



"Power Quality is our Business"

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The SineTamer® ST-RSE device provides outstanding transient protection for a device of its type. These devices are intended for single 208/380/480 VAC wye or delta 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 20kA per mode peak surge current rating.

This economical device is unique in that it is designed as a stand-alone surge suppression device and requires no special enclosure when used outside an existing enclosure or cabinet. Its compact size makes installation a breeze and the warranty is the best in the industry. Add to all that, completely encapsulated **Optimal Response Network™** circuitry, 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.

#### **GENERAL**

**Description:** Series wired parallel-connected transient voltage surge suppressor with encapsulated

**Optimal Response Network™** circuitry (20kA per mode 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 208/380/480 V 3 phase AC circuit.

**Warranty:** **25 Years Unlimited Free Replacement**

#### **MECHANICAL**

**Enclosure:** Plastic, UL 94V

**Mounting:** External mounting feet.

**Connection Method:** Wires - #10 stranded wire // 2.60 mm dia.

**Shipping Weight:** ≈ 2 lbs

#### **ELECTRICAL**

**Circuit Design:** Parallel connected hybrid design incorporating discrete all mode protection and utilizing our encapsulated **Optimal Response Network™** 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:** Protection components and circuitry for each mode. Normal Mode and Common Mode

**Input Power Frequency:** 50-60Hz

**Maximum Continuous**

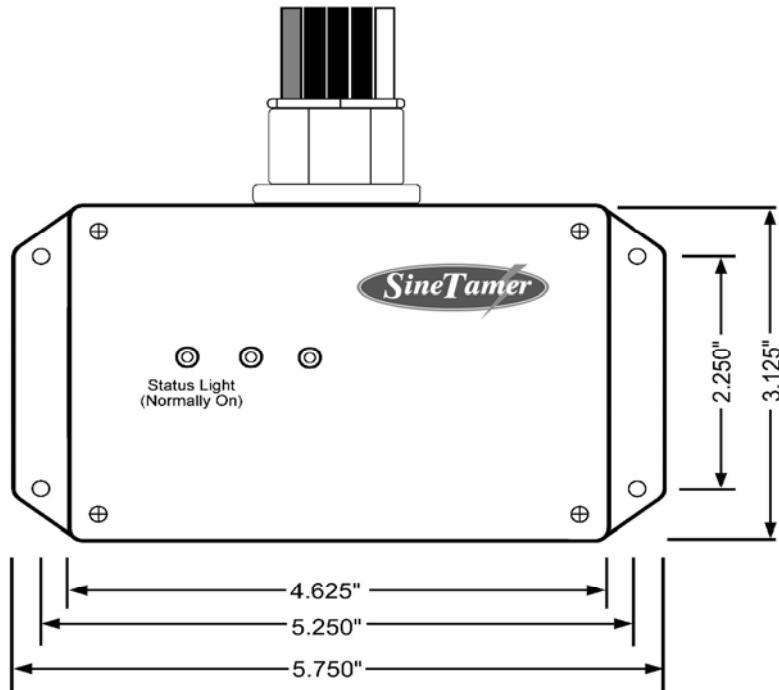
**Operating Current:** 60 Amps AC

**Response Time:** <1 nanosecond

**Circuit Diagnostics:** LED – 1 per phase, normally on.

**Circuit Interrupt:** Thermal and Current fusing integral to the unit

**Options:** Din rail mountable – specify **-DIN** as suffix.



MEASURED LIMITING VOLTAGE PERFORMANCE AND ELECTRICAL SPECIFICATIONS					
Model	MCOV	Mode	ANSI/IEEE C62.41 & C62.45 Let-Through Voltage Test Results		
			A3 6kV, 200A 100KHz Ring Wave 90° Phase Angle	B3/C1 6kV, 3kA Impulse Wave 90° Phase Angle	C3 20kV, 10kA Impulse Wave 90° Phase Angle
ST-RSE1S1	150 L-N	L-N	535	650	1,000 V
	300 L-L	L-L	930	1110	1,200 V
	150 L-G	L-G	930	1090	900 V
	150 N-G	N-G	510	640	900 V
ST-RSE3Y1	150 L-N	L-N	535	650	1,000 V
	300 L-L	L-L	930	1110	1,200 V
	150 L-G	L-G	930	1090	900 V
	150 N-G	N-G	510	640	900 V
ST-RSE3Y2	320 L-N	L-N	475	585 V	1200 V
	550 L-L	L-L	620	875 V	1400 V
	320 L-G	L-G	620	592 V	1100 V
	320 N-G	N-G	475	590 V	1400 V
ST-RSE3N2	320 L-L	L-L	470	575 V	1200 V
	320 L-G	L-G	470	575 V	1200 V
ST-RSE3N4	550 L-L	L-L	625	825 V	1400 V
	550 L-G	L-G	625	825 V	1400 V

\***Measured Limiting Voltage (Let-Through) Test Environment:** Dynamic (D) or Static (S), positive polarity. All voltages are peak ( $\pm 10\%$ ). Time Base is 1ms. 180° phase angle voltages are measured from 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 ( $\pm 10\%$ ), 90° phase angle voltages are measured from the zero crossing to the peak of the surge. All SineTamer products are manufactured exclusively for Energy Control Systems.