

# Surge-Trap<sup>®</sup> Type 1 SPD

## UL TYPE 1 SPD for Indoor and Outdoor Applications

The Surge-Trap<sup>®</sup> Type 1 SPD meets requirements for UL 1449 Third Edition. It provides a two-year warranty and offers an economical replacement for the former surge arrestor category. The Surge-Trap Type 1 SPD features TPMOV<sup>®</sup> technology inside making it a “no-fuse” surge suppressor that doesn’t require the use of additional overcurrent protection. It can be installed upstream or downstream of the main disconnect.

### Features/Benefits:

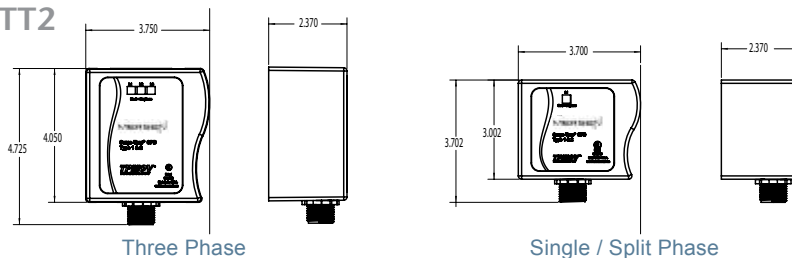
- Compact design
- Panel mount
- No additional overcurrent protection devices required
- 200kA Short circuit current rating (SCCR)
- UL 1449 Third Edition Type 1 listed
- For indoor, NEMA 2, applications
- For outdoor, NEMA 4X, applications
- Status LEDs
- Two-year warranty

### Applications:

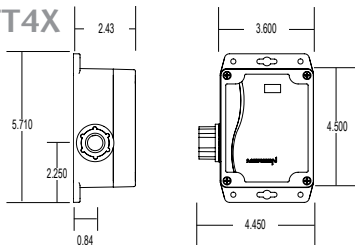
- AC distribution
- Power supplies
- Industrial
- Commercial
- Telecommunications
- Residential
- IT / Data centers

### Dimensions

#### STT2

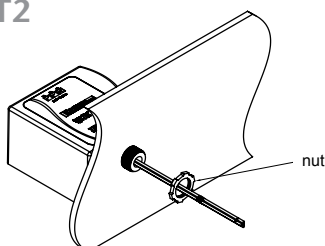


#### STT4X

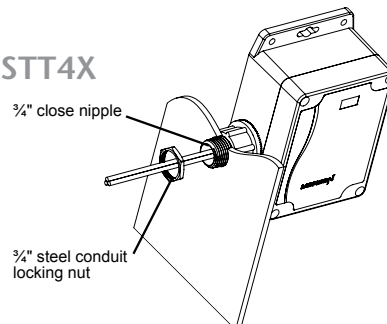


### Installation Diagram

#### STT2



#### STT4X



### Ratings:

#### Max Discharge Current

: 50kA per phase

#### Volts

: 120V to 600V AC

#### SCCR

: 200kA

#### Operating & storage temp

: -40°C to +85°C

#### Wiring size

: 16" #12 AWG integral leads

#### Enclosures

STT2 : NEMA 2

STT4X : NEMA 4X

#### Nominal discharge current

: 20kA (most models)

### Approvals:

- UL 1449 Third Edition Approved, File E210793
- Type 1 Listed for United States
- Type 2 Listed for Canada
- RoHS Compliant
- ANSI/IEEE C62.41
- UL 96A Lightning Protection Master Label (for 20kA, I<sub>n</sub>, most models)



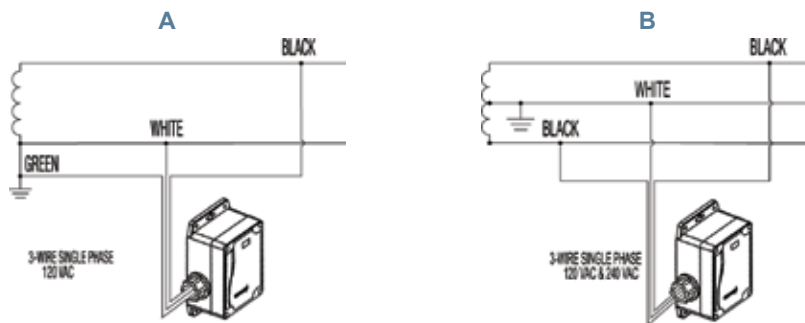
**MERSEN**

# Surge-Trap<sup>®</sup> Type 1 SPD

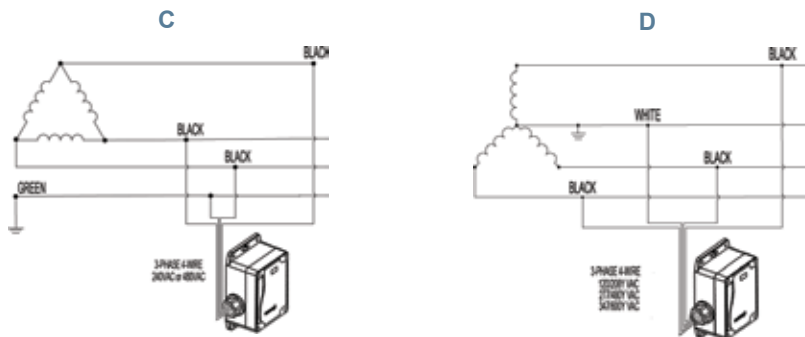
## Catalog Numbers

Catalog No. NEMA 2 Enclosure	Catalog No. NEMA 4X Enclosure	Nominal Voltage (VAC)	System Type	Freq (Hz)	MCOV (L-N)	Nominal Discharge Current (I <sub>n</sub> , kA)	Voltage Protection Rating (VPR)				Circuit Connection Wiring Diagrams
							L-N	L-G	N-G	L-L	
STT21201PG	STT4X1201PG	120	1	50/60	180	20	700	1200	600	-	A
STT2240SPG	STT4X240SPG	120/240	1S	50/60	180	20	700	-	-	1200	B
STT22401PG	STT4X2401PG	240	1	50/60	270	20	1000	1500	700	-	A
STT22083PYG	STT4X2083PYG	120/208	3Y	50/60	180	20	700	-	-	1200	D
STT24803PYG	STT4X4803PYG	277/480	3Y	50/60	320	10	1200	-	-	2000	D
STT26003PYG	STT4X6003PYG	347/600	3Y	50/60	420	10	1500	-	-	2500	D
STT22403PDG	STT4X2403PDG	240	3D	50/60	270 (L-G)	20	-	1000	-	1800	C
STT24803PDG	STT4X4803PDG	480	3D	50/60	550 (L-G)	10	-	1800	-	3000	C

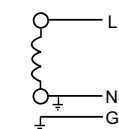
## Wiring Diagrams: STT2 and STT4X Single/Split Phase



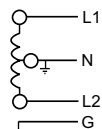
## Wiring Diagrams: STT2 and STT4X Three Phase Delta & Wye



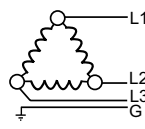
Note: Must be installed on a solidly grounded system.



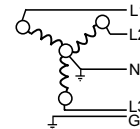
Single Phase (1)  
2 Wire + Ground



Split Phase (1S)  
3 Wire



3 Phase Delta (3D)  
3 Wire + Ground



3 Phase Wye (3Y)  
4 Wire