

Pluggable Multi-Pole SPD for Photovoltaic Systems

FLP-PVXXX-(S)

Class I • Class II • Type 1 • Type 2 • Type 1CA



Location of Use: String box, Inverter
 Mode of Protection: (DC+) - PE, (DC-) - PE, (DC+) - (DC-)
 Surge Ratings: I_{Total} = up to 12.5 kA (10/350 μ s)
 I_{Total} = up to 40 kA (8/20 μ s)
 IEC/EN/UL Category: Class I+II / Type 1+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

FLP-PVXXX-(S)		600	1000	1200	1500	
IEC Electrical						
Maximum Continuous Operating DC Voltage	(DC+) - PE, (DC-) - PE	U_{CPV}	600 V	1000 V	1200 V	1500 V
	(DC+) - (DC-)	U_{CPV}	600 V	1000 V	1200 V	1500 V
Nominal Discharge Current (8/20 μ s)		I_n		20 kA		
Impulse Discharge Current (10/350 μ s)		I_{imp}		6.25 kA		
Total Discharge Current (10/350 μ s)		I_{Total}		12.5 kA		
Total Discharge Current (8/20 μ s)		I_{Total}		40 kA		
Maximum Discharge Current (8/20 μ s)		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}		2000 A		
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	VPR	1600 V	2500 V	3000 V	4000 V
	(DC+) - (DC-)	VPR	1600 V	2500 V	3000 V	4000 V
Nominal Discharge Current (8/20 μ s)		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; 125V/0.2 A; 75V/0.5 A			
RC Conductor Cross Section (max)			16 AWG (Solid) / 1.5 mm ² (Solid)			
Order Information						
Order Code			600	1000	1200	1500
FLP-PVXXX			0760025	0710235	0712231	0715231
FLP-PVXXX-(S) (with remote contacts)			0760026	0710236	0712232	0715232
FLP-PVXXX/0 (spare modules)			0760002	0710202	0712202	0715202

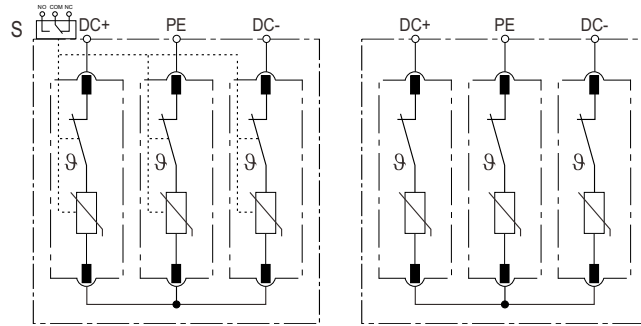
FLP-PVXXX-(S)

Internal Configuration

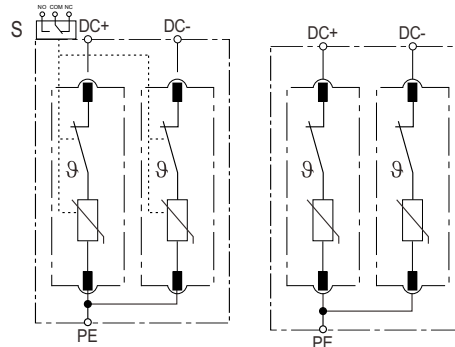
Legend

- PE Protective Earth
- S Signalling Contacts Optional

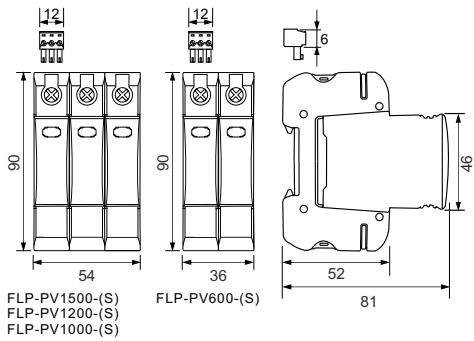
FLP-PV1000-(S), FLP-PV1200-(S), FLP-PV1500-(S)



FLP-PV600-(S)

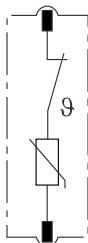


Dimensions & Packaging

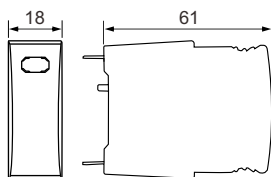


Plug Internal Configuration

FLP-PVXXX/0



Dimensions & Packaging



Dimensions & Packaging				
FLP-PVXXX-(S)	600	1000	1200	1500
Single Unit DIN 43880 Dimension	1 CTN			
Packaging Dimensions (HxWxL)	[220 x 230 x 330 mm]			
Minimum Order Quantity	32 Units	16 Units	16 Units	16 Units

Dimensions & Packaging				
FLP-PVXXX/0	600	1000	1200	1500
Single Unit DIN 43880 Dimension	1 CTN			
Packaging Dimensions (HxWxL)	[220 x 230 x 330 mm]			
Minimum Order Quantity	64 Units			

