

■ Surge Protection  
For *Business-Critical Continuity™*

## PowerSure™ LPM/LPL Series Surge Protection Solutions For Distribution Panels



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 PowerSure™ Low and Medium Exposure surge protective devices – the reliable way to keep these power problems from getting into your facility in the first place.

- **PowerSure™ 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.
- **PowerSure™ 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.

## PowerSure™ LPM/LPL Series Technical Specifications

|                                | Low Exposure (LPL)                             | Medium Exposure (LPM)                              |
|--------------------------------|--|--|
| Connection Type                | Parallel                                       | Parallel   |
| Operating Voltage Range        | ±15%   | ±15%   |
| Surge Current Capacity         | 25kA, 50kA or 100kA                            | 100kA or 160kA                                     |
| Fault Current Rating (AIC)     | 14kAIC   | 65kAIC   |
| Location Type                  | Type 2   | Type 2   |
| Nominal Discharge Current (In) | 3kA  | 10kA   |
| Dimensions                     | 4.72"x4.72"x2.36"                              | (160 kA units) 8"x6"x4"<br>(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                  | <0.5nanoseconds                                | <0.5 nanoseconds                                   |
| Dry Contact 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              | LEDs, Dry Contacts                             | LEDs, Dry Contacts                                 |
| Certifications                 | ANSI/UL 1449 Third Edition, cUL, (CE-optional) | ANSI/UL 1449 Third Edition, cUL Listed             |
| Warranty                       | 5-Years  | 5-Years  |

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

|                              | LPL (all-mode models)                                 | LPM 100-2 / LPM160   |
|------------------------------|---|--|
| 120 Volt Systems             | 600V (L-N), 700V (L-G),<br>700V (N-G), 1000V (L-L)    | 600V/600V (L-N), 1000V/600V (L-G),<br>600V/600V (N-G), 1200V/900V (L-L)      |
| 208 through 277 Volt Systems | 1200V (L-N), 1200V (L-G),<br>1200V (N-G), 2000V (L-L) | 1000V/1000V (L-N), 1800V/1000V (L-G),<br>1000V/900V (N-G), 2000V/1800V (L-L) |
| 480 Volt Systems             | 2000V (L-G), 2500V (L-L)                              | --/1800V (L-G), 2000V/1800V (L-L)  |

## Ordering Information

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

#### Examples

   L P L    1 2 3    (Low Exposure Unit)  
   L P M    1 2 3    (Medium Exposure Unit)

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

| 1 | Nominal Voltage Requirements |     |     | 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) | <u>N or L</u> |
| ■ Split (3 Wire + Gnd)        | <u>S</u>                |               |
| ■ Wye (4 Wire + Gnd)          | <u>Y</u>                |               |
| ■ Delta Hi-Leg (4 Wire + Gnd) | <u>H</u>                |               |
| ■ Delta (3 Wire + Gnd)        | <u>D</u>                |               |

| 3   | Surge Current Capacity | Model ID |
|---|------------------------|----------|
|   | <i>(Low Exposure)</i>  |          |
| ■ 100 kA/Phase<br>(L-N: 50 kA + L-G: 50 kA; N-G: 50 kA) | <b>100</b>             |          |
| ■ 50 kA/Phase<br>(L-N: 25 kA + L-G: 25 kA; N-G: 25 kA)  | <b>50</b>              |          |
| ■ 25 kA/Phase<br>(L-N: 25 kA; N-G: 25 kA)               | <b>25-2</b>            |          |
| <i>(Medium Exposure)</i>                                |                        |          |
| ■ 160 kA/Phase<br>(L-N: 80 kA + L-G: 80 kA; N-G: 80 kA) | <b>160</b>             |          |
| ■ 100 kA/Phase<br>(L-N: 100 kA; N-G: 100 kA)            | <b>100-2</b>           |          |

While every precaution has been taken to ensure accuracy and completeness in this literature, Liebert Corporation assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

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- Services
- **Surge Protection**

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