DC Surge Protective Device
FLP25-DC75 Series
Class I • Class II • Type 1 • Type 2

Location of Use: String box, Inverter
Network Systems: (DC+/-)-PE, (DC-)-(DC+) and (DC+)-PE
Surge Ratings: I_{imp} = 25 kA (10/350 µs)
I_n = 25 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

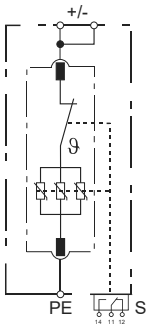
Technical Data

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	DM / CM
Maximum Continuous Operating DC Voltage	U_{cdc}	75 Vdc	75 Vdc / 255 Vdc
Residual Current - Leakage Current at U_{cdc}	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 Maximum Withstand 8/20 µs	I_{max}	70 kA	70 kA
Impulse Discharge Current Maximum Withstand 10/350 µs	I_{imp}	25 kA	25 kA / 50 kA
Total Lightning Current Maximum 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% 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 mm² (Solid, Stranded) / 25 mm² (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		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 mm² (Solid)	
Order Information			
Ordering Code		FLP25-DC75/1(S)	FLP25-DC75/1(S)+1
Without remote contacts		2507511	2507513
With remote contacts		2507512	2507514

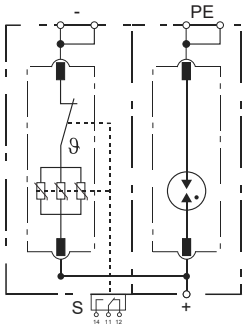
CE

Internal Configuration

FLP25-DC75/1(S)



FLP25-DC75/1(S)+1

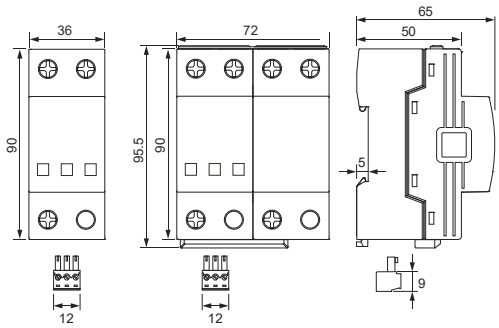


Legend

- PE/G Conductor Terminal
- S Signalling Contacts Optional

Dimensions & Packaging

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

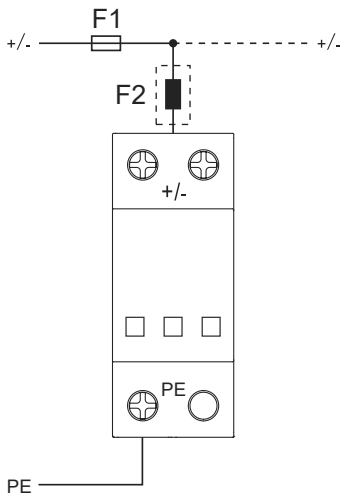
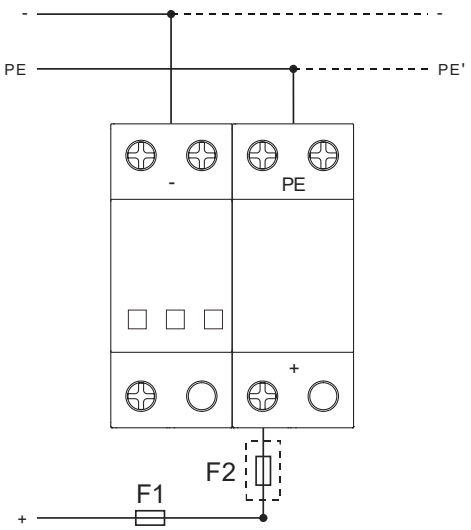


[mm]

Complete Unit		
	FLP25-DC75/1(S)	FLP25-DC75/1(S)+1
DIN 43880 Dimension	1 CTN	
Packaging Dimensions (H x W x L)	[260 × 220 × 330 mm]	
Standard Order Quantity	42 Units	24 Units

Connection Diagram

FLP25-DC75/1(S)



FLP25-DC75/1(S)+1