

Pluggable Multi-Pole SPD

SPT12.5-XXX/4(S)

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

Location of Use: Main Distribution Boards

Network Systems: TN-S

Mode of Protection: L-PE, N-PE

Surge Ratings: I_{imp} = up to 12.5 kA (10/350 μ s)
 I_n = up to 20 kA (8/20 μ s)

IEC/EN/UL Category: Class I+II / Type 1+2 / Type 1CA

Protective Elements: High Energy MOV

Housing: Pluggable Design

Compliance: IEC 61643-11:2011
EN 61643-11:2012
UL 1449 4th Edition



Technical Data

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		150	275	320	385	440
IEC Electrical						
Nominal AC Voltage (50/60Hz)	U _o /U _n	120V	230V	230V	230V	400V
Maximum Continuous Operating Voltage (AC)	U _c	150V	275V	320V	385V	440V
Nominal Discharge Current (8/20 μs)	I _n	20kA	20kA	20kA	20kA	20kA
Maximum Discharge Current (8/20 μs)	I _{max}	80kA	80kA	80kA	80kA	80kA
Impulse Discharge Current (10/350 μs)	I _{imp}	12.5kA	12.5kA	12.5kA	10kA	10kA
Specific Energy	W/R	39kJ/Ω	39kJ/Ω	39kJ/Ω	25 kJ/Ω	25kJ/Ω
Charge	Q	6.25As	6.25As	6.25As	5As	5As
Voltage Protection Level	U _p	1000V	1500V	1600V	1800V	2000 V
Response Time	t _A	<25 ns				
Back-Up Fuse (max)		315 A / 250 A gG				
Short-Circuit Current Rating (AC)	I _{SCCR}	25 kA / 50 kA				
TOV Withstand 5s	U _T	180V	335V	335V	335V	580V
TOV 120min	U _T	230V	440V	440V	440V	765V
	Mode	Safe Fail	Safe Fail	Safe Fail	Safe Fail	Safe Fail
Number of Ports		1				
UL Electrical						
Maximum Continuous Operating Voltage (AC)	MCOV	150V	275V	320V	385V	440V
Voltage Protection Rating	VPR	600V	900V	1200V	1350V	1500V
Nominal Discharge Current (8/20 μs)	I _n	20kA	20kA	20kA	20kA	20kA
Short-Circuit Current Rating (AC)	SCCR	200kA	150kA	150kA	150kA	200kA
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; 125 V / 0.2 A; 75 V / 0.5 A				
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)				

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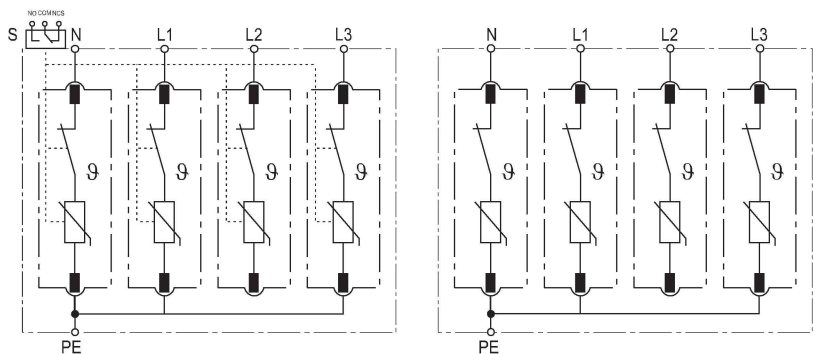


Order Information					
Order Code	150	275	320	385	440
SPT12.5-XXX/4	1215041	1227541	1232041	1238541	1244041
SPT12.5-XXX/4S(with remote contacts)	1215042	1227542	1232042	1238542	1244042
SPT12.5-XXX/0(spare modules)	1215001	1227501	1232001	1238501	1244001

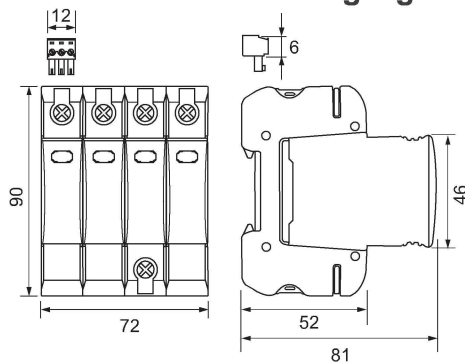
Internal Configuration

Legend

- L Line
- N Neutral
- PE Protective Earth
- S Signalling Contacts Optional

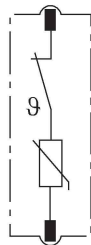


Dimensions & Packaging



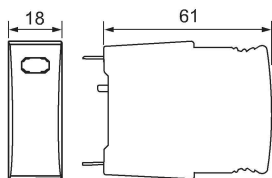
Dimensions & Packaging					
SPT12.5-XXX/4(S)	150	275	320	385	440
Single Unit DIN 43880 Dimension	1 CTN				
Packaging Dimensions (H x W x L)	[200 × 230 × 330 mm]				
Minimum Order Quantity	16 Units				

SPT12.5-XXX/0



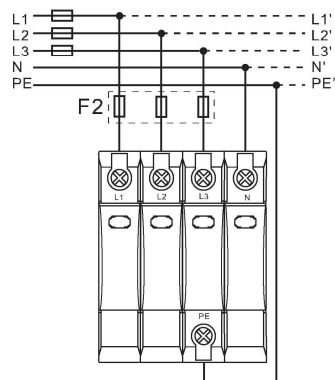
Plug Internal Configuration

Dimensions & Packaging



Dimensions & Packaging					
SPT12.5-XXX/0	150	275	320	385	440
Single Unit DIN 43880 Dimension	1 CTN				
Packaging Dimensions (H x W x L)	[200 × 230 × 330 mm]				
Minimum Order Quantity	64 Units				

TN-S (Three-phase, 4+0)



Connection Diagram