

# Pluggable Multi-Pole SPD FLP12.5-275/1(S)+1

Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards  
 Network Systems: TT, TN-S  
 Mode of Protection: L-N, N-PE  
 Surge Ratings:  $I_{imp}$  = up to 12,5 kA (10/350  $\mu$ s)  
 $I_n$  = up to 20 kA (8/20  $\mu$ s)  
 IEC/EN Category: Class I+II / Type 1+2  
 Protective Elements: High Energy MOV and GDT  
 Housing: Pluggable Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012

## Technical Data

### FLP12.5-275/1(S)+1

275

#### IEC Electrical

Nominal AC Voltage (50/60Hz)		230 V
Maximum Continuous Operating Voltage	(L - N) $U_c$	275 V
	(N - PE) $U_c$	255 V
Nominal Discharge Current (8/20 $\mu$ s)	(L - N) / (N - PE) $I_n$	20 kA / 25 kA
Maximum Discharge Current (8/20 $\mu$ s)	(L - N) / (N - PE) $I_{max}$	50 kA / 50 kA
Impulse Discharge Current (10/350 $\mu$ s)	(L - N) / (N - PE) $I_{imp}$	12,5 kA / 25 kA
Specific Energy	(L - N) / (N - PE) W/R	39 kJ / $\Omega$ / 156 kJ / $\Omega$
Charge	(L - N) / (N - PE) Q	6.25 As / 12.5 As
Voltage Protection Level	(L - N) / (N - PE) $U_p$	1500 V / 1500 V
Follow Current Interrupt Rating	(N - PE) $I_{fi}$	100 A <sub>RMS</sub>
Residual Current at $U_c$	$I_{PE}$	none
Response Time	(L - N) / (N - PE) $t_A$	< 25 ns / < 100 ns
Back-Up Fuse (max)		160 A gL / gG
Short-Circuit Current Rating (AC)	(L - N) $I_{SCCR}$	25 kA
TOV Withstand 5s	(L - N) $U_T$	335 V
TOV 120min	(L - N) $U_T$	440 V
	mode	Safe Fail
TOV Withstand 200ms	(N - PE) $U_T$	1200 V
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 <sup>2</sup> (Solid, Stranded) / 25 mm <sup>2</sup> (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 / 0.5A; DC: 250V / 0.1A; 125V / 0.2A; 75V / 0.5A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm <sup>2</sup> (Solid)

#### Order Information

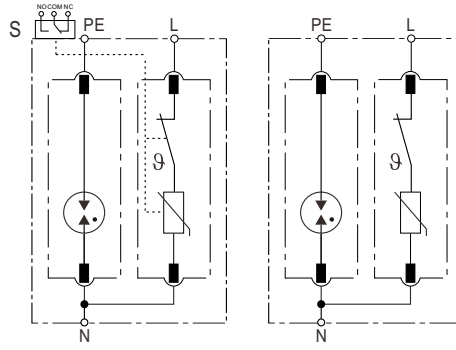
Ordering Code	275
FLP12.5-275/1+1	1227513
FLP12.5-275/1S+1 (with remote contacts)	1227514
FLP12.5-275/0 (spare modules)	1227501
FLP25-255/0 (spare modules)	2525502

## FLP12.5-275/1(S)+1

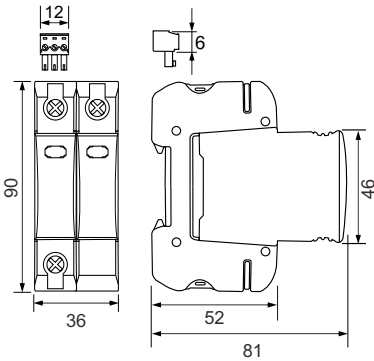
### Internal Configuration

#### Legend

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



### Dimensions & Packaging

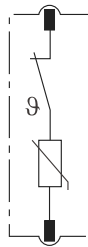


#### Dimensions & Packaging

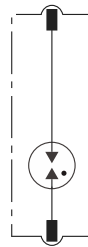
FLP12.5-275/1(S)+1	275
Single Unit DIN 43880 Dimension	1 CTN
Packaging Dimensions (HxWxL)	[200 × 230 × 330 mm]
Minimum Order Quantity	28 Units

### Plug Internal Configuration

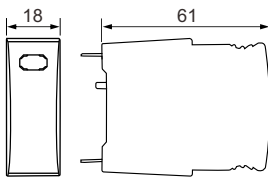
FLP12.5-275/0



FLP25-255/0



### Dimensions & Packaging



#### Dimensions & Packaging

FLP12.5-275/0	275
FLP25-255/0	255
Single Unit DIN 43880 Dimension	1 CTN
Packaging Dimensions (HxWxL)	[270 × 230 × 330 mm]
Minimum Order Quantity	96 Units

### Connection Diagram

TN-S,TT (Single-phase, 1+1)

