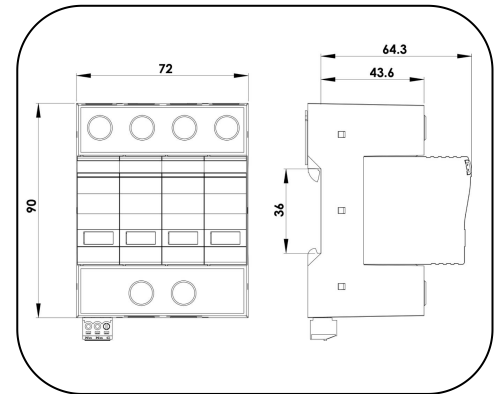


Basic circuit diagram



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.		SP150/3PN-S	SP180/3PN-S	SP275A/3PN-S	SP320/3PN-S	SP385/3PN-S	SP420/3PN-S
In accordance with		UL1449-4th; IEC61643-11:2012					
Category UL		Type 1ca					
Max. continuous operating voltage MCOV (VAC/VDC)	L- N	150/200	180/230	275/350	320/420	385/505	420/560
	N -PE	150	150	255	255	255	255
Nominal discharge current(8/20) In	L-N / N-PE	20kA					
Max. discharge current(8/20) I _{max}	L-N / N-PE	50kA					
Voltage protection rating	L-N @VPR	≤0.7kV	≤1.0kV	≤1.0kV	≤1.2kV	≤1.5kV	≤1.5kV
	N-PE @VPR	≤0.9kV	≤0.9kV	≤0.9kV	≤0.9kV	≤0.9kV	≤0.9kV
Response time	L-N	≤25 ns					
	N-PE	≤100 ns					
Follow current extinguishing capability I _{fi}	N-PE	I _{fi} : 200Arms @ 150Vac			I _{fi} : 200Arms @ 255Vac		
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		4 modules, DIN 43880					
Thermal disconnecter		Internal green – normal ; red - failure					
Remote alarm contact		Optional					
SCCR		200kA					
Approvals, Certifications		UL					
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)					