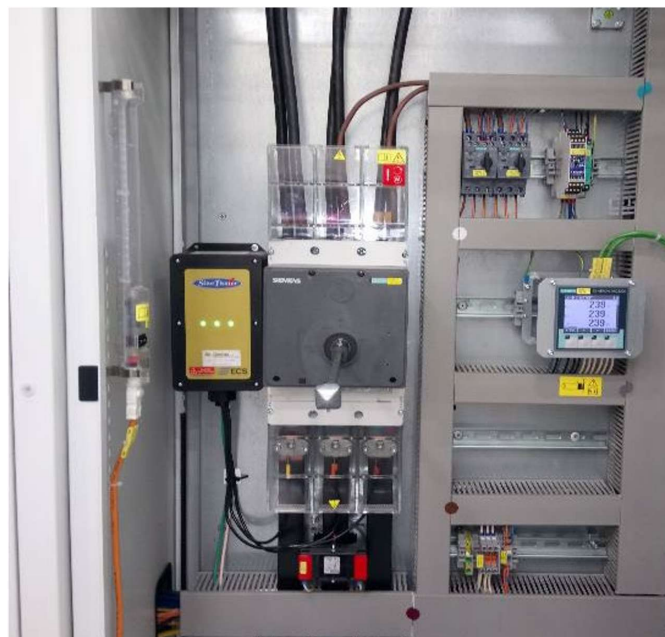


SineTamer LA-STxxx

Datasheet



Product	
Item	LA-STxxx Family
Description	The LA-ST Family is a versatile and effective surge protective device and dynamic transient filter (DTF) designed especially for cost sensitive applications. This SPD is intended for sensitive and critical load applications at service entrances, branch panels, control panels, and individual equipment disconnects. It is effective at mitigating externally generated high-energy impulses and internally generated transient voltage
Applicable Standards	IEC 61643-1 IEC 61643-11 - Type 2 ANSI/UL 1449 4 th Edition (Type 2) (UL File 363345 / CSA File 259700) ANSI C62.72-2007
Certificate	CE
Warranty	Twenty-Five (25) Years, Free Replacement

System Parameters	
Nominal voltage	(See "Measured Limiting Voltage Performance" for individual module)
Nominal frequency	50 – 60 Hz
Circuit Topology	Parallel configured Frequency Attenuation and standard Threshold Clamping circuit design incorporating individual component safety disconnecting technology.
Protection Styles:	Ten (10) (10-mode device considering a 3-phase WYE power supply) Six (6) (6-mode device considering a 3-phase DELTA power supply) Five (5) (5-mode device considering a Split phase – 2 L + N +G) Three (3) (3-mode device considering a 1 phase power supply – 1 L-N-G)

Performance Indicators	
SPD Type	Type 2, (Type 1 optional)
Nominal Discharge Current (I_n)	10 kA
Maximum Discharge Current ($I_{n, max}$)	100 kA (On single mode)
Noise Attenuation	30 dB Max. From 1 kHz to 10 MHz
Short Circuit Current Rating (SCCR)	200 kAIC

Monitoring	
Diagnostics	One Green LED Per phase = Good

Physical Characteristics	
Connection wire	Cross section area: 3,3 mm ² (12 AWG) stranded wire. Length: 610 mm (24 in.)
Dimensions (W x D x H mm)	127 x 76 x 238
Enclosure	NEMA 1 (IP10) polymer standard. Nema 4X (IP65) and other options are available. Contact your supplier. IK01
Conduit Fitting	12,7 mm (½") for a 304,7 mm (12") flexible conduit (provided)

Environment Requirements	
Operating temperature	-40° – 80° C (-40° – 185° F)
ANSI/IEEE C62.41.1 & C62.41.2-2002 environments	Suitable for Categories: A, B & C

Measured Limiting Voltage Performance							
Model	Circuit Type	MCOV	Peak Surge Current (Amps) Per Mode/Phase xx = Peak Surge	Mode	ANSI/IEEE C62.41 & C62.45 Let-Through Voltage Test Results		
					A1 2 kV, 67A 100 kHz Ring Wave 270° Phase Angle	Cat B3/C1 (6 kV, 3 kA) 90° Phase Angle	C3 10 kA Impulse Wave 90° Phase Angle
LA-STxx1P1	120 V, Single Ø (2 wire + ground)	150 L-N	See Chart Below	L-N	35	377	925
		150 L-G		L-G	60	380	1200
		150 N-G		N-G	55	541	1200
LA-STxx1S1	120/240 V, Split Ø (3 wire + ground)	300 L-L	See Chart Below	L-L	75	576	1200
		150 L-N		L-N	35	377	914
		150 L-G		L-G	60	380	1200
		150 N-G		N-G	55	541	1200
LA-STxx3Y1	120/208 V, 3ØY (4 wire + ground)	300 L-L	See Chart Below	L-L	55	576	1200
		150 L-N		L-N	35	377	914
		150 L-G		L-G	60	380	1200
		150 N-G		N-G	55	541	1200
LA-STxx1P2	240 V, Single Ø (2 wire + ground)	320 L-N	See Chart Below	L-N	60	560	1050
		320 L-G		L-G	80	588	1290
		320 N-G		N-G	55	941	1290
LA-STxx3Y2	277/480 V, 3ØY 220/380 V, 3ØY (4 wire + ground)	550 L-L	See Chart Below	L-L	130	805	1400
		320 L-N		L-N	60	560	1050
		320 L-G		L-G	80	588	1400
		320 N-G		N-G	55	941	1575
LA-STxx3N2	240 V, 3ØΔ (3 wire + ground)	320 L-L	See Chart Below	L-LL-G	96	576	1275
		320 L-G				497	1275
LA-STxx3N4	380 V, 3ØΔ 480 V, 3ØΔ (3 wire + ground)	550 L-L	See Chart Below	L-LL-G	140	792	1375
		550 L-G				792	1375

Let-Through Voltage Test Environment: Positive Polarity. Time base = 1 ms. 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 152,4 mm 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 above for xx =	
60	20.000 / 40.000
120	40.000 / 80.000
180	60.000 / 120.000
240	80.000 / 160.000
300	100.000 / 200.000

Additional Options:
-V Remove Frequency Attenuation
-N Remove N-G attenuation filter
-S6 Surge Counter
-C1 Dry Relay Contacts with wires
-AC11S6 – audible alarm with Surge Counter
-X3 Nema 4X enclosure.
Other options available. Call!