

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 (per phase):** 100, 150, 200, 300, 450kA
- **Short-Circuit Current Rating (SCCR):** 200kA
- **Optional 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



Shah & Shah Enterprise

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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 _n	MAXIMUM CONTINUOUS OPERATING VOLTAGE (MCOV, U _c)				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	1000	700
STZ120D...	120V 3-Phase DELTA	20kA	-	150	300	-	-	700	1000	-
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 Model Series	480Y Voltage and System Configuration	30 Surge Capacity	B Package	1 Enclosure	T Disconnect
STZ	240S: 240/120V Split 120D: 120V DELTA 208Y: 208/120V WYE 480Y: 480/277V WYE 240D: 240V DELTA 480D: 480V DELTA & HRG WYE	10: 100kA 15: 150kA 20: 200kA 30: 300kA 45: 450kA	A: Basic LED Status Indicators Phase Loss Indication B: Standard LED Status Indicators Phase Loss Indication Audible Alarm Form C Dry Contacts EMI/RFI Filter Surge Counter	1: NEMA 1/12/3R/4 X: NEMA 4X	T: UL98 Switch thru the door handle BLANK: 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
125VAC, 1A Resistive
30VDC, 2A General Purpose

COM = Common
NO = Normally Open
NC = Normally Closed

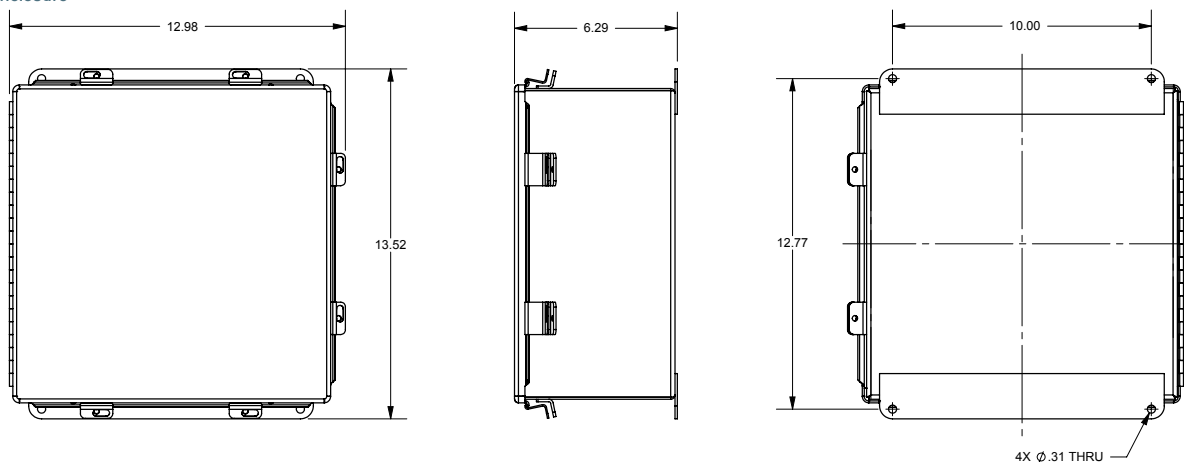
Audible Alarm

Alarm sounds when any protection is lost.



Dimensions and Mounting Configurations

**Without Disconnect Switch
12x12 Enclosure**



**With Disconnect Switch
16x12 Enclosure**

