

PV Surge Protective Device FLP-PVxxxG/(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: Monoblock Design
 Compliance: IEC 61643-31:2018
 EN 61643-31:2019

Technical Data



FLP-PVxxxG/(S)		1000	1500	
IEC Electrical				
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/ Ω	
Total Discharge Current (10/350 μs)		I_{total}	12.5 kA	
Specific energy [(DC+) / (DC-)-PE]		I	39.06 kJ/ Ω	
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	2.5 kV	3.75 kV
	(DC+)-(DC-)	U_p	4.75 kV	7.25 kV
Residual Current at U_c		I_{PE}	none	
Response Time		t_A	< 25 ns	
Short-Circuit Current Rating		I_{SCPV}	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% 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			1000	1500
FLP-PVxxxG			0710237	0715233
FLP-PVxxxG/(S) (with remote contacts)			0710238	0715234

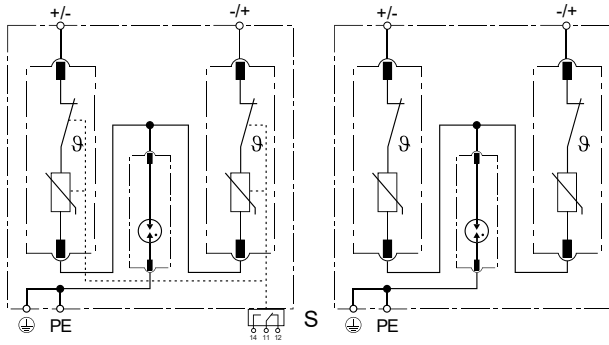


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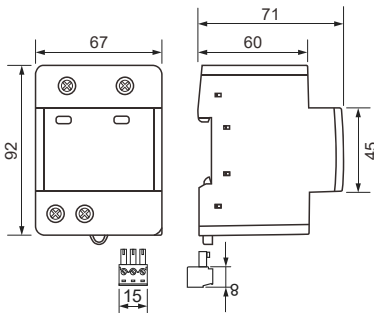
Internal Configuration

Legend

-  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

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