

**SIEMENS**

SETRON • SIVACON • ALPHA

# Low-Voltage Power Distribution and Electrical Installation Technology

Measuring Devices, Power Monitoring and  
Digitalization Solutions

Catalog  
Extract  
LV 10

Edition  
04/2021

[siemens.com/lowvoltage](https://www.siemens.com/lowvoltage)



# Making sure power makes its way

Consistent, safe and intelligent low-voltage power distribution and electrical installation technology

Whether industries, infrastructures or buildings: Each environment depends on a reliable power supply.

Which is why products and systems featuring maximum safety and optimum efficiency are in demand. This comprehensive portfolio for low-voltage power distribution and electrical installation technology covers every requirement – from the switchboard to the socket outlet.

We are there when you need us

Your personal contact can be found at  
[www.siemens.com/lowvoltage/contact](http://www.siemens.com/lowvoltage/contact)

Catalog LV 10 · 04/2021

You will find the latest edition and all future editions in the Siemens Industry Online Support at  
[www.siemens.com/lowvoltage/catalogs](http://www.siemens.com/lowvoltage/catalogs)

Refer to the Industry Mall for current prices  
[www.siemens.com/industrymall](http://www.siemens.com/industrymall)

The products and systems listed in this catalog are developed and manufactured using a certified quality management system in accordance with DIN EN ISO 9001:2008.

Technical data

The technical specifications are for general information purposes only. Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

All illustrations are not binding.

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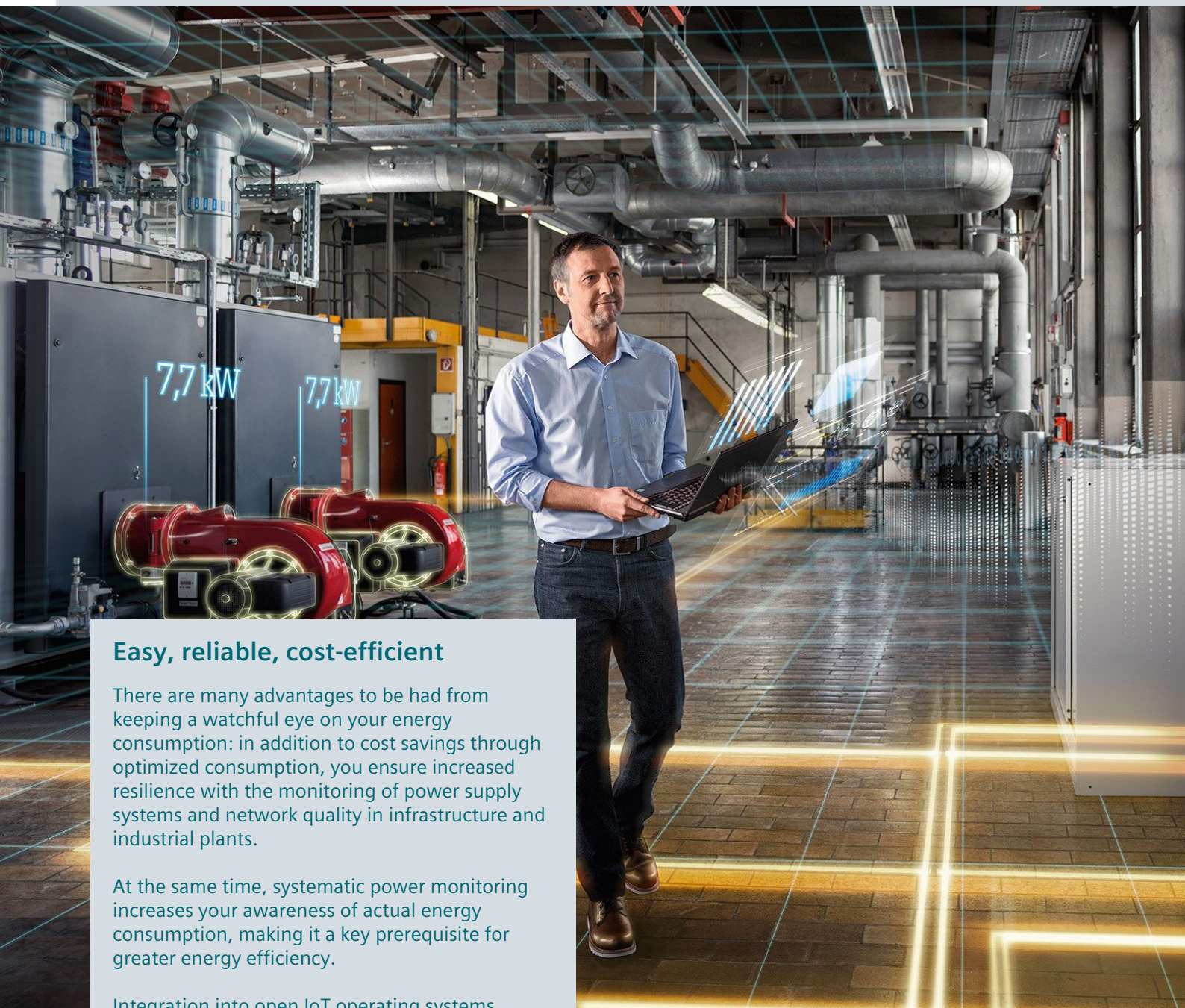
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A





## Easy, reliable, cost-efficient

There are many advantages to be had from keeping a watchful eye on your energy consumption: in addition to cost savings through optimized consumption, you ensure increased resilience with the monitoring of power supply systems and network quality in infrastructure and industrial plants.

At the same time, systematic power monitoring increases your awareness of actual energy consumption, making it a key prerequisite for greater energy efficiency.

Integration into open IoT operating systems such as MindSphere results in even greater optimization potential.

What is more, with a power monitoring system you lay the foundation for regular energy audits and a corporate energy management system according to ISO 50001 and ISO 50003.



# Measuring Devices, Power Monitoring and Digitalization Solutions



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# A multitude of additional information ...

## Information + ordering

### All the important things at a glance

For information about measuring devices, power monitoring and digitalization solutions, please visit our websites  
[www.siemens.com/powermonitoring](http://www.siemens.com/powermonitoring)  
[www.siemens.com/lowvoltage/digitalization](http://www.siemens.com/lowvoltage/digitalization)

### Your product in detail

The Siemens Industry Online Support (SIOS) provides comprehensive information  
[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

- Technical basic information – SENTRON power monitoring and digital solutions ([109769851](#))
- Brochure – Reliable, sustainable, and efficient – TÜV-certified power monitoring system in accordance with ISO 50001 ([109744679](#))
- Brochure – SENTRON portfolio for power monitoring ([109744725](#))

The relevant tender specifications can be found at  
[www.siemens.com/lowvoltage/tenderspecifications](http://www.siemens.com/lowvoltage/tenderspecifications)

### Siemens YouTube channel

- Power monitoring (general) [bit.ly/2lZ9QqC](https://bit.ly/2lZ9QqC)

### Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Measuring devices and power monitoring [sie.ag/2kTH9Lz](http://sie.ag/2kTH9Lz)
- Digitalization solutions [sie.ag/2olliNi](http://sie.ag/2olliNi)
- Library for SIMATIC [sie.ag/2kpbwcs](http://sie.ag/2kpbwcs)
- SENTRON powermanager / SENTRON powerconfig [sie.ag/2kTJjuF](http://sie.ag/2kTJjuF)

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.  
[www.siemens.com/product?Article No.](http://www.siemens.com/product?Article No.)

## The fast track to the experts

### Contact persons in your region

We offer a comprehensive portfolio of services.  
 You can find your local contacts at  
[www.siemens.com/lowvoltage/components/contact](http://www.siemens.com/lowvoltage/components/contact)  
 You can find further information on services at  
[www.siemens.com/service-catalog](http://www.siemens.com/service-catalog)

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at  
[www.siemens.com/lowvoltage/support-request](http://www.siemens.com/lowvoltage/support-request)



# ... can be found in our online services

## Commissioning + operation

### SENTRON powerconfig

The combined commissioning and service tool SENTRON powerconfig for communication-capable measuring devices and circuit breakers from the SENTRON portfolio.

[www.siemens.com/powerconfig](http://www.siemens.com/powerconfig)

Free download SENTRON powerconfig mobile via [App Store](#) und [Play Store](#)

### Your product in detail

The Siemens Industry Online Support (SIOS) provides detailed technical information

[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

- Operating instructions
- Certificates

Comprehensive mobile support via the Siemens Industry Online Support app available for download from the [App Store](#) and [Play Store](#)

You will find further information under:  
[www.siemens.com/support-app](http://www.siemens.com/support-app)

Provision of 3D data (step and u3d data formats)

- Siemens Industry Mall  
[www.siemens.com/lowvoltage/mall](http://www.siemens.com/lowvoltage/mall)
- Image database  
[www.siemens.com/lowvoltage/picturedb](http://www.siemens.com/lowvoltage/picturedb)

Engineering data for CAD or CAE systems are available in the CAX Download Manager at  
[www.siemens.com/lowvoltage/cax](http://www.siemens.com/lowvoltage/cax)

### Classroom or online training

Our training courses can be found at  
[www.siemens.com/sitrain-lowvoltage](http://www.siemens.com/sitrain-lowvoltage)

- Power monitoring with SENTRON (WT-LVAEM)
- Energy Management with Powermanager 4.x – User training (LV-EMUSER)
- Communication with SENTRON components (LV-COM)

### Manuals

Manuals are available for downloading in Siemens Industry Online Support at

[www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals)

- Configuration manual – Measuring devices and power monitoring ([45315973](#))
- Equipment manual – 7KT PAC1600 energy meter ([109759827](#))
- Equipment manual – 7KT PAC1600 multimeter ([109760293](#))
- System manual – 7KT multichannel current measuring system ([109483442](#))
- Equipment manual – PAC2200 measuring device ([109746835](#))
- Equipment manual – SENTRON PAC3200 power monitoring device ([26504150](#))
- Equipment manual – PAC3200T measuring device ([109746833](#))
- System manual – SENTRON PAC4200 power monitoring devices ([34261595](#))
- Equipment manual – PAC3100 measuring device ([37881976](#))
- Equipment manual – SENTRON PAC5100/5200 7KM5212/5412 ([109477872](#))
- Equipment manual – 7KM PAC3120 and 7KM PAC3220 ([109767307](#))
- Communication manual – SENTRON PAC5100/5200 7KM5212/5412 ([109477870](#))
- Communication manual – 3VA with IEC and UL certification ([98746267](#))
- SEM3™ – Embedded Micro Metering Module™ ([109748928](#))
- Equipment manual – 7KN POWERCENTER 3000 ([109763838](#))
- Quick Installation Guide – 7KN POWERCENTER 3000 ([109766001](#))
- Quick Installation Guide – 7KN Powercenter 1000 ([109791805](#))
- System manual – Circuit protection devices with communication and metering function ([109791806](#))

## Technical overview – Measuring devices, power monitoring and digitalization solutions



### The fast way to get you to our online services

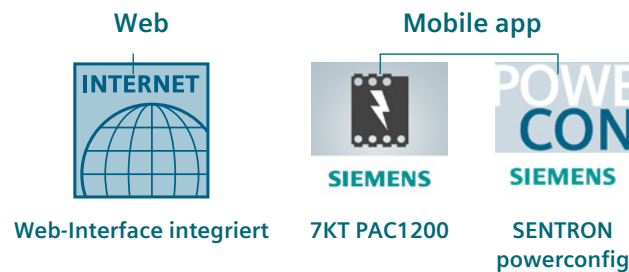
This page provides you with comprehensive information and links on measuring devices, power monitoring and digitalization solutions

[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support) ([109764480](#))

# Power monitoring

## Software

### Local monitoring systems



### Functions for power monitoring

- Commissioning of measuring devices and circuit breakers
- Displaying current data
- Displaying / evaluating current / historical values
- Prepared analyses / reports
- Customized reporting
- Data analysis in the cloud

–	–	■
■	■	■
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### Additionally for energy management

- Switching loads on and off

–	–	–
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### Operating environment

Use

Free of Charge

Free of Charge

Free of Charge

- System requirements
- Suitable according to ISO 50001
- Connection of non-Siemens devices
- Integrated cloud interface

Browser	Android, iOS	Android, iOS
–	–	–
–	–	–
–	–	–

More information

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## Measuring devices, circuit breakers and circuit protection devices

### Measuring devices for industrial applications



- 7KM PAC1020
- 7KM PAC2200 / PAC2200 CLP
- 7KM PAC3200T
- 7KM PAC3120
- 7KM PAC3220
- 7KM PAC4200
- 7KM PAC5100
- 7KM PAC5100 / 7KM PAC5200

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### Measuring devices for buildings and infrastructure



- 7KT PAC1200
- 7KT PAC1600
- SEM3

■	■	–
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■	–	–

### Circuit breakers



- 3WA
- 3WL
- 3WL10 / 3VA27
- 3VA ETU5/8

–	–	■
–	–	■
–	–	–
–	–	■

### Communication-capable circuit protection devices new



- 7KN Powercenter 1000 / 5ST3 COM AS+FC / 5SL6 COM MCB / 5SV6 COM AFDD / 3NA COM Fuse

–	–	■
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### Other Modbus devices

–	–	■
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■ Function available

□ Available with limited functionality

– Function not available

<sup>1)</sup> Included in upcoming versions



PC-basiert			Cloud	World of SIMATIC	
					
SENTRON powerconfig	SENTRON powermanager	7KN Powercenter 3000	SENTRON powermind (MindSphere)	SIMATIC TIA Portal integrated	SIMATIC TIA Portal capable
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Free of Charge	License and trial license	—	Subscription	—	—
Windows X64	Windows X64	—	Browser	—	—
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# Hardware components

## Industry



**7KM  
PAC1020**  
new



**7KM  
PAC2200**



**7KM  
PAC2200 CLP**  
new



**7KM  
PAC3200T**



**7KM  
PAC3120**



**7KM  
PAC3220**

### Type of mounting

Front mounting | Standard mounting rail |

Screw mounting

Withdrawable | Fixed-mounted

### Measuring connection

Direct measurement

Transformer measurement

Multichannel measuring system

### Suitable transformers

Window-type current transformers

Folding transformer

Integrated transformer

### Commissioning

MID version

Max. input voltage L-L/L-N

Transformer connection version

Direct connection version

DC power supply unit with

extra-low voltage version

Single-phase counter version

Electrically isolated voltage inputs

Version without display (for web interface)

### Evaluation

#### Measured quantities

Average value of measured values

Voltage, current, frequency

Power, power factor

#### Energy measurement

Daily energy storage

Apparent | Active | Reactive energy |  $\cos \varphi$

Distortion factor THD (voltage, current)

Harmonics (voltage, current)

Phase angle/phase chart

Load profile recording

Flicker acc. to IEC 61000-4-15

#### Monitoring functions

Operating hours counter

Limit monitoring

Logic functions

Event log

Gateway function

Reporting acc. to EN 50160

Integrated fault recorder

#### Integrated communication interfaces

Digital inputs/digital outputs

SO-Interface

M-Bus

RS485 (Modbus RTU)

Ethernet with Modbus TCP

BACnet

#### More information

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## Industry

## Buildings and infrastructure

## Circuit breakers



7KM  
PAC4200



7KM  
PAC5100



7KM  
PAC5200



7KT  
PAC1200



7KT  
PAC1600



SEM3



3WA **new**



3WL



3WL10 /  
3VA27



3VA ETU8

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690 V/400 V x/1 A or x/5 A	690 V/400 V x/1 A or x/5 A	690 V/400 V x/1 A or x/5 A	400 V/230 V x/5 A 40/63 A	400 V/230 V x/5 A 63/80 A	480 V/277 V 50...1200 A/0,1 A	1000 V/577 V integriert	690 V/400 V integrated	690 V/400 V integrated	690 V/400 V integrated
22 ... 65 V DC	-	-	-	-	-	24 V DC	24 V DC	24 V DC	24 V DC
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# Hardware components **new**

## Circuit protection devices



7KN Powercenter 1000

5ST3 COM auxiliary  
switches and fault  
signal contacts

5SV6 COM AFDD/MCB

### Communication interfaces

Wireless	■	■	■
Modbus TCP	■	—	—
Bluetooth	■	—	—
Gateway function	■	—	—

### Type of mounting

Standard mounting rail	■	■	■
Busbars	—	—	—

### Evaluation

Average value of measured values	—	—	■
Temperatures	—	■	■
Current	—	—	■
Voltage	—	—	■
Frequency	—	—	■
Power, power factor	—	—	■
Active and apparent energy	—	—	■

### Monitoring functions

Operating hours counter	■	■	■
Operating hours counter with load current	—	—	■
Operating cycle counters	—	■	■
Trip counter	—	■	■
Alarms for limit monitoring	■	■	■
Remote firmware update	■	■	■
Detection of overload and short circuit	—	—	■
Detection of arcing faults	—	—	■

### More information

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See page 4/54



## Circuit protection devices



**5SL6 COM miniature  
circuit breakers**

**3NA COM fuses**

5SL6 COM miniature circuit breakers	3NA COM fuses
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# Accessories

## Communication modules












**7KM Switched Ethernet  
PROFINET / Modbus TCP**




**7KM PROFIBUS DP**

**7KM RS485  
Modbus RTU**




### Industry

	7KM PAC1020 <b>new</b>	—	—	—
	7KM PAC2200	—	—	—
	7KM PAC2200 CLP <b>new</b>	—	—	—
	7KM PAC3200T	—	—	—
	7KM PAC3120	—	—	—
	7KM PAC3220	■	■	■
	7KM PAC4200	■	■	■
	7KM PAC5100	—	—	—
	7KM PAC5200	—	—	—

### Buildings and infrastructure

	7KT PAC1200	—	—	—
	7KT PAC1600	—	—	—
	SEM3	—	—	—

### Circuit breakers

	3WA / 3WL	—	—	—
	3WL10 / 3VA27	—	—	—
	3VA ETU5/8	■	■	■

### Expansion modules



### Current transformers



**7KM PAC  
4DI/2DO**

**7KM PAC  
I(N), I(Diff), analog**

**4NC**

**7KT**

**3NJ calibrated**

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# SENTRON powerconfig

## Configuration software for commissioning and maintenance

SENTRON powerconfig is available free of charge at [www.siemens.com/powerconfig](http://www.siemens.com/powerconfig)

You can find more information on the Internet at [www.siemens.com/sentron](http://www.siemens.com/sentron)

- Software tool for the efficient commissioning and diagnostics of communication-capable SENTRON components
- Supports all electronic SENTRON devices, e.g. 3WA, 3WL, 3VA, 7KN Powercenter 3000 and 7KN Powercenter 1000, with 5ST3 AS+FC COM, 5SL6 MCB COM, 5SV6 AFDD COM and 3NA Fuse COM
- General range of functions:
  - User-friendly parameter assignment even for complex devices such as the 3WA
  - Fast, optical detection of communication and metering-capable circuit protection devices, such as 7KN Powercenter 1000
  - Saving and printing of device settings
  - Monitoring, saving and printing of instantaneous measured quantities
  - Execution of specific device functions, such as resetting of devices and setting of energy counters

Free download SENTRON powerconfig mobile via:



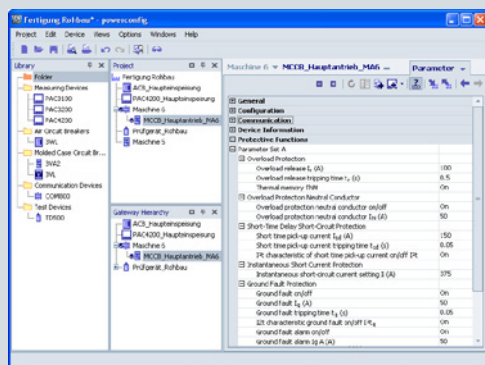
App Store



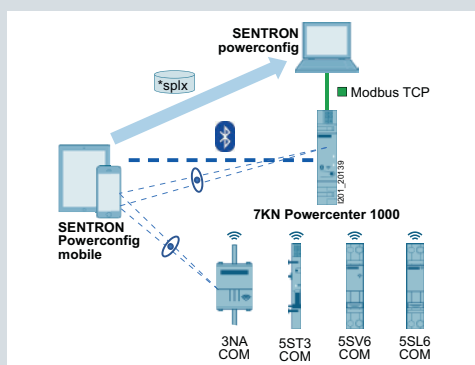
Play Store

- Service functions:
  - Detection of devices and acquisition of measured quantities and status information via different networks, e.g. via Ethernet
  - Device and status acquisition via local interfaces, such as Bluetooth and USB
  - Acquisition and archiving of historic records, such as load profiles and events
  - Firmware updates
  - Switching of language packs for 7KM PAC measuring devices
- Cooperative interaction between powerconfig mobile and powerconfig on the PC:
  - powerconfig mobile offers a high degree of mobile versatility, e.g. to scan codes on the circuit protection devices
  - powerconfig on the PC can be used for subsequent editing and archiving of the defined devices

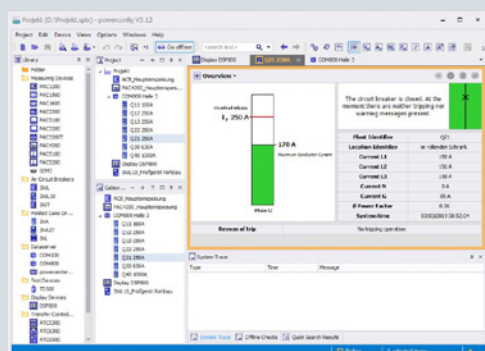
10



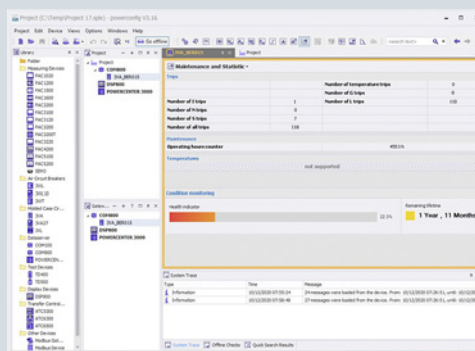
Setting of parameter values



Scanning of circuit protection devices



Display of the circuit breaker status



Display of the state of health of the 3VA

# SENTRON powermanager V3

## PC-based power monitoring software



### SENTRON powermanager 3.6

- Support of new devices:
  - PAC3120
  - PAC3220 with firmware V2.1

Version	Description	Article No.
<b>powermanager V3.5</b>		
Basic Package	Full product license for up to 10 devices, installation for client/server, web access	3ZS2711-0CC30-0YA0
Trial license	Full product license limited to 60 days for up to 10 devices, incl. "Expert" and "Web" option packs Available free of charge at <a href="http://www.siemens.com/lowvoltage/product-support">www.siemens.com/lowvoltage/product-support</a> (64850998)	
<b>V3.x device expansions</b>		
Device Pack (20)	Device expansion license for up to 20 devices	3ZS2711-0CC30-0YD0
Device Pack (50)	Device expansion license for up to 50 devices	3ZS2712-0CC30-0YD0
Device Pack (100)	Device expansion license for up to 100 devices	3ZS2713-0CC30-0YD0
Device Pack (200)	Device expansion license for up to 200 devices	3ZS2714-0CC30-0YD0
Device Pack (500)	Device expansion license for up to 500 devices	3ZS2715-0CC30-0YD0
Device Pack (1000)	Device expansion license for up to 1000 devices	3ZS2716-0CC30-0YD0
<b>Option packs</b>		
"Expert" option pack	Option for creating/presenting any number of freely configured images	3ZS2710-2CC20-0YH0
"Client (5)" option pack	Expansion for up to 5 clients	3ZS2710-3CC00-0YD0
"Distributed Systems (2)" option pack	Option for the connection of 2 autonomous powermanager systems for the exchange of measured values and alarms	3ZS2718-1CC00-0YH0
"Distributed Systems (5)" option pack	Option for the connection of 5 autonomous powermanager systems for the exchange of measured values and alarms	3ZS2718-2CC00-0YH0
"Distributed Systems (10)" option pack	Option for the connection of 10 autonomous powermanager systems for the exchange of measured values and alarms	3ZS2718-3CC00-0YH0
"OPC UA Server" option pack	Option pack for data exchange with other processing platforms via OPC UA	3ZS2710-4CC30-0YD0
<b>Update powermanager V2.0 to V3.0</b>		
Update license	From V2.0 Lean to V3.x (10)	3ZS2711-0CC30-0YE0
Update license	From V2.0 Standard to V3.x (50)	3ZS2712-0CC30-0YE0
Update license	From V2.0 Maximum to V3.x (100)	3ZS2713-0CC30-0YE0
Update license	From V2.0 Maximum to V3.x (200)	3ZS2714-0CC30-0YE0

# SENTRON powermanager V4

## PC-based power monitoring software



### SENTRON powermanager V4.2

SENTRON powermanager V4 is based on a new platform with advanced graphical capabilities and a standard SQL database. The workflows for setting up the system, creating devices, graphically displaying the device data and processing it in reports have been fundamentally revised. Unlike with V4.1, PAC3120 and PAC3220 are now also supported.

Two additional graphical options can now be used to create customer-specific graphics. The „Graphics Editor 60 Days“ option is limited to 60 days of use and is aimed at end users who want to create graphics during the setup phase.

The „Trial“ license gives customers the opportunity to gain initial experience with SENTRON powermanager during a 60-day test phase. The application can still be used by purchasing a regular license.

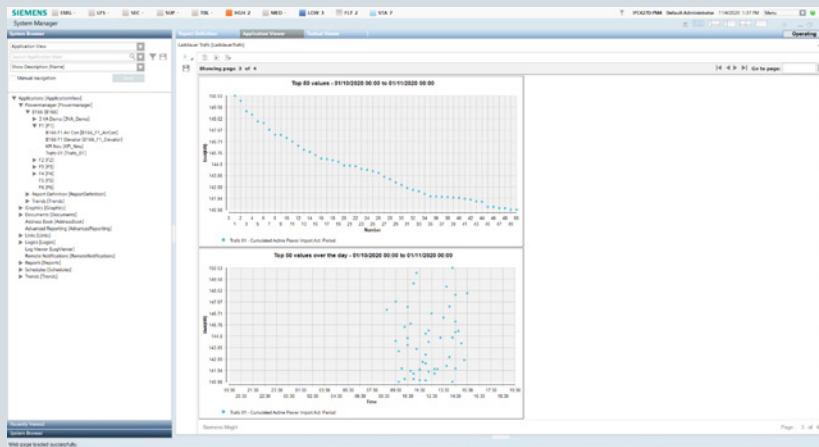
The migration of existing SENTRON powermanager V3.x projects will be supported as of a future SENTRON powermanager version.

You can find more information on the Internet at [www.siemens.com/powermanager](http://www.siemens.com/powermanager)

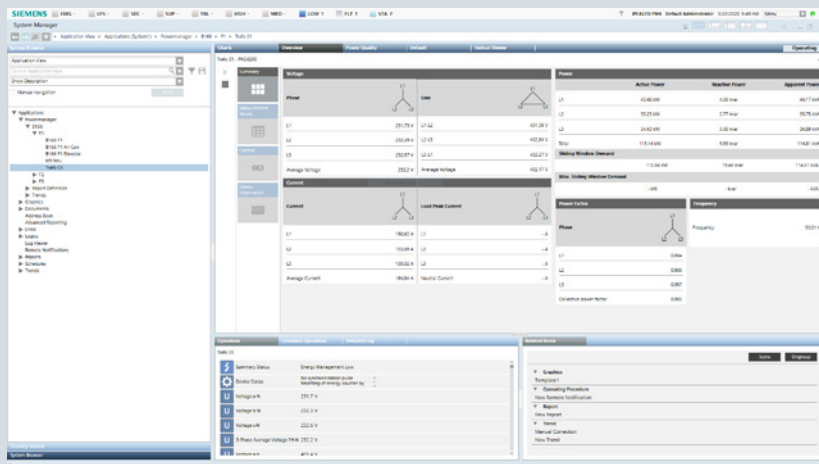
You can find training courses on the Internet at [www.siemens.com/sittrain-lowvoltage](http://www.siemens.com/sittrain-lowvoltage)

Version	Description	Article No.
<b>powermanager V4.2</b>		
Extended Package	Full product license for up to 10 devices, installation for client/server, web access	7KN2710-2CE40-0YCO
Trial license	Full product license limited to 60 days for up to 10 devices, incl. all functions; software download via SIOS Portal <a href="http://www.siemens.com/lowvoltage/product-support">www.siemens.com/lowvoltage/product-support</a> (109771760) A free license for one-time use (limited to 60 days) must also be requested via <a href="mailto:powermanagerlicence.de@siemens.com">powermanagerlicence.de@siemens.com</a>	
<b>Device expansions</b>		
Device Pack (20)	Device expansion license for up to 20 devices	7KN2711-1CE40-0YCO
Device Pack (50)	Device expansion license for up to 50 devices	7KN2711-2CE40-0YCO
Device Pack (100)	Device expansion license for up to 100 devices	7KN2711-3CE40-0YCO
Device Pack (200)	Device expansion license for up to 200 devices	7KN2711-4CE40-0YCO
Device Pack (500)	Device expansion license for up to 500 devices	7KN2711-5CE40-0YCO
Device Pack (1000)	Device expansion license for up to 1000 devices	7KN2711-6CE40-0YCO
<b>Option packs</b>		
"Graphics Editor 60 Days" option pack	Option for creating/presenting any number of freely configured images, Validity period limited to 60 days	7KN2712-0CE40-0YCO
„Engineering License“ option pack	Option for creating custom-made SENTRON powermanager applications, e.g. graphics; especially suitable for partners such as Solution Providers, control cabinet builders, etc.	7KN2712-0CE40-0YC1 <b>new</b>
"Client (2)" option pack	Expansion for up to 2 clients	7KN2712-1CE40-0YCO
"Client (5)" option pack	Expansion for up to 5 clients	7KN2712-2CE40-0YCO
"powermanager Server" option pack	Additionally, powermanager server license for distributed systems without devices, web, etc.	7KN2712-4CE40-0YCO
<b>System packages</b>		
System 1	Package comprising 1× powermanager Extended 1× PAC4200 1× PAC3120 1× RS485 modules	7KN2715-1CE40-0YCO
System 3	Package comprising 1× powermanager Extended 3× PAC3220	7KN2715-3CE40-0YCO
System 4	Package comprising 1× powermanager Extended 1× PAC4200 4× PAC1600 1× RS485 module	7KN2715-4CE40-0YCO
System 5	Package comprising 1× powermanager Extended 5× PAC2200 transformer measurement Modbus TCP	7KN2715-5CE40-0YCO





powermanager – Load duration report



powermanager – Overview of measuring devices



powermanager – Measuring device diagram

# 7KN Powercenter

## Edge/IoT-based data acquisition and visualization for low-voltage power distribution

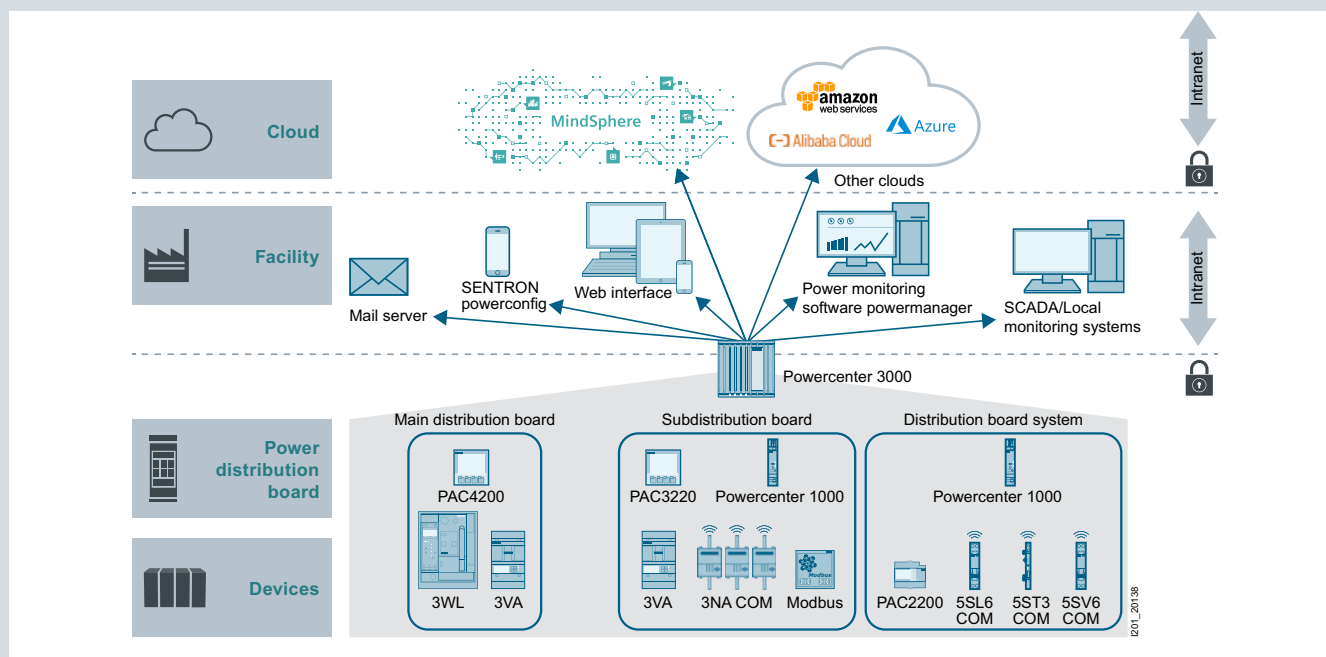
### 7KN Powercenter 3000

- Offers a range of interfaces for the digitalization of low-voltage power distribution
  - One web interface for a clear overview of all connected devices
  - Very simple communication with the SENTRON MindSphere application. See MindSphere Apps
  - Low-voltage power distribution data interface to MindSphere, the IoT operating system from Siemens
  - Communication interface via Modbus TCP for diverse applications, e.g. SENTRON powermanager
- Provision of the 15 min energy values over 14 months for the connected devices as a basis for energy management according to ISO 50001.
  - Periodic emails
  - Explicit emails
  - Explicitly stored as a csv file
- Event message via email and web interface
- Flexible IT security features for protection against unauthorized access
- Easy commissioning using powerconfig
- Compact design, 24 V DC supply

- Events from the devices are sent as emails
- Display and export of daily trends
- Support of SENTRON powermind made easy
- Third-party devices can be used in the SENTRON environment, e.g. web interface and SENTRON powermind
- Applications in other clouds, e.g. aws, Azure, can be supplied with data via 7KN Powercenter 3000.
- Web interface in up to 10 languages

You can find more information on the Internet at [www.siemens.com/powermonitoring](http://www.siemens.com/powermonitoring)

Mounting	Interfaces	Protocols	Article No.
Standard rail mounting	2x Ethernet	Modbus TCP, http, MindSphere	7KN1310-0MC00-0AAB



Application areas 7KN Powercenter 3000

## Wireless data acquisition and visualization for low-voltage power distribution new

### 7KN Powercenter 1000

The 7KN Powercenter 1000 data transceiver is designed to enable comprehensive data acquisition of communication and metering-capable circuit protection devices. This increases transparency in the final circuit, through which optimization measures can be derived to increase system availability.

Up to 24 devices can communicate wirelessly with 7KN Powercenter 1000 via radio link. This means that no increased installation effort is required for communication. Comprehensive data availability can be ensured by buffering selected data.

The compact design of the 7KN Powercenter 1000, in a single modular width, results in an extremely small footprint in the distribution on board so as to enable wireless, comprehensive data acquisition. This is complemented by easy mounting on a 35 mm DIN rail and plug-in terminals for a 24 V DC power supply, which can be immediately looped through (daisy chain) to supply other devices.

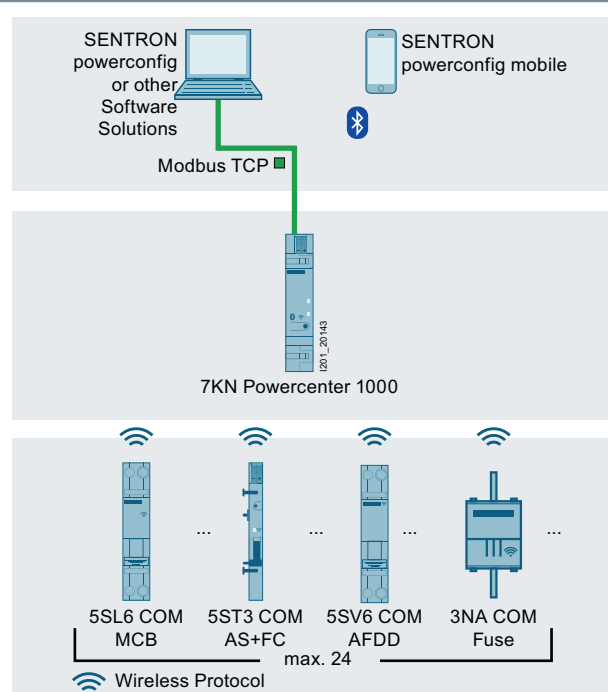
The integrated Bluetooth interface enables simple on-site communication and commissioning via powerconfig or powerconfig mobile. Connection to various configuration or power monitoring systems is ensured via the Modbus TCP interface. Furthermore, this interface also enables a connection via e.g. 7KN Powercenter 3000 or via LOGO! to cloud applications.

Mounting	Power supply	Devices that can be connected	Interfaces	Article No.
Standard rail mounting	24 V DC SELV	24 circuit protection devices via radio link	Bluetooth, Ethernet (Modbus TCP)	7KN1110-0MC00



10

### 7KN Powercenter 1000 data transceiver



- Wireless radio transmission of measured values and data to the 7KN Powercenter 1000 data transceiver
- Parameter assignment, firmware updates and further processing of the data via the 7KN Powercenter 1000 data transceiver



You will find further information under:

Quick Installation Guide – 7KN Powercenter 1000 ([109791805](#))



System Manual – Circuit protection devices with communication and metering function ([109791806](#))





# SENTRON powermind

## Cloud-based solution for data visualization and analysis in power distribution systems



SENTRON powermind is aimed equally at energy managers, facility managers and/or operators. For energy managers, predefined, automated representations and analyses of energy data are available, such as:

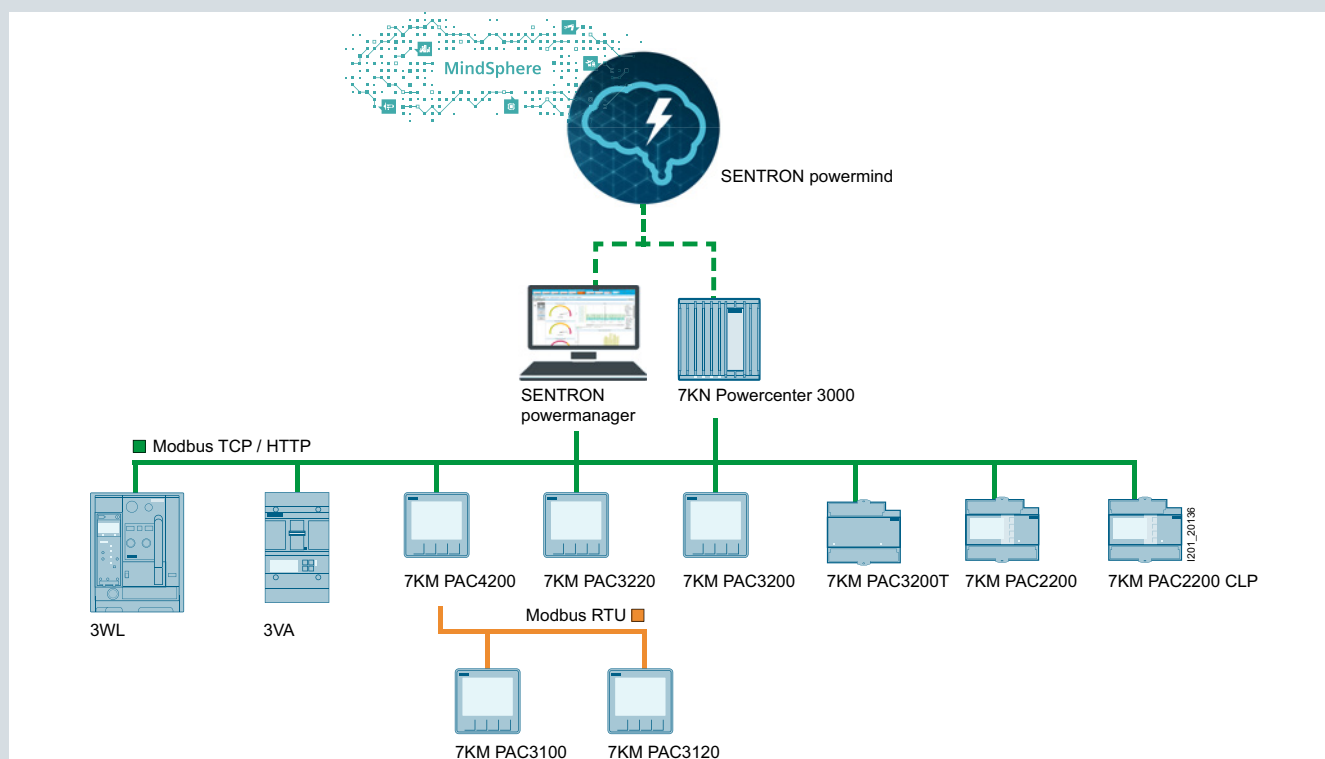
- Comparison of energy consumption on weekdays and weekend with percentage day-by-day representation of the distribution of energy consumption to identify unnecessary energy consumption
- Comparison of energy consumption and power import during a selected period as compared with a reference period to assess the effectiveness of energy efficiency measures
- Day-by-day representation of the 15 min power demand, incl. min and max values to assess power peaks

SENTRON powermind offers operators and facility managers the following information and analyses:

- Status of the switching and protection devices, such as 3VA, 3WA and 3WL
- Display of the maximum current value of an individual phase in relation to  $I_n$
- Condition monitoring information about the condition of the contact system of each circuit breaker and also as an overview of all circuit breakers
- The following devices are supported:  
PAC2200/PAC2200CLP, PAC3100/PAC3120, PAC3200/PAC3200T/PAC3220, PAC4200 measuring devices,  
3VA, 3WA and 3WL circuit breakers

You can find more information on the MindSphere Store at

[www.dex.siemens.com/mindsphere/applications](http://www.dex.siemens.com/mindsphere/applications)

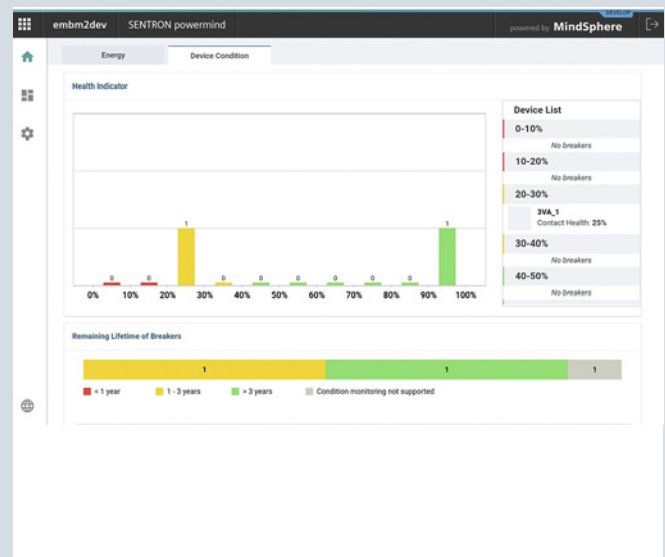
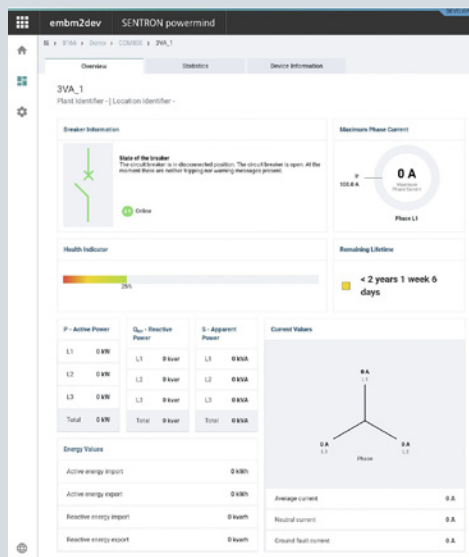


A large number of devices transmit data via SENTRON Powercenter 3000 or SENTRON powermanager to SENTRON powermind

SENTRON powermind processes data from SENTRON Powercenter 3000 or SENTRON powermanager V3.6 or higher. The connection via SENTRON powermanager V3.6 does not require any additional hardware.

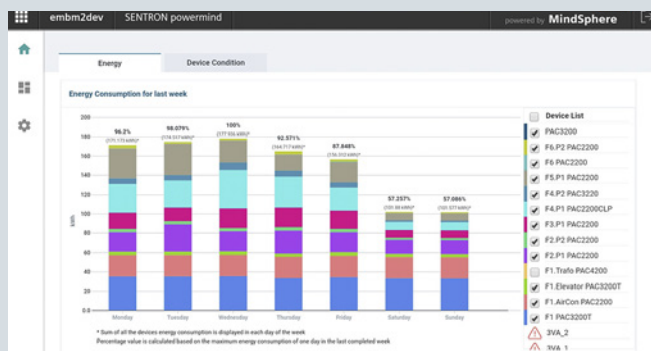
In both cases, no complex configuration or parameterization is required, as the necessary information is exchanged using files. This also prevents possible incorrect entries or write errors. An error-free connection can thus be easily established in just a few minutes.

The examples show some of the functions of SENTRON powermind, which are aimed at different customer groups, such as energy managers and maintenance personnel, but also electricians. All information is available via a web browser on a standard PC, but also on mobile devices, such as tablets and smartphones. The information is therefore available both on-site (locally) and off-site (remotely).



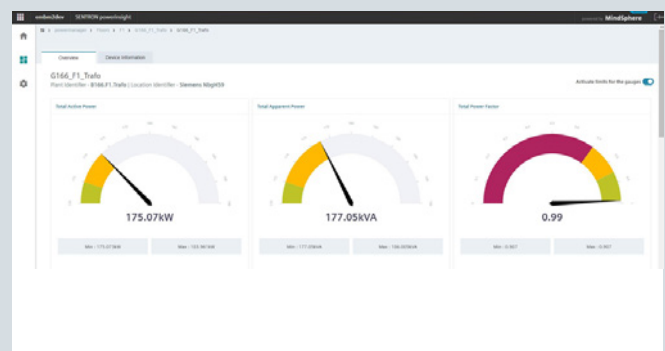
### Creating transparency

- Representation of the device status, e.g. open, closed, tripped and relevant measured quantities, such as maximum phase current, total power ...
- Information about the state of health of the device to take action proactively



### Overview of the circuit breaker status

- Overview of the state of the health of all circuit breakers in the switchboard
- Assignment to a maintenance cycle (< 1 year; between 1 and 3 years; > 3 years)
- Display of circuit breakers in list form as well as link to the respective circuit breaker dashboard



### Creating transparency

- Representation of the power flow/power import in various parts of the power distribution system
- Comparison of the weekly energy consumption (percentage distribution of weekdays in comparison to weekend) to identify unusual energy consumption patterns and saving measures



### Energy management

- Comparison of the energy consumption of two periods, for example, to assess the effectiveness of energy saving measures
- Representation of the active power as mean and min/max values

# SIMATIC Energy Suite

For integrated energy management

## Highlights

- Simple and intuitive configuration instead of programming
- Automatic generation of the PLC energy program
- Convenient integration of measuring components from the Siemens portfolio and from other manufacturers
- Integrated into the TIA Portal and the automation system
- Archiving in WinCC Professional or PLC
- Seamless interfacing to Energy Manager PRO and Energy
- Analytics

Additional information on the SIMATIC Energy Suite:

[www.siemens.com/energysuite](http://www.siemens.com/energysuite)

# SIMATIC Modbus/TCP SENTRON PAC

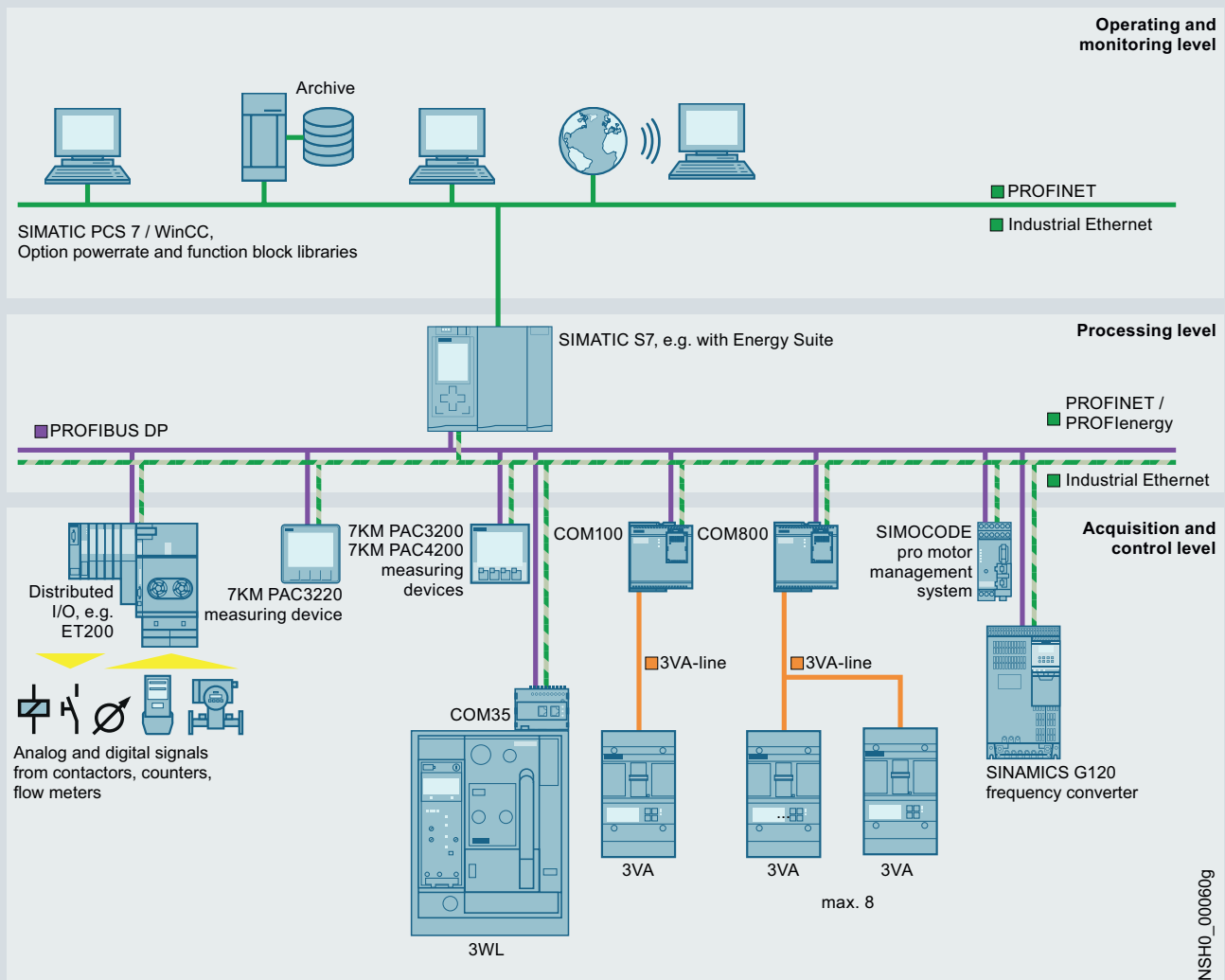
For 7KM PAC3200/4200 measuring devices

Use and version	Valid for	Type	Article No.
Communication via the integrated PN interface for reading values out of PAC 3200 and PAC PAC 4200 devices, single license	1 CPU and up to 20 SENTRON PACs	Modbus/TCP 20 SENTRON PAC	6AV6676-6MA30-0AX0
	1 CPU and up to 100 SENTRON PACs	Modbus/TCP 100 SENTRON PAC	6AV6676-6MA30-1AX0
	1 CPU and up to 512 SENTRON PACs	Modbus/TCP 512 SENTRON PAC	6AV6676-6MA30-2AX0

# PAC/3WL/3VA SIMATIC PCS 7 library

For 7KM PAC3200/3220/4200 measuring devices and 3WL/3VA/3VL circuit breakers

Application	Version	Type of delivery	Article No.
<b>PAC/3WL/3VA SIMATIC PCS 7 library</b>			
<ul style="list-style-type: none"> <li>AS blocks and faceplates for integrating the 3WL/3VA/3VL circuit breakers into SIMATIC PCS 7, V8.x or V9.0 SP2</li> <li>For each SIMATIC PCS 7 Operator Station of the single station/server version, a license containing the following is required: <ul style="list-style-type: none"> <li>Engineering license for one SIMATIC PCS 7 Operator Station of the single station/server version</li> <li>Runtime license for one automation system (1 required per automation system, further AS runtime licenses can be ordered separately)</li> </ul> </li> </ul>	Engineering and runtime software, software class A, 2-language (English, German), single license for one installation	Software and electronic documentation on DVD, engineering and runtime license as Certificate of License	3ZS2787-1CC30-0YG0
<b>AS runtime license for PAC/3WL/3VA library for SIMATIC PCS 7</b>			
License for one automation system in each case	Runtime software, software class A, 2-language (English, German), single license for one installation	Runtime license as Certificate of License without software and documentation	3ZS2787-1CC30-6YH0





# 7KM PAC measuring devices

## Basic units



Connections	Power supply	Display	Interface	MID	PTB-A50.7	7KM PAC1020	7KM PAC2200 / PAC2200 CLP	7KM PAC3200T
<b>Transformer measurement</b>								
Screw terminals	Self-powered	With	M-Bus	With	Without	—	7KM2200-2EA30-1GA1	—
				Without	Without	—	7KM2200-2EA30-1CA1	—
			Modbus RTU	With	Without	—	7KM2200-2EA30-1HA1	—
				Without	Without	—	7KM2200-2EA30-1DA1	—
			Modbus TCP	With	With	—	7KM2200-2EA00-1JB1 <b>new</b>	—
				Without	Without	—	7KM2200-2EA30-1JA1	—
				Without	Without	—	7KM2200-2EA30-1EA1	—
				Without	Without	—	—	—
			AC/DC wide-voltage power supply unit	Without	Without	7KM1020-0BA01-1DA0 <b>new</b>	—	—
			Without	Without	Without	—	—	7KM3200-OCA01-1AA0
			DC power supply unit with extra-low voltage	Without	Without	—	—	—
Ring cable lug connection	AC/DC wide-voltage power supply unit	With	Modbus TCP	Without	Without	—	—	—
<b>Direct measurement</b>								
Screw terminals	Self-powered	With	M-Bus	With	Without	—	7KM2200-2EA40-1GA1	—
				Without	Without	—	7KM2200-2EA40-1CA1	—
			Modbus RTU	With	Without	—	7KM2200-2EA40-1HA1	—
				Without	Without	—	7KM2200-2EA40-1DA1	—
			Modbus TCP	With	With	—	7KM2200-2EA40-1JB1 <b>new</b>	—
				Without	Without	—	7KM2200-2EA40-1JA1	—
				Without	Without	—	7KM2200-2EA40-1EA1	—
				Without	Without	—	—	—

### Further technical specifications

		7KM1020-..	7KM2200-..	7KM3200-..	7KM3120-0..	7KM3120-1..
<b>Basic data</b>						
Installation		Front mounting	Standard mounting rail		Front mounting	
Mounting width		—	6 TE		—	
Control panel instrument		96 × 96 mm	—		96 × 96 mm	
External auxiliary voltage	50/60 Hz AC	100 ... 250 V	—	90 ... 276 V	100 ... 250 V ±10 %	—
	DC	110 ... 250 V ±10 %	—	110 ... 275 V	110 ... 250 V ±10 %	24 ... 60 V ±20 %
<b>Measuring inputs</b>						
Transformer connection	Secondary input current $I_e$	x/1 A or x/5 A	x/1 A or x/5 A		x/1 A or x/5 A	
Direct connection	Input voltage $U_e$ 3 AC 50/60 Hz	400/230 V	—		690/400 V	
	Rated current $I_n$	—	65 A	—	—	



7KM PAC3120

7KM PAC3220

7KM PAC4200

7KM PAC5100

7KM PAC5200

–	–	–	–	–
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–	–	–	–	–
7KM3120-0BA01-1DA0	–	–	–	–
–	7KM3220-0BA01-1DA0	7KM4212-0BA00-3AA0	7KM5212-6BA00-1EA2	7KM5412-6BA00-1EA2
–	–	–	7KM5212-6CA00-1EA8	7KM5412-6CA00-1EA8
–	7KM3220-1BA01-1EA0	7KM4211-1BA00-3AA0	–	–
7KM3120-1BA01-1EA0	–	–	–	–
–	–	7KM4212-0BA00-2AA0	–	–
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7KM3220-0..

7KM3220-1..

7KM4212-..

7KM4211-..

7KM5212-

7KM5412

Front mounting

Front mounting / Standard mounting rail

96 × 96 mm

100 ... 250 V  
±10 %

–

95 ... 240 V  
±10 %

–

110 ... 230 V  
±10 %

100 ... 250 V  
±10 %

24 ... 60 V  
±20 %

110 ... 340 V  
±10 %

22 ... 65 V  
±10 %

24 ... 250 V  
±10 %

x/1 A or x/5 A

690/400 V





500/289 V

690/400 V






–

# 7KM PAC measuring devices

## Accessories

		7KM PAC1020	7KM PAC3120 7KM PAC3220 7KM PAC4200
7KM PAC TMP2 standard mounting rail adapter			
	<ul style="list-style-type: none"><li>Two-tier adapter for mounting a measuring device on a standard mounting rail</li><li>Front display</li><li>For manual intervention</li></ul>		
		7KM9900-0XA00-0AA0	
7KM PAC TMP mounting plate			
	<ul style="list-style-type: none"><li>Adapter for mounting a measuring device on standard mounting rail</li><li>Display faces backwards towards standard mounting rail</li><li>Readout and evaluation of measurements solely via mains operation</li></ul>		
		7KM9900-0YA00-0AA0	
Compact holder			
	<ul style="list-style-type: none"><li>Device holder for 7KM PAC3100 /3120/3200/3220/4200</li><li>10 holders for 5 PAC devices</li><li>For seamless side-by-side mounting of the devices (without spaces)</li></ul>		
		7KM9900-0GA00-0AA0	
Spare parts 7KM PAC			
	<ul style="list-style-type: none"><li>Spare parts comprising:<ul style="list-style-type: none"><li>Device holders for panel mounting (2X)</li><li>Screw terminal for connection of voltage inputs</li><li>Screw terminal for connection of current inputs</li><li>Terminal block inputs/outputs for 7KM PAC3100/4200</li><li>Terminal block inputs/outputs for 7KM PAC3200</li><li>RS485 terminal blocks for 7KM PAC3100</li></ul></li></ul>		
		—	7KM9900-0SA00-0AA0

## Expansion and communication modules

	7KM PAC3220 7KM PAC4200	COM100/800 (3VA)
<b>7KM Switched Ethernet PROFINET communication module</b>		
 <ul style="list-style-type: none"> <li>• Latest PROFINET switching properties</li> <li>• S2 system redundancy for operation in H systems</li> <li>• CiR Configuration in Run</li> <li>• Firmware update via the modules for PAC4200 and PAC3220</li> </ul>		
	7KM9300-0AE02-0AA0	
<b>7KM PROFIBUS DP communication module</b>		
		
	7KM9300-0AB01-0AA0	
<b>7KM RS485 communication module</b>		
		
	7KM9300-0AM00-0AA0 <sup>1)</sup>	
<b>7KM PAC 4DI/2DO expansion module</b>		
		
	7KM9200-0AB00-0AA0	—
<b>7KM PAC I(N), I(Diff), analog expansion module</b>		
 <ul style="list-style-type: none"> <li>• To add the following functions to the measuring inputs: <ul style="list-style-type: none"> <li>– N conductor measurement</li> <li>– Two analog inputs, also for measuring non-electrical quantities such as temperature, water or air pressure</li> <li>– Residual current measurement via type A or type B summation current transformers</li> </ul> </li> </ul>		
	7KM9200-0AD00-0AA0	—

<sup>1)</sup> Suitable for 7KM PAC4200 (especially for the Modbus TCP/RTU Gateway)

Residual-current transformers for 7KM PAC I(N), I(Diff), analog expansion module, [see page 11/1](#)

# 7KT PAC measuring devices

## Basic unit PAC1600



Connections	Version	Power supply	Display	Interface	MID	7KT PAC1600
Transformer measurement						
Screw terminals	3-phase	Self-powered	With	Modbus RTU	Without	7KT1661
					With	7KT1662
				M-Bus	Without	7KT1663
					With	7KT1664
				S0-Interface	Without	7KT1672
					With	7KT1673
	3-phase, universal	Auxiliary power: 100 ... 240 V AC, 110 ... 250 V DC 50/60Hz	With	–	Without	7KT1681
				Modbus RTU	Without	7KT1682
Direct measurement						
Screw terminals	1-phase	Self-powered	With	Modbus RTU	Without	7KT1651
					With	7KT1652
				M-Bus	Without	7KT1653
					With	7KT1654
				S0-Interface	Without	7KT1655
					With	7KT1656
	3-phase	Self-powered	With	Modbus RTU	Without	7KT1665
					With	7KT1666
				M-Bus	Without	7KT1667
					With	7KT1668
				S0-Interface	Without	7KT1670
					With	7KT1671



## PAC1200 multichannel current measuring system

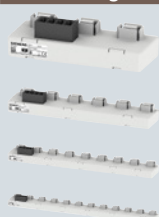


Connections	Version	Power supply	Display	Interface	MID	7KT PAC1200
Direct measurement						
Screw terminals	3-phase	Self-powered	Without	Modbus TCP	Without	7KT1260

### PAC1200

7KT PAC1200

#### Data manager with 7KT1260, sensor bars



##### Number of connections

3

6

9

12

##### Article No.

7KT1233

7KT1236

7KT1238

7KT1242

#### Data manager with 7KT1260, sensors



##### Current $I_e$

40 A

63 A

##### Article No.

7KT1254

7KT1255

10

## PAC1200 Bundles



Data manager	Sensor bars	Sensors	18 bundle	24 bundle
1× data manager 7KT1260	2× 9-sensor bar 7KT1238	18× sensors 40 A 7KT1254	7KT1222	—
1× data manager 7KT1260	2× 12-sensor bar 7KT1242	24× sensors 40 A 7KT1254	—	7KT1223

# SEM3 multichannel current measuring system

## Data manager



Connections	Version	Power supply	Display	Interface	MID	
<b>Transformer measurement</b>						
Screw terminals	3-phase	Self-powered	Without	Modbus TCP RS485 Modbus RTU	Without	US2:SEM3CONTROLLER

## Further technical specifications

SEM3

<b>Basic data</b>	
Installation	Screw mounting
<b>Measuring inputs</b>	
Max. input voltage 50/60 Hz AC	480 V / 277 V
Standard current transformers	50 ... 1200 A / 0.1 A
Folding transformer	50 ... 2000 A / 0.1 A

## Accessories

### Metering modules



- For recording measured values
- Accuracy of 0.2% or 1% for the entire measurement including current transformer
- Simple setting of phase configuration by means of slide switch
- Connection of a current transformer for measuring a phase
- Metering module is plugged into meter rack

#### Measuring accuracy

0.2%

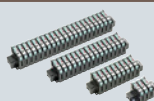
1%

#### Article No.

US2:SEM3PHAMETER

US2:SEM3PLAMETER

### Meter racks



#### Version

For 3 metering modules

For 9 metering modules

For 15 metering modules

For 21 metering modules

#### Article No.

US2:SEM3RACK3

US2:SEM3RACK9

US2:SEM3RACK15

US2:SEM3RACK21

### Connecting cables



- 600 V insulated special cable for connecting meter racks to the data manager

#### Length

0.3 m

0.6 m

0.9 m

#### Article No.

US2:SEM3CAB12INCH

US2:SEM3CAB24INCH

US2:SEM3CAB36INCH

### Standard current transformers



- Standard power cable brown and yellow, 1.82 m long
- Can be extended up to 100 m while still maintaining accuracy
- Transformer configuration is carried out in the data manager

#### Output signal

100 mA

#### Transformer transmission ratio

50 : 0.1

125 : 0.1

250 : 0.1

400 : 0.1

600 : 0.1

800 : 0.1

1200 : 0.1

#### Article No.

US2:SEM3SCCT50

US2:SEM3SCCT125

US2:SEM3SCCT250

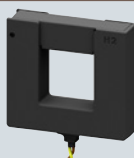
US2:SEM3SCCT400

US2:SEM3SCCT600

US2:SEM3SCCT800

US2:SEM3SCCT1200

### Folding transformers



- Standard power cable brown and yellow, 1.82 m long
- Can be extended up to 100 m while still maintaining accuracy
- Transformer configuration is carried out in the data manager

#### Output signal

100 mA

#### Transformer transmission ratio

50 : 0.1

125 : 0.1

250 : 0.1

400 : 0.1

600 : 0.1

800 : 0.1

1200 : 0.1

1600 : 0.1

2000 : 0.1

#### Article No.

7KT1280-5MA00

7KT1280-5MA01

7KT1280-5MA02

7KT1280-5MA03

7KT1280-5MA04

7KT1280-5MA05

7KT1280-5MA06

7KT1280-5MA07

7KT1280-5MA08

### DIN rail adapters



- 5 adapters for snapping onto standard mounting rail
- 1 adapter each for data manager and for meter racks with 3, 9, 15 and 21 metering modules
- Adapters are screwed onto the data manager or the meter racks

#### Article No.

US2:SEM3DINKIT

# Time and pulse counters

## Mechanical counting mechanisms



Display	Resetting	Rated frequency	Rated control supply voltage $U_c$	48 × 48 mm	72 × 72 mm	–
<b>Time counter</b>						
00000.00 h	Without	–	10 ... 80 V DC	7KT5500	–	–
			10 ... 50 V DC	–	7KT5600	–
			12 ... 24 V DC	–	–	7KT5801
		50 Hz	24 V AC	7KT5505	–	7KT5802
			115 V AC	7KT5501	7KT5601	7KT5803
			230 V AC	7KT5502	7KT5602	7KT5804
		60 Hz	115 V AC	7KT5503	7KT5603	7KT5806
			230 V AC	7KT5504	7KT5604	7KT5807
<b>Pulse counter</b>						
0000000	Without	–	12 ... 24 V DC	–	–	7KT5811
		50/60 Hz	24 V AC	–	–	7KT5812
			230 V AC	–	–	7KT5814

### Further technical specifications

	7KT55..	7KT56..	7KT58..
<b>Basic data</b>			
Installation	Front mounting		Standard mounting rail
Mounting width	–		2 MW
Front frame	48 × 48 mm	72 × 72 mm	–
Display	Drum-type register		
Version	–	With narrow frame according to DIN 43700	–

### Accessories

Accessories			7KT55..	7KT56..	7KT58..
Cover					
	Size		Article No.	Article No.	Article No.
	55 x 55 mm		7KT9020	–	–
Sealing ring for cover					
	Degree of protection	Scope of supply	Article No.	Article No.	Article No.
	IP43 (in switchboards with smooth surfaces)	1 set = 5 units	7KT9000	–	–
Terminal cover					
	Degree of protection		Article No.	Article No.	Article No.
	IP20 (with connected conductors)		–	7KT9021	–

## Electronic counting mechanisms



Display	Resetting	Rated frequency	Rated control supply voltage U <sub>c</sub>	
<b>Time counter</b>				
000000.0 h	Without	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5821
	Electrical	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5822
	Electrical and mechanical	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5823
<b>Pulse counter</b>				
0000000	Electrical and mechanical	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5833

### Further technical specifications

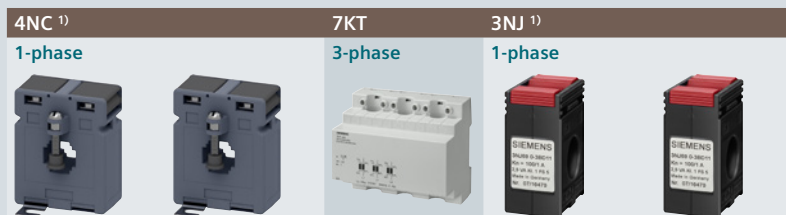
7KT58..

<b>Basic data</b>	
Installation	Standard mounting rail
Mounting width	2 MW
Display	LCD display



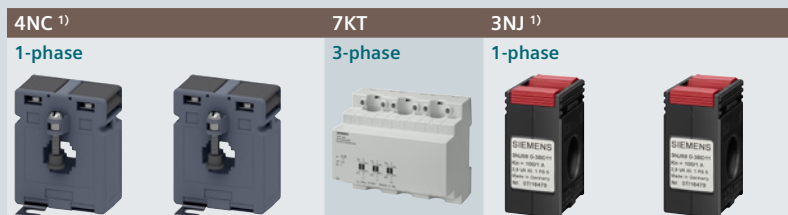
# Current transformers

For measuring purposes



Size	Insulation level U <sub>m</sub>	Rated primary current I <sub>pr</sub>	Rated power P <sub>n</sub>	I <sub>sr</sub> = 5 A	I <sub>sr</sub> = 1 A	I <sub>sr</sub> = 5 A	I <sub>sr</sub> = 5 A	I <sub>sr</sub> = 1 A
Accuracy class 0.2s								
1	720 V	150 A	1 VA	4NC5121-2FA21	—	—	—	—
		200 A	2,5 VA	4NC5122-2FC21	—	—	—	—
		250 A	2,5 VA	4NC5123-2FC21	—	—	—	—
		300 A	5 VA	4NC5124-2FE21	—	—	—	—
		400 A	5 VA	4NC5125-2FE21	—	—	—	—
		500 A	5 VA	4NC5126-2FE21	—	—	—	—
5	720 V	600 A	5 VA	4NC5227-2FE21	—	—	—	—
		700 A	5 VA	4NC5228-2FE21	—	—	—	—
		800 A	5 VA	4NC5231-2FE21	—	—	—	—
		1000 A	5 VA	4NC5232-2FE21	—	—	—	—
Accuracy class 0.5								
1	720 V	100 A	1 VA	4NC5117-2DA21	4NC5117-0DA21	—	—	—
		150 A	2,5 VA	4NC5121-2DC21	4NC5121-0DC21	—	—	—
		200 A	5 VA	4NC5122-2DE21	4NC5122-0DE21	—	—	—
		250 A	5 VA	4NC5123-2DE21	4NC5123-0DE21	—	—	—
2	720 V	200 A	5 VA	4NC5222-2DE21	4NC5222-0DE21	—	—	—
		250 A	5 VA	4NC5223-2DE21	4NC5223-0DE21	—	—	—
		300 A	5 VA	4NC5224-2DE21	4NC5224-0DE21	—	—	—
		400 A	5 VA	4NC5225-2DE21	4NC5225-0DE21	—	—	—
3	720 V	400 A	5 VA	4NC5325-2DE21	4NC5325-0DE21	—	—	—
		500 A	5 VA	4NC5326-2DE21	4NC5326-0DE21	—	—	—
		600 A	5 VA	4NC5327-2DE21	4NC5327-0DE21	—	—	—
		750 A	5 VA	4NC5330-2DE21	4NC5330-0DE21	—	—	—
		800 A	5 VA	4NC5331-2DE21	—	—	—	—
4	720 V	800 A	10 VA	4NC5431-2DH21	4NC5431-0DH21	—	—	—
		1000 A	10 VA	4NC5432-2DH21	4NC5432-0DH21	—	—	—
		1200 A	10 VA	4NC5433-2DH21	4NC5433-0DH21	—	—	—
		1500 A	10 VA	4NC5435-2DH21	4NC5435-0DH21	—	—	—
		1600 A	15 VA	4NC5436-2DK21	—	—	—	—
		2000 A	20 VA	4NC5438-2DL21	—	—	—	—
		2500 A	25 VA	4NC5440-2DM21	—	—	—	—
		3000 A	30 VA	4NC5441-2DN21	—	—	—	—
Accuracy class 0.5 calibrated								
—	720 V	100 A	1,5 VA	—	—	—	3NJ6920-3BD23	3NJ6920-3BD13
		150 A	2,5 VA	—	—	—	3NJ6920-3BE23	3NJ6920-3BE13
		300 A	5 VA	—	—	—	3NJ6940-3BH23	3NJ6940-3BH13
		400 A	5 VA	—	—	—	3NJ6940-3BJ23	3NJ6940-3BJ13
		500 A	5 VA	—	—	—	3NJ6940-3BK23	3NJ6940-3BK13
		600 A	5 VA	—	—	—	3NJ6940-3BL23	3NJ6940-3BL23

<sup>1)</sup> Overcurrent limiting factor FS5



Size	Insulation level $U_m$	Rated primary current $I_{pr}$	Rated power $P_n$	$I_{sf} = 5 A$	$I_{sf} = 1 A$	$I_{sf} = 5 A$	$I_{sf} = 5 A$	$I_{sf} = 1 A$
Accuracy class 1,0								
1	720 V	50 A	1,2 VA	4NC5112-2CB21	4NC5112-0CB21	—	—	—
		60 A	1,2 VA	4NC5113-2CB21	4NC5113-0CB21	—	—	—
			1,25 VA	—	—	7KT1200	—	—
		75 A	2,5 VA	4NC5115-2CC21	4NC5115-0CC21	—	—	—
		100 A	2,5 VA	4NC5117-2CC21	4NC5117-0CC21	7KT1201	—	—
		150 A	2,5 VA	4NC5121-2CC21	4NC5121-0CC21	—	—	—
			3,75 VA	—	—	7KT1202	—	—
		200 A	5 VA	4NC5122-2CE21	4NC5122-0CE21	—	—	—
2	720 V	250 A	5 VA	4NC5123-2CE21	4NC5123-0CE21	—	—	—
		200 A	5 VA	4NC5222-2CE21	4NC5222-0CE21	—	—	—
		250 A	5 VA	4NC5223-2CE21	4NC5223-0CE21	—	—	—
		300 A	5 VA	4NC5224-2CE21	4NC5224-0CE21	—	—	—
3	720 V	400 A	5 VA	4NC5225-2CE21	4NC5225-0CE21	—	—	—
		400 A	5 VA	4NC5325-2CE21	4NC5325-0CE21	—	—	—
		500 A	5 VA	4NC5326-2CE21	4NC5326-0CE21	—	—	—
		600 A	5 VA	4NC5327-2CE21	4NC5327-0CE21	—	—	—
4	720 V	750 A	5 VA	4NC5330-2CE21	4NC5330-0CE21	—	—	—
		800 A	10 VA	4NC5431-2CH21	4NC5431-0CH21	—	—	—
		1000 A	10 VA	4NC5432-2CH21	4NC5432-0CH21	—	—	—
		1250 A	10 VA	4NC5434-2CH21	4NC5434-0CH21	—	—	—
		1500 A	10 VA	4NC5435-2CH21	4NC5435-0CH21	—	—	—
		2000 A	12,5 VA	4NC5438-2CJ21	4NC5438-0CJ21	—	—	—
		2500 A	12,5 VA	4NC5440-2CJ21	4NC5440-0CJ21	—	—	—
		3000 A	30 VA	4NC5441-2CN21	—	—	—	—

## Accessories

### Standard rail mounting



For transformer size	Article No.	Article No.	Article No.	Artikel-Nr.	Artikel-Nr.
1 and 5	4NC5923-5LT21	4NC5923-5LT21	—	—	—
2	4NC5925-5LT21	4NC5925-5LT21	—	—	—
3	4NC5930-5LT21	4NC5930-5LT21	—	—	—
4	4NC5940-5LT21	4NC5940-5LT21	—	—	—





# Appendix



Conditions of sale and delivery \_\_\_\_\_ A/2

Link directory \_\_\_\_\_ A/4

# Conditions of sale and delivery

## 1. General Provisions

By using this catalog you can purchase products (hardware, software and services) described therein from Siemens Aktiengesellschaft subject to the following Terms and Conditions of Sale and Delivery (hereinafter referred to as „T&C“). Please note that the scope, the quality and the conditions for supplies and services, including software products, by any Siemens entity having a registered office outside Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. The following T&C apply exclusively for orders placed with Siemens Aktiengesellschaft, Germany.

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- for other services, the „Supplementary Terms and Conditions for Services (‘‘BL’’)<sup>1)</sup> and/or
- for other supplies the „General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry“<sup>1)</sup>.

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For customers with a seat or registered office outside European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for consulting services the „Standard Terms and Conditions for Consulting Services of the Division DF for Customers with a Seat or Registered Office Outside of Germany“<sup>1)</sup> and/or
- for other services the „International Terms & Conditions for Services“<sup>1)</sup> supplemented by „Software Licensing Conditions“<sup>1)</sup> and/or
- for other supplies of hard- and software the „International Terms & Conditions for Products“<sup>1)</sup> supplemented by „Software Licensing Conditions“<sup>1)</sup>

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To the extent our supplies and/or services offered are covered by an existing master or framework agreement, the terms and conditions of that agreement shall apply instead of T&C.

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# Link directory

## Catalog LV 10

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## LV 10 Low-Voltage Power Distribution and Electrical Installation Technology SENTRON • SIVACON • ALPHA

Protection, Switching, Measuring and  
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Distribution Systems

PDF (E86060-K8280-A101-B3-7600)



## LV 14 Power Monitoring Made Simple SENTRON

E86060-K1814-A101-A7-7600



## LV 18 Air Circuit Breakers and Molded Case Circuit Breakers with UL Certification SENTRON

PDF (E86060-K8280-E347-A6-7600)



## ET D1 Switches and Socket Outlets DELTA

PDF



## IC 10 Industrial Controls SIRIUS

PDF (E86060-K1010-A101-B2-7600)



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[www.siemens.com/sitrain](http://www.siemens.com/sitrain)

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