

Monoblock Single&Multi-Pole SPD for DC Power Systems

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 61643-31:2018
 EN 61643-31:2019
 EN 50539-11:2013

Technical Data

48 Vdc power Surge Protector	FLP25-DC75(1(S))	FLP25-DC75(1(S))+1
IEC Electrical		
Rated Operational DC Voltage	U_0/U_n	48 Vdc
Connection mode		DC+ - PE or DC- - PE
Protection mode(s)		CM
Max. PV operating voltage	U_c	75 Vdc
Residual current		
- Leakage current at U_c	I_{pe}	< 0,5 mA
Nominal Discharge Current		
- 15 x 8/20 μs impulses	I_n	25 kA
Maximum Discharge Current		
Max. withstand 8/20 μs	I_{max}	100 kA
Impulse Discharge Current		
Max. withstand 10/350 μs	I_{imp}	25 kA
Total lightning current		
Max. total withstand 10/350 μs	I_{total}	50 kA
Voltage Protection Level	U_p	0.5 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 94 V-0
Thermal Protection		Yes
Operating State / Fault Indication		White ok / Red defect
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/0.5 A; DC: 250V/0.1 A; 125V/0.2 A; 75V/0.5 A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)
Order Information		
Ordering Code	FLP25-DC75(1(S))	FLP25-DC75(1(S))+1
without remote contacts	2507511	2507513
with remote contacts	2507512	2507514

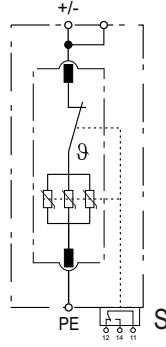
FLP25-DC75 Series

Internal Configuration

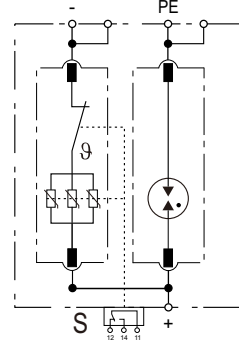
Legend

- PE Protective Earth
- S Signalling Contacts Optional

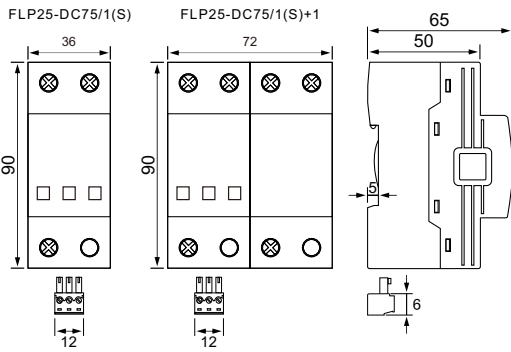
FLP25-DC75/1(S)



FLP25-DC75/1(S)+1



Dimensions & Packaging

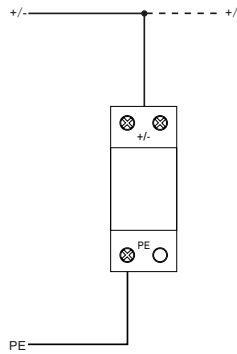


Dimensions & Packaging		
	FLP25-DC75/1(S)	FLP25-DC75/1(S)+1
Single Unit DIN 43880 Dimension	1 CTN	
Packaging Dimensions (HxWxL)	[270 x 230 x 330 mm]	
Minimum Order Quantity	42 Units	24 Units

[mm]

Connection Diagram

FLP25-DC75/1(S)



FLP25-DC75/1(S)+1

