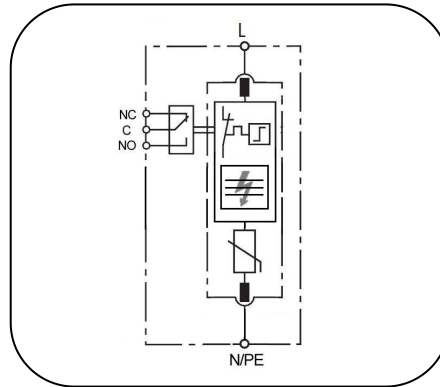
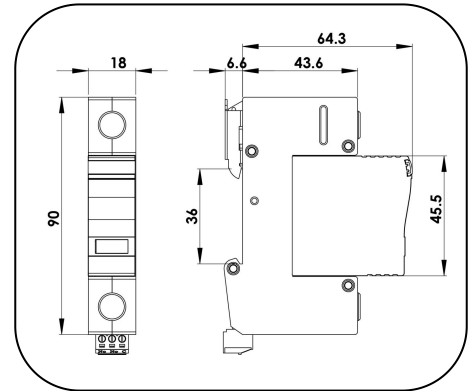


SURGE PROTECTIVE DEVICE – TYPE 1ca SPD

SP...-S



Basic circuit diagram



Dimension drawing

UL recognized Type 1ca surge protective device is especially designed for low-voltage power supply system surge protection, especially for point of entry (Category C,D, ANSI/IEEE C62.41) and sub-circuit (Category B, ANSI/IEEE C62.41) protection.

Technical Features

- UL recognized Type 1ca SPD, passed short circuit current rating (SCCR) 200kA without external fuse or CB..
- High reliability due to global patented thermally protected MOV with special arc-extinguish device (TPAE technology).
- Large surge energy capability up to 50KA per mode.
- DIN-rail mounting configuration.
- Pluggable module for easy replacement
- Degradation failure indication.
- Meet both standards of UL1449-4th and IEC61643-11:2012

Part No.	SP150-S	SP180-S	SP275A-S	SP320-S	SP385-S	SP420-S	SP550-S	SP690-S
In accordance with	UL1449-4 th ; IEC61643-11:2012							
Category UL(EN/IEC)	Type 1ca (T2 or Class II)							
Max. continuous operating voltage MCOV (AC/DC)	MCOV 150 /200	180 /230	275 /350	320 /420	385 /505	420 /560	550 /745	690 /895
Nominal discharge current(8/20 us)	In 20kA							
Max. discharge current(8/20 us)	Imax 50kA 40kA							
Voltage Protection Rating @6kV/3kA UL 1449	VPR ≤0.7kV	≤1.0kV	≤1.0kV	≤1.2kV	≤1.5kV	≤1.5kV	≤1.8kV	≤2.5kV
Temporary Overvoltage TOV - withstand mode	U _{toV} 175V/5s	228V/5s	335V/5s	335V/5s	403V/5s	504V/5s	697V/5s	872V/5s
Residual Current	I _{pe}	<0.1mA						
Short Circuit Current Rating per	I _{scCR}	200kA						
Response time	t _a	≤25 ns						
Backup fuse(only required if not already provided in mains)	125A gL/GG							
Operating temperature range	- 40°C ~ + 85°C							
Cross-section of connection wire	Single-strand 35mm ² (or # 2AWG) ; multi-strand 25mm ² (or # 4AWG)							
Mounting	35mm DIN-rail in accordance with EN 50022/DIN46277-3							
Enclosure material	thermoplastic; extinguishing degree UL94 V-0							
Degree of protection	IP20							
Installation width	1 module, DIN 43880							
Thermal disconnecter	Internal green – normal ; red - failure							
Remote alarm contact	Optional							
Approvals, Certifications	UL, CE							
Additional data for Remote Alarm Contacts								
Remote alarm contact type	Isolated Form C							
Switching capability Un/In	AC: 250V/0.5A DC: 250V/0.1A; 125V/0.2A; 75V/0.5A							
Max. Size of connecting wire	Max. 1.5mm ² (or # 16AWG)							