

Pluggable Multi-Pole SPD

SPT12.5-XXX/2(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

SPT12.5-XXX/2(S)

75 150 275 320 385 440

| IEC Electrical | | 75 | 150 | 275 | 320 | 385 | 440 |
|--|------------|--|----------------|----------------|----------------|-----------------|----------------|
| Nominal AC Voltage (50/60Hz) | U_o/U_n | 60V | 120V | 230V | 230V | 230V | 400V |
| Maximum Continuous Operating Voltage (AC) | U_c | 75V | 150V | 275V | 320V | 385V | 440V |
| Nominal Discharge Current (8/20 μ s) | I_n | 20kA | 20kA | 20kA | 20kA | 10kA | 10kA |
| Maximum Discharge Current (8/20 μ s) | I_{max} | 50kA | 50kA | 50kA | 50kA | 50kA | 50kA |
| Impulse Discharge Current (10/350 μ s) | I_{imp} | 12.5kA | 12.5kA | 12.5kA | 12.5kA | 10kA | 10kA |
| Specific Energy | W/R | 39kJ/ Ω | 39kJ/ Ω | 39kJ/ Ω | 39kJ/ Ω | 25 kJ/ Ω | 25kJ/ Ω |
| Charge | Q | 6.25 As | 6.25As | 6.25As | 6.25As | 5As | 5As |
| Voltage Protection Level | U_p | 700V | 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 | 114V | 180V | 335V | 335V | 335V | 580V |
| TOV 120min | U_T | 114V | 230V | 440V | 440V | 440V | 765V |
| | Mode | Withstand | Safe Fail | Safe Fail | Safe Fail | Safe Fail | Safe Fail |
| Number of Ports | | 1 | | | | | |
| UL Electrical | | 75 | 150 | 275 | 320 | 385 | 440 |
| Maximum Continuous Operating Voltage (AC) | MCOV | 75V | 150V | 275V | 320V | 385V | 440V |
| Voltage Protection Rating | VPR | 330V | 600V | 900V | 1200V | 1350V | 1500V |
| Nominal Discharge Current (8/20 μ s) | I_n | 20kA | 20kA | 20kA | 20kA | 20kA | 20kA |
| Short-Circuit Current Rating (AC) | SCCR | 100kA | 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) | | | | | |

SPT12.5-XXX/2(S)

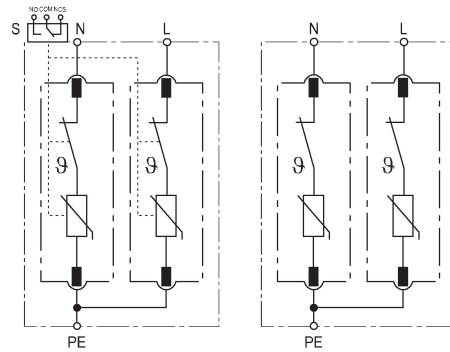


| Order Information | | | | | | |
|--------------------------------------|---------|---------|---------|---------|---------|---------|
| Order Code | 75 | 150 | 275 | 320 | 385 | 440 |
| SPT12.5-XXX/2 | 1207521 | 1215021 | 1227521 | 1232021 | 1238521 | 1244021 |
| SPT12.5-XXX/2S(with remote contacts) | 1207522 | 1215022 | 1227522 | 1232022 | 1238522 | 1244022 |
| SPT12.5-XXX/0(spare modules) | 1207501 | 1215001 | 1227501 | 1232001 | 1238501 | 1244001 |

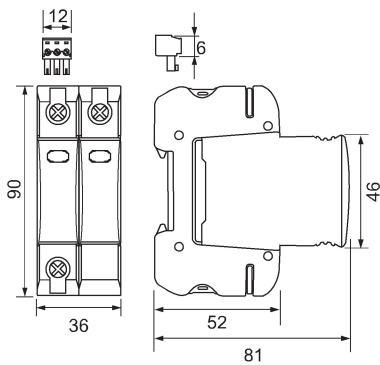
Internal Configuration

Legend

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



Dimensions & Packaging

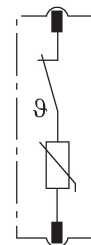


Dimensions & Packaging

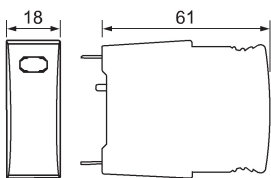
| SPT12.5-XXX/2(S) | 75 | 150 | 275 | 320 | 385 | 440 |
|----------------------------------|----------------------|-----|-----|-----|-----|-----|
| Single Unit DIN 43880 Dimension | 1 CTN | | | | | |
| Packaging Dimensions (H x W x L) | [200 x 230 x 330 mm] | | | | | |
| Minimum Order Quantity | 32 Units | | | | | |

Plug Internal Configuration

SPT12.5-XXX/0



Dimensions & Packaging



Dimensions & Packaging

| SPT12.5-XXX/0 | 75 | 150 | 275 | 320 | 385 | 440 |
|----------------------------------|----------------------|-----|-----|-----|-----|-----|
| Single Unit DIN 43880 Dimension | 1 CTN | | | | | |
| Packaging Dimensions (H x W x L) | [200 x 230 x 330 mm] | | | | | |
| Minimum Order Quantity | 64 Units | | | | | |

Connection Diagram

