

# STZ Series SPD

Surge-Trap®

## SURGE PROTECTIVE DEVICE

## NEMA DEVICES FOR ANSI/UL 1449 TYPE 1 AND 2 APPLICATIONS



The Mersen flagship for facility-wide protection, The Surge-Trap® Type 1 STZ Series features surge capacities up to 450kA designed with Mersen's industry leading TPMOV® technology inside making it the safest and most reliable product on the market. Options include surge counter, through-the-door disconnect switch, audible alarm, dry contact, and EMI/RFI filtering. This external SPD can be installed on the line or load side of the service entrance.

## FEATURES AND BENEFITS:

- Type 1 SPD for service entrance and facility-wide protection
- Ideal for new construction bid projects and specification as well as existing facility retrofit
- Designed with the industry leading Mersen TPMOV® Technology (internally fused)
- Standard features include LED phase loss indication, EMI/RFI filter, surge counter with reset, dry contacts and audible alarm with silence button
- Field replaceable SPD module
- SPD module can be rotated 90 degrees depending on desired cable entry location
- Available with or without disconnect switch
- For use in ANSI/UL Type 1 or 2 SPD installations
- Up to 10 Modes of Protection (L-N, L-L, L-G, N-G)
- 15-year warranty

## RATINGS:

- **Volts ( $U_n$ ):** 240-480VAC
- **Nominal Discharge Current Rating ( $I_n$ ):** 20kA
- **Surge Capacity (per phase):** 100, 200, 300, 450kA
- **Short-Circuit Current Rating (SCCR):** 200kA
- **EMI/RFI Filter:** Up to -50dB from 10kHz to 100MHz

## APPROVALS:

- ANSI/UL 1449 4th Edition, Type 1 SPD, File E210793
- CSA C22.2, Type 1 SPD
- ANSI/IEEE C62.41.1, C62.41.2, C62.45
- UL96A Lightning Protection
- RoHS Compliant



## GENERAL PRODUCT SPECIFICATIONS

|                                  |                                   |                                   |                         |
|----------------------------------|-----------------------------------|-----------------------------------|-------------------------|
| Mounting:                        | Mounting feet                     | Relative Humidity Range:          | 0 to 95% non-condensing |
| Wiring:                          | Wire Lugs for 6-10 AWG copper     | Visual LED End-of-Life Indicator: | Green = 67 to 100% Life |
| Enclosure:                       | NEMA 4 or NEMA 4X stainless steel |                                   | Yellow = 34 to 66% Life |
| Flammability:                    | UL94-5VA                          |                                   | Red = 0 to 33% Life     |
| Operating & Storage Temperature: | -40°C to +85°C                    | Frequency:                        | 50-60Hz                 |

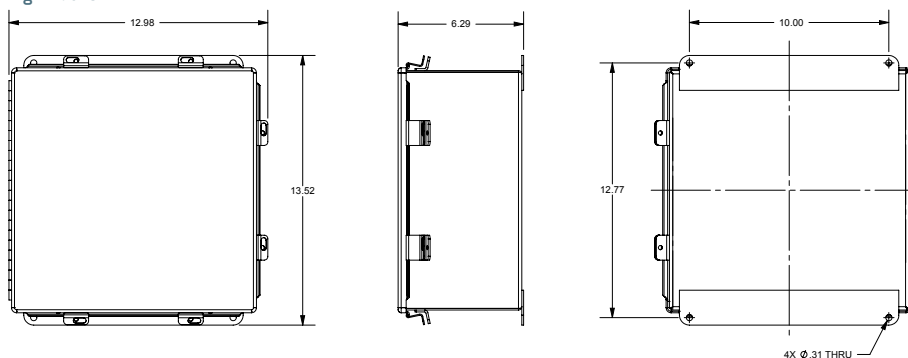
| CATALOG NUMBER (INCLUDES SUFFIXES*) | SYSTEM VOLTAGE AND CONFIGURATION | I <sub>n</sub> | MAXIMUM CONTINUOUS OPERATING VOLTAGE (MCOV, U <sub>c</sub> ) |     |      |     | VOLTAGE PROTECTION RATING (VPR) (UL 1449, 6KV, 3KA) |      |      |     |
|-------------------------------------|----------------------------------|----------------|--------------------------------------------------------------|-----|------|-----|-----------------------------------------------------|------|------|-----|
|                                     |                                  |                | L-N                                                          | L-G | L-L  | N-G | L-N                                                 | L-G  | L-L  | N-G |
| STZ240S...                          | 240/120V Split Phase             | 20kA           | 150                                                          | 150 | 300  | 150 | 700                                                 | 700  | 1000 | 700 |
| STZ208Y...                          | 208/120V 3-Phase WYE             | 20kA           | 150                                                          | 150 | 300  | 150 | 700                                                 | 700  | 1000 | 700 |
| STZ480Y...                          | 480/277V 3-Phase WYE             | 20kA           | 320                                                          | 320 | 640  | 150 | 1200                                                | 1200 | 2000 | 700 |
| STZ240D...                          | 240V 3-Phase DELTA               | 20kA           | -                                                            | 320 | 640  | -   | -                                                   | 1200 | 2000 | -   |
| STZ480D...                          | 480V 3-Phase DELTA & HRG WYE     | 20kA           | -                                                            | 550 | 1100 | -   | -                                                   | 1800 | 3000 | -   |

Part Number Selector (Don't see what you need? Please contact the factory)

| STZ<br>Model Series | 480Y<br>Voltage and System Configuration                                                                           | 30<br>Surge Capacity                             | B<br>Package                                                                                                                             | 1<br>Enclosure                                               | T<br>Disconnect                                                                                 |
|---------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| STZ                 | 240S: 240/120V Split<br>208Y: 208/120V WYE<br>480Y: 480/277V WYE<br>240D: 240V DELTA<br>480D: 480V DELTA & HRG WYE | 10: 100kA<br>20: 200kA<br>30: 300kA<br>45: 450kA | B: Standard<br>LED Status Indicators<br>Phase Loss Indication<br>Audible Alarm<br>Form C Dry Contacts<br>EMI/RFI Filter<br>Surge Counter | 1: NEMA 1/12/3R/4<br>X: NEMA 4X<br>Q: Field-replaceable unit | BLANK: None<br>T: UL98 Switch thru the door handle<br>U: UL98 Switch for field-replaceable unit |

## Dimensions and Mounting Configurations

Without Disconnect Switch  
12x12 Enclosure



With Disconnect Switch  
16x12 Enclosure

