

Pluggable Multi-Pole SPD for DC Power Systems

FLP7-DCXXX/2(S)

Class I • Class II • Type 1 • Type 2



Location of Use: String box, Inverter
 Mode of Protection: (DC+/-) - PE, (DC-/-) - PE
 Surge Ratings: $I_{imp} = 7 \text{ kA}$ (10/350 μs)
 $I_n = 20 \text{ kA}$ (8/20 μs)
 IEC/EN Category: Class I+II / Type 1+2
 Protective Elements: High Energy MOV
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012
 EN 50539-11:2013

Technical Data

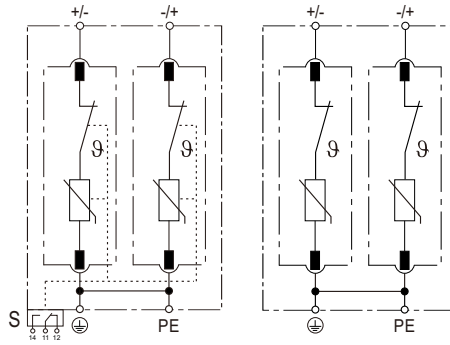
FLP7-DCXXX/2(S)	36	65	75	85	180	
IEC Electrical						
Rated Operational DC Voltage	U_o/U_n	24V	48V	48V	75V	150V
Maximum Continuous Operating DC Voltage (DC+) - PE, (DC-) - PE	U_c	36V	65V	75V	85V	180V
Residual current - Leakage current at U_c	I_{pe}			< 0,5 mA		
Nominal Discharge Current - 15 x 8/20 μs impulses	I_n			20 kA		
Maximum Discharge Current Max. withstand 8/20 μs	I_{max}			40 kA		
Impulse Discharge Current Max. withstand 10/350 μs	I_{imp}			7 kA		
Total lightning current Max. total withstand 10/350 μs	I_{total}			14 kA		
Voltage Protection Level	U_p	0.35kV	0.4kV	0.4kV	0.5kV	0.8kV
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%...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 ² (Solid, Stranded) / 25 mm ² (Flexible)				
Mounting		35 mm DIN Rail, EN 60715				
Degree Of Protection		IP 20 (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: 250V/0.5A; DC: 250V/0.1A; 125V/0.2A; 75V/0.5A				
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)				
Order Information						
Ordering Code		36	65	75	85	180
FLP7 -DCXXX/2		0703621	0706521	0707521	0708521	0718021
FLP7 -DCXXX/2S (with remote contacts)		0703622	0706522	0707522	0708522	0718022
FLP7 -DCXXX/0 (spare modules)		0703601	0706501	0707501	0708501	0718001

FLP7-DCXXX/2(S)

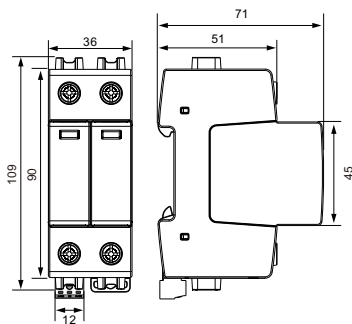
Internal Configuration

Legend

- ⊕/PE Protective Earth
- S Signalling Contacts Optional



Dimensions & Packaging

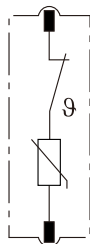


Dimensions & Packaging

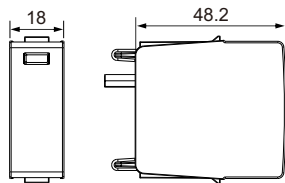
FLP7-DCXXX/2(S)	36	65	75	85	180
Single Unit DIN 43880 Dimension	1 CTN				
Packaging Dimensions (HxWxL)	[270 × 230 × 330 mm]				
Minimum Order Quantity	42 Units				

Plug Internal Configuration

FLP7-DCXXX/0



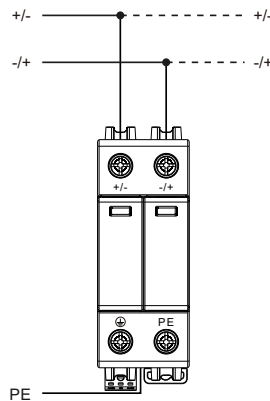
Dimensions & Packaging



Dimensions & Packaging

FLP7-DCXXX/0	36	65	75	85	180
Single Unit DIN 43880 Dimension	1 CTN				
Packaging Dimensions (HxWxL)	[270 × 230 × 330 mm]				
Minimum Order Quantity	96 Units				

Connection Diagram



[mm]