

AC Surge Protection

LS Plus Series - Modular Surge Protection Device

1480-013 RevB



LS 100

The LS Plus is a compact modular surge protection device. This unit is listed to UL 1449 3rd Edition using thermal protection to maintain performance ratings. The LS Plus is designed to be installed quickly and serviced easily to eliminate downtime. A robust surge capacity up to 300 kA and fully loaded diagnostics package make this a versatile SPD for any application.

Features

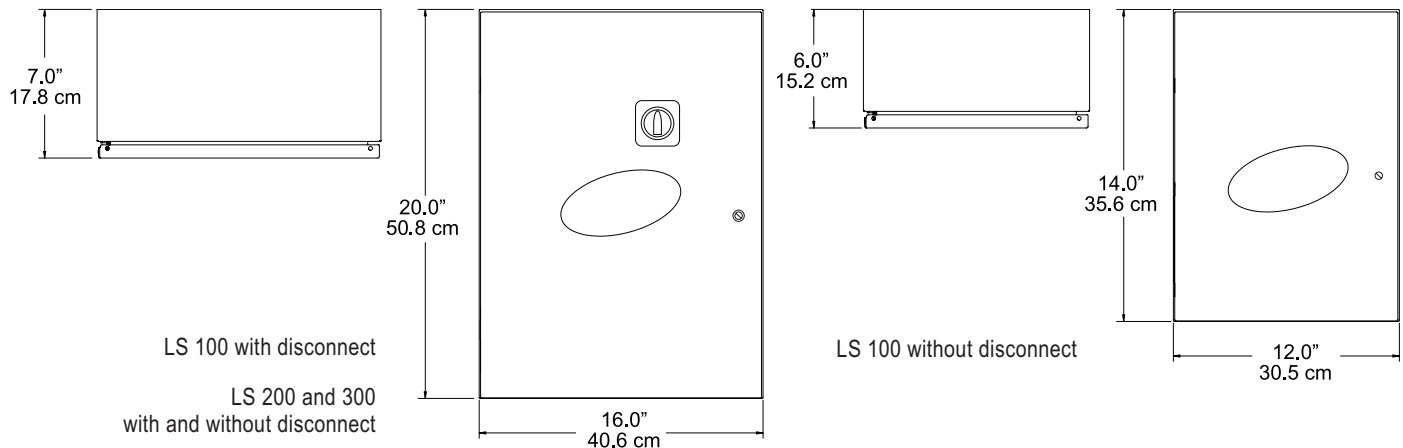
- **Alarm with Disable Switch** - audible indication
- **Surge Counter** - counts transients the unit suppresses
- **External Indication Lights** - shows loss of power and protection integrity
- **Suppression Indicator** - monitoring to identify damaged unit for easy servicing
- **Dry Contacts** - Form C contacts for remote monitoring (NO & NC)
- **Linear Sharing** - shares energy to extend product life
- **Compact Enclosure** - supports installation requirements when space is an issue
- **Thermally Protected MOV** - allows maximum surge capacity, repetitive capability, and performance while maintaining safety requirements
- **Modular** - field serviceable unit
- **All Mode Protection** - L-N, L-G, N-G & L-L
- **Warranty** - 20 year manufacturer

Options

- Thru-door rotary disconnect switch for easy servicing (-D)

Standards

- UL 1449 3rd Edition
- NEC Article 285
- IEEE C62
- NEMA LS
- UL96A Compliant



| LS Plus | LS100 | LS200 | LS300 |
|--|----------------------|----------------------|----------------------|
| Performance | | | |
| Connection | Parallel | Parallel | Parallel |
| Operating Voltage Range | ± 15% | ± 15% | ± 15% |
| Nominal Operating Voltage | 120-480 Vac | 120-480 Vac | 120-480 Vac |
| Operating Frequency | 47-63 Hz | 47-63 Hz | 47-63 Hz |
| MCOV | 115% | 115% | 115% |
| Surge Capacity per Mode | 50 kA | 100 kA | 150 kA |
| Surge Capacity per Phase | 100 kA | 200 kA | 300 kA |
| Nominal Discharge Current Rating (I _n) | Up to 20 kA | Up to 20 kA | Up to 20 kA |
| IEEE Location | C - High, B - Medium | C - High, B - Medium | C - High, B - Medium |
| UL Location | Type 1 | Type 1 | Type 1 |
| Fault Rating (SCCR) | 100 kAIC | 100 kAIC | 100 kAIC |

| Mechanical | | | |
|------------------------|---|---|---|
| Dimensions - H x W x D | Without Disconnect 14.0" x 12.0" x 6.0" 35.6 cm x 30.5 cm x 15.2 cm With Disconnect 20.0" x 16.0" x 7.0" 50.8 cm x 40.6 cm x 17.8 cm | With and Without Disconnect 20.0" x 16.0" x 7.0" 50.8 cm x 40.6 cm x 17.8 cm | With and Without Disconnect 20.0" x 16.0" x 7.0" 50.8 cm x 40.6 cm x 17.8 cm |
| Weight (Max) lb, kg | Without Disconnect - 24, 10.9 With Disconnect - 32, 14.6 | Without Disconnect - 32, 14.6 With Disconnect - 33, 15 | Without Disconnect - 42, 19 With Disconnect - 43, 19.5 |
| Lug Range | #14 - I/O AWG | #14 - I/O AWG | #14 - I/O AWG |

| Environmental | | | |
|-----------------------|--------------------|--------------------|--------------------|
| Humidity | 95% non-condensing | 95% non-condensing | 95% non-condensing |
| Operating Temperature | -40° C to + 65° C | -40° C to + 65° C | -40° C to + 65° C |
| Enclosure Type | NEMA 3R | NEMA 3R | NEMA 3R |

| Model | Voltage | Part Number | Model | Voltage | Part Number | Model | Voltage | Part Number |
|-------|---------|-------------|-------|---------|-------------|-------|---------|-------------|
|-------|---------|-------------|-------|---------|-------------|-------|---------|-------------|

Part Number Without Disconnect

| | | | | | | | | |
|-------|------------|-------------|-------|------------|-------------|-------|------------|-------------|
| LS100 | 120/240-SP | B39-00-1001 | LS200 | 120/240-SP | B39-00-2001 | LS300 | 120/240-SP | B39-00-3001 |
| LS100 | 120/208-3Y | B39-00-1003 | LS200 | 120/208-3Y | B39-00-2003 | LS300 | 120/208-3Y | B39-00-3003 |
| LS100 | 277/480-3Y | B39-00-1005 | LS200 | 277/480-3Y | B39-00-2005 | LS300 | 277/480-3Y | B39-00-3005 |

Part Number With Disconnect (D)

| | | | | | | | | |
|-------|--------------|-------------|-------|--------------|-------------|-------|--------------|-------------|
| LS100 | 120/240-SP-D | B39-00-1002 | LS200 | 120/240-SP-D | B39-00-2002 | LS300 | 120/240-SP-D | B39-00-3002 |
| LS100 | 120/208-3Y-D | B39-00-1004 | LS200 | 120/208-3Y-D | B39-00-2004 | LS300 | 120/208-3Y-D | B39-00-3004 |
| LS100 | 277/480-3Y-D | B39-00-1006 | LS200 | 277/480-3Y-D | B39-00-2006 | LS300 | 277/480-3Y-D | B39-00-3006 |