

SPD for DC Power Systems

48Vdc power Surge Protector

Class I • Class II • Type 1 • Type 2 • Type 1CA

Class II • Type 2 • Type 1CA



Location of Use: String box, Inverter
 Mode of Protection: DC+/DC- and DC+/PE, DC+/PE, DC-/PE
 Surge Ratings: $I_{imp} =$ from 4 kA to 25 kA (10/350 μ s)
 $I_n =$ from 20 kA to 25 kA (8/20 μ s)
 IEC/EN/UL Category: Class I+II / Type 1+2 and / Type 1CA
 Class II / Type 2 and / Type 1CA
 Protective Elements: High Energy MOV and GDT
 Housing: Monoblock and Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012
 EN 50539-11:2013

Technical Data

48Vdc power Surge Protector FLP25-DC75/1(S) FLP25-DC75/1(S)+1 FLP7-DC65/1(S) FLP7-DC65/2(S) SLP40-DC65/1(S) SLP40-DC65/2(S)

IEC Electrical

Rated Operational DC Voltage	U_o/U_n	48 Vdc					
Connection mode		DC+/PE or DC-/PE	DC+/DC- and DC+/PE	DC+/PE or DC-/PE	DC+/PE and DC-/PE	DC+/PE or DC-/PE	DC+/PE and DC-/PE
Protection mode(s)		CM	CM/DM	CM	CM	CM	CM
Max. PV operating voltage	U_{cdc}	75 Vdc	75 Vdc	65 Vdc	65 Vdc	65 Vdc	65 Vdc
Residual current							
- Leakage current at U_c	I_{pe}	< 0.1 mA	without	< 0.1 mA	< 0.1 mA	< 0.1 mA	< 0.1 mA
Nominal Discharge Current							
- 15 x 8/20 μ s impulses	I_n	25 kA	25 kA/50 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current							
Max. withstand 8/20 μ s	I_{max}	100 kA	100 kA	50 kA	50 kA	40 kA	40 kA
Impulse Discharge Current							
Max. withstand 10/350 μ s	I_{imp}	25 kA	25 kA/50 kA	7 kA	7 kA	4 kA	4 kA
Total lightning current							
Max. total withstand 10/350 μ s	I_{total}	-	50 kA	-	14 kA	-	8 kA
Voltage Protection Level	U_p	0.5kV	0.5 kV/1.5 kV	0.3kV	0.3kV	0.3kV	0.3kV
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/0.5 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

Order Code	FLP25-DC75/1(S)	FLP25-DC75/1(S)+1	FLP7-DC65/1(S)	FLP7-DC65/2(S)	SLP40-DC65/1(S)	SLP40-DC65/2(S)
without remote contacts	2507511	2507513	0706511	0706521	4006511	4006521
with remote contacts	2507512	2507514	0706512	0706522	4006512	4006522
spare modules	-	-	0706501	0706501	4006501	4006501

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Internal Configuration

FLP25-DC75/1(S)

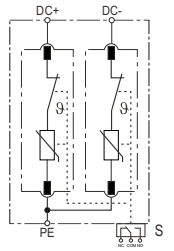
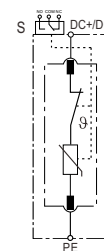
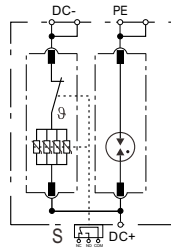
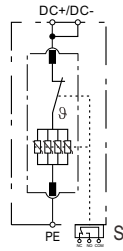
FLP25-DC75/1(S)+1

FLP7-DC65/1(S)
SLP40-DC65/1(S)

FLP7-DC65/2(S)
SLP40-DC65/2(S)

Legend

- PE Protective Earth
- S Signalling Contacts Optional



Dimensions & Packaging

Single Unit DIN 43880 Dimension

1 CTN

Packaging Dimensions (HxWxL)

[270 x 230 x 330 mm]

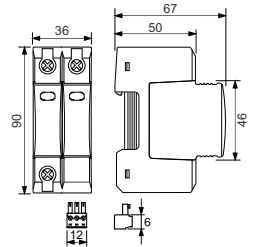
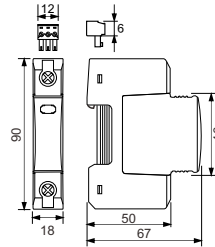
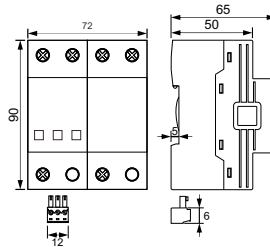
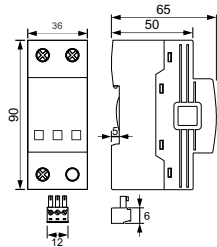
Minimum Order Quantity

42 Units

24 Units

72 Units

42 Units



Connection Diagram

