

DC Surge Protective Device FLP25-DC75 Series

Class I • Class II • Type 1 • Type 2



Location of Use: String box, Inverter
 Mode of Protection: (DC+/-) - PE, (DC-) - (DC+) and (DC+) - PE
 Surge Ratings: $I_{imp} = 25 \text{ kA}$ (10/350 μs)
 $I_n = 25 \text{ kA}$ (8/20 μs)
 IEC/EN Category: Class I+II / Type 1+2
 Protective Elements: High Energy MOV and GDT
 Housing: Monoblock Design
 Compliance: IEC/EN 61643-41

Technical Data

48 Vdc power Surge Protector

		FLP25-DC75/1(S)	FLP25-DC75/1(S)+1
IEC Electrical			
Rated Operational DC Voltage	U_o/U_n	48 Vdc	
Connection mode		(DC+) - PE or (DC-) - PE	(DC-) - (DC+) and (DC+) - PE
Protection mode(s)		CM	CM/DM
Max. PV operating voltage	U_{dc}	75 Vdc	75 Vdc / 255Vdc
Residual current - Leakage current at U_c	I_{pe}	< 0.1 mA	without
Nominal Discharge Current - 15 x 8/20 μs impulses	I_n	25 kA	25 kA / 50 kA
Maximum Discharge Current Max. withstand 8/20 μs	I_{max}	100 kA	100 kA
Impulse Discharge Current Max. withstand 10/350 μs	I_{imp}	25 kA	25 kA / 50 kA
Total lightning current Max. total withstand 10/350 μs	I_{total}	-	50 kA
Voltage Protection Level	U_p	0.5 kV	0.5 kV / 1.5 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%...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 94V-0	
Thermal Protection		Yes	
Operating State / Fault Indication		White 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

	FLP25-DC75/1(S)	FLP25-DC75/1(S)+1
Ordering Code		
Without remote contacts	2507511	2507513
With remote contacts	2507512	2507514

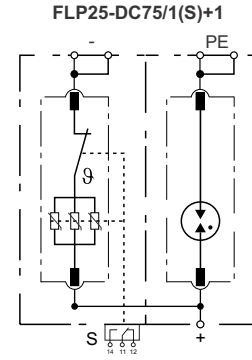
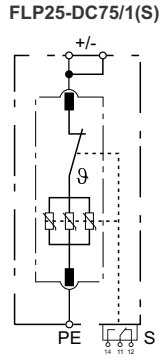


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Internal Configuration

Legend

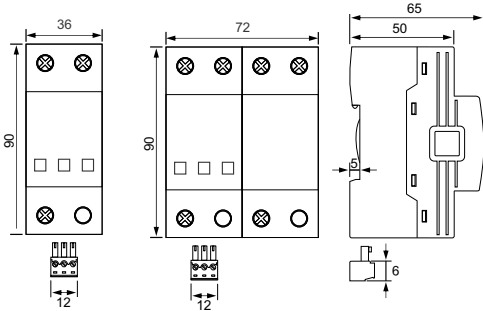
- ⊕/PE PE/G Conductor Terminal
- S Signalling Contacts Optional



Dimensions & Packaging

FLP25-DC75/1(S) FLP25-DC75/1(S)+1

[mm]



Complete Unit		
	FLP25-DC75/1(S)	FLP25-DC75/1(S)+1
DIN 43880 Dimension	1 CTN	
Packaging Dimensions (H x W x L)	[240 x 220 x 330 mm]	
Standard Order Quantity	42 Units	24 Units

Connection Diagram

