

## 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 $\mu\text{s}$ )  
 $I_{\text{total}} = \text{up to } 40\text{kA}$  (8/20 $\mu\text{s}$ )  
 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	
<b>IEC Electrical</b>						
Maximum Continuous Operating DC Voltage	(DC+) - PE, (DC-) - PE	$U_{\text{cpv}}$	600 V	1000 V	1200 V	1500 V
	(DC+) - (DC-)	$U_{\text{cpv}}$	600 V	1000 V	1200 V	1500 V
Nominal Discharge Current (8/20 $\mu\text{s}$ )		$I_n$		20 kA		
Total Discharge Current (8/20 $\mu\text{s}$ )		$I_{\text{Total}}$		40 kA		
Maximum Discharge Current (8/20 $\mu\text{s}$ )		$I_{\text{max}}$		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		$I_{\text{scpv}}$		2000A		
Number of Ports				1		
<b>UL Electrical</b>						
Maximum Permitted DC Voltage		$V_{\text{pvc}}$	600 V	1000 V	1200 V	1500 V
Voltage Protection Rating	(DC+) - PE, (DC-) - PE	$V_{\text{PR}}$	1600 V	2500 V	3000 V	4000 V
	(DC+) - (DC-)	$V_{\text{PR}}$	1600 V	2500 V	3000 V	4000 V
Nominal Discharge Current (8/20 $\mu\text{s}$ )		$I_n$		20 kA		
Short-Circuit Current Rating		SCCR	35 kA	50 kA	55 kA	65 kA
<b>Mechanical &amp; Environmental</b>						
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		$M_{\text{max}}$	39.9 lbf-in [4.5 Nm]			
Conductor Cross Section (max)			2 AWG (Solid, Stranded) / 4 AWG (Flexible)			
			35 mm <sup>2</sup> (Solid, Stranded) / 25 mm <sup>2</sup> (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 <sup>2</sup> (Solid)			

# SPT40-PVXXX-(S)



## Order Information

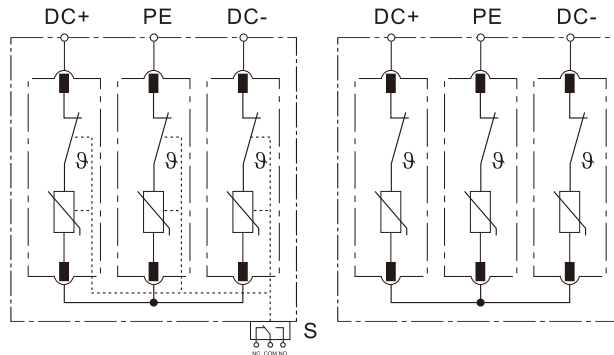
Order Code	600	1000	1200	1500
SPT40-PVXXX	4060025	4010235	4012231	4015231
SPT40-PVXXX-(S) (with remote contacts)	4060026	4010236	4012232	4015232
SPT40-PVXXX/0 (spare modules)	4060002	4010202	4012202	4015202

## Internal Configuration

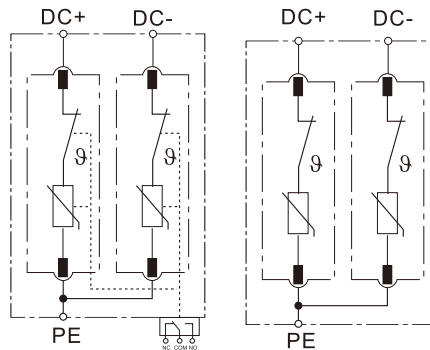
### Legend

- PE Protective Earth
- S Signalling Contacts Optional

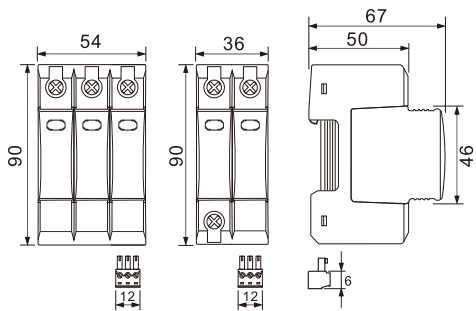
SPT40-PV1000-(S), SPT40-PV1200-(S), SPT40-PV1500-(S)



SPT40-PV600-(S)



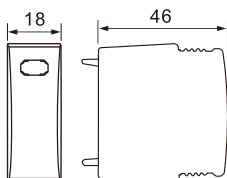
## Dimensions & Packaging



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

## Plug Internal Configuration

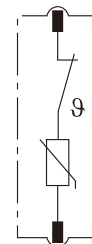
## Dimensions & Packaging



## 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			