

# 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:  $I_{Total} = 12.5 \text{ kA (10/350 } \mu\text{s)}$   
 $I_{Total} = 40 \text{ kA (8/20 } \mu\text{s)}$   
 IEC/EN Category: Class I+II / Type 1+2  
 Protective Elements: High Energy MOV and GDT  
 Housing: Monoblock Design  
 Compliance: IEC 61643-31:2018  
 EN 61643-31:2019

### Technical Data

FLP-PVxxxG-(S)		1000	1500	
<b>IEC Electrical</b>				
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 $\mu\text{s}$ )		$I_n$		20 kA
Impulse Discharge Current (10/350 $\mu\text{s}$ )		$I_{imp}$		6.25 kA
Specific energy [DC+ -> PE / DC- -> PE]		W/R		9.76 kJ / ohms
Total Discharge Current (10/350 $\mu\text{s}$ )		$I_{Total}$		12.5 kA
Specific energy [DC+ / DC- -> PE]		I		39.06 kJ / ohms
Total Discharge Current (8/20 $\mu\text{s}$ )		$I_{Total}$		40 kA
Maximum Discharge Current (8/20 $\mu\text{s}$ )		$I_{max}$		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		$I_{SCPV}$		2000 A
Number of Ports				1
<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		$M_{max}$		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 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 <sup>2</sup> (Solid)
<b>Order Information</b>				
Ordering Code			1000	1500
FLP-PVxxxG			0710237	0715233
FLP-PVxxxG-(S) (with remote contacts)			0710238	0715234

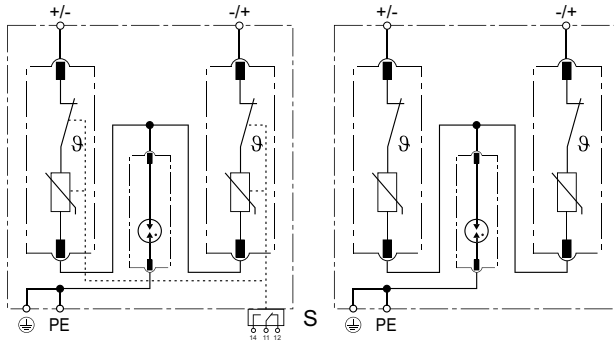


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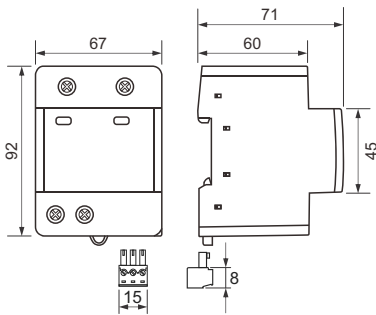
## Internal Configuration

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

