

Pluggable Multi-Pole SPD for Photovoltaic Systems

SPT40-PVXXX-(S)

Class II • Type 2 • Type 1CA

- Location of Use: String box, Inverter
- Mode of Protection: (DC+)- PE, (DC-)- PE, (DC+)- (DC-)
- Surge Ratings: $I_n = 20\text{kA}$ (8/20 μs)
 $I_{\text{total}} = \text{up to } 40\text{kA}$ (8/20 μs)
- IEC/EN/UL Category: Class II/ Type 2/ Type 1CA
- Protective Elements: High Energy MOV
- Housing: Pluggable Design
- Compliance: IEC 61643-31:2018
EN 50539-11:2013+A1:2014
UL 1449 4th Edition



Technical Data

SPT40-PVXXX-(S)		600	1000	1200	1500	
IEC Electrical						
Maximum Continuous Operating DC Voltage	(DC+) - PE, (DC-) - PE	U_{opv}	600 V	1000 V	1200 V	1500 V
	(DC+) - (DC-)	U_{opv}	600 V	1000 V	1200 V	1500 V
Nominal Discharge Current (8/20 μs)		I_n		20 kA		
Total Discharge Current (8/20 μs)		I_{Total}		40 kA		
Maximum Discharge Current (8/20 μs)		I_{max}		40 kA		
Voltage Protection Level	(DC+) - PE, (DC-) - PE	U_p	2200 V	4000 V	4400 V	5200 V
	(DC+) - (DC-)	U_p	2200 V	4000 V	4400 V	5200 V
Response Time		t_A		< 25 ns		
Short-Circuit Current Rating		I_{scpv}		2000A		
Number of Ports				1		
UL Electrical						
Maximum Permitted DC Voltage		V_{pvdc}	600 V	1000 V	1200 V	1500 V
Voltage Protection Rating	(DC+) - PE, (DC-) - PE	V_{PR}	1600 V	2500 V	3000 V	4000 V
	(DC+) - (DC-)	V_{PR}	1600 V	2500 V	3000 V	4000 V
Nominal Discharge Current (8/20 μs)		I_n		20 kA		
Short-Circuit Current Rating		SCCR	35 kA	50 kA	55 kA	65 kA
Mechanical & Environmental						
Operating Temperature Range		T_a		-40 °F to +158 °F [-40 °C to +70 °C]		
Permissible Operating Humidity		RH		5%...95%		
Atmospheric pressure and altitude				80k Pa ... 106k Pa / -500 m ... 2000 m		
Terminal Screw Torque		M_{max}		39.9 lbf-in [4.5 Nm]		
Conductor Cross Section (max)				2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (Flexible)		
Mounting				35 mm DIN Rail, EN 60715		
Degree of Protection				IP 20 (built-in)		
Housing Material				Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection				Yes		
Operating State / Fault Indication				Green ok / Red defect		
Remote Contacts (RC)				Optional		
RC Switching Capacity				AC: 250V / 0.5 A; DC: 250V / 0.1 A; 125 V / 0.2 A; 75 V / 0.5 A		
RC Conductor Cross Section (max)				16 AWG (Solid) / 1.5 mm ² (Solid)		

SPT40-PVXXX-(S)



Order Information

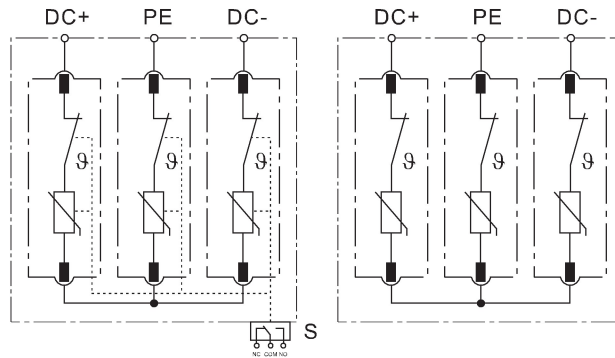
Order Code	600	1000	1200	1500
SPT40-PVXXX	4060025	4010235	4012231	4015231
SPT40-PVXXX-(S) (with remote contacts)	4060026	4010236	4012232	4015232
SPT40-PVXXX/0 (spare modules)	4060002	4010202	4012202	4015202

Internal Configuration

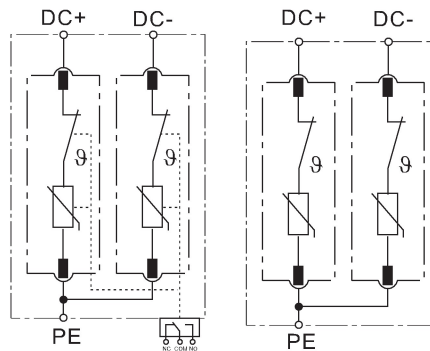
Legend

- PE Protective Earth
- S Signalling Contacts Optional

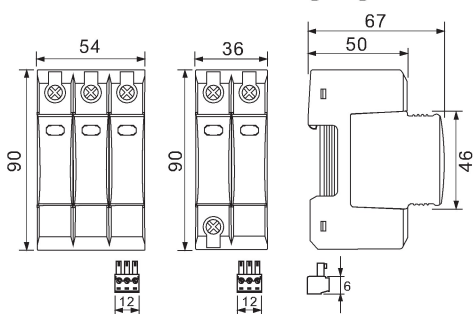
SPT40-PV1000-(S), SPT40-PV1200-(S), SPT40-PV1500-(S)



SPT40-PV600-(S)



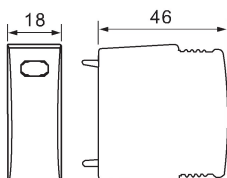
Dimensions & Packaging



SPT40-PV1500-(S) SPT40-PV600-(S)
SPT40-PV1200-(S)
SPT40-PV1000-(S)

Plug Internal Configuration

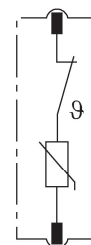
Dimensions & Packaging



Dimensions & Packaging

SPT40-PVXXX-(S)	600	1000	1200	1500
Single Unit DIN 43880 Dimension	1 CTN			
Packaging Dimensions (H x W x L)	[270 x 230 x 330 mm]			
Minimum Order Quantity	42 Units	30 Units	30 Units	30 Units

SPT40-PVXXX/0



Dimensions & Packaging

SPT40-PVXXX/0	600	1000	1200	1500
Single Unit DIN 43880 Dimension	1 CTN			
Packaging Dimensions (H x W x L)	[270 x 230 x 330 mm]			
Minimum Order Quantity	96 Units			