

# 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)

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

\*Contact factory for 600 V options.

## Specifications (Shunt Trip)

|                         |                                             |
|-------------------------|---------------------------------------------|
| <b>Voltage Rating</b>   | 120 V, 60 Hz                                |
| <b>Max Inrush</b>       | 4 A                                         |
| <b>Max On time</b>      | 1.5 cycles                                  |
| <b>Momentary Inrush</b> | 140 VA                                      |
| <b>SCCR</b>             | 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 (BYBASS 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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