

## DC Surge Protective Device

# FLP-DCxxx/2(S)

Class I • Class II • Type 1 • Type 2



Application of Use: String box, Inverter  
 Degree of Protection: DC+ - PE and DC- - PE  
 Surge Ratings:  $I_{imp} = 4 \text{ kA}$  (10/350  $\mu\text{s}$ )  
 $I_n = \text{From } 15 \text{ kA to } 20 \text{ kA}$  (8/20  $\mu\text{s}$ )  
 Protection Category: Class I+II / Type 1+2  
 Protective Elements: High Energy MOV  
 Housing: Pluggable Design  
 Compliance: IEC/EN 61643-41

### Technical Data

FLP-DCxxx/2(S)		65	85
<b>IEC Electrical</b>			
Rated Operational DC Voltage	$U_o/U_n$	48 Vdc	75 Vdc
Max. PV operating voltage	$U_{cdc}$	65 Vdc	85 Vdc
Residual current - Leakage current at $U_c$	$I_{pe}$	< 0.1 mA	
Nominal Discharge Current - 15 x 8/20 $\mu\text{s}$ impulses	$I_n$	15 kA	20 kA
Maximum Discharge Current Max. withstand 8/20 $\mu\text{s}$	$I_{max}$	30 kA	40 kA
Impulse Discharge Current Max. withstand 10/350 $\mu\text{s}$	$I_{imp}$	4 kA	
Total lightning current Max. total withstand 10/350 $\mu\text{s}$	$I_{total}$	8 kA	
Voltage Protection Level	$U_p$	0.3 kV	0.39 kV
Response Time	$t_A$	< 25 ns	
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		65	85
FLP-DCxxx/2 (Without remote contacts)		0406521	0408521
FLP-DCxxx/2S (With remote contacts)		0406522	0408522
FLP-DCxxx/0 (Spare modules)		0406501	0408501

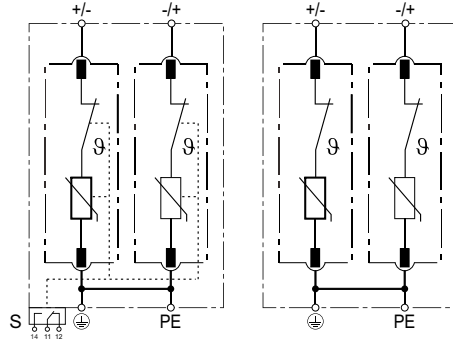


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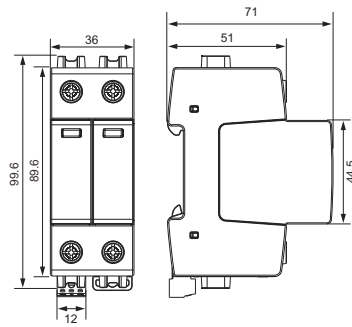
## Internal Configuration

### Legend

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



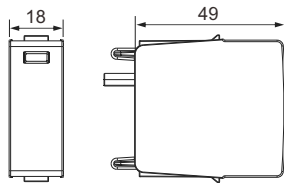
## Dimensions & Packaging



[mm]

Complete Unit		
FLP-DCxxx/2(S)	FLP-DC65/2(S)	FLP-DC85/2(S)
DIN 43880 Dimension		1 CTN
Packaging Dimensions (H x W x L)		[260 x 220 x 330 mm]
Standard Order Quantity		48 Units

## Spare Plug



Single Unit		
FLP-DCxxx/0	FLP-DC65/0	FLP-DC85/0
DIN 43880 Dimension		1 CTN
Packaging Dimensions (H x W x L)		[260 x 220 x 330 mm]
Standard Order Quantity		120 Units

## Connection Diagram

