Transient Voltage Surge Suppressors By:

AC Distribution Panel Unit

Model RM-ST60

Made in the USA

"Power Quality is Our Business"

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The SineTamer© RM series of units blends outstanding high-energy "impulse" suppression with excellent "ring-wave" transient protection with our Frequency Attenuation Network®. This durable device is intended for general purpose and sensitive/critical load applications. The RM-STxx is typically installed at small to mediem service entrances, distribution and sub-distribution panels. Please discuss specific installations with your local representative. 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.

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** provide 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)
Application:	Designed for use at ANSI/IEEE Categories C, B and A with susceptibility up to medium exposure levels. Designed to protect sensitive/critical loads fed from distribution panels, branch panels and/or individual equipment panels.
Warranty:	**15 Years Unlimited Free Replacement**
Product Qualifications:	**Listed to ANSI/UL 1449-2006 (3rd Edition) by UL. ML record: E363345; UL1283* and CE Compliant (* Type 2 SPDs only) ISO 9001:2008, ANSI C62.72-2007, IEC 61643-1 Class 2&3**

MECHANICAL

Enclosure:	High strength ABS Plastic, NEMA 1 (IP67) rated enclosure.
Mounting:	3/4" conduit fitting (internally threaded) and external mounting feet.
Connection Method:	#10 stranded wire.
Shipping Weight:	≈6 lbs // 2.7 kg

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.
Temperature Rating:	Up to 80°C
Humidity	0-99% Non-condensing
Energy Consumption:	12mA Total (Approximately 4mA per LED)
Fusing:	Component Level Thermal and Board Level Current Fusing
kAIC Rating:	200 kAIC when installed according to installation instructions
Options:	-V Remove Frequency Attenuation; -S Surge Counter; -C Dry Relay Contacts, Other options available. Call!

Listed to ANSI/UL 1449-2006 3e

C SP® US

CE

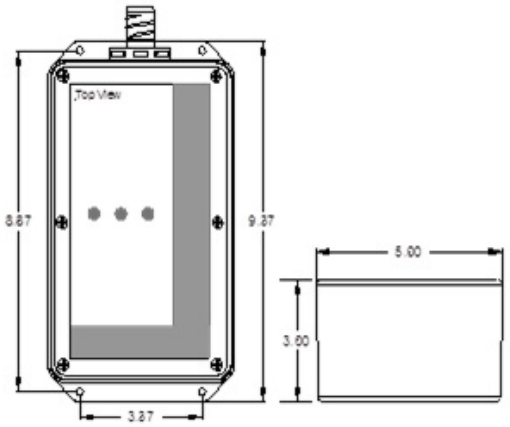
Made in USA

ISO 9001 MANUFACTURER ISO 9001:2000

2004 2006 FROST & SULLIVAN Transient Voltage Surge Suppressors Customer Value Enhancement Award

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

AC Distribution Panel Unit **Model RM-STxx**



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	Cat B3/C1 (6 kV, 3 kA) 90° Phase Angle	C3 20kV, 10kA Impulse Wave 90º Phase Angle
RM-STxx1P1	120V, Single Ø (2 wire + ground)	150 L-N 150 L-G 150 N-G	See Chart Below	L-N L-G N-G	70 85 60	377 380 541	925 1200 1200
RM -STxx1S1	120/240V, Split Ø (3 wire + ground)	300 L-L 150 L-N 150 L-G 150 N-G	See Chart Below	L-L L-N L-G N-G	80 75 85 65	576 377 380 541	1200 914 1200 1200
RM-STxx3Y1	120/208V, 3ØY (4 wire + ground)	300 L-L 150 L-N 150 L-G 150 N-G	See Chart Below	L-L L-N L-G N-G	80 75 85 65	576 377 380 541	1200 914 1200 1200
RM -STxx1P2	240V, Single Ø (2 wire + ground)	320 L-N 320 L-G 320 N-G	See Chart Below	L-N L-G N-G	96 100 100	560 588 941	1050 1290 1290
RM -STxx3Y2	277/480V, 3ØY 220/380V, 3ØY (4 wire + ground)	550 L-L 320 L-N 320 L-G 320 N-G	See Chart Below	L-L L-N L-G N-G	135 96 100 100	805 560 588 941	1400 1050 1400 1575
RM -STxx3N2	240V, 3∅Δ (3 wire + ground)	320 L-L 320 L-G	See Chart Below	L-L L-G	96	576 497	1275 1275
RM -STxx3N4	380V, 3∅Δ 480V, 3∅Δ (3 wire + ground)	550 L-L 550 L-G	See Chart Below	L-L L-G	140	792 792	1375 1375

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.

Peak Surge Current per Mode/Phase for each Model. See below for xx =	
60	20,000 / 40,000
120	40,000 / 80,000
180	60,000 / 120,000

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