in mm	A in mm for installation part position			B in mm for installation position*			C in mm for installation position			D in mm for installation position*		
		1	0	-1	1	0	-1	1	0	-1	1	0	-1
TwinLine-G	225	40	52.5	65	127.5	115	102.5	80	92.5	105	76.5	64	51.5
TwinLine-L	275	75	87.5	100	142.5	130	117.5	115	127.5	140	91.5	79	66.5
TwinLine-W	350	123.5	136	148.5	169	156.5	144	163.5	176	188.5	117.5	105	92.5

* Referred to the surface of the connection area (see page 157); outside the connection area this dimension is reduced by 35 mm
> Dimensions in mm

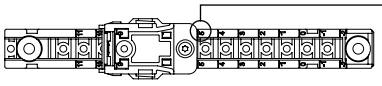
Assembly with EDF on WR mounting frame



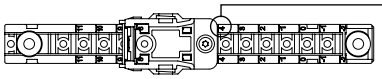
Mounting rail
Top view



Mounting rail
Position 6



Mounting rail
Position 5 / Installation position



Mounting rail
Installation osition 4

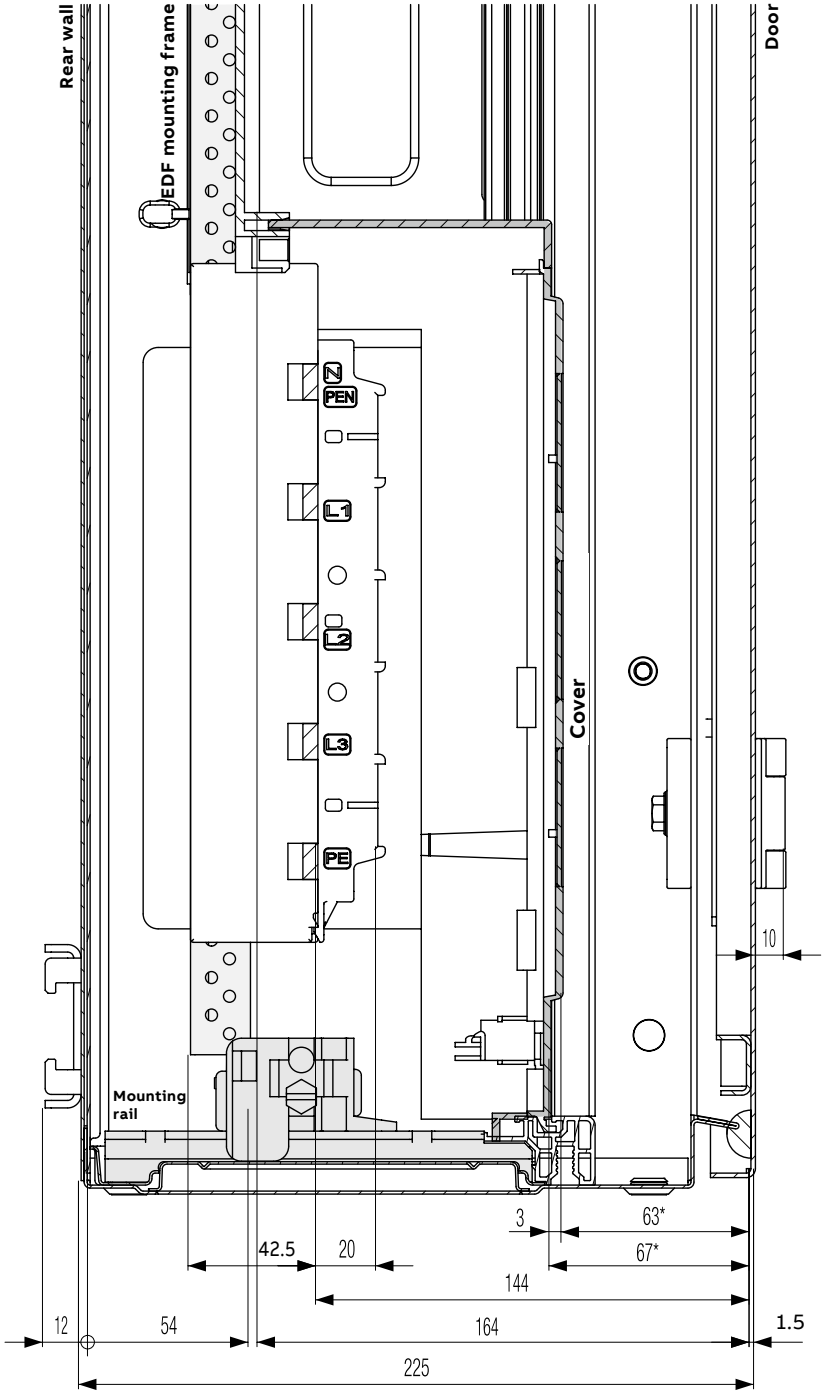
Schrankserie	Tiefe in mm	A in mm for installation part position			B in mm for installation position			C in mm for installation position*			D in mm for installation position			E in mm for installation position*		
		6	5	4	6	5	4	6	5	4	6	5	4	6	5	4
TwinLine-L	275	12.5	25	37.5	98	110.5	123	139.5	127	114.5	117.5	130	142.5	88.5	76	63.5
TwinLine-W	350	61	73.5	86	146.5	159	171.5	165.5	153	140.5	166.5	179	191.5	114.5	102	89.5

* Referred to the surface of the connection area (see page 158); outside the connection area this dimension is reduced by 35 mm
> Dimensions in mm

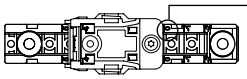
Quick product references

Overall dimensions

Assembly with meter panel for TwinLine-G



Mounting rail
Top view

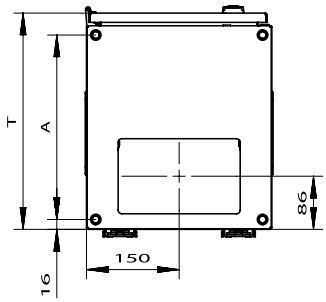


Mounting rail
Position 0 / as delivered

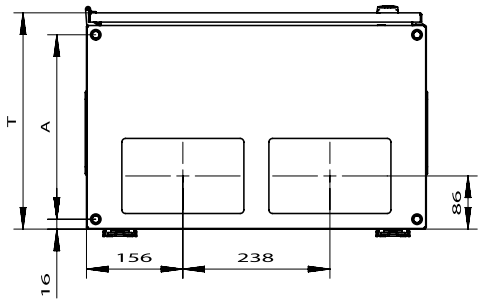
* Referred to the surface of the connection area (see page 159); outside the connection area this dimension is reduced by 35 mm
> Dimensions in mm

TwinLine Top view / side flange knockout, top and bottom

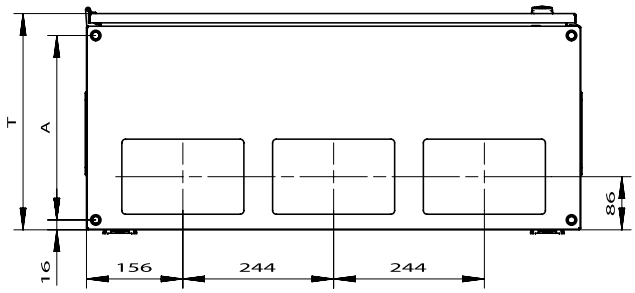
TG1...
TL1...
TW1...



TG2...
TL2...
TW2...



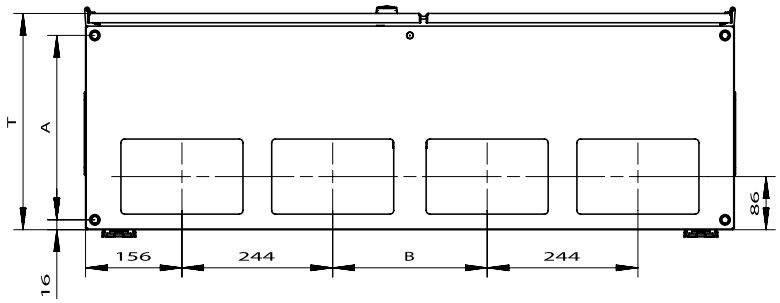
TG3...
TL3...
TW3...



TG4...
TL4...
TW4....

TG5...
TL5...
TW5....

TG6...
TL6...
TW6....

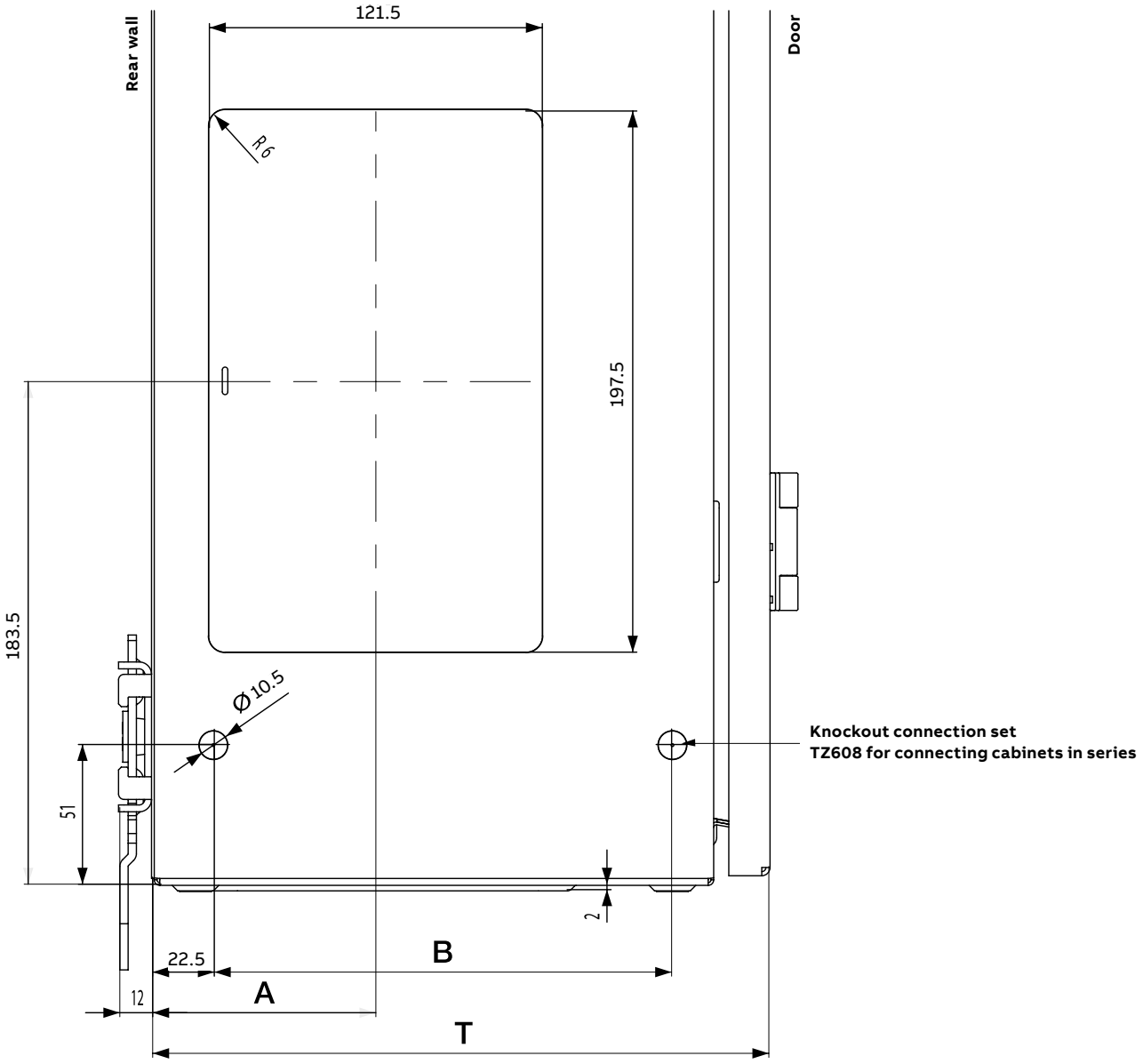


Cabinet series	Depth in mm	A in mm	B in mm / 4 panel wide	B in mm / 5 panel wide	B in mm / 6 panel wide
TwinLine-G	225	173.5			
TwinLine-L	275	223.5	1 x 250 (250)	2 x 250 (500)	3 x 250 (750)
TwinLine-W	350	298.5			

Quick product references

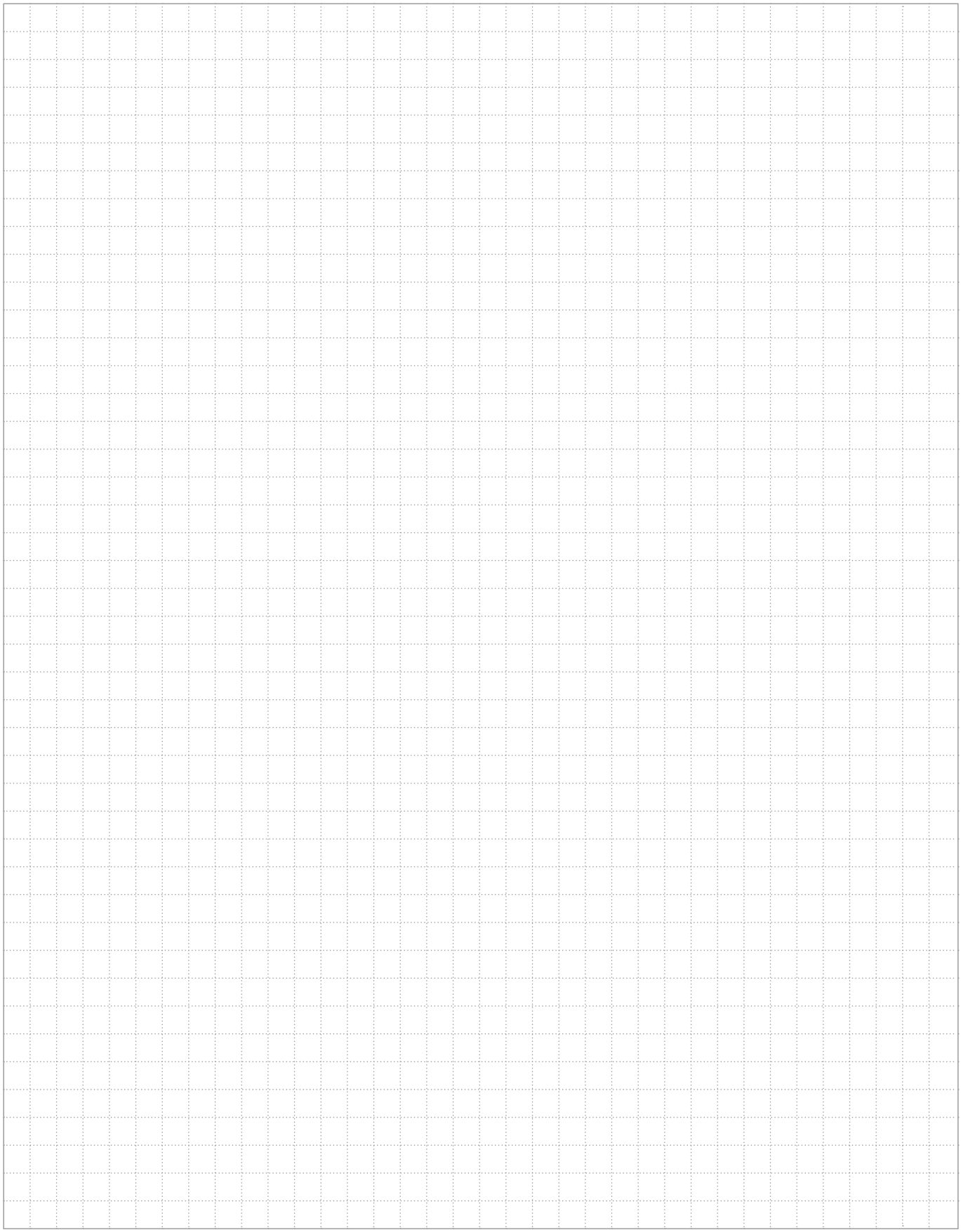
Overall dimensions

TwinLine Side view / side flange knockout, top and bottom



Cabinet series	Depth in mm	A in mm	B in mm
TwinLine-G	225	80.5	167
TwinLine-L	275	106.5	217
TwinLine-W	350	154.5	292

Notes



Quick product references

MCBs and RCDs worldwide marks and approvals

This is the present situation regarding worldwide marks and approvals for ABB System pro M compact range devices.
Although some products already obtained some approvals or certificates, they don't necessarily bear the related marks on the product.

The F 200 range has obtained the EPD (Environmental Product Declaration), according to ISO 14040.

EPD®
This product/service has a
CERTIFIED ENVIRONMENTAL PRODUCT DECLARATION
describing information about environmental performance, contents and recycling which has been controlled and verified by Rina according to MSR 1999:2
Registration number: S-P 00080 and S-P 00081
More information on the Internet : http//www.environdec.com

	AENOR - Spain	BBJ - Poland	BSMI - Taiwan	CCC - China
S 200	■ S 200	■ S 200		■ S 200
S 200 M	■ S 200 M	■ S 200 M		■ S 200 M
S 200 M UC				
S 200 P	■ S 200 P	■ S 200 P		■ S 200 P
S 200 S				
S 200 U				■ S 200 U
S 200 UP				■ S 200 UP
S 200 UDC				
S 200 MR / S 200 PR				
SU 200 MR / SU 200 PR				
SN 201				■ SN 201
S 280 80 - 100 A				■ S 280 80 - 100 A
S 700				
S 750 DR				
S400M				■ S400M ⑲
S 800				■ S 800
S 500 -K, S 500UC-K				■ S 500-K, S 500UC-K
F 200	■ F 200		■ F 200 ③	■ F 200 ③
F-ATI Test				
F-ARI Test				
DDA 200				
DS 200				
DS201				■ DS201
DS202C				
DDA 800				
SN201-S, SN201-IH				■ SN201-S, SN201-IH
DS401/402				■ DS401/402

Legend:
■ Approved
● Waiting for approval
① Supplementary protection
② Branch circuit protection
③ Available for F200 type for overseas markets
④ Only S 500-K range
⑤ Only DS202C M Type A and APR
The indicated approvals generally cover all available approvals worldwide. To verify the approval status in your country please contact your LSO.

CEBEC - Belgium	CERTIF - Portugal	CSA - Canada	DEMKO - Denmark	EZU - Czech Republic	FIMKO - Finland
■ S 200	■ S 200		■ S 200	■ S 200	■ S 200
■ S 200M	■ S 200M	■ S 200M ①	■ S 200M	■ S 200M	■ S 200M
■ S 200 P	■ S 200 P	■ S 200 P (≤ 25 A) ①	■ S 200 P	■ S 200 P	■ S 200 P
		■ S 200 U ②			
		■ S 200 UP ②			
		■ S 200 UDC ②			
		■ S 200 MR / S 200 PR ①			
		■ SU 200 MR / SU 200 PR ②			
■ F 200	■ F 200				■ F 200

Quick product references

MCBs and RCDs worldwide marks and approvals

	EAC - Russia	GOST - Ucraina	IIS - Israel	IMQ - Italy
S 200	■ S 200			■ S 200
S 200M	■ S 200M			■ S 200M
S 200M UC				
S 200 P	■ S 200 P			■ S 200 P
S 200 S				● S 200 S
S 200 U				
S 200 UP				
S 200 UDC				
S 200 MR / S 200 PR				
SU 200 MR / SU 200 PR				
SN 201		■ SN 201	■ SN 201	■ SN 201
S 280 80 - 100 A	■ S 280 80 - 100 A			■ S 280 80 - 100 A
S 750 DR	■ S 750 DR			
S400M	■ S400M			
S 800	■ S 800			
F 200	■ F 200	■ F 200	■ F 200	■ F 200
F-ATI Test				
F-ARI Test				
DDA 200	■ DDA 200	■ DDA 200	■ DDA 200	■ DDA 200
DS 200	■ DS 200	■ DS 200	■ DS 200	■ DS 200
DS201	■ DS201	■ DS201	■ DS201	■ DS201
DS202C	■ DS202C			■ DS202C
DS203NC	■ DS203NC		■ DS203NC	■ DS203NC
DDA 800		■ DDA 800		
F2C..	■ F2C..			
S 290 accessories	■ S 290 accessories			
DS401/402	■ DS401/402			
S-ARC1				■ S-ARC1

Legend:
■ Approved
● Waiting for approval
① Supplementary protection
② Branch circuit protection
③ Available for F200 type for overseas markets
④ Only S 500-K range
⑤ Only DS202C M Type A and APR
⑥ not available for F200 left neutral
The indicated approvals generally cover all available approvals worldwide. To verify the approval status in your country please contact your LSO.

IMQ CSV - Italy	IRAM - Argentina	KC- South Korea	KEMA - Netherland	LCIE - France	NEMKO - Norway	OVE - Austria
			■ S 200	■ S 200	■ S 200	■ S 200
			■ S 200 M	■ S 200 M	■ S 200 M	■ S 200 M
			■ S 200 P	■ S 200 P	■ S 200 P	■ S 200 P
			● S 200 S	■ S 200 S		■ S 200 S
			■ SN 201	■ SN 201		
				■ S 280 80 - 100 A		
	■ F 200 ③		■ F 200	■ F 200	■ F 200	■ F 200
■ F-ARI Test						
				■ DDA 200		
				■ DS 200		
		■ DS201	■ DS201	■ DS201		■ DS201
		■ DS202C		■ DS202C		
			■ DS203NC			
				■ S-ARC1		

Quick product references

MCBs and RCDs worldwide marks and approvals

	HDB/PSB - Singapore	SABS - South Africa	SEMKO - Sweden	SEV - Switzerland
S 200	■ S 200	■ S 200	■ S 200	■ S 200
S 200 M	■ S 200 M	■ S 200 M	■ S 200 M	■ S 200 M
S 200 M UC				
S 200 P			■ S 200 P	■ S 200 P
S 200 S				● S 200 S
S 200 U				
S 200 UP				
S 200 UDC				
S 200 MR / S 200 PR				
SU 200 MR / SU 200 PR				
SN 201				
S 280 80 - 100 A				
S 700				
S 750 DR				
S400E				■ S400E
S400M				■ S400M
S 800				■ S 800
S 500 -K, S 500UC-K				
F 200	■ F 200 ③	■ F 200 ③		■ F 200
F 204 B				
F-ATI Test				
F-ARI Test				
DDA 200		■ DDA 200		
DS 200				
DS201				■ DS201
DS202C				
DS203NC				
DSE201 - DSE201 M				
DDA 800				
DS401/402			■ DS401/402	■ DS401/402
S-ARC1				

Legend:
■ Approved
● Waiting for approval
① Supplementary protection
② Branch circuit protection
③ Available for F200 type for overseas markets
④ Only S 500-K range
⑤ Only DS202C M Type A and APR
⑥ not available for F200 left neutral
The indicated approvals generally cover all available approvals worldwide. To verify the approval status in your country please contact your LSO.

SIQ - Slovenia	SIRIM - Malaysia	RCM - Australia	UL - USA			VDE - Germany
■ S 200	■ S 200	■ S 200		■ S 200 ①		■ S 200
■ S 200 M	■ S 200 M	■ S 200 M	■ S 200 M ①			■ S 200 M
						■ S 200 M UC
■ S 200 P		■ S 200 P		■ S 200 P ①		■ S 200 P
						■ S 200 S
					■ S 200 U ②	
					■ S 200 UP ②	
					■ S 200 UDC ②	
			■ S 200 MR / S 200 PR ①			■ S 200 MR / S 200 PR
					■ SU 200 MR / SU 200 PR ②	■ SU 200 MR / SU 200 PR
		■ SN 201				
		■ S 280 80 - 100 A				
						■ S 700
						■ S 750 DR
						■ S400E
						■ S400M ⑲
			■ S 800		■ S800S, S800C, S800HV	■ S 800
			■ S 500-K, S 500UC-K			
	■ F 200 ③	■ F 200 ③	■ F 200 ⑥			■ F 200
						■ F 204 B
						■ F-ATI Test
						■ DS 200
		■ DS201				■ DS201
		■ DS202C				■ DS202C
						■ DS203NC
		■ DSE201 - DSE201 M				
						■ DS401/402
						■ S-ARC1

Quick product references

MCBs and RCDs worldwide marks and approvals

	RIVER	MARINE	MARINE	MARINE
	RRR - Russia	ABS - USA	DNV - Norway	DNV-GL - Germany
S 200		■ S 200	■ S 200	■ S 200
S 200 M		■ S 200 M	■ S 200 M	■ S 200 M
S 200 MUC				
S 200 P			■ S 200 P	
S 200 S				
S 200 U				
S 200 UP				
S 200 UDC				
S 200 MR / S 200 PR				
SU 200 MR / SU 200 PR				
SN 201				
S 280 80 - 100 A			■ S 280 80-100 A	
S 700				
S 750 DR				
S400E				
S400M			■ S400M	■ S400M
S 800			■ S 800	■ S 800
S 500 -K, S 500UC-K			■ S 500-K ④	
F 200	■ F 200			
F 204 B				
F-ATI Test				
F-ARI Test				
DDA 200				
DS 200				
DS201		■ DS201, DS201 M, DS201 M 110 V		■ DS201, DS201 M, DS201 M 110 V
DS202C		■ DS202C M, DS202C M 110 V		■ DS202C M, DS202C M 110 V
DS203NC				
DS 271				
DDA 800				

Legend:
■ Approved
● Waiting for approval
① Supplementary protection
② Branch circuit protection
③ Available for F200 type for overseas markets
④ Only S 500-K range
⑤ Only DS202C M Type A and APR
⑥ not available for F200 left neutral
The indicated approvals generally cover all available approvals worldwide. To verify the approval status in your country please contact your LSO.

MARINE	MARINE	MARINE
LRS - Great Britain	RINA - Italy	RMRS - Russia
■ S 200	■ S 200	■ S 200
■ S 200 M	■ S 200 M	■ S 200 M
■ S 200 P	■ S 200 P	■ S 200 P
■ S 800	■ S 800	■ S 800
		■ S 500-K ④
	■ DDA 200 110 V	
		■ DS 200
	■ DS201 M 110 V	■ DS201, DS201 M, DS201 M 110 V
	■ DS202C M, DS202C M 110 V	■ DS202C M, DS202C M 110 V

Quick product references

MDRCs worldwide marks and approvals

	BSI UK	CCC China	CEBEC Belgium	ENEC Europe	EAC Russia	GOST Russia	GOST Ucraina	IMQ Italy	KEMA Netherland	NF France
OVR					■ OVR T1 and T2	■ OVR T1 and T2				■ OVR T1 and T2
RD						■ RD	■ RD			
TR-TRM						■ TR-TRM	■ TR-TRM			
E 90		■ E90 ③, E90h ③ E90 PV*			■ E90, E90h, E90 PV*		■ E90, E90h, E90 PV*, E90 CC	■ E90 ③, E90h ③		■ E90 ⑤, E90h ⑥
E90 50/125		■ E90 50/125			■ E90 50/125					
E90										
E 200		■ E 200			■ E 200				■ E 200	
SD 200		■ SD 200			■ SD 200				■ SD 200	
SHD 200		■ SHD 200			■ SHD 200				■ SHD 200	
E210		■ E210 ②			■ E210					
ESB		■ ESB								
EN		■ EN								
E290					■ E290					
E297					■ E297					
E 260					■ E 260					
E 234		■ E 234				■ E 234				
AT					■ AT					
D Line					■ D line					
E 232					■ E 232					
T line					■ T line					

Legend:
■ Approved whole range
● Waiting for approval
① Except for ESB/EN 20
② For series E219 CCC mark not needed
③ Just no LED versions
⑤ Version without neutral
⑥ Dedicated rang with neutral on left
⑦ IMQ available for TM up to 30 VA
⑧ VDE available only on M1175 (standard grey version) and M1175-C (with cover)
* E90 PV 1000 V DC only

SEV Swiss	UL/CSA USA/ Canada	UL/CSA USA/ Canada	VDE Germany	BV/F France	GL/D Germany	LRS Great Britain	RINA Italy	RMRS Russia
		● OVR T2	■ OVR T2 40 275					
	■ E90 PV, E90 CC	■ E90		■ E90, E90h, E90 PV*		● E90 ③, E90h ③	■ E90 ③, E90h ③	
		■ E90 50/125		■ E90 50/125		■ E90 50/125	■ E90 50/125	
	■ E90 J							
			■ E 200					
			■ SD 200					
			■ SHD 200					
		■ E210	■ E210					
		■ ESB		■ ESB ①	■ ESB ①			
		■ EN		■ EN ①	■ EN ①			
			■ E290					
			■ E297					
					■ E 260			
		■ E 234						
			■ E 232					

Quick product references

MDRCs worldwide marks and approvals

	BSI UK	CCC China	CEBEC Belgium	ENEC Europe	EAC Russia	GOST Russia	GOST Ucraina	IMQ Italy	KEMA Netherland	NF France
THS					■ THS					
RAL						■ RAL	■ RAL			
LSS1/2						■ LSS1/2	■ LSS1/2			
RH/RL						■ RH/RL	■ RH/RL			
SQZ3						■ SQZ3	■ SQZ3			
LEE 230						■ LEE 230	■ LEE 230			
CT / CTA / TRFM						■ CT/CTA/ TRFM	■ CT/CTA/ TRFM			
MCA/MCV						■ MCA/ MCV				
HMT						■ HMT				
TM						■ TM		■ TM ⑦		
TS						■ TS				
TS-C				■ TS-C		■ TS-C				
TSM/TSR						■ TSM/TSR	■ TSM/TSR			
SM/RM						■ SM/RM	■ SM/RM			
M1170						■ M1170				
M1173						■ M1173	■ M1173	■ M1173		
M1174			■ M1174			■ M1174	■ M1174			■ M1174
M1175						■ M1175	■ M1175			
M1363	■ M1363									
M1011										
M1011										
TM-C, TM-I, TM-S				■ TM-C, TM-I, TM-S		■ TM-C, TM-I, TM-S				

Legend:
■ Approved whole range
● Waiting for approval
① Except for ESB/EN 20
② For series E219 CCC mark not needed
③ Just no LED versions
④ Dedicated range for chinese market
⑤ Version without neutral
⑥ Dedicated rang with neutral on left
⑨ E291S in preparation: will be available in 2016

SEV Swiss	UL/CSA USA/ Canada	UL/CSA USA/ Canada	VDE Germany	BV/F France	GL/D Germany	LRS Great Britain	RINA Italy	RMRS Russia
			■ TS					
			■ M1175 ⑧					
■ M1011								
		■ TM-C, TM-I, TM-S						

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