

PV Surge Protective Device

FLP-PVxxx/(S)

Class I • Class II • Type 1 • Type 2



Location of Use: String box, Inverter
 Network Systems: (DC+)-PE, (DC-)-PE
 Surge Ratings: $I_{total} = 12.5 \text{ kA (10/350 } \mu\text{s)}$
 $I_{total} = 40 \text{ kA (8/20 } \mu\text{s)}$
 IEC/EN Category: Class I+II / Type 1+2
 Protective Elements: High Energy MOV
 Housing: Pluggable Design
 Compliance: IEC 61643-31:2018
 EN 61643-31:2019

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}	-	1000 V	1200 V	1500 V
Nominal Discharge Current (8/20 μs)		I_n		20 kA		
Impulse Discharge Current (10/350 μs)		I_{imp}		6.25 kA		
Total Discharge Current (10/350 μs)		I_{total}		12.5 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	2.2 kV	4 kV	4.4 kV	5.2 kV
	(DC+)-(DC-)	U_p	-	4 kV	4.4 kV	5.2 kV
Residual Current at U_c		I_{PE}		< 0.5 mA		
Response Time		t_A		< 25 ns		
Short-Circuit Current Rating		I_{SCPV}		10 kA		
Number of Ports				1		
Mechanical & Environmental						
Operating Temperature Range		T_a	-40 °F to +158 °F [-40 °C to +70 °C]			
Permissible Operating Humidity		RH	5% to 95%			
Atmospheric Pressure and Altitude			80 kPa to 106 kPa / -500 m to 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			IP20 (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: 250 V / 0.5 A; DC: 250 V / 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)			
Order Information						
Ordering 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	



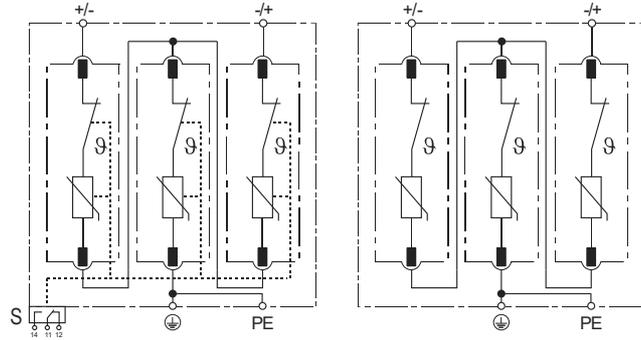
FLP-PVxxx/(S)

Internal Configuration

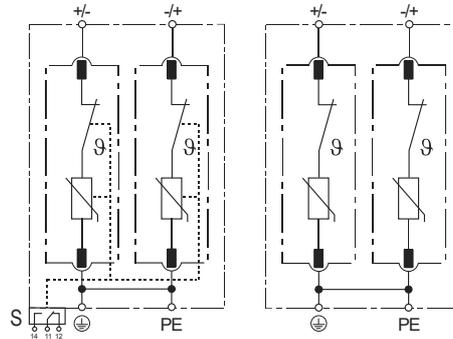
Legend

- ⊕ PE/G Conductor Terminal
- S Signalling Contacts Optional

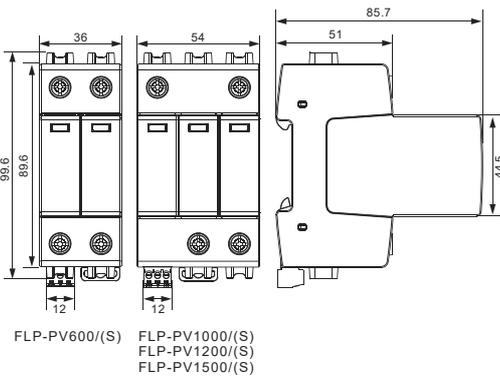
FLP-PV1000/(S), FLP-PV1200/(S), FLP-PV1500/(S)



FLP-PV600/(S)



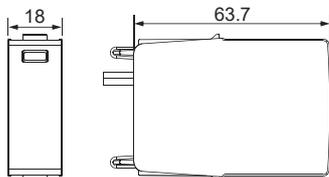
Dimensions & Packaging



[mm]

Complete Unit				
FLP-PVxxx/(S)	600	1000	1200	1500
DIN 43880 Dimension	1 CTN			
Packaging Dimensions (H x W x L)	[210 × 220 × 330 mm]			
Standard Order Quantity	28 Units	20 Units	20 Units	20 Units

Spare Plug



Single Unit				
FLP-PVxxx/0	600	1000	1200	1500
DIN 43880 Dimension	1 CTN			
Packaging Dimensions (H x W x L)	[210 × 220 × 330 mm]			
Standard Order Quantity	120 Units			