# Liebert<sup>®</sup> PowerSure<sup>®</sup> Panel TVSS Surge Suppression Solutions For Distribution Panels

## Surge Protection For Business-Critical Continuity<sup>™</sup>



Electric power line disturbances such as high voltage transients can disrupt or damage sensitive electronic equipment causing a major loss in productivity and money. Liebert understands this problem and offers the Liebert PowerSure® Panel Low and Medium Exposure surge suppression systems — the reliable way to keep these power problems from getting into your facility in the first place.

- Liebert PowerSure® Panel
   Low Exposure Designed for use on branch panels or equipment in low exposure locations. Available up to 100kA/phase surge current capacity. LED status indication and Form C contacts for remote indication are standard.
- Liebert PowerSure® Panel
   Medium Exposure Offers protection from transients on distribution panels or any medium exposure location.

Available in 100kA/phase and 160kA/phase, all mode and two mode protection, small footprints, NEMA 12 enclosure, silver link fusing with thermal protection, all voltage and phase configurations, 5-year warranty.



## Liebert PowerSure® Panel TVSS Technical Specifications

	Low Exposure	Medium Exposure	
Connection Type	Parallel	Parallel	
Operating Voltage Range	±15%	±15%	
Surge Current Capacity	25kA, 50kA or 100kA	100kA or 160kA	
Fault Current Rating (AIC)	22kAIC	65kAIC	
Dimensions	4.72"x4.72"x2.36"	(160 kA units) 8"x6"x4"	
		(100 kA units) 6"x4"x3"	
Operating Frequency Range	47–63 Hz	47–63 Hz	
Capacity	Continuous	Continuous	
EMI/RFI Attenuation	40 dB typical	40 dB typical	
Response Time	<0.5 nanoseconds	<0.5 nanoseconds	
Dry Contract rating	125 VAC, 8.0A, 1.0pf	125 VAC, 8.0A, 1.0pf	
Operating Temperature	-40°C to +50°C	-40°C to +50°C	
Operating Humidity	0% to 95%	0% to 95%	
Status Indication	LED, Dry Contacts	LEDs, Dry Contacts	
Certifications	UL 1449, CUL(CE-optional)	UL 1449, CUL	
Warranty	5-Years	5-Years	

## UL 1449 (second edition) Classification

	Low Exposure	Medium Exposure
120 Volt systems	400 Volts all modes	400 Volts all modes
208 through 277 Volt systems	800 Volts all modes	800 Volts all modes
480 Volt systems	1,500 Volts all modes	1,500 Volts all modes

## Ordering Information

### Building a Low and Medium Exposure Model Number: Examples

<u>LPL123</u> (Low Exposure Unit) <u>LPM123</u> (Medium Exposure Unit)

No	ominal Vo	ltage Req	uirements	Model ID
	L-N	L-L	L-G	
	120	N/A	120	<u>120</u>
	120	208	120	<u>120</u>
	120	240	240	<u>120</u>
	N/A	208	208	<u>208</u>
	230	400	230	<u>230</u>
	N/A	240	240	<u>240</u>
	277	480	277	<u>277</u>
	N/A	400	400	<u>400</u>
	N/A	480	480	<u>480</u>

2	System Configuration	Model ID
_	Single (2 Wire + Gnd)	N or L
	<ul> <li>Split (3 Wire + Gnd)</li> </ul>	<u>s</u>
	<ul> <li>Wye (4 Wire + Gnd)</li> </ul>	Y
	<ul> <li>Delta Hi-Leg (4 Wire + Gnd)</li> </ul>	Н
	<ul> <li>Delta (3 Wire + Gnd)</li> </ul>	D

(use Model ID column when determining 1, 2, 3 portion of Model Number)

3	Surge Current Capacity		Model ID
	(Lov	v Exposure)	
		100 kA/Phase	100

- (L-N: 50 kA + L-G: 50 kA; N-G: 50 kA) 50 kA/Phase 50
- (L-N: 25 kA + L-G: 25 kA; N-G: 25 kA)
- 25 kA/Phase **25-2** (L-N: 25 kA; N-G: 25 kA)

### (Medium Exposure)

160 kA/Phase	160
 (L-N: 80 kA + L-G: 80 kA	A; N-G: 80 kA)

100 kA/Phase
 100-2
 (L-N: 100 kA; N-G: 100 kA)

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