














Recommended installation acc. to IEC 60364-4-42

-  Premises with sleeping accommodations
-  Fire-propagating structures, i.e. high-rises, where a chimney effect can occur
-  Branch circuits with a high connected load that supply electrical consumers such as washing machines, dryers, or dishwashers

Note: already mandatory in Germany acc. to DIN VDE 0100-420

-  Woodworking industry, paper, and textile factories
-  Storage areas with combustible materials
-  Wooden buildings and barns
-  Airports<sup>1</sup>
-  Railway stations<sup>1</sup>
-  National monuments, museums<sup>1</sup>
-  Public buildings<sup>1</sup>
-  Laboratories<sup>1</sup>
-  Data centers<sup>1</sup>

Mandatory installation in Germany acc. to DIN VDE 0100-420

-  Daycare centers<sup>2</sup>
-  Retirement homes<sup>2</sup>
-  Barrier-free apartments<sup>2</sup>

<sup>1</sup> With irreplaceable goods/materials

<sup>2</sup> To be provided in bedrooms and lounges

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Subject to changes and errors.

The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

SIEMENS

*Ingenuity for life*



It's time to act!

The 5SM6 AFD unit complies with the standard IEC 60364-4-42

[siemens.com/afd-units](http://siemens.com/afd-units)

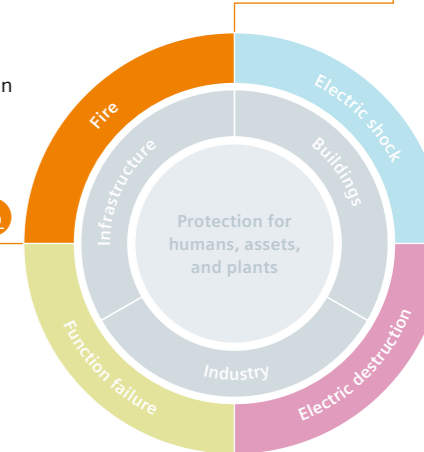
The figures speak for themselves: action is needed!

In Europe, one-third of all fires reported can be traced back to dangerous defects in the electrical installation. The devastating result: fire damage running into the billions, thousands injured, and even deaths! Given this serious background, the installation of arc fault detection (AFD) units is urgently recommended.

**approx. 25,000**  
people die in Europe every year due to fires\*

**about 30%**  
of all fires are caused by electricity\*

**more than 2 million**  
fires are reported in Europe each year\*



\*Consumer fire safety (2009): European statistics and potential fire safety measures

The International Electrotechnical Commission (IEC), the European Committee for Electrotechnical Standardization (CENELEC), and the German Institute for Standardization (DIN) have recognized the urgency.

According to the international standard IEC 60364-4-42, AFD units are strongly recommended all over Europe as the recognized state-of-the-art technology in specific application fields. With the publishing of the standard DIN VDE 0100-420, the installation of AFD units is now mandatory for many locations in Germany.



Proven SENTRON protection devices offer reliable protection against all sources of electrical hazards.

## Better to play it safe!

There are many sources of electrical hazards. That's because electrical installations – whether outdated or new – always harbor certain risks. Inadequate protection existed especially with regard to dangerous arcing faults, so the 5SM6 AFD units were added to the Siemens protection concept to close this safety gap. The AFD unit is part of a consistent, coordinated end-to-end product portfolio that offers comprehensive protection in electrical installations.

### Circuits

AFD units are to be installed in single-phase AC systems with an operating current no higher than 16 A.



AFD units can be combined with MCBs and RCBOs.

## 5SM6 AFD unit – preventive, proven, standard-compliant

The AFD unit is the first device in the European IEC market to provide protection against serial arcing faults, and has proven itself in many applications since it was first introduced.

Already available in the second generation, the 5SM6 AFD unit comes in two versions each for circuits up to 16 A and 40 A. In addition to the new design and streamlined handling, the innovative protection device excels through the patented SIARC detection technology.

- Preventive and proven fire protection for humans, assets, and plants
- Seamless safety: The 5SM6 detects dangerous arcing faults that go undetected by miniature circuit breakers (MCBs) and residual-current circuit breakers (RCCBs)
- The AFD unit corresponds to the recognized state-of-the-art technology





Recommended immediately, as state-of-the-art technology and already mandatory installation in Germany

## The AFD unit in everyday use

- 1 Daycare centers<sup>1</sup>
- 2 Storage area with combustible materials
- 3 Laboratory<sup>2</sup>
- 4 Archive<sup>2</sup>
- 5 Gallery<sup>2</sup>
- 6 Joiners' workshops
- 7 Data centers<sup>2</sup>

<sup>1</sup> Now mandatory in Germany according to DIN VDE 0100-420

<sup>2</sup> With irreplaceable goods/materials

5SM6, 1 TE		5SM6011-2 AFD unit (16 A)
		5SM6014-2 AFD unit (40 A)
5SM6, 2 TE		5SM6021-2 AFD unit (16 A)
		5SM6024-2 AFD unit (40 A)

## Order now!

### More information

[siemens.com/afd-units](https://www.siemens.com/afd-units)  
[siemens.com/protection-concept](https://www.siemens.com/protection-concept)

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well  
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