

DC Surge Protective Device

FLP7-DC65/2(S)

Class I • Class II • Type 1 • Type 2



Location of Use: String box, Inverter
 Network Systems: (DC+/-)-PE, (DC-/-)-PE
 Surge Ratings: $I_{imp} = 7 \text{ kA}$ (10/350 μs)
 $I_n = 30 \text{ kA}$ (8/20 μs)
 IEC/EN Category: Class I+II / Type 1+2
 Protective Elements: High Energy MOV
 Housing: Pluggable Design
 Compliance: IEC/EN 61643-41

Technical Data

FLP7-DCxxx/2(S)

65

IEC Electrical

Rated Operational DC Voltage	U_o / U_n	48 Vdc
Maximum Continuous Operating DC Voltage (DC+)-PE, (DC-)-PE	U_{cdc}	65 Vdc
Residual Current		
- Leakage Current at U_{cdc}	I_{pe}	< 0.5 mA
Nominal Discharge Current		
-15 x 8/20 μs Impulses	I_n	30 kA
Maximum Discharge Current		
Maximum Withstand 8/20 μs	I_{max}	70 kA
Impulse Discharge Current		
Maximum Withstand 10/350 μs	I_{imp}	7 kA
Total Lightning Current		
Maximum Total Withstand 10/350 μs	I_{total}	14 kA
Voltage Protection Level	U_p	0.3 kV
Response Time	t_A	< 25 ns
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

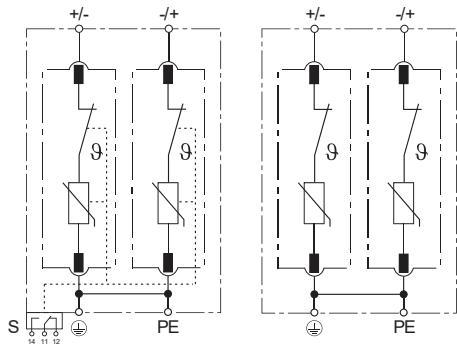
Ordering Code	65
FLP7-DCxxx/2	0706521
FLP7-DCxxx/2S (with remote contacts)	0706522
FLP7-DCxxx/0 (spare modules)	0706501



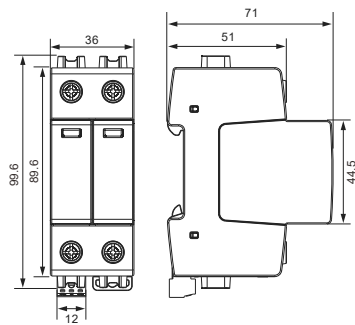
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Internal Configuration

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



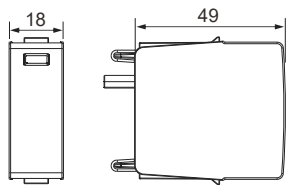
Dimensions & Packaging



[mm]

Complete Unit	
FLP7-DCxxx/2(S)	65
DIN 43880 Dimension	1 CTN
Packaging Dimensions (H x W x L)	[260 × 220 × 330 mm]
Standard Order Quantity	48 Units

Spare Plug



Single Unit	
FLP7-DCxxx/0	65
DIN 43880 Dimension	1 CTN
Packaging Dimensions (H x W x L)	[260 × 220 × 330 mm]
Standard Order Quantity	120 Units

Connection Diagram

