

# SURGE-TRAP® STZ SERIES EXTERNAL SPD

## 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:

- Ideal for new construction bid projects and specification as well as existing facility retrofit
- Available with accessory **Option A** for basic features (LED status indicators) and **Option B** for standard features (EMI/RFI filter, surge counter, Audible alarm and dry contacts)
- Replaceable SPD Module which can be rotated 90 degrees depending on desired cable entry location
- Up to 10 Modes of Protection (L-N, L-L, L-G, N-G)
- 15-year warranty

### RATINGS:

- **Volts ( $U_n$ ):** 120-480VAC
- **Nominal Discharge Current Rating ( $I_n$ ):** 20kA
- **Surge Capacity:** 100, 150, 200, 300, 450kA
- **Short-Circuit Current Rating (SCCR):** 200kA

### 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 Yellow = 34 to 66% Life Red = 0 to 33% Life
Enclosure:	NEMA 4 or NEMA 4X stainless steel	Frequency:	50-60Hz
Flammability:	UL94-5VA		
Operating & Storage Temperature:	-40°C to +85°C		

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, 6kA, 3kV)			
			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	1200	700
STZ208Y...	208/120V 3-Phase WYE	20kA	150	150	300	150	700	700	1200	700
STZ480Y...	480/277V 3-Phase WYE	20kA	320	320	640	320	1200	1200	2000	1200
STZ240D...	240V 3-Phase DELTA	20kA	-	320	640	-	-	1200	2000	-
STZ480D...	480V 3-Phase DELTA	20kA	-	550	1100	-	-	1800	3000	-

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

STZ Model Series	480Y Voltage and System Configuration	30 Surge Capacity	B Package	1 Enclosure	T Disconnect
STZ	<b>240S:</b> 240/120V Split <b>208Y:</b> 208/120V WYE <b>480Y:</b> 480/277V WYE <b>240D:</b> 240V DELTA <b>480D:</b> 480V DELTA	<b>10:</b> 100kA <b>15:</b> 150kA <b>20:</b> 200kA <b>30:</b> 300kA <b>45:</b> 450kA	<b>A: Basic</b> LED Status Indicators Phase Loss Indication <b>B: Standard</b> LED Status Indicators Phase Loss Indication Audible Alarm Form C Dry Contacts EMI/RFI Filter Surge Counter	<b>1:</b> NEMA 1/12/3R/4 <b>X:</b> NEMA 4X	<b>T:</b> UL98 Switch thru the door handle <b>BLANK:</b> None

### Human-Machine Interface (HMI)

Option A: Basic



Option B: Standard



Note: Images above show HMI mounted on Internal SPD (STZ-R Series).  
For the STZ External SPD, HMI will be mounted on the enclosure door.

**Optional Form C Dry Contact and Audible Alarm  
(Included with Option B)**

Form C Dry Contact (250V/60W/250VA)

NC = Normally Closed

COM = Common

NO = Normally Open

Audible Alarm

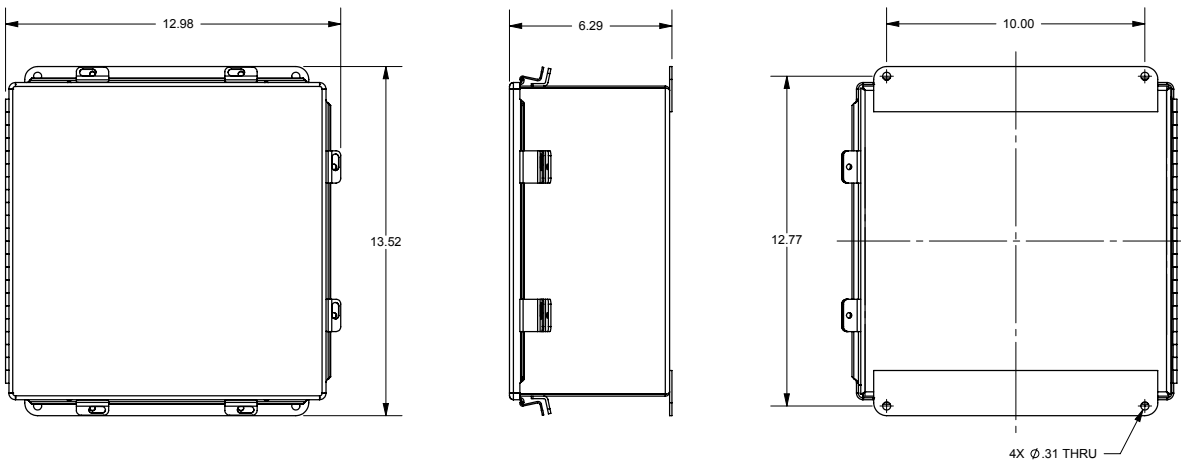
Alarm sounds when any protection is lost.



**Dimensions and Mounting Configurations**

Without Disconnect Switch

12x12 Enclosure



With Disconnect Switch

16x12 Enclosure

