

# Ensuring The High Availability Of Mission-Critical Data And Applications.



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## Emerson Network Power.

The global leader in enabling *Business-Critical Continuity™*.

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- Racks & Integrated Cabinets
- Services
- **Surge Protection**

■ Surge Protection  
For *Business-Critical Continuity*™

## Liebert SI Series Surge Protective Device

Setting The Standard For Facility-Wide Protection



## The Capacity To Handle The Surges; The Footprint That Saves You Space

Today's businesses demand more protection from their surge protective devices. A power disturbance can strike at any time, causing a loss of data, productivity and money. Customers require systems that will consistently provide clean power and safeguard their equipment from the substantial costs of power disturbances.

### Features

- **Built-In-Testing** - The Liebert SI Series (Interceptor) comes equipped with a built-in testing circuit that monitors MOV/fuse link status. The built-in testing can be operated by the simple push of a button on the display panel, and testing can occur at any voltage within the continuous operating voltage range, even during a transient event. No other surge manufacturer offers this monitoring capability as a standard feature.
- **Precise Current Sharing Assures Performance and Long Life** - High Energy current diversion is handled by a sophisticated parallel system of computer matched, custom metal-oxide varistor (MOV) array.
- **Protection From Extreme Voltage Conditions** - Individual component-level fusing coordinates to ensure each unit is safeguarded.
- **Lowest Clamping Voltages** - through use of low impedance copper conduction plates.
- **Real-time Status Indication** - internal and external LED's, audible alarms and Form C contacts activate when protection is reduced or phase loss/undervoltage conditions are detected.
- **Best-in-Class Capacitive Filtering** - for excellent ringwave transient attenuation.
- **Test Data Package** - Available for surge current capacity, life cycle, EMI/RFI noise rejection, fault interrupt current and industry safety approvals.
- **ANSI/UL 1449 Third Edition Listed for Type 1 installations.**
- **10-Year Warranty for parts and 5-Year on-site labor.**





## Liebert SI Series 160kA - 1000kA.

Connection Type	Parallel Connected
Agency Listings	ANSI/UL 1449 Third Edition, UL 1283 (Type 2 Locations), cUL, FCC Part 15 Class B
Operating Voltage Range	+/- 15%
Fault Current Rating (AIC)	200kAIC
Location Type	Type 1
Nominal Discharge Current (In)	20kA
Operating Frequency Range	47 - 63 Hertz
50 ohm EMI/RFI Attenuation	63 dB max from 10kHz to 100MHz
Protection Modes	All applicable modes standard (Line to Neutral, Line to Ground, Neutral to Ground and Line to Line)
Response Time	<0.5 nanoseconds
Temperature	-40 to +60 degrees C
Operating Humidity	0% to 95% noncondensing
Status Indication	LEDs, Dry Contacts, Audible Alarm
Enclosure	NEMA 4 standard
Altitude	0 to 18,000 feet
Audible Noise	Less than 45 dBa
Warranty	10-Years Parts and 5-Years On-Site Labor

## Tested Suppression Voltages (without disconnect/with disconnect)

System Voltage	Mode	B3 Ringwave	6kv/500A Comb.Wave	B3/C1 Comb.Wave	C3 Comb.Wave
120/208	L-N	328/344	308/312	376/376	452/536
120/208	L-G	340/348	320/316	364/368	444/584
120/208	L-L	464/448	576/568	680/652	792/832
120/208	N-G	344	284	344	468
277/480	L-N	520/536	532/528	800/800	912/952
277/480	L-G	736/760	688/688	760/776	840/896
277/480	L-L	736/776	720/728	1480/1416	1656/1600
277/480	N-G	736	648	760	896

## ANSI/UL 1449 Third Edition - Voltage Protection Ratings (VPRs)

System Voltage	L-N	L-G	N-G	L-L
120/240	700V	700V	700V	1000V
120/208	700V	700V	700V	1000V
240	N/A	1200V	N/A	1000V
230/400	1000V	1200V	1000V	1800V
277/480	1000V	1200V	1000V	1800V
480	N/A	1800V	N/A	1800V

### How To Specify The Appropriate Model:

Use Chart A to build your Liebert SI starting with the Surge Rating column. Moving left to right, choose the correct configurations from each column for your application. Your completed model number should look similar to the example below or SI016120YARDE. Refer to Chart B for Liebert SI dimensional data.

## Chart A – Liebert SI Series Model Selection

EXAMPLE																
SI Series	016		120		Y			A		R		D		E		
Code	Choose Surge Current Rating		Choose Voltage (L-G)		Choose Voltage Configuration			Choose Modes of Protection		Choose Type of Connection		Choose Monitoring Option		Choose Enclosure Type		
SI	016	160kA	120	120V	N	1 Phase L-N 2+W+GND		A	All	N	Wire Lugs	S	Standard Monitoring LEDs, Audible Alarm, Form C Contacts		E	NEMA 4
	025	250kA	208	208V	L	1 Phase L-L 2W +GND		*Other modes of protection available; Call factory.	R	Disconnect	C	D	Standard Monitoring Plus Single Surge Counter	N	Caseless	
	032	320kA	220	220V	S	Split Phase 3W+GND										
	040	400kA	230	230V	Y	3 Phase Wye 4W+GND										
	050	500kA	240	240V	D	3 Phase Delta 3W+GND										
	060	600kA	277	277V	X	3 Phase Wye 3W+GND										
	075	750kA	480	480V	H	3 Delta Hi-Leg 4W+GND										
	100	1000kA														
																*Other enclosure options available; Call factory.

## Chart B – Liebert SI Series Dimensional Data

Surge	Connection	A	B	C	D	E	F	Weight
160kA	Wire lugs	16	12	9	17.25	9.5	0.44	35
250kA	Disconnect	16	16	9	17.25	10	0.44	45
320kA	Wire lugs	16	12	9	17.25	9.5	0.44	45
500kA	Disconnect	16	16	9	17.25	10	0.44	55
600kA	Wire lugs	20	16	9	21.25	10	0.44	55
750kA	Disconnect	20	20	9	21.25	14	0.44	85
1,000kA	Wire lugs	20	20	9	21.25	14	0.44	85
	Disconnect	20	24	9	21.25	18	0.44	95

