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SIEMENS
Ingenuity for life

Better to play
it safe!

SENTRON protection devices for modern
electrical installations

siemens.com/protection-concept



Meeting complex requirements

Seamless all-around protection

Increasingly automated infrastructures, new technical conditions, and stricter standards are focusing more attention on adequate protection for electrical installations. In many buildings, the electrical installation can barely keep up with ever more complex requirements and may harbor a growing number of risks.

The appropriate technical solution that can seamlessly cover all potential hazards in electrical installations has a name: SENTRON.

The consistent, end-to-end portfolio contains all the products necessary for the completely reliable protection of people and plants. In addition, with its 5SM6 arc-fault detection (AFD) units, Siemens offers a unique and proven technology to protect against fires caused by serial arcing faults. The new standard IEC 60364-4-42 strongly recommends the installation of AFD units in specific locations of use as the recognized state-of-the-art technology – and at Siemens, these devices are already available for reliable use.

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Kaufhaus des Westens, Berlin

Recognizing the potential of intelligent electrical installations

Throughout their service life, electrical installations in buildings need to be adjusted to changing usage or operating conditions. The electrical devices common today, and modern communications and multimedia equipment, for example, are far more power-intensive than in the past. Despite partially lower consumption, this leads to an increasing load on the electrical wiring and power distribution boards. And yet 70 percent of all electrical installations in residences have not been adapted to new

usage patterns and devices, and they remain in service beyond their normal service life. The corresponding protection equipment is often reduced to a minimum, which is insufficient and can have disastrous consequences: Electrical installations and devices can overheat due to faults or loads that are too high and can cause a fire.

These dangers can be averted with intelligent electrical installations and state-of-the-art AFD units.

Simply safe with SENTRON protection devices

Well-designed protection concept

With the publishing of the international standard IEC 60364-4-42, it's high time to expand, modernize, and adapt old electrical installations to state-of-the-art technology. Thanks to extensive years of experience and the use of innovative technologies, Siemens is the ideal partner to meet these challenges. A comprehensive product range of standard-compliant protection devices offers reliable all-around protection from damage caused by fire, electric shock, lightning, and overvoltage.

Intuitive handling

The functional design and intuitive handling of all devices from Siemens enables easy installation and fast retrofitting.

The accessories for all of these protection devices are standardized and can be flexibly combined. With less inventory management required, this approach quickly enables additional functions.

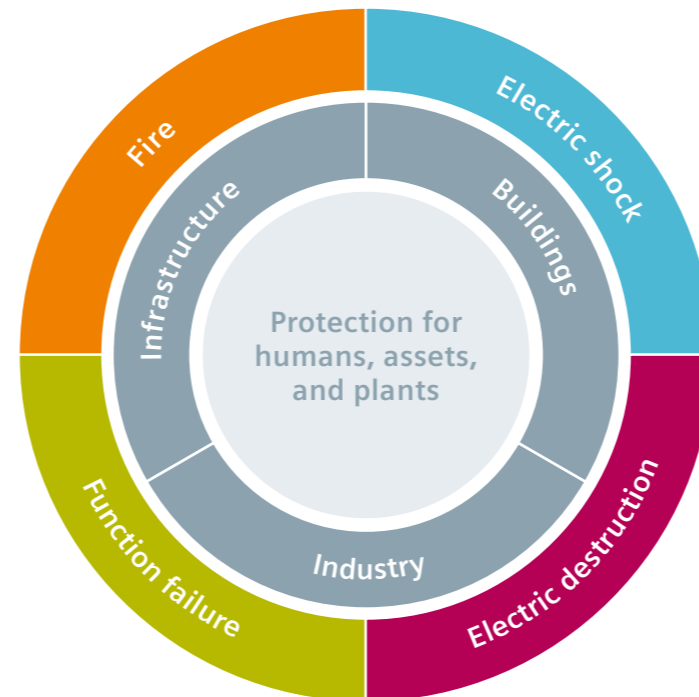
Flexible use

Products from the SENTRON portfolio are suitable for buildings and infrastructure as well as industrial applications. Regardless of the industry or requirement, the comprehensive portfolio covering all the required protection measures stipulated in the standard and beyond makes it easy to provide complete protection for humans, assets, and plants in an electrical installation.

The product spectrum is perfectly supplemented by the ALPHA power distribution boards, into which the devices can be conveniently installed. SIMARIS planning tools also support the entire engineering process, from project planning to system documentation.

Highlights

- Extensive product selection that prevents all potential hazards
- Uniform accessories for easy device handling
- Comprehensive standard-compliant protection for the electrical installation



The proven SENTRON protection devices offer reliable, comprehensive protection from electrical hazards.

Clear results



Fire

25,000

people die in Europe each year due to fires¹

33 percent

of all fires are caused by electricity²

55 percent

of all electrical fires are caused by electrical devices or systems³



Electric shock

approx. 100

deaths caused by electricity accidents every year in Germany¹

19 percent

of all systems do not guarantee any protection from direct contact²

6 percent

of all systems do not guarantee any protection in the event of indirect contact²



Electric destruction

approx. 410,000

cases of damage caused by lightning and overvoltage every year, with costs amounting to €330 billion⁴

approx. 33 percent

of all property damage to electrical consumers can be traced back to lightning and the overvoltage that occurs as a result



Function failure

13 percent

of all faults occur as a result of overusing electrical equipment or insufficient cleanliness in systems²

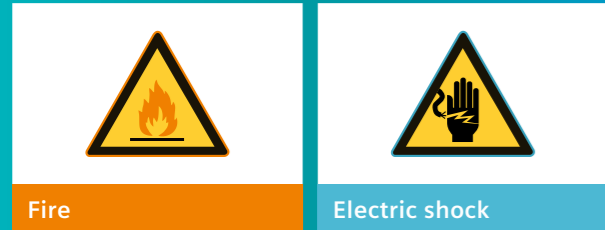
¹ Consumer fire safety (2009): European statistics and potential fire safety measures

² IFS (2014): Fire statistics (2013)

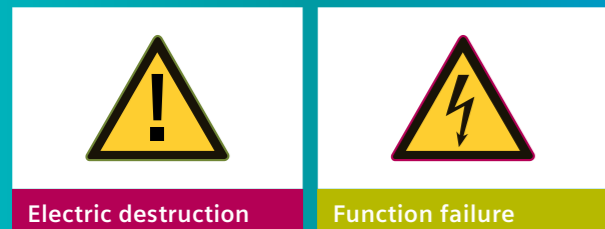
³ IFS (2012): Fault Prism – Safety in the home

⁴ GDV (2013): Lightning strike overview

Reliable all-around protection ...



- Fire**
- Causes**
- Overload and short-circuits
 - Arcing faults
- Protection devices**
- Fuse systems
 - Miniature circuit breakers (MCBs)
 - AFD units
 - RCBOs
- Electric shock**
- Causes**
- Direct contact
 - Indirect contact
- Protection devices**
- Residual current protective devices (RCDs)






- Electric destruction**
- Causes**
- Overvoltage due to switching operations and lightning
- Protection devices**
- Overvoltage protection devices
- Function failure**
- Causes**
- Soiling
 - Overload
 - Fuse failure
- Protection devices**
- Monitoring devices
 - Measuring devices


Industry Online Support App


With our app you have access to all of our product-related information – anytime and anywhere, whether you have problems with the implementation of a project, need help with troubleshooting, want to expand your system, or are planning a new one.





... with SENTRON protection devices

Protection for humans and assets	
Fire	
Potential hazards	Possible consequence
<ul style="list-style-type: none"> • Incorrectly designed protection device / wiring • Operating current > permissible current for line load 	Overload
<ul style="list-style-type: none"> • Insulation faults • Conductive connection between the phase conductors or neutral conductors 	Parallel arcing faults (short-circuit)
<ul style="list-style-type: none"> • Damaged cable insulation • Crushed cables • Outdated insulation • Loose connections due to insufficient torque 	Serial arcing faults
Protective measures	The right product for every potential hazard
	Overload <ul style="list-style-type: none"> • Fuse systems • MCBs
	Parallel arcing faults <ul style="list-style-type: none"> • Fuse systems • MCBs • RCCBs
	Serial arcing faults <ul style="list-style-type: none"> • AFD unit in combination with MCB • AFD unit in combination with RCBO

Protection for humans	
Electric shock	
Potential hazards	Possible consequence
<ul style="list-style-type: none"> • Insulation faults • Connection errors (L and PE swapped) • Improper work practices • Lack of protective measures 	Direct contact
<ul style="list-style-type: none"> • Insulation faults: Phase-on conductive parts that can be touched from outside • Faulty installation • Interrupted PE conductor • Lack of protective measures 	Indirect contact
Protective measures	The right product for every potential hazard
	Direct contact <ul style="list-style-type: none"> • RCCBs, type A • RCCBs, type F • RCCBs, type B
	Indirect contact <ul style="list-style-type: none"> • RCCBs, type A • RCCBs, type F • RCCBs, type B

Plant protection	
Electric destruction	
Potential hazards	Possible consequence
<ul style="list-style-type: none"> • Lightning strike 	Overvoltage due to lightning
<ul style="list-style-type: none"> • Switching operations in the transformer substation • Overvoltage in operating equipment • Electrostatic discharges 	Overvoltage due to switching operations
Protective measures	The right product for every potential hazard
	Overvoltage caused by lightning <ul style="list-style-type: none"> • 5SD7 surge arrester, type 1 • 5SD7 surge arresters, type 1 and type 2 (+ type 3)
	Overvoltage caused by switching operations <ul style="list-style-type: none"> • 5SD7 surge arresters, type 2 (+ type 3)

Asset protection	
Function failure	
Potential hazards	Possible consequence
<ul style="list-style-type: none"> • Thermal overload 	Soiling Overload
<ul style="list-style-type: none"> • Insulation fault, short-circuit 	Mechanical overload
<ul style="list-style-type: none"> • Phase faults • Thermal overload • Overvoltage/undervoltage 	Wire break / corrosion Mechanical defect Switching operations Dirty electricity
<ul style="list-style-type: none"> • Frequency fluctuation • Short-circuit, overload 	Load shifting Fuse failure
Protective measures	The right product for every potential hazard
	Monitoring devices <ul style="list-style-type: none"> • 5TT3 motor protection relays • 5TT3 voltage relays • 5SV8 residual current monitors
	Measuring devices <ul style="list-style-type: none"> • 7KM PAC3100 measuring devices • 7KM PAC3200 measuring devices • 7KM PAC4200 measuring devices • 7KM PAC5200 measuring devices

Simply smart fire protection – safety without gaps

Highlights

- Preventive protection from electrical fires
- Reliable coverage of the protection gap
- Reliable disconnection of the circuit if hazardous arcing faults occur

Protection from hazardous arcing faults

Arcing faults can take two different forms: they are either serial or parallel arcing faults. Parallel arcing faults are caused, for example, by outdated insulation material or by conductive soiling between the phase conductors.

Serial arcing faults can occur in a variety of situations, including damaged cable insulation, crushed cabling, bent connectors, or loose contacts in the electrical installation and connected devices. The result is rapid overheating that can ultimately spark a cable fire and even lead to a fire in the building.

In serial arcing faults in an active conductor, no power flows to "N" or ground and the load current is even reduced due to the arcing voltage in series with the useful load.

Closing the critical protection gap

Electrical installation circuits are usually safeguarded by proven protection, including fuse systems, miniature circuit breakers (MCBs), and residual current protective devices (RCCBs). These are not suitable, however, for detecting and safely disconnecting serial arcing faults. This protection gap is now being closed with the AFD unit from Siemens.



Preventive fire protection

AFD units detect arcing faults by continuously measuring the high-frequency noise of voltage and current for their intensity, duration, and gaps between them. Integrated filters with intelligent software analyze these signals and trigger the disconnection of the connected circuit by the protection device (MCB or RCBO) within fractions of a second if anything unusual is detected.

The AFD units reliably distinguish between arcing faults that occur during normal operation, such as in power drills or vacuum cleaners, and hazardous arcing faults, and they trip only in the event of an actual fault.

Simple installation

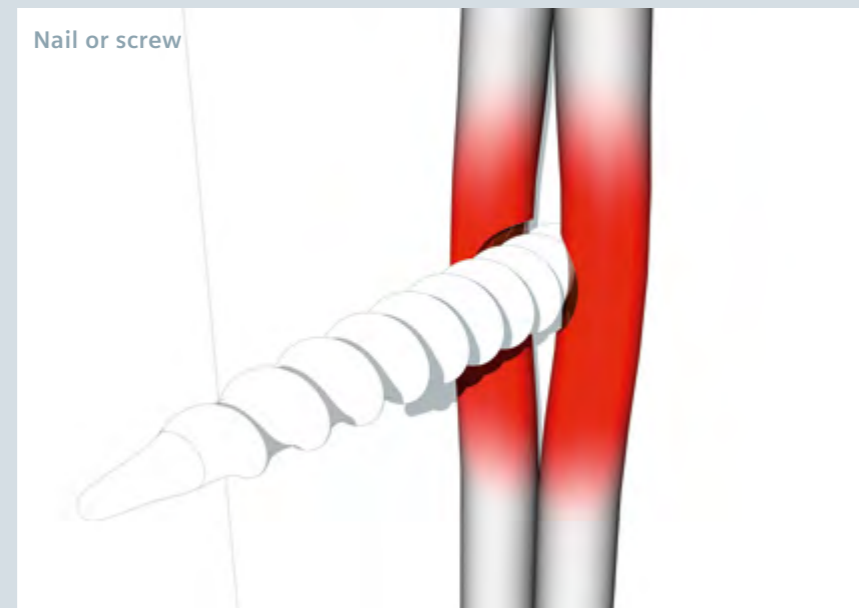
In connection with an upstream RCCB, the AFD units are used in combination with the MCBs, in all other applications, they are used in conjunction with the RCBO. In the event of a fault, the protected circuit is completely disconnected from the mains supply.

The AFD unit can be easily assembled without tools on-site, along with the corresponding protection device, and then mounted on a DIN rail. For a fast and secure power supply, the power in-feed can take place via a busbar assembly.

More information
[siemens.com/afd-units](https://www.siemens.com/afd-units)

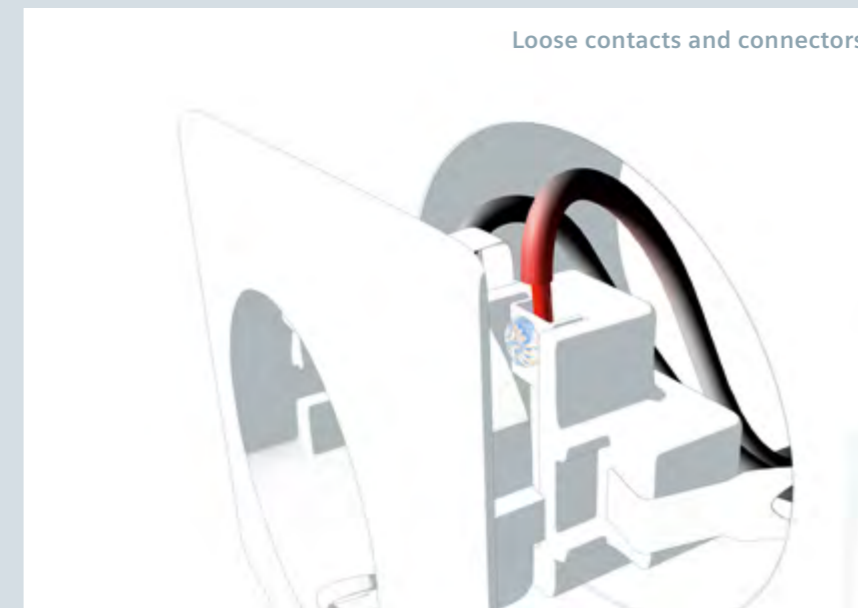
Fire hazard in branch circuits due to arcing faults

Parallel arcing faults between the phase and neutral conductors

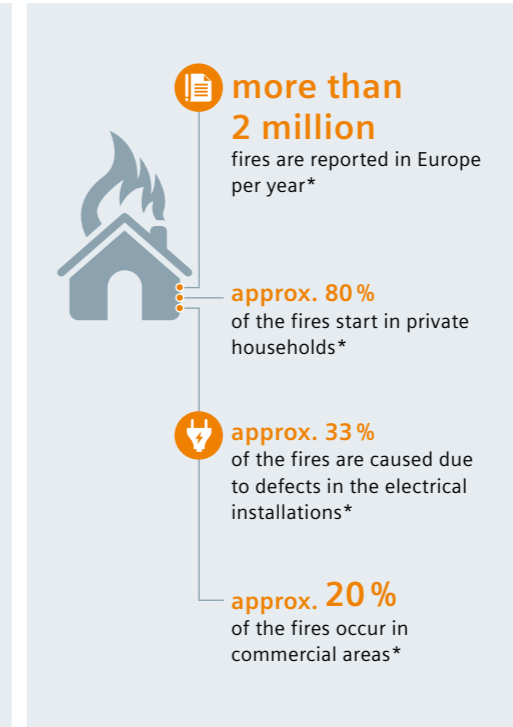
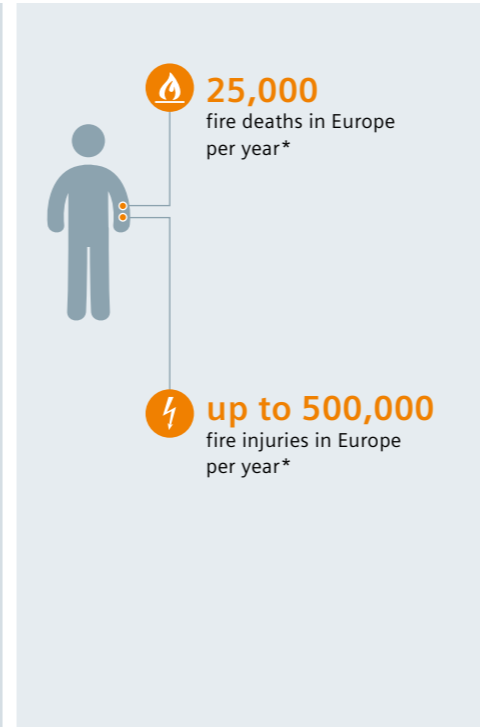


High temperature of the arc
 +
 Flammable material
 →

Serial arcing faults in phase and neutral conductors



MCBs or RCCBs are not suitable for detecting serial arcing faults. AFD units are used to detect serial arcing faults and close the protection gap.



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

Danger? Just disconnect

In Europe, one-third of all fires reported can be traced back to dangerous defects in the electrical installation.

A clothes dryer that is overheating or a technical defect in a television can lead to dangerous fires.

These fires can be prevented! By installing an AFD unit as a preventive protection device, the danger will be detected before a fire can start.

Urgency was recognized

AFD units should be installed in single-phase AC voltage systems with an operating current no higher than 16 A. 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 locations of use. With the publishing of the standard DIN VDE 0100-420 the installation of AFD units has become mandatory in Germany for many locations.

The adjacent figure indicates the locations of use where the installation of AFD units is strongly recommended in Europe.

Recommended installation starting immediately as the state-of-the-art technology

- | | | |
|---|---|-----------------------------|
| Facilities with sleeping accommodations | Woodworking industry, paper and textile factories, and laboratories | National monuments, museums |
| Locations with fire-propagating structures such as high-rise buildings where a chimney effect can occur | Warehouse areas with flammable materials | Public buildings |
| Branch circuits with a high connected load that supply electrical consumers like washing machines, dryers, or dishwashers | Wooden houses and farm buildings | Day care* |
| | Airports | Retirement homes* |
| | Railway stations | Barrier-free apartments* |

* including in bedrooms and living rooms

Reliable protection for humans – preventing electrical accidents

Highlights

- Reliable protection for people and assets
- All RCDs comply with the provisions of the DIN VDE standard
- The right RCCB for every requirement

Residual current protective devices (RCDs) can prevent life-threatening electrical accidents caused by direct or indirect contact with live equipment by immediately disconnecting the electricity in the event of a fault.

In addition to offering fault protection when RCDs are used with $I_{\Delta n} \leq 30$ mA, they offer added protection in the event of direct contact. They prevent life-threatening electrical accidents by rapidly disconnecting hazardous residual currents to ground. Fires caused by ground-fault currents can be prevented at a very early stage. The standard reach-around and touch protection provides for safe installation.

The right type

Residual current operated circuit breakers (RCCBs) vary in terms of their suitability for detecting different residual currents.

Type AC/A

Type AC trips in the case of sinusoidal AC residual currents; type A also trips in the event of pulsating DC residual currents.

Type F

In addition to type A residual currents, type F is also suitable for protection from electric shock for electrical loads with frequency converters in the single-phase alternating-current network. It detects residual currents consisting of a mixture of frequencies up to 1 kHz.

Type B/B+

The universal current-sensitive type B/B+ also reacts to faults in smooth DC residual currents that can occur with frequency converters (for example, at construction sites in accordance with BGI 608 or with variable-speed machine tools). Type B+ also offers enhanced preventive fire protection.

The right version

Depending on the requirements, the following versions are selected:

Super-resistant K

Unwanted power disconnections are prevented by briefly delaying the tripping of the RCCB.

Selective S

The selective disconnection of individual system components is ensured by time-delayed tripping and a sliding scale of tripping times and rated residual currents.

SIGRES

The integrated condensation protection ensures maximum safety and a long service life, even in harsh conditions like gas or moisture in the ambient air.

More information
[siemens.com/rcds](https://www.siemens.com/rcds)



According to the function of RCCBs in various types

Current form	Type AC	Type A	Type F	Type B	Type B+
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Effective plant protection – avoiding failures

Highlights

- High system availability and operational safety while protecting people and systems
- Uninterruptible power supply
- Reliable protection from production downtime

Production downtime can have a variety of causes: for example, technical defects, an unstable power supply, wear, or contamination. Downtime can cause significant damage and seriously jeopardize smooth building and industrial operation.

Power supplies in state-of-the-art plants are faced with increasingly strict requirements. Thanks to new load conditions, a growing number of consumers, and an ever-increasing level of automation, today it is more important than ever to continuously monitor the quality of the power supply. Only the continuous monitoring of networks, wiring, and applications can ensure reliable plant protection. Hazardous faults are detected and reported at an early stage and the causes eliminated before a plant failure occurs. This enables a high level of system and operating safety as well as reduced costs.

The wide product range of SENTRON protection, switching, measuring, and monitoring devices offers many options for seamlessly coordinated plant protection. The monitoring devices perform numerous functions to protect both humans and machines.

Efficient motor protection

The voltage relay product range provides everything needed for supplying safety lighting and detecting N-conductor breaks and short-term voltage interruptions. A distinction is made between undervoltage and overvoltage relays.

Residual-current monitoring devices can detect faults in plants at an early stage and eliminate them before the protective device disconnects.

Transparent energy flows

The 7KT/KM PAC measuring devices record basic electrical variables like energy values, frequencies, power factors, unbalance, and network quality. These variables can be visualized in the powermanager power monitoring software or in a control system. This allows users to monitor the power supply and prevent critical states – an advantage for plant safety, especially in sensitive areas.

More information
siemens.com/sentron



Causes and potential hazards

Mechanical		Electrical	
Causes	Potential hazards	Causes	Potential hazards
Soiling/overload	Thermal overload	Switching operations/ dirty electricity	Overvoltage/ undervoltage
Vibrations/ mechanical stress	Insulation fault, short-circuit	Load shifting	Frequency fluctuation
Wire break/ corrosion	Phase fault	Fuse failure	Short-circuit, overload
Mechanical defect	Thermal overload		

A reliable, uninterruptible power supply is an important requirement to ensure the reliability of systems, equipment, and machines.

Lightning and overvoltage protection – integrated safety

Highlights

- Reliable protection from overvoltage caused by lightning and switching operations
- Three-stage overvoltage protection suitable for any requirement
- Comprehensive portfolio for an integrated lightning protection system

410,000 cases of lightning and overvoltage damage are reported every year – resulting in costs in the millions. Lightning and overvoltage protection tailored to local conditions can help prevent this damage.

Overvoltage is an increase in voltage that lasts less than a thousandth of a second and far exceeds the permissible operating voltage for electronic devices, resulting in the destruction of the devices and the associated electrical installation. Even electrostatic discharges and switching operations in the network can cause overvoltage.

Suitable for any requirement

In a comprehensive protection concept, all active cable paths at risk are switched with suitable overvoltage protection devices. In a graded solution, from terminal equipment all the way to where the cables enter the building, the high-voltage lines as well as the communication cables are equipped with overvoltage protection devices in various performance classes. This is referred to as “graded protection.” With graded protection, the protection devices are selected according to the load at the installation location.



Three-level protection

Overvoltage protection devices differ in terms of their discharge capacity and the level of protection that can be achieved.

A distinction is made between the following:

Lightning arresters, type 1

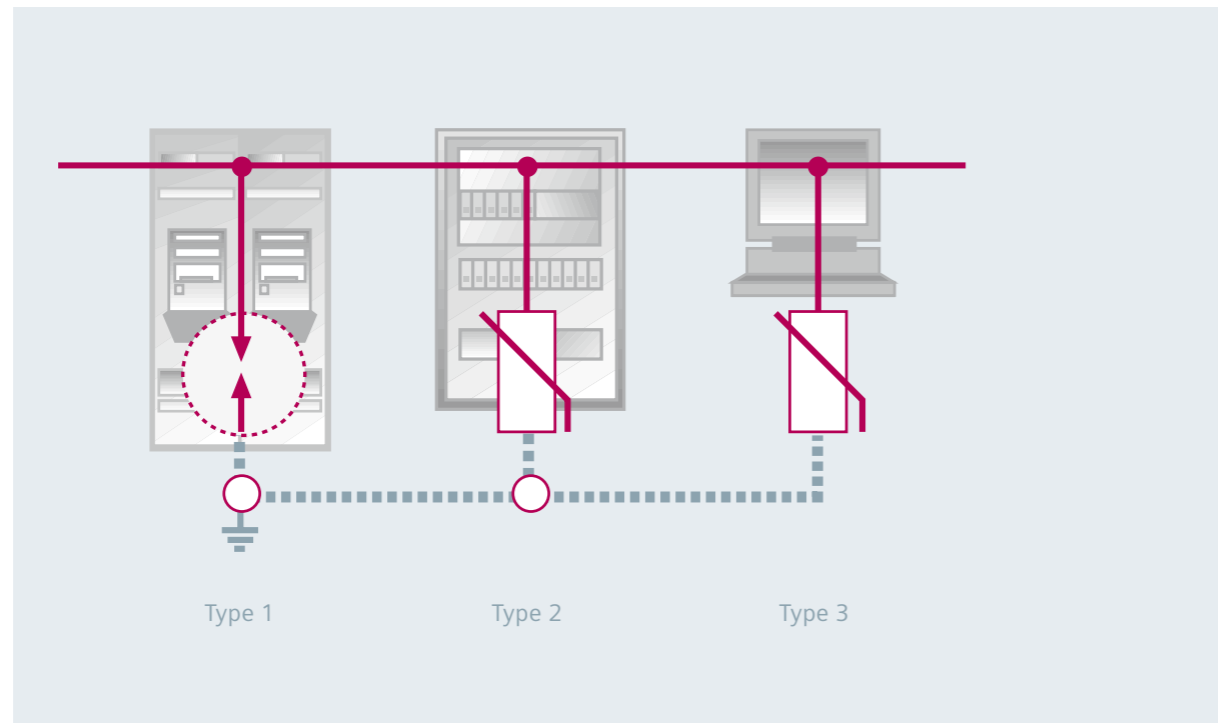
A type 1 lightning arrester provides protection from overvoltage caused by a direct or indirect lightning strike (should be used only in combination with a type 2 lightning arrester).

Surge arresters, type 2, type 3

Type 2 and type 3 surge arresters provide protection from overvoltage caused by switching operations in the network. All overvoltage protection devices come completely configured for all network systems (TNC, TNS, and TT systems).

More information

[siemens.com/overvoltage-protection](https://www.siemens.com/overvoltage-protection)






Insulation coordination in accordance with IEC 60364-4-443

Protection level	Designation	Type	Protection level	Typical installation location
1	Lightning arresters	1	≤ 4.0 kV	Main power distribution
2	Surge arresters	2	≤ 2.5 kV	Sub-distribution board
3	Device protection	3	≤ 1.5 kV	Upstream from the terminal equipment

Every building needs a coordinated protection concept. Depending on the requirements, the lightning and overvoltage protection must be installed at the appropriate installation location.

SENTRON protection devices at a glance

Protection for humans and assets	Protection for humans and assets	Protection for humans and assets
Fire	Fire	Fire
AFD units	MCBs	RCBO
		
Benefits	Benefits	Benefits
<ul style="list-style-type: none"> Enhanced protection from fires caused by electricity due to serial or parallel arcing faults Reliable covering of the protection gap The protected circuit is completely disconnected from the grid in the event of a fault 	<ul style="list-style-type: none"> Protect electrical plants from overload and short-circuit Diverse assortment for industrial applications as well as buildings and infrastructure Uniform and comprehensive accessories 	<ul style="list-style-type: none"> Combination of RCCB and MCB provides protection from electrical fires RCBOs combine protection for people, plants, and overload in a single device
Types	Types	Types
<ul style="list-style-type: none"> Combination with 5SY MCBs Combination with 5SU1 RCBOs 	<p>Buildings and infrastructure</p> <ul style="list-style-type: none"> For standard applications: 5SL MCBs in 6 kA and 10 kA For fast installation: 5SJ6 MCBs ...-KS with plug terminal up to 6 kA For distribution boards with little installation space: 5SY6 0 MCBs, 1+N in 1 TE up to 6 kA <p>Industrial applications</p> <ul style="list-style-type: none"> For high-current and universal-current applications: 5SY MCBs up to 25 kA, 5SP MCBs Approved for global use in accordance with UL 489 and IEC: 5SJ4 ...-HG up to 10 kA 	<ul style="list-style-type: none"> Rated residual current of 10 mA for rooms with increased risk to people and outside facilities in residential construction Rated residual current of maximum 300 mA for preventive fire protection in the event of insulation faults

Protection for humans and investments	Protection for humans	Investment protection
Fire	Electric shock	Fire and electric destruction
Fuses	RCCBs	Overvoltage protection devices
		
Benefits	Benefits	Benefits
<ul style="list-style-type: none"> Reliable disconnection of the circuit in the event of an overload or short-circuit Broad portfolio for all application areas, including protection for cables, devices, and plants DIAZED and NEOZED fuse systems developed by Siemens and proven over decades of use 	<ul style="list-style-type: none"> Enhanced protection from electrical fires Protection in the event of direct and indirect contact with electric voltage Reliable reach-around and touch protection during installation 	<ul style="list-style-type: none"> Protection from dangerous overvoltage in electrical wiring and devices due to lightning strikes or switching operations Three-level protection suitable for any requirement
Types	Types	Types
<ul style="list-style-type: none"> NH fuse systems DIAZED and NEOZED fuse systems Fuse systems Class CC Cylindrical fuse systems SITOR semiconductor fuses 	<p>Super-resistant K</p> <ul style="list-style-type: none"> Prevents unwanted power disconnections through delayed tripping <p>Selective S</p> <ul style="list-style-type: none"> Provides selective disconnection through time-delayed tripping, sliding-scale of tripping times, and rated residual currents <p>SIGRES</p> <ul style="list-style-type: none"> For protection under special conditions, including gases or moisture in the ambient air: for example, indoor swimming pools, agriculture, and the chemical industry 	<p>Lightning arresters, type 1</p> <ul style="list-style-type: none"> Protection from overvoltage and high surge currents caused by direct or indirect lightning strike <p>Surge arresters, type 2</p> <ul style="list-style-type: none"> Protection from overvoltage caused by switching operations <p>Surge arresters, type 3</p> <ul style="list-style-type: none"> For the protection of consumers in sub-distribution boards

Safety – perfectly packaged

Highlights

- High flexibility and space savings
- Individual installation options thanks to modular design
- Time-saving assembly with convenient, functional housing

The product portfolio for an integrated protection concept in the electrical installation is optimally supplemented by the ALPHA power distribution boards. These distribution boards enable the convenient installation of all protection, switching, measuring, and monitoring devices from the SENTRON portfolio.

The ALPHA power distribution board system features an integrated and modular design that lays the foundation for a safe, flexible, and efficient low-voltage power distribution and electrical installation technology while covering all requirements. All ALPHA power distribution boards offer reliable standard-compliant quality and feature a uniform design concept and high-quality surface finish.

ALPHA distribution boards – flexible use

The ALPHA distribution boards are available as small, wall-mounted and floor-mounted distribution boards for rated currents from 63 A to 1,250 A.

The ALPHA SIMBOX XL small distribution boards are easily mounted, regardless whether you use them as flush-mounting, hollow-wall, or surface-mounting distribution boards.

The type-tested ALPHA 160 distribution boards for rated currents up to 160 A can be flexibly and individually equipped. Thanks to their especially flat design, they can even be used in confined spaces. There is also a version available for flush-mounting. An integrated blind frame permits a clean wall connection.

The ALPHA distribution boards are suitable for higher-rated currents up to 400 A, and are also available in different versions for surface-mounted and flush-mounted installation.

The modular ALPHA 630 and ALPHA 1250 floor-mounted distribution boards offer even more mounting and wiring space for rated currents up to 1,250 A. The floor-mounted distribution boards are available in four depths.

ALPHA 3200 power distribution boards – a powerful, comprehensive system

The ALPHA 3200 low-voltage power distribution board rounds out the ALPHA portfolio and provides integrated power distribution for applications in building infrastructures up to 3,200 A. The ALPHA 3200 is optimally tested and coordinated with the SENTRON protection, switching, measuring, and monitoring devices. Combined with the portfolio's innovative components, it is a well-designed, comprehensive system that meets all the requirements for modern, safe, and efficient energy distribution.

A QR code on the front side of the field cover offers direct access to all production information, including certificates, installation instructions, graphics (3D models), and technical datasheets.

ALPHA SIMBOX XL small distribution boards



Protection concepts – easy to plan

Highlights

- Integrated project planning for the ALPHA power distribution boards
- Simple configuration of SENTRON components
- Time savings thanks to rapid project configuration
- Engineering support, from project planning to system documentation



The SIMARIS configuration software supports the entire engineering process for electrical installations and energy distribution – from project planning through calculation and bid preparation to system documentation.

Time savings thanks to menu-driven project planning

SIMARIS configuration offers intuitive, user-friendly operation. Structured menus and the graphical display of selection options simplify and accelerate project planning.

Planning security through error checking

During configuration, errors are automatically displayed so they can be immediately corrected. The intelligent preselection of devices after the function has been defined as well as automatic placement are features that enhance planning security and help prevent errors.

Convenient bid preparation

The configuration of devices (order number-specific) from the SENTRON portfolio and the integrated price calculation facilitate the bid preparation process. The software even performs the copper calculation. The generation of a parts list with a click of a mouse also simplifies ordering.

More information

siemens.com/simarisconfig

Unanswered questions? One click and you're well-informed

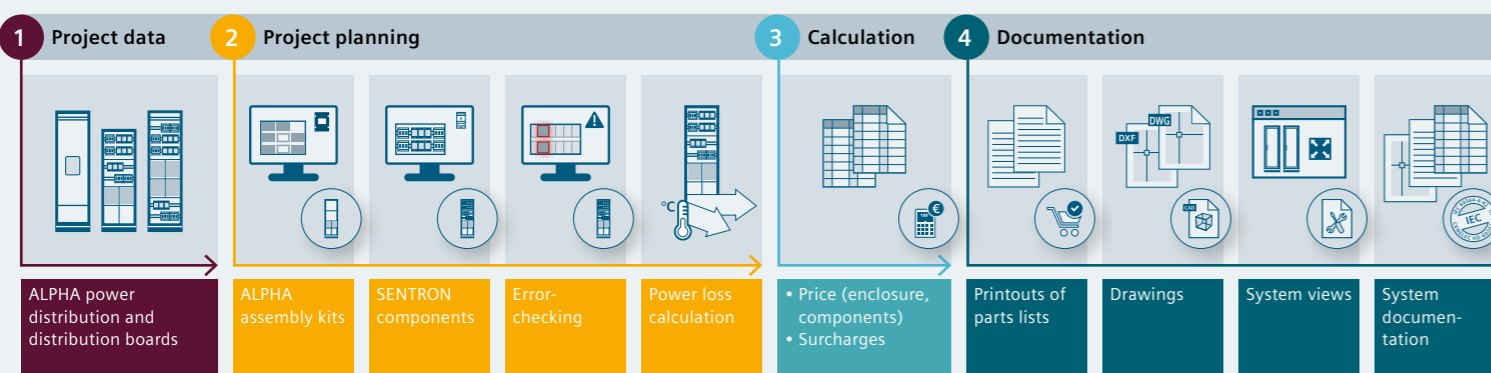
Always here for you: our comprehensive support

			
Information	Planning/order	Operation/service	Training
<ul style="list-style-type: none"> – Website – Catalogs and brochures – Newsletters – Image database 	<ul style="list-style-type: none"> – Industry Mall – Configuration – SIMARIS planning tools – CAx Download Manager 	<ul style="list-style-type: none"> – Siemens Industry Online Support (SIOS) – My Documentation Manager – Technical support – Support request 	<ul style="list-style-type: none"> – SITRAIN Portal – Siemens Power Academy – BT Academy

We support you from the planning stages to commissioning to operation.

siemens.com/lowvoltage

Software for configuring ALPHA power distribution and distribution boards



Free download of SIMARIS configuration: siemens.com/simarisconfig