

LPS SERIES SHUNT TRIP DISCONNECT SWITCH



Description

The Littelfuse® LPS Series provides a simple and economical solution for applications that require selective coordination and shunt trip capabilities.

Utilizes Class J time-delay fuses that are easily coordinated with other system overcurrent devices. The shunt trip capability allows the LPS Series to meet the ANSI/ASME standard that requires power to be automatically disconnected before water is turned on by the fire safety system.

Applications

- Elevator circuits
- Data processing rooms
- Building emergency systems

Web Resources

Download technical information: [Littelfuse.com/LPS](https://www.littelfuse.com/LPS)

Specifications (Disconnect Switch)

| | |
|-------------------------------|----------------------------------------------------------|
| Supply Voltage Rating* | 208 V, 240 V, 480 V |
| Ampere Range | 30 A, 60 A, 100 A, 200 A, 400 A |
| Enclosures | NEMA 1 (standard) NEMA 3R, NEMA 4, NEMA 12 (optional) |
| Approvals | UL Listed (File: E219511) |

*Contact factory for 600 V options.

Specifications (Shunt Trip)

| | |
|-------------------------|---------------------------------------------|
| Voltage Rating | 120 V, 60 Hz |
| Max Inrush | 4 A |
| Max On time | 1.5 cycles |
| Momentary Inrush | 140 VA |
| SCCR | Refer to Operations and Maintenance Manual* |

*Contact factory for 400 A panel SCCR

Features/Benefits

- Pre-engineered single unit, which makes procurement easier than systems with multiple components
- Reduces labor costs up to 66% and total installation costs by over 30%
- Pre-installed UL Listed Class J fuse holder – unique Class J size eliminates the need for any rejection type fuse clips
- Optional features offer flexibility for a variety of applications
- Color coded control power terminal blocks
- UL Listed package
- Cu and Al wire rated
- Pre-wired control circuits lower installation time
- Lockable operating handle meets all code and safety requirements (accepts up to 3 locks)
- Every unit is fully tested before delivery

Options

- Control power transformer with fuses and blocks
- Fire safety interface relay
- Key to test switch
- Pilot light "On"
- Isolated neutral lug
- Mechanical interlock auxiliary contact for hydraulic elevators with automatic recall (5 amp 120 V ac rated)
- Fire alarm voltage monitoring relay
- Enclosure
- Surge Protection Device
- Option to bypass alarm when performing maintenance (-AZ option)
- XPress-Ship™ service offers 48 hours direct shipment service on select fully loaded LPS Series Shunt Trip Disconnect Switches

LPS SERIES SHUNT TRIP DISCONNECT SWITCH

Ordering Information

Complete catalog numbers consist of switch catalog numbers and the desired options. See example below.

Example Catalog Number from Desired Options

| = Littelfuse Catalog Number LPS1T20R1KGN1BF3US-AZ | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------------------|--------|------------------------------------------------------------------------|-------------|----------------------------------------------------|-------------|--------------------|-------------|------------------|-------------|----------------------|-------------|------------------------------------------------------------------------------------------------|-------------|------------------------------------------------|-------------|--------------------|-------------|-------------------------|-------------|-------------------------------------------------------|
| LITTELFUSE SWITCH CATALOG NUMBER | | CONTROL POWER TRANSFORMER STD. 100 VA WITH PRI & SEC FUSE (120 V SEC.) | | "FIRE SAFETY" INTERFACE RELAY (3 PDT, 10 A, 120 V) | | KEY TO TEST SWITCH | | PILOT LIGHT "ON" | | ISOLATED NEUTRAL LUG | | MECHANICAL INTERLOCK AUX. CONTACT FOR HYDRAULIC ELEVATORS WITH AUTOMATIC RECALL (5 A,120 V AC) | | FIRE ALARM SHUNT TRIP VOLTAGE MONITORING RELAY | | OPTIONAL ENCLOSURE | | SURGE PROTECTION DEVICE | | AZ OPTION (BYPASS FIRE ALARM DURING MAINTENANCE TEST) |
| REQUIRED | | REQUIRED | | REQUIRED | | OPTIONAL | | OPTIONAL | | OPTIONAL | | REQUIRED | | REQUIRED | | OPTIONAL | | OPTIONAL | | OPTIONAL** |
| BASE | RATING | RATING | OPTION CODE | RATING | OPTION CODE | RATING | OPTION CODE | RATING | OPTION CODE | RATING | OPTION CODE | RATING | OPTION CODE | RATING | OPTION CODE | RATING | OPTION CODE | OPTION CODE | OPTION CODE | OPTION CODE |
| LPS3* | 30 A | 208 V | T20 | 24 V dc Coil | R2 | 120 V | K | Red | R | 30 A | N6 | 1 NO & 1 NC | A | 1-Pole | F1 | NEMA 3R | U | S | | -AZ |
| LPS6* | 60 A | 240 V | T24 | 120 V ac Coil | R1 | | | Green | G | 60 A | N6 | 2 NO & 2 NC | B | 3-Pole | F3 | NEMA 4 | Y | | | |
| LPS1* | 100 A | 480 V | T48 | | | | | White | W | 100 A | N1 | | | | | NEMA 12 | Z | | | |
| LPS2* | 200 A | | | | | | | | | 200 A | N2 | | | | | | | | | |
| LPS4* | 400 A | | | | | | | | | 400 A | N4 | | | | | | | | | |

*Part Numbers: Any voltage can be paired with any amperage. Options can be any combination but the ratings must match the option code. Not all options are required. Contact factory for 600 V control power transformer option.

** All switches with "-AZ" option automatically include option codes B and F3. The B and F3 option codes are not used in part number system but will be included in the unit.

Note: When ordering - desired options must be listed in the order shown above. Typical options include Control Power Transformer, Fire Safety Interface Relay, Mechanical Interlock Auxiliary Contact and Fire Alarm Voltage Monitoring Relay.

Dimensions of Enclosure

| CATALOG SERIES | AMPERE RATING | NEMA 1 DIMENSIONS | NEMA 3R DIMENSIONS | NEMA 4, 12 DIMENSIONS | LUG SIZE | SHIPPING WEIGHT (LBS) |
|----------------|---------------|--------------------|--------------------|-----------------------|------------------------------|-----------------------|
| LPS3 | 30 | 24"H x 20"W x 9"D | 24"H x 20"W x 8"D | 24"H x 20"W x 10"D | #14 - #8 AL or CU | 75 |
| LPS6 | 60 | 24"H x 20"W x 9"D | 24"H x 20"W x 8"D | 24"H x 20"W x 10"D | #14 - #2 AL or CU | 75 |
| LPS1 | 100 | 24"H x 20"W x 9"D | 24"H x 20"W x 8"D | 24"H x 20"W x 10"D | #8 - 1/0 AL or CU | 75 |
| LPS2 | 200 | 30"H x 20"W x 9"D | 30"H x 24"W x 8"D | 30"H x 20"W x 10"D | #6 - 250 kcmil AL or CU | 85, 115*, 120** |
| LPS4 | 400 | 48"H x 36"W x 10"D | 48"H x 36"W x 12"D | 48"H x 36"W x 10"D | (2) 250 kcmil - 3/0 AL or CU | 225 |

* NEMA 3R

** NEMA 4 & NEMA 12

Note: Over-size enclosures used to accommodate control power transformer, interface relay and terminal blocks.

XPress-Ship™

US Only

Littelfuse XPress-Ship™ service offers 48 hours** direct-shipment service on select fully-loaded LPS Series Shunt Trip Disconnect Switches to meet your urgent system requirements on time.

XPress-Ship™ switches include three JTD_ID Series fuses rated at the device's maximum ampacity.

| AMPERE RATING | VOLTAGE RATING | CATALOG NUMBER | XPress-Ship™ ORDERING NUMBER |
|---------------|----------------|---------------------|------------------------------|
| 60 A | 208 V | LPS6T20R1KGN6BF3-AZ | XPS6T20R1KGN6F3-AZ* |
| 60 A | 480 V | LPS6T48R1KGN6BF3-AZ | XPS6T48R1KGN6F3-AZ* |
| 100 A | 208 V | LPS1T20R1KGN1BF3-AZ | XPS1T20R1KGN1F3-AZ* |
| 100 A | 480 V | LPS1T48R1KGN1BF3-AZ | XPS1T48R1KGN1F3-AZ* |
| 100 A | 480 V | LPS1T48R1KGN1BF3 | XPS1T48R1KGN1BF3 |
| 200 A | 208 V | LPS2T20R1KGN2BF3-AZ | XPS2T20R1KGN2F3-AZ* |
| 200 A | 480 V | LPS2T48R1KGN2BF3 | XPS2T48R1KGN2BF3 |

*AZ option includes B & F3 options.

**XPress-Ship™ 48 hour service requires ordering from XPress-Ship™ Ordering Numbers shown above and is subject to a maximum of any combination of three switches per customer order. XPress-Ship™ service offers 48 hour shipment from the factory through standard ground transportation. For expedited delivery, contact your local Littelfuse Representative.

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