

# SPA106

## Type 1/2 (Class I/II) Surge Arrester

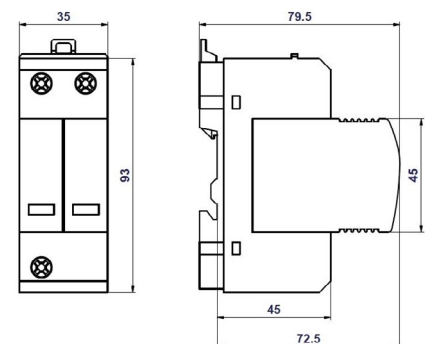
The SPA106 is a two-pole, Type 1 and 2 MOV + GDT lightning arrester according to EN 61643-11 and IEC 61643-11. This arrester is recommended for use in the Lightning Protection Zones Concept at the boundaries of LPZ 0 – 1 (according to IEC 1312-1 and EN 62305) where it provides the equipotential bonding and discharge of both, the lightning current and the switching surge, which are generated in power supply systems entering the building. The use of this arrester is mainly in the power supply lines, which are operated as TN-S and TT systems. The main use of arrester is in structures of LPL III – IV according to EN 62305.

Specification	
Test class according to EN 61643-11 and IEC 61643-11	Type 1/2, Class I/II
Network type	TN-S, TT
Maximum continuous operating voltage	$U_C$ 275 V AC / 350 V DC
Max. discharge current (8/20 $\mu$ s) L/N	$I_{max}$ 50 kA
Impulse discharge current for class I test (10/350) L/N	$I_{imp}$ 12.5 kA
Charge L/N	Q 6.25 As
Specific energy for class I test L/N	W/R 39 kJ/ $\Omega$
Impulse discharge current for class I test (10/350) N/PE	$I_{imp}$ 25 kA
Charge N/PE	Q 12.5 As
Specific energy for class I test N/PE	W/R 156 kJ/ $\Omega$
Total discharge current (10/350) L+N->PE	$I_{total}$ 25 kA
Total discharge current (8/20 $\mu$ s) L+N->PE	$I_{total}$ 50 kA
Nominal discharge current for class II test (8/20) L/N	$I_n$ 25 kA
Nominal discharge current for class II test (8/20) N/PE	$I_n$ 30 kA
Voltage protection level	$U_p$ < 1.2 kV
Temporary overvoltage (TOV) L/N	$U_T$ 335 V/5 s
Temporary overvoltage (TOV) N/PE	$U_T$ 1200 V/0.2 s
Response time L/N	$t_A$ < 25 ns
Response time N/PE	$t_A$ < 100 ns
Max. back-up fuse	160 A gL/gG
Short-circuit withstand capability	$I_p$ 60 kA <sub>rms</sub>
LPZ	0-1
Housing material	Polyamid PA6, UL 94 V-0
Degree of protection of enclosure	IP20
Operating temperature	$\vartheta$ -40°C to +80 °C
Cross-section of the connected conductors (at tightening moment of clamps 4 Nm)	25 mm <sup>2</sup> (solid) 16 mm <sup>2</sup> (wire)
Method of assembly	DIN rail 35 mm
Failure signalisation (S)	green - ok / red - failure
Weight	m 215 g
Part Code	SPA106

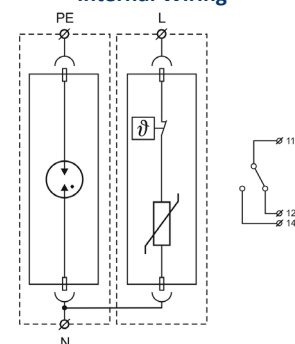


SPA106

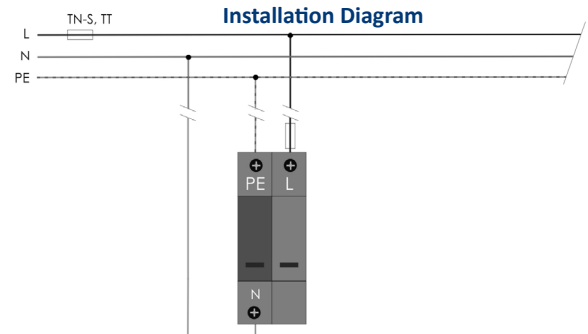
### Dimensions in mm



### Internal Wiring



### Installation Diagram



Information subject to change without notice.

All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application.