Surge-Trap® Pluggable STPT12 Series - 25kA

SURGE PROTECTION FOR POWER LINES

DIN-RAIL IEC TYPE 1+2 / CLASS I+II



STP T12 25 is the series of combined Type 1+2/Class I+II devices for discharging lightning currents and protecting against voltage surges, in accordance with EN/IEC 61643-11. Suitable as the first step of protection in incoming power supply panels and areas with exposure to the atmosphere, where installations are usually provided with an external lightning protection system.

TECHNICAL DATA OVERVIEW

Class	Type 1+2 / Class I+II
U_n	230/400V
Iimp	25 kA
Imax	100 kA
I_n (8/20)	25 kA
Isccr	25 kA
Body Material	PA66 CT1; V-0
System type	TT, TNS, TNC
Number of Poles	1,2,3,4
Format	Pluggable
Temperature range	-40 ... 80 ° C
IP Code	20
Back-up fuse	315 A gG
Stranded wire Section	6 ... 25 mm²
Rigid wire Section	6 ... 35 mm²

FEATURES & BENEFITS

- Lightning impulse current (10/350µs): 25kA per phase
- Maximum discharge current (8/20µs): 100kA per phase
- Nominal discharge current (8/20µs): 25kA per phase
- TNS, TNC and TT networks
- Un(L-N/L-L): 230/400V
- DIN-rail mountable, plug-in format
- Visual and remote end of life indicators
- Reversible chassis to allow cable entry from above or below
- Mechanically coded cartridges to avoid cartridge replacement errors
- Back-up fuse: 315 A gG

APPLICATIONS

- Industry and automation
- Commercial and residential installations
- Telecom & IT & Data Centers
- Water treatment
- Smart grid & LV Metering
- Photovoltaic & wind

STANDARDS

- IEC 61643-11
- EN 61643-11

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Surge-Trap® Pluggable STPT12 Series - 25kA

PRODUCT RANGE



STPT12-25K275V-1PM

1 Pole

Catalog number	Item number	U_n	U_c	I_{imp} (10/350)	I_{max} (8/20)	I_n (8/20)	U_p at I_n	Remote	Cartridge No L-N	Cartridge No N-PE
L-N (1Ph)										
STPT12-25K275V-1P	83120152	230 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	No	SP12-25K275V	-
STPT12-25K275V-1PM	83120153	230 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	Yes	SP12-25K275V	-
N-PE (N)										
STPT12-100K-N	83120166	Neutral	255 V	100 kA	100 kA	50 kA	≤ 1.5 kV	No	-	SP12-100K-N



STPT12-25K275V-2PM

2 Poles

Catalog number	Item number	U_n	U_c	I_{imp} (10/350)	I_{max} (8/20)	I_n (8/20)	U_p at I_n	Remote	Cartridge No L-N	Cartridge No N-PE
TT (1Ph+N)										
STPT12-25K275V-2PG	83120154	230 / 400 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	No	SP12-25K275V	SP12-50K-2PN
STPT12-25K275V-2PGM	83120155	230 / 400 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	Yes	SP12-25K275V	SP12-50K-2PN
TNS (1Ph+N)										
STPT12-25K275V-2P	83120156	230 / 400 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	No	SP12-25K275V	-
STPT12-25K275V-2PM	83120157	230 / 400 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	Yes	SP12-25K275V	-



STPT12-25K275V-3PM

3 Poles

Catalog number	Item number	U_n	U_c	I_{imp} (10/350)	I_{max} (8/20)	I_n (8/20)	U_p at I_n	Remote	Cartridge No L-N
TNC (3Ph)									
STPT12-25K275V-3P	83120158	230 / 400 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	No	SP12-25K275V
STPT12-25K275V-3PM	83120159	230 / 400 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	Yes	SP12-25K275V

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Surge-Trap® Pluggable STPT12 Series - 25kA

PRODUCT RANGE



STPT12-25K275V-4PM

4 Poles

Catalog number	Item number	U_n	U_c	I_{imp} (10/350)	I_{max} (8/20)	I_n (8/20)	U_p at I_n	Remote	Cartridge No	
									L-N	N-PE
TT (3Ph+N)										
STPT12-25K275V-4PG	83120150	230 / 400 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	No	SP12-25K275V	SP12-100K-N
STPT12-25K275V-4PGM	83120151	230 / 400 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	Yes	SP12-25K275V	SP12-100K-N
TNS (3Ph+N)										
STPT12-25K275V-4P	83120160	230 / 400 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	No	SP12-25K275V	-
STPT12-25K275V-4PM	83120161	230 / 400 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV	Yes	SP12-25K275V	-



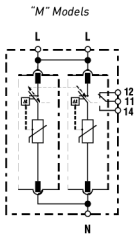
SP12-25K275V

Replacement cartridges

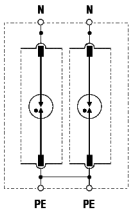
Catalog number	Item number	U_n	U_c	I_{imp} (10/350)	I_{max} (8/20)	I_n (8/20)	U_p at I_n
L-N (1Ph)							
SP12-25K275V	83120007	230 VAC	275 V	25 kA	100 kA	25 kA	≤ 1.5 kV
N-PE (N)							
SP12-50K-2PN	83120009	Neutral	255 V	50 kA	100 kA	25 kA	≤ 1.5 kV
SP12-100K-N	83120008	Neutral	255 V	100 kA	100 kA	50 kA	≤ 1.5 kV

ELECTRICAL DIAGRAMS

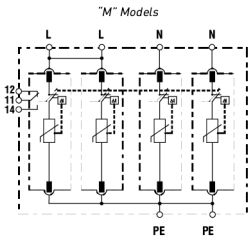
L-N (1Ph)



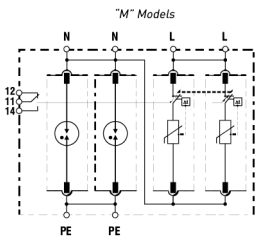
N-PE (N)



TNS (1Ph+N) - 2P



TT (1Ph+N) - 2PG

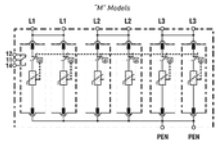


MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

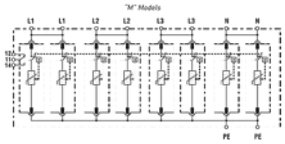
Surge-Trap® Pluggable STPT12 Series - 25kA

ELECTRICAL DIAGRAMS

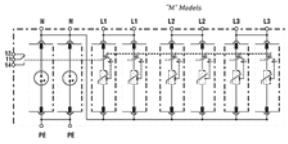
TNC (3Ph) - 3P



TNS (3Ph+N) - 4P

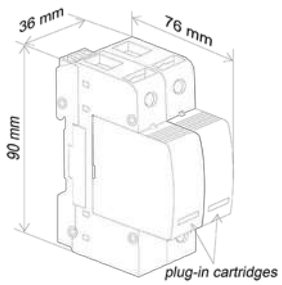


TT (3Ph+N) - 4PG

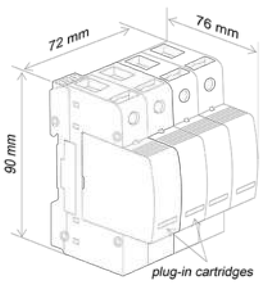


DIMENSIONS

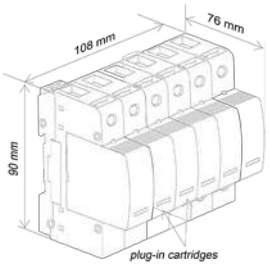
1 Pole



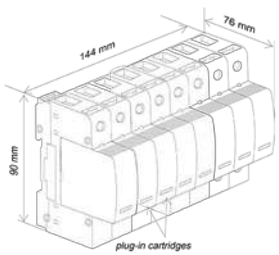
2 Poles



3 Poles



4 Poles



MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.