Transient Voltage Surge Suppressors By:

ST-CDIN Series

DIN Rail Mounted Series Wired AC Unit with Sine Wave Tracking and Discrete All-Mode Protection

SineTamer
Energy Control Systems

Made in the USA

"Power Quality is our Only Business"

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The SineTamer© ST-CDIN devices provide the best ring wave transient protection available for a device of its type. These devices are intended for a single 120 or 240 VAC circuit applications at locations feeding sensitive/critical equipment. It is extremely effective in limiting transients generated inside the facility and is an absolute must on circuits feeding critical microprocessor based equipment. It boasts a robust 60kA per phase peak surge current rating.

This economical 35MM DIN rail mounted device is unique in that it is designed as a stand-alone surge suppression device and requires no special external fusing. It is equipped with our board level thermal fusing in combination with our patent-pending component level current fusing as well. Its compact size makes installation a breeze and the warranty is the best in the industry. Add to all that, dedicated "all mode" **E**nhanced **S**inewave **T**racking™ and encapsulated **O**ptimal **R**esponse **N**etwork™, and you get a device that defines effective and reliable surge suppression.

We believe that we offer the most versatile TVSS devices on the market with performance specs that are superior to our competitors and a warranty that is second to none, the ST-CDIN units are simply another example of meeting the market demand.

GENERAL

Description:	Series wired parallel-connected transient voltage surge suppressor with encapsulated **O**ptimal **R**esponse **N**etwork™ and **E**nhanced **S**inewave **T**racking circuitry (60kA per phase peak surge current.)
Application:	Designed for use at ANSI/IEEE Category A with susceptibility up to medium exposure levels to protect sensitive/critical loads fed by a single 120 or 240VAC circuit.
Warranty:	**25 Years Unlimited Free Replacement**
Unit Listings:	Tested to UL 1449 Second Edition and CUL

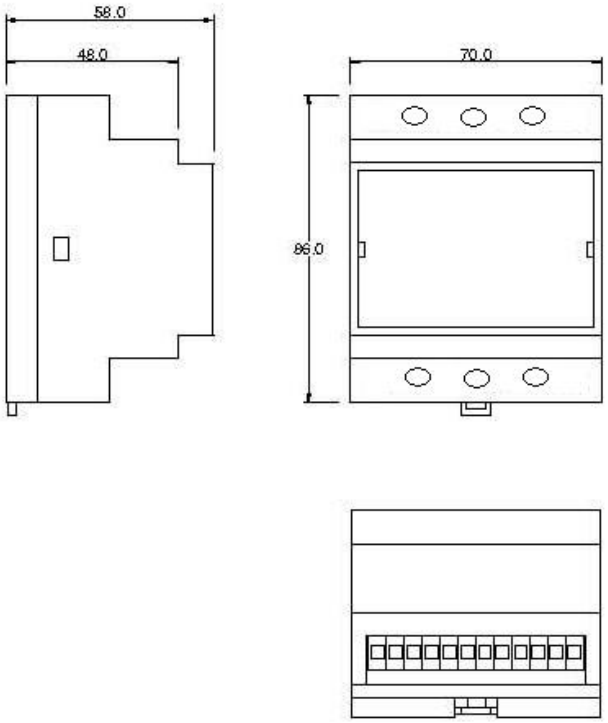
MECHANICAL

Enclosure:	Lexan, UL 94V0
Mounting:	35MM DIN rails
Connection Method:	Terminal strip at both the input and output sides of the device. 12 AWG – 30 AWB
Shipping Weight:	≈ 2 lbs

ELECTRICAL

Circuit Design:	Series wired, parallel connected hybrid design incorporating discrete all mode protection and utilizing our encapsulated **O**ptimal **R**esponse **N**etwork™ and **E**nhanced **S**inewave **T**racking circuitry design to provide lowest possible let-through-voltages. All suppression circuits are completely encapsulated in our exclusive compound to assure long component life and complete protection from the environment and/or vibration.
Protection Modes:	Dedicated protection components and circuitry for each mode. Discrete L-N (Normal Mode), and Discrete L-G, N-G (Common Mode)
Input Power Frequency:	50-60Hz
Maximum Continuous Operating Current:	20 Amps AC
Response Time:	<1 nanosecond
Circuit Diagnostics:	Super Bright LED, normally on.
Circuit Interrupt:	None Required – Board level current fusing standard.

Because we are constantly seeking to improve our products, specifications are subject to change at any time.



MEASURED LIMITING VOLTAGE PERFORMANCE AND ELECTRICAL SPECIFICATIONS					
Model	MCOV	Mode	**ANSI/IEEE C62.41 & C62.45 Let-Through Voltage Test Results**		
			A1 2kV, 67A 100KHz Ring Wave 180º Phase Angle	A3 6kV, 200A 100KHz Ring Wave 90º Phase Angle	B3/C1 6kV, 3kA Impulse Wave 90º Phase Angle
ST-CDIN120-20	150 L-N 150 L-G 150 N-G	L-N L-G N-G	28V (D) 62V (D) 41V (S)	94V (D) 190V (D) 94V (S)	281V (D) 360V (D) 550V (S)
ST-CDIN240-20	300 L-N 300 L-G 300 N-G	L-N L-G N-G	38V (D) 70V (D) 51V (S)	121V (D) 220V (D) 121V (S)	610V (D) 605V (D) 605V (S)

***Measured Limiting Voltage (Let-Through) Test Environment:** Dynamic (D) or Static (S), positive polarity. All voltages are peak (±10%). Time Base is 1ms. 180° phase angle voltages are measured form the zero crossing, 90° phase angle voltages are measured from the positive peak of the sine wave to the positive peak of the surge indicating actual excess voltage let through. All tests were performed with the device connected in series simulating actual installation.
****Suppressed Voltage Test Environment** using test parameters as defined by Underwriters Laboratory: Dynamic (D) or Static (S), Positive Polarity. Time base=10μs. All voltages are peak (±10%), 90° phase angle voltages are measured from the zero crossing to the peak of the surge.

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