Transient Voltage **Surge Suppressors By:**

AC Distribution Panel Unit

Model RM-ST40





"Power Quality is Our Business"

P.O. Box 330607 Ft. Worth, TX 76163 Phone: 817.483.8497 Fax: 817.572.2242 www.sinetamer.com

The SineTamer® RM series of units blends outstanding high-energy "impulse" suppression with excellent "ring-wave" transient protection. This durable device is intended for general purpose and sensitive/critical load applications. The RM-ST40 is typically installed at small service entrances up to 400 amps, distribution and sub-distribution panels. Compact size and non-metallic enclosure design also allow it to be installed directly inside electrical panels and individual equipment disconnects. The internal installation provides the absolute shortest possible lead length and optimum performance. The RM-ST40 is extremely effective in limiting internally generated transients and is an absolute must on panels feeding office locations and/or microprocessor based equipment.

This economical device has features that are not available in devices costing many times its price. Its compact size makes installation a breeze. Maintenance Free operation and 15 Year Unlimited Free Replacement Warranty provides peace of mind.



GENERAL

Description: Parallel connected, transient voltage surge suppressor device utilizing both high-energy

handling and sine-wave tracking circuitry for virtual elimination of impulse and ring wave

type transients. (actively tracking the AC sine wave)

Designed for use at ANSI/IEEE Categories C, B and A with susceptibility up to medium Application:

exposure levels. Designed to protect sensitive/critical loads fed from distribution panels,

branch panels and/or individual equipment panels.

15 Years Unlimited Free Replacement Warranty: **Product Qualifications:** ISO 9001:2008, ANSI C62.72-2007

MECHANICAL

Enclosure: ABS Plastic, UL94-0

Mounting: 3/4" conduit fitting (internally threaded) and external mounting feet.

Connection Method: #10 stranded wire.

Shipping Weight: ≈3 lbs

ELECTRICAL

Circuit Design: Parallel connected, internally fused, hybrid design incorporating all mode protection, and

utilizing our encapsulated design to provide improved durability. All suppression circuits are encapsulated in our exclusive compound to assure long component life and complete

protection from the environment and/or vibration.

Protection Modes: L-N, L-L (Normal Mode), and L-G, N-G (Common Mode). (Seven discrete modes)

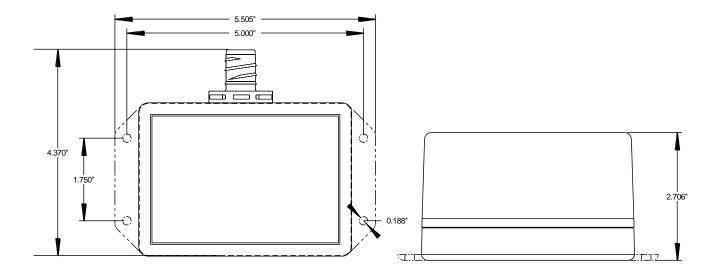
Input Power Frequency: 50-60Hz constant

EMI/RFI Noise Attenuation: 30dB Max. from 1kHz to 10MHz

Capacitance: Up to 3.5 uF Max.

Circuit Diagnostics: Super Bright LED, 1 per phase, normally on.

Circuit Interrupt: External and internal (see installation instructions for details). Fusing: Component Level Thermal Fusing/Phase Level Current Fusing



MEASURED LIMITING VOLTAGE PERFORMANCE AND ELECTRICAL SPECIFICATIONS						
Model	Circuit Type	MCOV	Peak Surge Current (Amps) Per Mode/Phase	Mode	ANSI/IEEE C62.41 & C62.45 Let-Through Voltage Test Results	
					A1 2kV, 67A 100KHz Ring Wave 270º Phase Angle	B3/C1 6kV, 3kA Impulse Wave 90º Phase Angle
RM-ST402N1	120V, 2Ø (2 wire + ground)	150 L-L 150 L-G	20,000 / 40,000	L-L L-G	55	445 445
RM-ST401P2	240V, 1Ø (2 wire + ground)	320 L-N 320 L-G	20,000 / 40,000	L-N L-G	70 70	585 585
RM-ST402N2	240V, 1Ø (2 wire + ground)	320 L-N 320 L-G	20,000 / 40,000	L-L L-G	70	585 585
RM-ST402N4	480V, Single Ø (2 wire + ground)	550 L-L 550 L-G	20,000 / 40,000	L-L L-G	70	925 925
RM-ST403Y2	277/480V, 3ØY 220/380V, 3ØY (4 wire + ground)	550 L-L 320 L-N 320 L-G 320 N-G	20,000 / 40,000	L-L L-N L-G N-G	70 60 80 50	925 585 592 1000
RM-ST403N1	100V, 3Ø∆ (3 wire + ground)	150 L-L 150 L-G	20,000 / 40,000	L-L L-G	75	445 445
RM-ST403N2	200V, 3ØΔ (3 wire + ground)	300 L-L 300 L-G	20,000 / 40,000	L-L L-G	70	585 585
RM-ST403N4	380V, 3Ø∆ 480V, 3Ø∆ (3 wire + ground)	550 L-L 550 L-G	20,000 / 40,000	L-L L-G	70	925 925

Let-Through Voltage Test Environment: Positive Polarity. Time base=1ms. All voltages are peak (±10%). Surge voltages are measured from the insertion point of surge on the sine wave to the peak of the surge. All tests are Dynamic (voltage applied) except N-G which is static (no voltage applied). All tests were performed with 6 inches of lead length outside the device enclosure which simulates actual "as installed" performance.

Single-pulse, surge current capacities of 200,000 amps or less are determined by single-unit testing of all components within each mode. Present industry test equipment limitations require testing of individual components or sub-assemblies within a mode for single-pulse, surge current capacities over 200,000 amps.