

**WARNINGS**

- **TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE REPLACING ENCLOSURE COVER.**
  - **TO AVOID FIRE, SHOCK OR DEATH, DISCONNECT ALL POWER SUPPLIES TO ENCLOSURE BEFORE EXPOSING INTERIOR. MORE THAN ONE SUPPLY DISCONNECT MAY BE REQUIRED TO DE-ENERGIZE THIS EQUIPMENT BEFORE SERVICING.**
  - This enclosure cover assembly includes a lockout provision (in the OFF position) for a suitable padlock. Use up to three (3) padlocks with a shackle diameter of 1/4 in. (6 mm) only to isolate power from the connected equipment in compliance with OSHA Lockout/Tagout Regulation 29 CFR Part 1910.147.
- NOTE:** The lockout feature does NOT interrupt the power supplied to the switch within the enclosure.

**CAUTIONS**

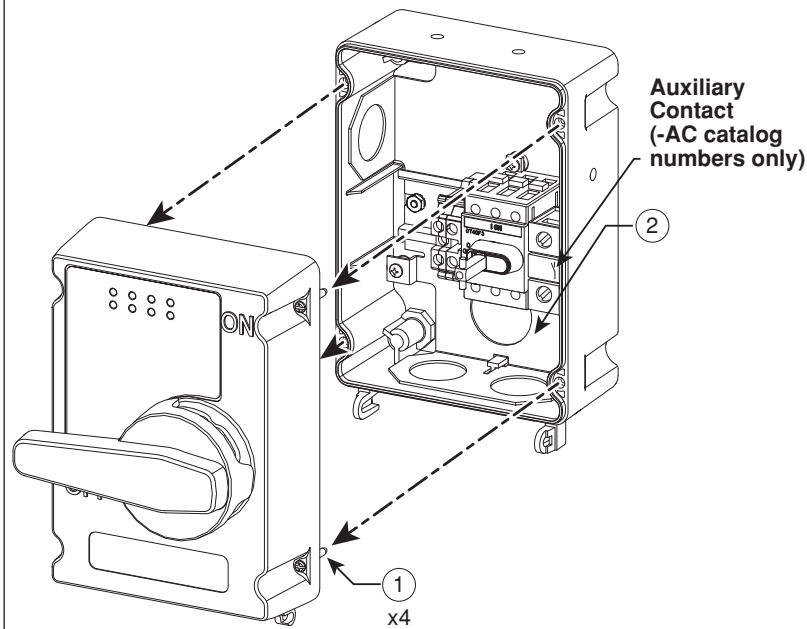
- Check to see that the rating marked on the device is correct for the intended installation. Connected equipment electrical rating must not exceed the ampere rating of this device.
  - The device is suitable for use on a circuit capable of delivering not more than 600 VAC maximum. For fused items, use Class J fuses.
  - This device must be mounted vertically with the line side at the top.
  - Suitable as Motor Disconnect on a circuit capable of delivering not more than 10kA rms symmetrical amperes, 600V max., when protected by a 60A Class J fuse.
  - For installation only by an electrician in accordance with the National Electrical Code® (NEC®) or the Canadian Electrical Code® (CEC®), local codes, and the installation instructions.
  - Use of a UL Listed Watertight conduit fitting (not provided) is required to maintain the desired environmental ratings. Rating of the fitting/hub must be equal to or better than the desired installation ingress protection rating.
- NOTE:** Feed-thru configurations are possible.

**INSTALLATION INSTRUCTIONS**

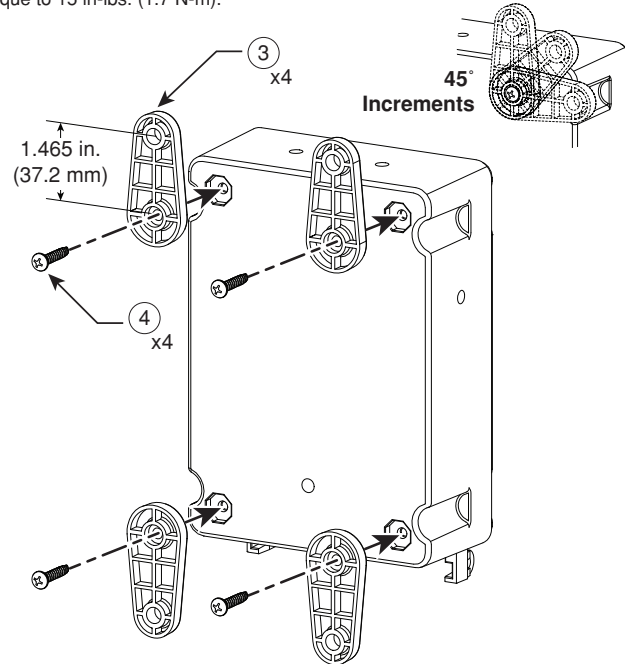
**Step 1A: Mounting - Wall Mount With Mounting Feet (feet and hardware provided)**

**NOTE:** Leviton® Safety Disconnect Switches may be mounted for top, bottom, side, or back feed of supply wires. When mounting with provided feet, drilling through the enclosure is not required. The mounting hardware ships inside the enclosure.

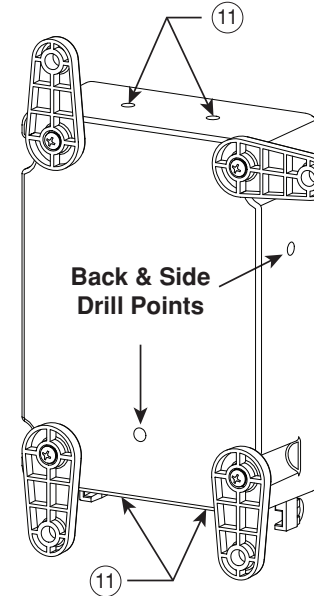
- a. Loosen cover screws ① utilizing either a flat head, Philips® #2, or Robertson® #0 screwdriver. Remove cover and retrieve the bag of mounting hardware ②.



- b. Attach mounting feet ③ with provided #8-16 x 7/8 in. thread cutting screws ④. Torque to 15 in.-lbs. (1.7 N-m).

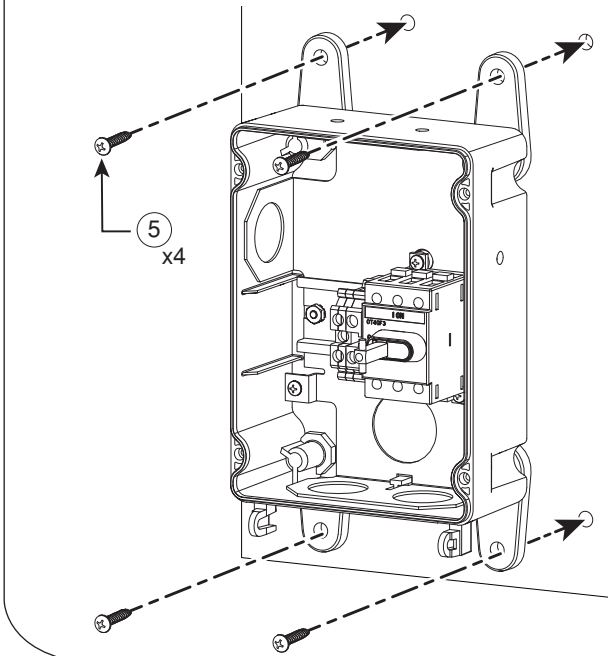


- c. Select drill point(s) ⑩ and drill hole(s) for conduit entry. The recommended hub trade size is 3/4 in. Consult the hub manufacturer's specifications for hole dimensions. Feed-thru configurations are possible/optional.

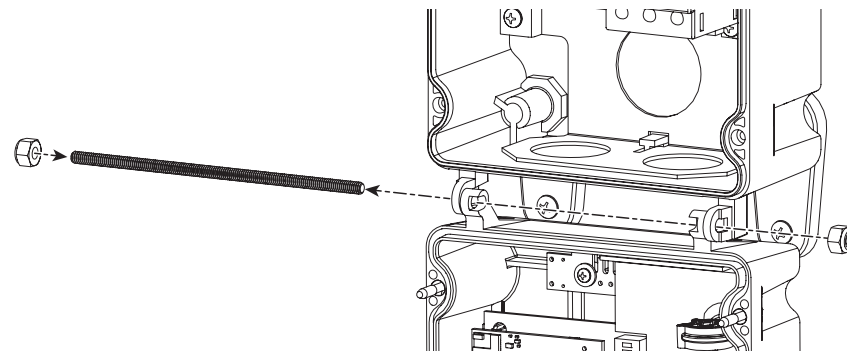


- d. Mount unit to the wall using the 0.28 in. (7.1 mm) diameter clearance holes in the mounting feet. Mounting screws ⑤ not provided.

**NOTE:** Verify enclosure is level prior to mounting.



- e. **OPTIONAL:** If you prefer to have a hinge feature, you have the option to use a hinge pin to keep the cover assembly in place during the remainder of the installation process. Install through holes provided in the cover and the base enclosure as shown.

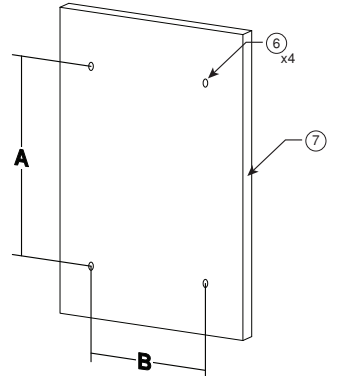


**Step 1B: Mounting - Thru-Panel Without Mounting Feet (hardware not provided)**

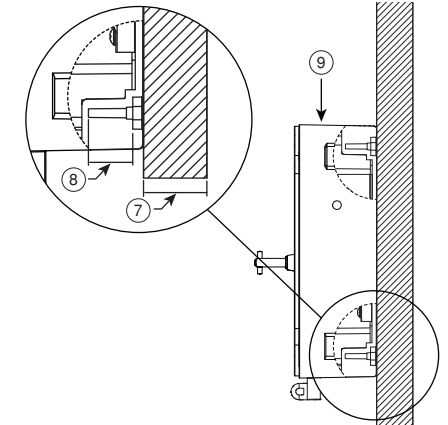
- NOTES:**
- Leviton Safety Disconnect Switches accommodate top, bottom, side, or back feed of supply wires.
  - NSF compliance not met if mounting without mounting feet.

- a. Drill holes ⑥ in the board/wall ⑦.

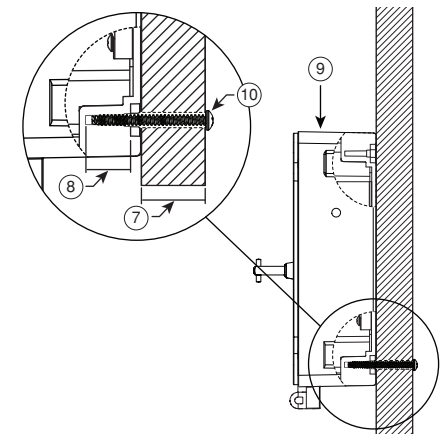
[A] 5.80 in. (147.3 mm)  
 [B] 3.64 in. (92.6 mm)



- b. To calculate mounting screw length, add the board/wall ⑦ thickness to the thread engagement ⑧. Thread engagement into enclosure ⑨ must be between 0.5 in. and 1.0 in.



- c. Mount unit to the board/wall ⑦ with four #8-16 thread forming screws ⑩ (not provided). Torque to max. of 15 in.-lbs. (1.7 N-m).



## Step 2: Wiring Installation

**WARNING: TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!**

### NOTES:

- All Leviton Disconnects are rated "Break all Lines" configurations and are suitable for motor circuits.
- Select conductor in accordance with ampacity of Table 310-15 of the National Electrical Code or Table 2 of the Canadian Electrical Code.
- For bending radius, refer to specific UL standard and NEC article. The handle must be in the "OFF" position to install the cover. Do not tin conductors.
- For installations subject to condensation and/or non-conforming with the above, the use of sealing filling per NEC 300.7 is recommended.

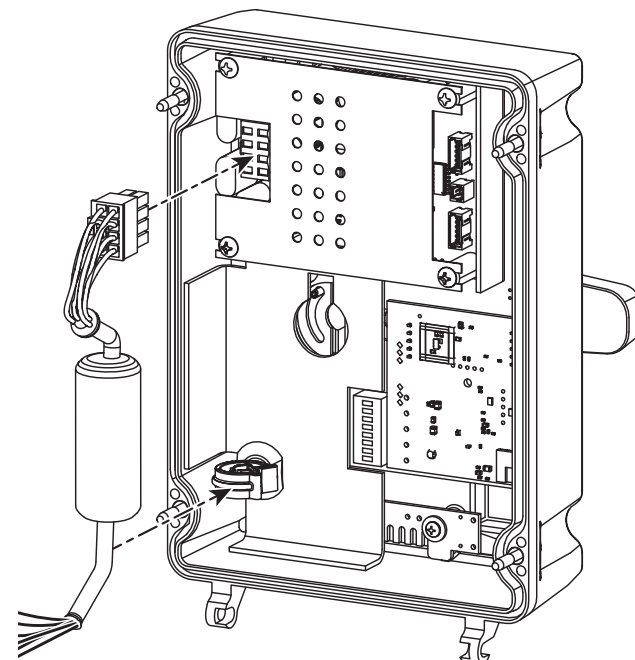
**a. Conduit Connection:** Install the hub and conduit per manufacturer's instructions. Ensure the hub locking ring is seated tightly against the inner grounding bracket for proper grounding. In top feed installations, use of condensation drip loops is recommended. Loops are to be made in the top or bottom bending space while maintaining minimum bending radius per NEC.

**b.** Select wire type per Table 1. To ensure compliance with UL/NEC wire bending space requirements, use wire sizes and strip lengths per Table 2.

**c.** Connect the electrical wires and sensor cable assembly wires to the switch, ground bus, and neutral bus (if applicable). Please note the labels attached to the sensor cable assembly wires and connect them to the switch's corresponding marked terminals.

**d.** Tighten terminal screws per Table 3.

**e.** Connect the cable assembly to the PCB and insert the wire bundle into the cable clamp in the cover as shown.



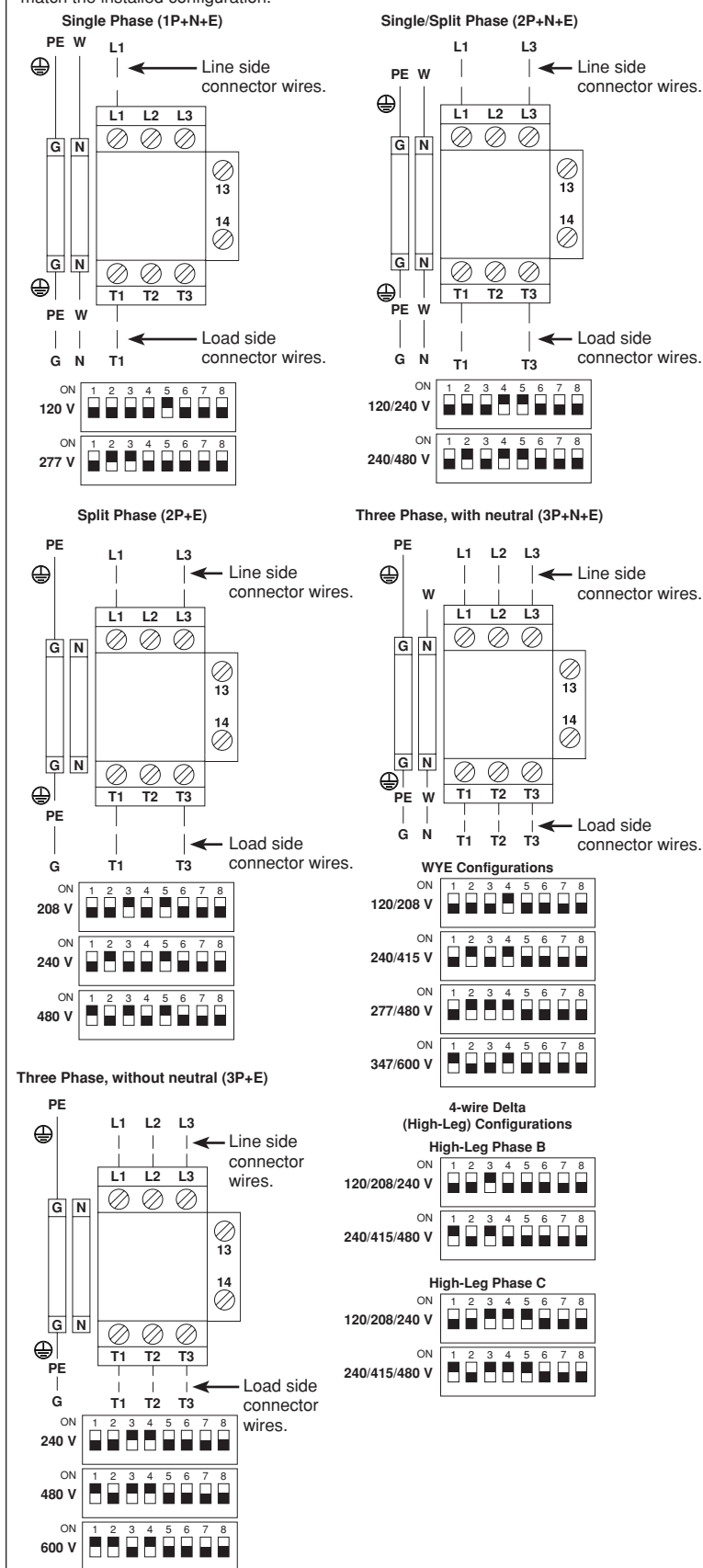
**f.** The proper wiring configuration must be programmed via dip switch SW2 for the voltage error detection feature to function correctly. Use the Wiring Diagrams and Switch Configuration diagrams to select the switch settings appropriate for the installation.

**g.** Install the cover, dressing wires to prevent interference with the cover when closing. The switch handle must be in the "OFF" position before closing cover. Tighten cover screws to 10 in-lbs. (1.2 N-m).

**IN THE EVENT OF LIQUID FAULT:** If using the threaded rod, be sure to remove it from the unit. Then remove the cover screws to pull the cover from the base.

## Wiring Diagrams and Dip Switch Configuration

Select the appropriate wiring diagram for the installation. Then set the dip switch (SW2) to match the installed configuration.



### NOTES:

- Line side connector wires are labeled L1, L2, L3. Ensure connections to appropriate line side labeled terminals.
- Load side connector wires are labeled T1, T2, T3. Ensure connections to appropriate load side labeled terminals.
- Ensure neutral and ground labeled connectors cable connection to neutral and ground side labeled terminals.

## Remote Monitoring Features

**a.** For models with remote monitoring via Wi-Fi connection (LDS30-AXC/LDS30-ACC), refer to the Inform App Manual (document number Q-1216).

**b.** For models with remote monitoring via Modbus connection (LDS30-0MB/LDS30-AMB), refer to the Inform Modbus Setup Guide.

**NOTE:** These documents are available at [www.leviton.com](http://www.leviton.com).

## Specifications

### Dimensions

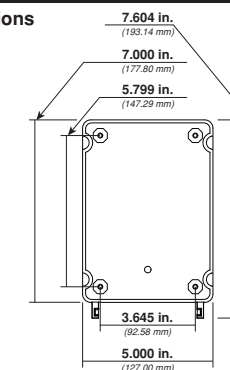


Table 1 - Wiring Type

Min. Wire (AWG) Copper Conductors to Meet NEC Table 310-15 (Phase and Neutral Wires)		Min. Wire (AWG) Copper Conductors to Meet Protective Earth Requirements***
(60°C) Wire (AWG)*	(>75°C) Wire (AWG)**	
#10	#10	#10

\* - Wire types TW, UF  
 \*\* - Wire types RHW, THHW, THW, THWN, XHHW, USE, ZW, TBS, SA, SIS, FEP, FEPB, MI, RHH, RHW-2, THHN, THHW, THW-2, THWN-2, USE-2, XHH, XHHW, XHHW-2, ZW-2  
 \*\*\* - NEC table 250.122 for unit rated ampacities. For other types/styles refer to NEC.

Table 2 - Terminal Wiring Size and Strip Length

Switch Terminal		Neutral Terminal		Protective Earth Terminal		Shield Ground Terminal		Aux. Contact Terminal	
AWG	Strip Length	AWG	Strip Length	AWG	Strip Length	AWG	Strip Length	AWG	Strip Length
#14-8	0.5" (12mm)	#24-8	0.4" (10mm)	#26-8	0.4" (10mm)	N/A		#18-14	0.5" (12mm)

Table 3 - Terminal Screw Torque Ratings

Switch	Neutral	Earth	Aux. Contact
7 in-lbs (0.8 N-m)	15 in-lbs (1.7 N-m)	15 in-lbs (1.7 N-m)	7 in-lbs (0.8 N-m)

Table 4 - Cover Screw Torque Ratings

LDS30-AX, LDS30-AC	LDS60-AX, LDS60-AC	LDS10-AX, LDS10-AC
10 in-lbs. (1.2 N-m)	18 in-lbs. (2 N-m)	18 in-lbs. (2 N-m)

Table 5 - Horsepower Ratings

Voltage	Current	Horsepower
600 VAC	30/32 A	2 Hp
110 VAC 1Ø		5 Hp
208-240 VAC 1Ø		5 Hp
480 VAC 1Ø		5 Hp
600 VAC 1Ø		5 Hp
208-240 VAC 3Ø		10 Hp
480 VAC 3Ø		20 Hp
600 VAC 3Ø		25 Hp

## Cleaning Procedures

**WARNING: RISK OF ELECTRIC SHOCK. TURN OFF POWER AT CIRCUIT BREAKER OR FUSE. DO NOT** clean this product while undergoing electrical maintenance or service.

**CAUTION:** Use only chemicals and cleaning solutions that are safe for use with plastics and rubber gaskets.

**CAUTION: DO NOT** direct or concentrate high pressure water or cleaning solution on the enclosure gasket seams, switch handle area or exterior labels.

**NOTE:** Follow general cleaning procedures established by your facility.

**NOTE:** This product is certified by NSF International to NSF/ANSI/3-A 14159-1.

- Use hose-directed water or cleaning solution to remove any collected contaminants from behind the enclosure.
- Use hose-directed water or cleaning solution to remove soil and contaminants from the exterior surfaces of the enclosure.
- Use a dry clean cloth to wipe away any excess water.

## Statements

### FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at Leviton Manufacturing of Canada ULC to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9 or by telephone at 1 800 405-5320.

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### LIMITED 3 YEAR PRODUCT WARRANTY

For Leviton's limited 3 year product warranty, go to [www.leviton.com](http://www.leviton.com). For a printed copy of the warranty you may call 1-800-323-8920 or write to Leviton Manufacturing Co., Inc., Attn: Customer Service Dept., 201 North Service Road, Melville, New York 11747.