

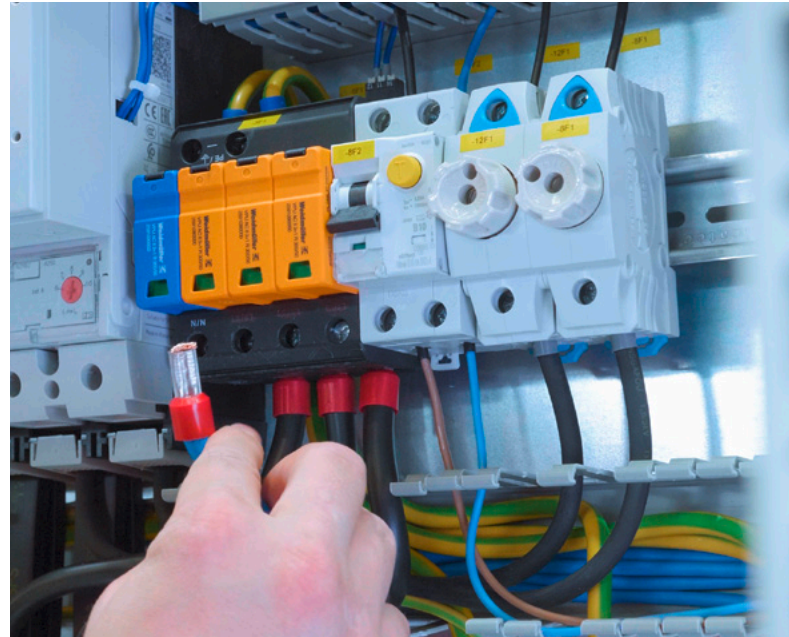
Lightning and surge protection

Avoid failures due to damage from voltage surges

Reliable protection for buildings, installations and power networks

Bosch Building Automation GmbH relies on reliable surge protection from Weidmüller

Electrical installations and energy systems are now considered to be elementary capital goods. Protection against lightning and surge voltages is therefore an existential requirement in the construction of new buildings, installations and power systems and is also defined in various standards. There are therefore many ways in which operators can implement protection against lightning and voltage surges. Bosch Building Automation GmbH, formerly GFR, knows this only too well, and therefore relies on the extensive expertise and customised solutions provided by Weidmüller. Bosch Building Automation also focuses on risk minimisation, future-proof technical features to boost efficiency and operational safety in its customer installations and plant. Increasingly efficient protection concepts are required from the power feed-in to distribution and all the way to the consumer, particularly in the power supply and building infrastructure.



The proven surge protection devices in the VPU series with an integrated back-up fuse make the back-up upstream of the VPD redundant.



Bosch Building Automation GmbH is one of the leading suppliers in the building automation industry. The company develops and markets technologies, solutions, products and services for the planning, construction, operation and optimisation of integrated building automation systems worldwide. Dirk Späte, team manager for control panel building production at Bosch Building Automation GmbH: „Our technologies and solutions are present in almost all sectors, such as hospitals, universities, shopping malls and industrial and administrative buildings. The reliability of our control panels is therefore of utmost importance.“

Photo left: production Bosch Building Automation GmbH

The use of the appropriate surge protection in the power distribution system enables operators to reliably avoid costly damage from lightning and voltage surges in industrial plants, private and public buildings and photovoltaic systems. The proven surge protection devices in the VARITECTOR PU AC series with integrated fuse provide optimum protection with a 20 kA rated discharge current and 40 kA maximum discharge current. The combined type II+III surge protection devices have one back-up fuse per protective path and can be used universally in power distribution systems. Dimensioning is independent of the main fuse rating – no additional pre-fuse is required, even above 315 A. The wiring can therefore be minimised for all power distributions. VARITECTOR PU AC surge protection products effectively reduce the interference coupling that can occur from transient surge voltages, even significantly below the limits prescribed by insulation coordination in accordance with EN 60664-3/DIN VDE 0110-3. The entire system is less vulnerable to malfunctions.



The combined VARITECTOR AC type II+III surge protection devices have one backup fuse per protective path and can be used universally in power distribution systems.

Bosch Building Automation GmbH is also committed to the product: „The reduced wiring, the compact size and the elimination of the back-up fuse is a great advantage, particularly for us in control panel construction. The excellent connection technology also enables us to boost efficiency,“ says Späte enthusiastically.

The application-oriented pluggable product configurations enable flexible use in different network systems such as TN-C, TN-S, IT with N, IT with no N or TT networks. Operators can therefore select the correct arrester at any time, regardless of where and in which network the power distribution requires protection. Versions with a pre-warning display provide uninterrupted protection, as the remote signalling contact first sends the pre-warning signal to external monitoring systems. The arresters are tested pursuant to product standard IEC 61643-11 / DIN EN 61643-11 and can be installed in systems in accordance with IEC 61643-12 / VDE 0675-6-12 and IEC 62305-4 / VDE 0185-4.

Ralf Dolle, sales engineer at Weidmüller adds: „Our VARITECTOR product family fulfils all the international norms and standards in the surge protection sector; moreover the ease of maintenance, long life cycles and cost efficiency are perennial and persuasive arguments for our customers.“



Dirk Späte, team manager for control panel building production at Bosch Building Automation GmbH, and Ralf Dolle, sales engineer at Weidmüller, are equally enthusiastic about the reliability of the VARITECTOR AC product range.

The latest addition to the VARITECTOR portfolio, the VPU ZPA S, offers many advantages and optimisation potential. The ZPA S combines type I, II and III arresters in one unit, and can be integrated without the use of screws on three-phase busbars with separate PE connection. The module has an overall width of just 36 mm, and can therefore also be combined with two SLS switches and feed-in adapter. „The integrated additional tap is also extremely efficient, as it gives customers the option of simply connecting other devices, e.g. a modem or gateway,“ says Dolle.



In its modern production facilities, Bosch Building Automation GmbH also insists on excellent quality when selecting surge protection with the VARITECTOR AC range from Weidmüller.

In the energy sector, the VARITECTOR portfolio offers lightning and surge protection solutions for voltages from 75 V to 1,500 V for diverse applications in energy supply, renewable energies or water management. With approx. 200 variants, the first-class VPU AC series covers the various protection zones and protection classes, and therefore provides specific product solutions for individual protection requirements the building infrastructure. The products are tested in accordance with the valid product standards EN 61643-11 (AC), EN 61643-31 (PV) and UL 1449. Products for metering and control technology and data interfaces complement the portfolio.