

PV Surge Protective Device

FLP-PVxxxG-(S)

Class I • Class II • Type 1 • Type 2



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

FLP-PVxxxG-(S)

1000

1500

IEC Electrical

Parameter	Mode of Protection	Symbol	1000	1500
Maximum Continuous Operating DC Voltage	(DC+) - PE, (DC-) - PE	U_{CPV}	725 V	1100 V
	(DC+) - (DC-)	U_{CPV}	1000 V	1500 V
Nominal Discharge Current (8/20 μs)		I_n		20 kA
Impulse Discharge Current (10/350 μs)		I_{imp}	6.25 kA	
Specific energy [DC+ -> PE / DC- -> PE]		W/R	9.76 kJ / ohms	
Total Discharge Current (10/350 μs)		I_{Total}	12.5 kA	
Specific energy [DC+ / DC- -> PE]		I	39.06 kJ / ohms	
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	2500 V	3750 V
	(DC+) - (DC-)	U_p	4750 V	7250 V
Residual Current at U_c		I_{PE}	none	
Response Time		t_A	< 25 ns	
Short-Circuit Current Rating		I_{SCP}	2000 A	
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%...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 94V-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

Order Code	1000	1500
FLP-PVxxxG	0710237	0715233
FLP-PVxxxG-(S) (with remote contacts)	0710238	0715234

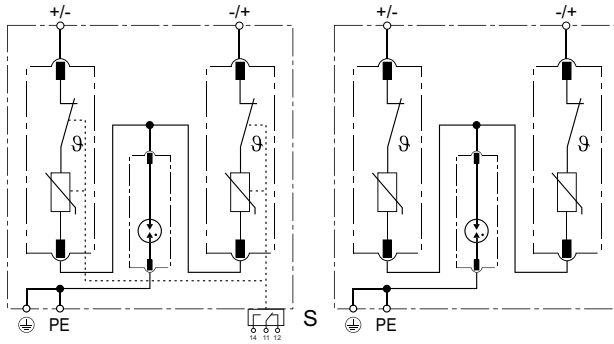


FLP-PVxxxG-(S)

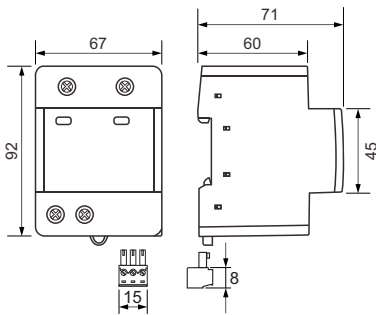
Internal Configuration

Legend

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



Dimensions & Packaging



[mm]

Complete Unit		
FLP-PVxxxG-(S)	1000	1500
DIN 43880 Dimension	1 CTN	
Packaging Dimensions (H x W x L)	[210 x 220 x 330 mm]	
Standard Order Quantity	16 Units	

Connection Diagram

FLP-PVxxxG-S

