

AXON RS485 Protector AXON RS485 Protector DIN

Surge protection of RS485 terminal equipment



The **AXON RS485 Protector** and the **AXON RS485 Protector DIN** are designed for surge protection of electronic appliances operating in industrial control systems based on RS485 transmission or variants thereof with the voltage not higher than 5V.

The device incorporates protective elements that limit overvoltages between the transmission lines and the PE protective wire and simultaneously discharges the surge energy to the earth. The devices also use protective elements to limit the dangerous voltage that may occur between lines A and B. With this extensive protection **AXON RS485 Protector** and **AXON RS485 Protector DIN** protect the connected equipment in a comprehensive way. The **AXON RS485 Protector** features a metal, shielding housing. Three-way, detachable clamp terminals are used as the connection elements. The **AXON RS485 DIN Protector's** housing is designed for mounting in control and distribution cabinets equipped with the popular 35mm DIN rail. Terminals A and B are used to connect transmission lines to be protected, while the third terminal can be used by the installer as a signal earth if required. The earthing wire terminated with a fork terminal is led out of the housing and connected directly to it. The devices are asymmetric surge protectors. The transmission line should be connected to the "Line" terminals, while the "Equip." terminal is used to connect the protected appliance.

Common specifications:

Nominal voltage U_N	6V
Maximum voltage U_C	10V
Rated current I_N	0.75A=
Level of protection U_P (line-line)	$\leq 16V - 1kV/\mu s, C3$
Level of protection U_P (line-earthing)	$\leq 1000V - 1,2kV/50\mu s, C2$
Nominal discharge current i_N (line-line)	25A – 10/1000 $\mu s, C3$
Nominal discharge current i_N (line-earthing)	5kA – 8/20 $\mu s, C2$
Serial impedance R_S	$\leq 2\Omega$
Bandwidth	0 – 1MHz
Line-line capacity	50pF
Line-earthing capacity	16pF
Standards	EN 61643-21

Specifications only for **AXON RS485 Protector**

Type of sockets	screw terminals max 1.5mm ² , pluggable
Housing	metal, powder coated
Dimensions	63x30x20mm
Weight	0.08kg

Specifications only for **AXON RS485 Protector DIN**

Type of sockets	screw terminals max 2.5mm ²
Housing	plastic, installation on 35mm rail, 1.5 modules wide
Dimensions	90x58x22.5mm
Weight	0.07kg

The manufacturer reserves the right to change the technical parameters of the device, resulting from technological progress.
NOTE! Specifications define the maximum values of voltage spikes, against which the device is protected.