

# PV Surge Protective Device

## FLP-PVxxx-(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  
 Housing: Pluggable Design  
 Compliance: IEC 61643-31:2018  
 EN 61643-31:2019

### Technical Data

FLP-PVxxx-(S)			600	1000	1200	1500
<b>IEC Electrical</b>						
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 $\mu\text{s}$ )		$I_n$		20 kA		
Impulse Discharge Current (10/350 $\mu\text{s}$ )		$I_{imp}$		6.25 kA		
Total Discharge Current (10/350 $\mu\text{s}$ )		$I_{Total}$		12.5 kA		
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	$U_p$	2200 V	4000 V	4400 V	5200 V
	(DC+) - (DC-)	$U_p$	-	4000 V	4400 V	5200 V
Residual Current at $U_c$		$I_{PE}$		< 0.5 mA		
Response Time		$t_A$		< 25 ns		
Short-Circuit Current Rating		$I_{SCPV}$		10000 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			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



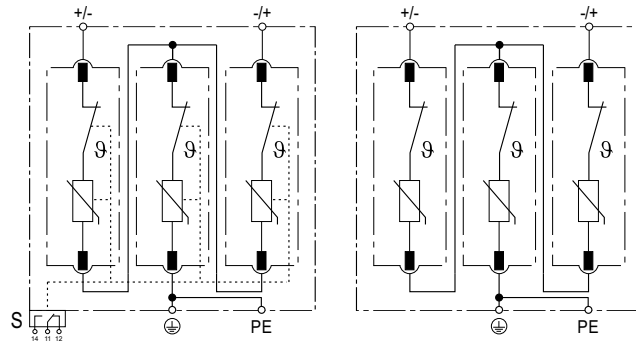
# FLP-PVxxx-(S)

## Internal Configuration

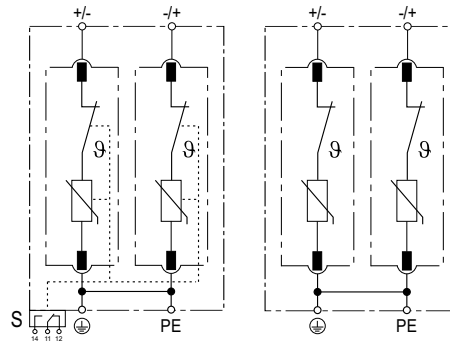
### Legend

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

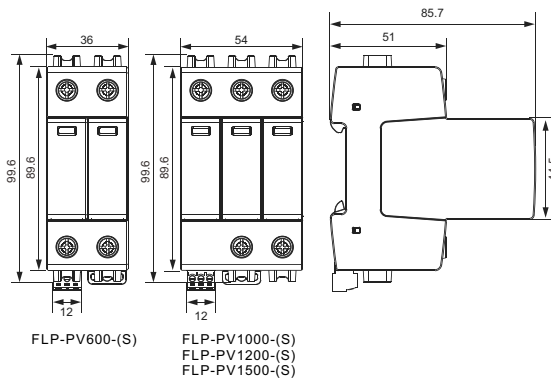
### FLP-PV1000-(S), FLP-PV1200-(S), FLP-PV1500-(S)



### FLP-PV600-(S)



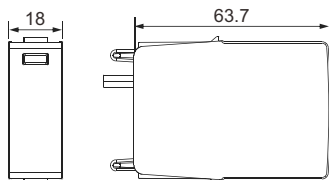
## Dimensions & Packaging



[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	32 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			