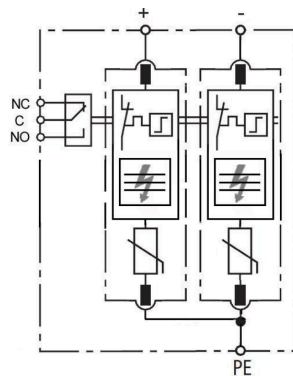


**Class I + Class II (T1+T2), PV DC Surge Arresters
PV50/600-V-C-S**

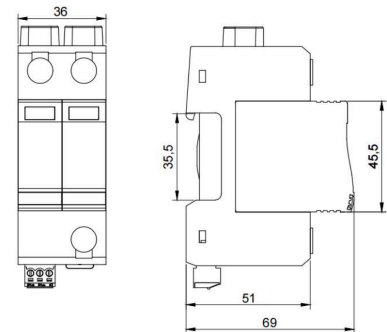
The PV50 C is class I & class II (or T1+T2) prewired PV DC SPD designed for DC applications such as PV / Photovoltaic system DC-side protection, especially for location of high-risk exposure or LPZ 0-2 building entrances (IEC 62305-4) to against the damage from direct or close lightning strikes.

With built in PROSURGE high energy MOV, PV50 C ensures remarkable lightning current discharge capacity up to 7.5kA 10/350µs and high reliability.

The unique design of thermal protection provides quick thermal response and secure disconnection.



Basic Circuit Diagram



Dimension Drawing

- TUV certified T1+ T2 DC SPD per IEC/EN 61643-31 standard.
- 18mm narrow model design, prewired two poles of V circuit for common mode protection
- Application in Photovoltaic (PV) systems and other DC power system like charging system for electric vehicles etc.
- Unique thermal disconnecter design
- Lightning current capacity up to 7.5kA 10/350µs
- Surge current capability up to 50kA 8/20µs
- Low voltage protection level
- Degradation failure indication and optional remote signal contact.
- Pluggable module for easy replacement without the need to remove system wiring.
- Wide operating temperature -40°C ~85°C
- 35mm DIN-rail mounting
- Comply with EN 50539-11, UL1449 5th Edition, IEEE C62.41, CSA C22.2 standards

**Class I + Class II (T1+T2), PV DC Surge Arresters
PV50/600-V-C-S**
Technical Data

Part No.	PV50/ 600-V-C-(S)	
In accordance with	IEC/EN 61643-31; UL1449 5 th ; EN 50539-11	
Category IEC/EU/VDE	I+ II /1+2/ B+C	
Protection mode	DC+ to DC- , DC+/- to PE	
Nominal Voltage (DC) U_n	600V	
Max. continuous operating voltage (DC) U_{cpv}	670V	
Nominal discharge current (8/20) I_n	20kA	
Max. discharge current (8/20) I_{max}	50kA	
Lightning impulse current (10/350) I_{imp}	4.5kA	
Voltage protection level U_p	DC+/- to PE	2.2kV
	DC + to DC -	4.0kV
Response time t_A	$\leq 25ns$	
Leakage Current I_{pe}	$< 0.1mA$	
Short-circuit Current I_{scpv}	1000A	
Operating temperature range	- 40°C ~ + 85°C	
Altitude	-500m ~ +4000m	
Cross-section of connection wire (max)	Single-strand 35mm ² ; multi-strand 25mm ²	
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	2 modules, DIN 43880	
Thermal disconnecter	Internal Green – normal ; red - failure	
Remote alarm contact	Optional	
Approvals, Certifications	TUV, CE	
Additional data for Remote Alarm Contacts		
Remote alarm contact type	Isolated Form C	
Switching capability U_n/I_n	AC: 250V/0.5A	DC: 250V/0.1A; 125V/0.2A; 75V/0.5A
Cross-section of remote signaling wire	Max. 1.5mm ² (or # 16AWG)	