



LineMaster iSE

150,000 Amp Panel Protection

The Linemaster™ iSE panel is a high performance service entrance Surge Protection Device (SPD) designed to provide protection for service entrances or extremely critical loads in industrial, commercial, and medical environments.



PROTECTION

The iSE suppressor provides state-of-the-art protection for multi-phase applications. The iSE's 150,000 Amperes surge current capability protects equipment L-L, L-N, L-G and N-G surge currents and transient voltages.

PERFORMANCE

The EFI Electronics LineMaster iSE utilizes a hybrid Sine Wave Tracker™ suppression circuit in bolt-on replaceable modules. Modules bolt onto tin plated copper bus bars to ensure the least amount of impedance. The LineMaster iSE provides transient protection and up to -54 dB noise filtration. The iSE panels have passed a pulse life test of 5,000 ANSI category C-3 surges without clamping drift.

APPLICATIONS

Designed and manufactured for installation on main service panels, the iSE can also be installed at sensitive equipment. The iSE can be installed in series (Kelvin) for sensitive loads up to 150 amperes to compliment any other EFI Electronics SPD in a cascaded suppression filter system.

FEATURES	ADVANTAGES	BENEFITS
LED suppression Status indicator per phase	Provides visual indication of the suppressors status.	Allows immediate response if suppressor is damaged
Audible Alarm and NO/NC dry contacts status indicator	Provides additional indication of the suppressors status.	Provides the customer with the ability to remotely monitor the SPDs protection status
150,000 Peak Amp Capacity	Protects against high energy lightning strikes.	Protects sensitive electronic equipment at all times, even during lightning storms.
Sine Wave Tracker circuitry	Provides a tight clamping window above and below the AC sine wave	Customer assurance of superior transient protection.

LineMaster iSE

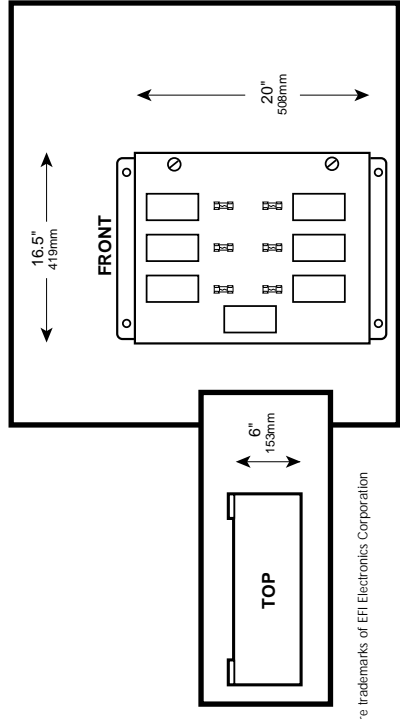
Product Specifications

Model	ISE120/240Y	ISE120/208Y	ISE220/380Y	ISE277/480Y	ISE347/600Y
Max. operating voltage (L-N)	130 Vac	130 Vac	250 Vac	320 Vac	390 Vac
Rated line voltage	120/240V 1-ph 3-wire + G	120/208V 3-ph, 4-wire + G	220/380V 3-ph, 4-wire + G	277/480V 3-ph, 4-wire + G	347/600V 3-ph, 4-wire + G
Frequency	50/60 and 400 Hz	50/60 and 400 Hz	50/60 and 400 Hz	50/60 and 400 Hz	50/60 and 400 Hz
Internal Fusing	Yes, User replaceable	Yes, User replaceable	Yes, User replaceable	Yes, User replaceable	Yes, User replaceable
Suppression circuit	Hybrid parallel	Hybrid parallel	Hybrid parallel	Hybrid parallel	Hybrid parallel
Sine Wave Tracking	Yes	Yes	Yes	Yes	Yes
Peak transient current	150,000 Amps per phase	150,000 Amps per phase	150,000 Amps per phase	150,000 Amps per phase	150,000 Amps per phase
EMI/RFI noise rejection	Up to -54 dB	Up to -54 dB	Up to -54 dB	Up to -54 dB	Up to -54 dB
Response time	Instantaneous	Instantaneous	Instantaneous	Instantaneous	Instantaneous
Diagnosics	Suppression status per phase, alarm, Form C dry contacts				
Operating/Storage temp.	14° - 140°F / -40° - 160°F (-10° - 60°C / -40° - 85°C)				
Altitude	Sea level to 12,000 feet (3,658 Meters)				
Size	20" x 16.5" x 6" (510mm x 420mm x 160mm)				
Weight	48 lbs	48 lbs	48 lbs	48 lbs	48 lbs
Safety Approvals	UL 1449-Second Edition	UL 1449-Second Edition	UL 1449-Second Edition	UL 1449-Second Edition	UL 1449-Second Edition
Warranty	cUL 10 Year	cUL 10 Year	cUL 10 Year	cUL 10 Year	cUL 10 Year
Clamping Voltages					
Category A3 ringwave (6kV, 200 A, 100kHz)	265V	265V	424V	500V	620V
Category B3 ringwave (6kV, 500 A, 100kHz)	300V	300V	560V	660V	830V
Category C1 impulse (6kV 1.2x50 µs, 3kA, 8x20 µs)	330V	330V	626V	760V	1080V
UL 1449-Second Edition	330V	330V	600V	800V	900V

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Product Specifications (cont)

Model	iSE240D	iSE240/120D	iSE380D	iSE480D	iSE600D
Max. operating voltage (L-L)	260 Vac	250/130 Vac	500 Vac	640 Vac	780 Vac
Rated line voltage	240 V 3-ph Δ, 3-wire + G	240/120 V, 3-ph Δ, 4-wire + G	380 V, 3-ph Δ, 3-wire + G	480 V, 3-ph Δ, 3-wire + G	600 V, 3-ph Δ, 3-wire + G
Frequency	50/60 and 400 Hz	50/60 and 400 Hz	50/60 and 400 Hz	50/60 and 400 Hz	50/60 and 400 Hz
Internal Fusing	Yes, User replaceable	Yes, User replaceable	Yes, User replaceable	Yes, User replaceable	Yes, User replaceable
Suppression circuit	Parallel	Hybrid parallel	Parallel	Parallel	Parallel
Sine Wave Tracking	No	Yes	No	No	No
Peak transient current	150,000 Amps per phase	150,000 Amps per phase	150,000 Amps per phase	150,000 Amps per phase	150,000 Amps per phase
EMI/RFI noise rejection	Up to -20 dB	Up to -54 dB	Up to -20 dB	Up to -20 dB	Up to -20 dB
Response time	<5 ns	<5 ns	<5 ns	<5 ns	<5 ns
Diagnostics	Suppression status per phase, alarm, Form C dry contacts				
Operating/Storage temp.	14°-140°F/-40°-160°F (-10°-60°C / -40°-85°C)				
Altitude	Sea level to 12,000 feet (3,658 Meters)				
Size	20" x 16.5" x 6" (510mm x 420mm x 160mm)				
Weight	48 lbs	48 lbs	48 lbs	48 lbs	48 lbs
Safety Approvals	UL 1449-Second Edition	UL 1449-Second Edition	UL 1449-Second Edition	UL 1449-Second Edition	UL 1449-Second Edition
Warranty	10 Year	10 Year	10 Year	10 Year	10 Year
Clamping Voltages	cUL	cUL	cUL	cUL	cUL
Category A3 ringwave (6kV, 200 A, 100kHz)	584V	424V/275V	860V	1020V	1200V
Category B3 ringwave (6kV, 500 A, 100kHz)	604V	560V/300V	1126V	1320V	1640V
Category C1 impulse (6kV 1.2x50 μs, 3kA, 8x20 μs)	652V	626V/330V	1416V	1680V	2136V
UL 1449-Second Edition	700V	700V/400V	1200V	1500V	1800V



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