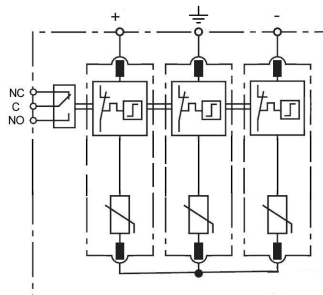
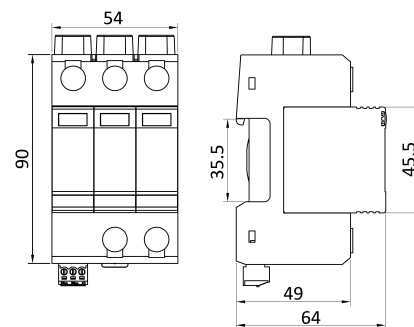




## Class II/T2, PV DC Surge Protective Devices PV40/1500-MVCDR



Basic circuit diagram



Dimension drawing

The PV40 CD is class II (or T2) prewired PV DC SPD designed for DC application such as PV/ Photovoltaic system dc-side protection to against the damage from surges, at the boundaries from lightning protection zone 1-2 and higher.

With built in high energy MOV, PV40 ensures remarkable surge current discharge capacity up to 40kA 8/20 $\mu$ s and high reliability. The unique design of thermal protection provides quick thermal response and secure disconnection.

- Class II/T2 PV DC SPD per IEC/EN 61643-31 standard.
- 18mm narrow model design, prewired three poles of Y circuit for common mode & differential mode protection
- Application in Photovoltaic (PV) systems and other DC power system like charging system for electric vehicles etc.
- Unique thermal disconnecter design
- Surge current capability up to 40kA 8/20 $\mu$ s
- Low voltage protection level
- Window failure indication and 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, IEEE C62.41, CSA C22.2 standards



## Technical data

Part No.	PV40/1500-MVCDR
In accordance with	IEC/EN 61643-31; UL1449 5 <sup>th</sup> ; EN 50539-11
Category IEC/EU/VDE	II /2/ C
Protection mode	DC+ to DC- , DC+/- to Ground
Nominal Voltage (DC) $U_n$	1500V
Max. continuous operating voltage (DC) $U_{cpv}$	1500V
Nominal discharge current (8/20) $I_n$	20kA
Max. discharge current (8/20) $I_{max}$	40kA
Voltage protection level $U_p$ (DC+/- to PE, DC+ to DC-)	4.5kV
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 <sup>2</sup> ; multi-strand 25mm <sup>2</sup>
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	3 modules, DIN 43880
Thermal disconnecter	Internal Green – normal ; red - failure
Remote alarm contact	With
<b>Additional data for Remote Alarm Contacts</b>	
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 <sup>2</sup> (or # 16AWG)