

Powerful surge protection in a minimal space

VARITECTOR ZPA S – sleeker, more powerful, more versatile

Every year, lightning strikes in Germany cause damages totalling €200 million. According to the German Insurance Association, around 210,000 lightning and surge claims were settled in 2021 alone. This damage can be reliably prevented with powerful surge protection. The legislator has also recognised this and has stipulated surge protection for new buildings and changes to electrical installations. Building installations are becoming increasingly complex, and powerful, compact and efficient surge protection devices with a high level of ease of use are therefore in great demand - such as the VARITECTOR ZPA S series from Weidmüller.

Thunderstorms pose a great threat to building installations. A building does not even have to be hit by a direct lightning strike. A strike can still cause damage within a radius of 2 kilometres. This makes it all the more important to install a reliable and powerful surge protector that complies with the respective regulations. This is particularly easy with the VARITECTOR ZPA S from Weidmüller. The module combines type I, II and III arresters in one unit and provides optimum protection against lightning and surge voltage damage with an installation width of only 36 mm. It can be snapped onto 40 mm bus bars quickly and without the use of tools. The module can also be combined with 2-SLS switches and a feed-in adapter due to its narrow width. All requirements of VDE-AR-N 4100 are met. The installation takes place in the pre-meter area. Two fused voltage taps with PUSH IN connection are also provided in the event that additional applications are supplied via the module. An optional signal output enables the reliable monitoring of the protection status. The remote signalling contact is monitored via the building management system to ensure prompt information about malfunctions.

Reliable discharge without follow current

The VARITECTOR ZPA S works with a combination of gas arrester and varistor. This means that no follow current is generated during the discharge. This is a decisive advantage over conventional type I surge protection modules based on spark gap technology. With these modules an arc is ignited when the overvoltage reaches the unit. This creates a short-circuit between phase and earth, which reduces the overvoltage. The follow current then flows over the arc in the earth direction. If it is not interrupted, this will trigger upstream protective elements - for example the fuses in the domestic junction box. To prevent this, the follow current must be limited by an additional fuse. This is an extra cost that is no longer necessary with the VARITECTOR ZPA S series from Weidmüller.

Flexible with future-proof expansion

VARITECTOR ZPA S surge protection devices are available in various versions for different requirements and applications. They are available with a 12.5 kA and 7.5 kA discharge capacity and can be used in TN-C, TN-S, TT or IT networks. The ZAP S offers an innovative, plug-in voltage tap with PUSH-IN connection to provide space for an additional application and a meter connection point. The installation is carried out in the pre-meter area in accordance with the application rule VDE-AR-N 4100 and enables the future expansion of meter cabinets. For example, smart metering systems can be integrated to support the optimal utilisation of electricity grids and thus reduce energy costs. Here too, Weidmüller can offer the right systems and solutions. A 40 mm feed-in module is available as an accessory.

3,601 characters including spaces



Image caption: Convenient and compact: the VPU ZPA S can be quickly and easily installed in the pre-meter area. The narrow construction width of only 36 mm enables the module to be combined with 2-SLS switches and feed-in adapters.

Your contact person: Weidmüller Corporate Communications
Tel. +49 (0) 5231 / 14-292322
Email: presse@weidmueller.com

Weidmüller – your partner in industrial connectivity.

The Weidmüller Group has production facilities, marketing companies and representative offices in more than 80 countries. With our customers, we shape the digital transformation – with products, solutions and services for Smart Industrial Connectivity and the Industrial Internet of Things. In the fiscal year of 2021, Weidmüller reached sales of 960 million euros with around 5,300 employees.

Responsible for content: Weidmüller Corporate Communications
Corporate Spokesperson, Sybille Hilker