

Safety Disconnect Switch in Watertight Enclosure

Cat. Nos. DS30-FAX (Fused), Rated: 30A-600VAC Max.
 DS60-AX (Non-Fused), DS60-FAX (Fused), Rated: 60A-600VAC Max.
 DS100-AX (Non-Fused), Rated: 100A-600VAC Max.



PK-93399-10-00-4D AR 0540

INSTALLATION INSTRUCTIONS

WARNING AND CAUTIONS:

- For installation only by a qualified electrician in accordance with the National Electrical Code (NEC) or the Canadian Electrical Code (SEC), local codes, and the installation instructions.
- Risk of electrical shock. Disconnect all power supplies to enclosure before exposing interior. More than one supply disconnect may be required to de-energize this equipment before servicing.
- Separate overcurrent protection must be provided in accordance with the NEC article 220 or CEC, section B as appropriate.
- Use this device only with **copper or copper clad wire**.
- Check to see that rating marked on device is correct for the intended installation. Connected equipment electrical rating must not exceed the ampere rating of this device.
- The Lockout feature DOES NOT interrupt the power supplied to the switch.
- Device is suitable for use on a circuit capable of delivering not more than 600 VAC maximum. For fused items, use class J fuses.
- Cover cannot be removed when handle is in the "ON" position.
- This device must be mounted vertically, with line side at the top.

FEATURES

- Provides ON-OFF switched control of a directly connected load.
- Meets the requirements of Outdoor/Indoor (IP67, Type 3R, 4X, Watertight, Corrosion resistant) and Indoor (Type 12K Dust tight) installations.
- This enclosure provides lockout capability in compliance with OSHA Lockout/Tagout Regulation 29 CFR Part 1910.147 (in the OFF position) with an acceptable padlock/shackle, thereby assuring the connected equipment cannot be energized.
- Auxiliary contact open prior to the line contacts for pilot duty switching.

NOTE: This enclosure must not be used as a junction box for feed-through connections.

INSTALLATION

NOTE: Leviton Safety Disconnect Switches may be mounted for Top or Bottom feed of supply wires (refer to Figure 1A).

Mounting:

- Loosen the four (4) cover screws from the front cover.
- Drill four (4) 1/4" (6.4 mm) diameter holes through the four corner wells on the inside back/rear of enclosure (refer to Figure 1A). If desired or to meet Type 4X requirements, attach the four mounting feet to the rear of the enclosure using the hardware provided. The mounting feet may be oriented in several positions. Tighten each foot screw to 18 in.-lbs. (2 N-m) torque. Mounting feet holes accept up to 5/16" (8.0 mm) diameter screws (not provided).

Top or Bottom Feed:

- Drill points provided for top left, top right, bottom left and bottom right conduit entry (refer to Figure 1A).

NOTE: A metal closure plug must be grounded (bonded) back to an unused grounding terminal.

Fitting sizes are as follows:

- Cat. No. DS30-FAX – 1" (25.4 mm) diameter hole for 3/4" (19.05 mm) hub.
- Cat. No. DS60-AX/FAX – 1-5/8" (41.3 mm) diameter hole for 1-1/4" (31.75 mm) hub.
- Cat. No. DS100-AX – 2" (50.8 mm) diameter hole for 1-1/2" (38.1 mm) hub.

NOTE: Use of a UL Listed Watertight conduit fitting (**NOT provided**) is required to maintain the Type 3R, 4X and Type 12K ratings (refer to Figure 1A).

- Install the conduit fitting ensuring that the "O" ring is properly seated and the inside locking ring is seated tightly against the inside metal frame to assure proper grounding (refer to Figure 1A).
- When using Top feed conduit entrance, always form condensation drip loops in wiring as shown in Figure 1A and 1B.

Wiring:

NOTE: Use conductors with insulation rated 75°C or higher having sufficient ampacity in accordance with the 60°C column of Table 310-16 of the NEC or Table 2 of the Canadian Electrical Code. **DO NOT** tin conductors.

- WARNING:** TO AVOID FIRE, SHOCK, OR DEATH; **TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!**
- Strip all conductors approximately 11/16" (17.5 mm). For Auxiliary contact, strip conductors 5/16" (8.0 mm).

For Switch terminals, conductor size ranges as follows:

- Cat. No. DS30-FAX – #14-#8 AWG.
- Cat. No. DS60-AX – #14-#4 AWG.
- Cat. No. DS60-FAX – #14-#4 AWG.
- Cat. No. DS100-AX – #8-#00 AWG.

For Neutral and Ground terminals, conductor size ranges as follows:

- Cat. No. DS30-FAX – #14-#10 AWG.
- Cat. No. DS60-AX/FAX – #10-#2 AWG.
- Cat. No. DS100-AX – #8-#00 AWG. (Neutral terminal)
- Cat. No. DS100-AX – #8-#2 AWG. (Ground terminal)

For Auxiliary terminals, conductor size ranges as follows:

- Cat. No. DS30-FAX – #18-#14 AWG.
- Cat. No. DS60-AX/FAX – #18-#14 AWG.
- Cat. No. DS100-AX – #18-#14 AWG.

- Connect conductors per appropriate WIRING DIAGRAM.

4. Tighten terminal screws as follows:

Switch:

- Cat. No. DS30-FAX – 17 in.-lbs. (2 N-m)
- Cat. No. DS60-AX – 18 in.-lbs. (2 N-m)
- Cat. No. DS60-FAX – 30 in.-lbs. (3.4 N-m)
- Cat. No. DS100-AX – 55 in.-lbs. (6.2 N-m)

Neutral and Ground:

- Cat. No. DS30-FAX – 14 in.-lbs. (1.6 N-m)
- Cat. No. DS60-AX – 51 in.-lbs. (5.7 N-m)
- Cat. No. DS60-FAX – 51 in.-lbs. (5.7 N-m)
- Cat. No. DS100-AX, Ground – 51 in.-lbs. (5.7 N-m)
- Cat. No. DS100-AX, Neutral – 87 in.-lbs. (9.8 N-m)

Auxiliary:

- All devices – 7 in.-lbs. (0.8 N-m)

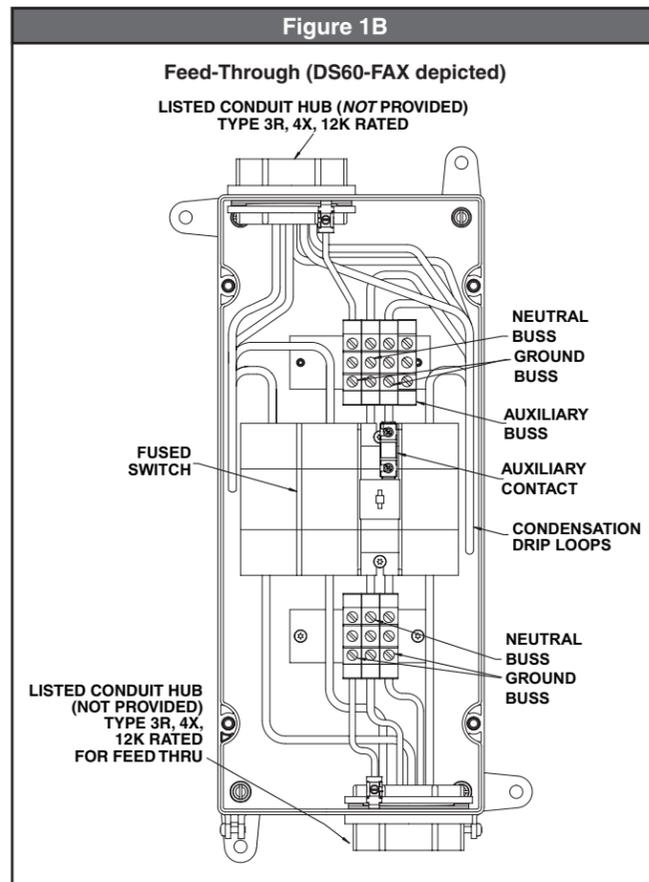
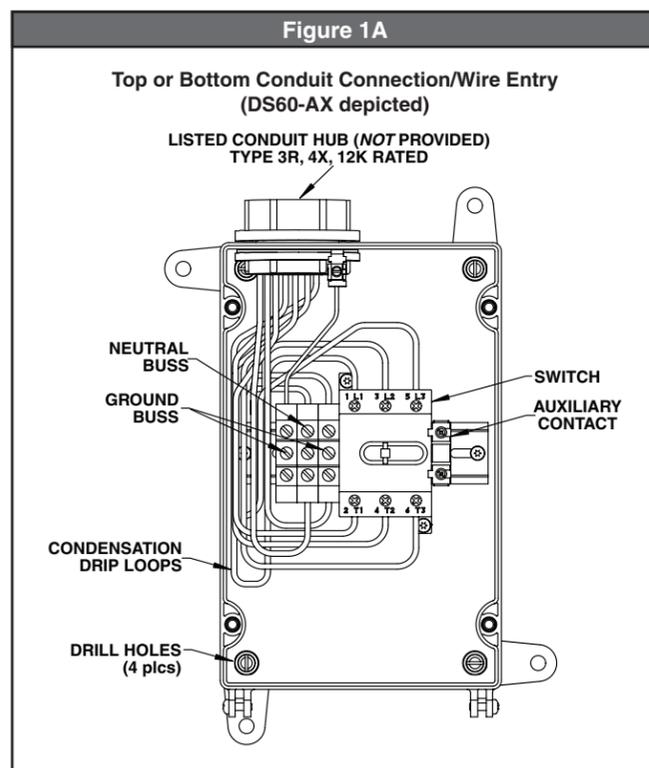
- Make sure that there are no stray conductor strands.
- Ensure that the gasket is in place in cover groove. Replace cover and tighten cover screws to 22 in.-lbs. (2.5 N-m) torque.

NOTE: Handle must be in the "OFF" position to install cover.

Fuses (not included):

For Cat. No. DS30-FAX use Bussman LPJ30SP or Gould-Shawmut AJT30.
 For Cat. No. DS60-FAX use Bussman LPJ60SP or Gould-Shawmut AJT60.

CAUTION: Ampere rating of fuses must not exceed the maximum ampere rating of this device. Refer to front cover for device's maximum ampere rating.



Ratings

Cat. No. DS30-FAX			
Amps	Poles	HP Rating	
30	2	110 VAC 1 Ø	2 HP
30	2	208-240 VAC 1 Ø	3 HP
30	2	480 VAC 1 Ø	7.5 HP
30	3	208-240 VAC 3 Ø	7.5 HP
30	3	480 VAC 3 Ø	15 HP
30	3	600 VAC 3 Ø	20 HP
AUXILIARY CONTACT RATING			
10	1	600 V AC	

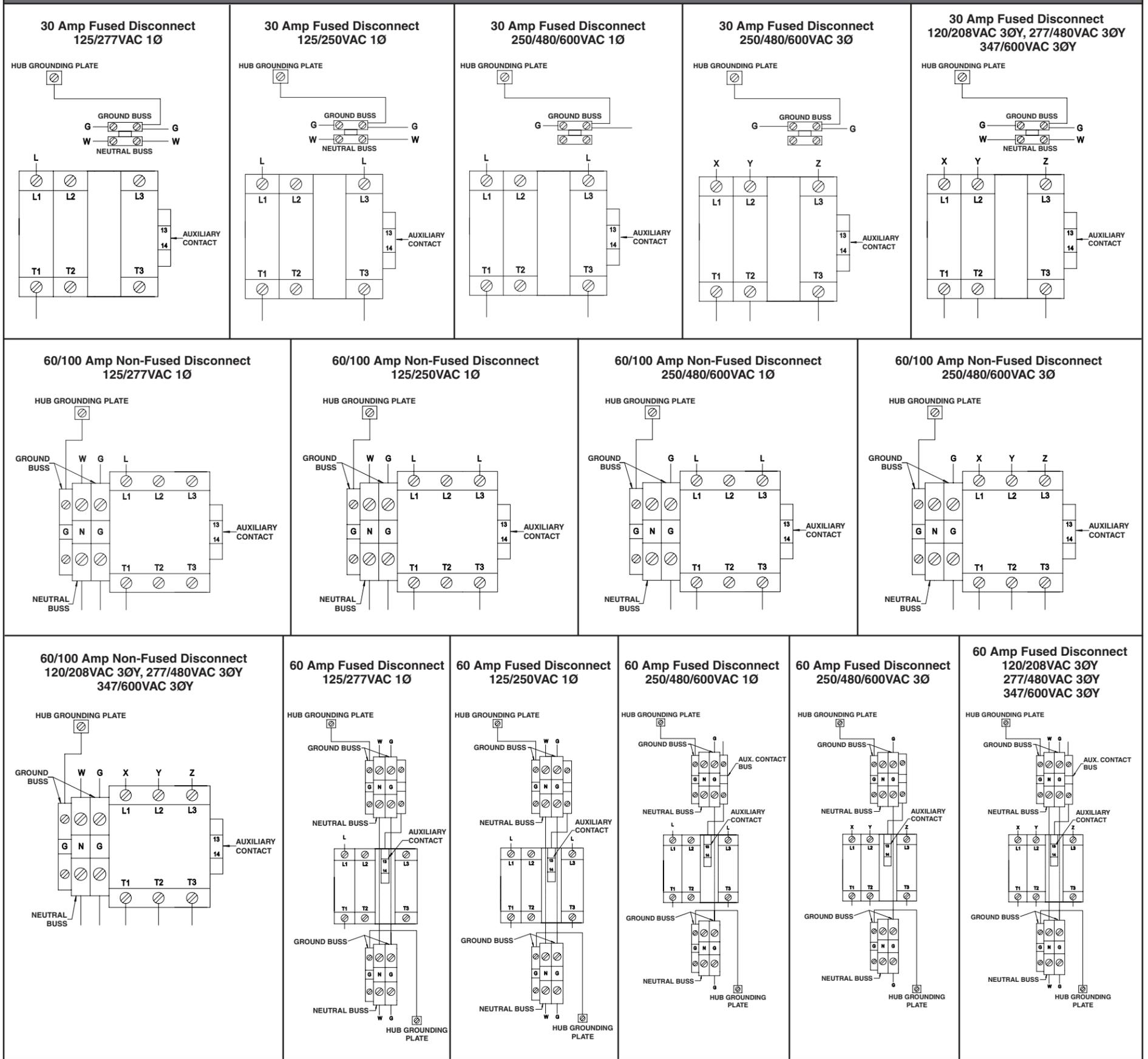
Cat. No. DS60-AX			
Amps	Poles	HP Rating	
60	2	110 VAC 1 Ø	2 HP
60	2	208-240 VAC 1 Ø	10 HP
60	2	480 VAC 1 Ø	20 HP
60	2	600 VAC 1 Ø	20 HP
60	3	208-240 VAC 3 Ø	20 HP
60	3	480 VAC 3 Ø	40 HP
60	3	600 VAC 3 Ø	40 HP
AUXILIARY CONTACT RATING			
10	1	600 V AC	

Cat. No. DS60-FAX			
Amps	Poles	HP Rating	
60	2	110 VAC 1 Ø	* HP
60	2	208-240 VAC 1 Ø	* HP
60	2	480 VAC 1 Ø	* HP
60	2	600 VAC 1 Ø	* HP
60	3	208-240 VAC 3 Ø	15 HP
60	3	480 VAC 3 Ø	30 HP
60	3	600 VAC 3 Ø	50 HP
AUXILIARY CONTACT RATING			
10	1	600 V AC	

Cat. No. DS100-AX			
Amps	Poles	HP Rating	
100	2	110 VAC 1 Ø	5 HP
100	2	208-240 VAC 1 Ø	15 HP
100	2	480 VAC 1 Ø	25 HP
100	2	600 VAC 1 Ø	20 HP
100	3	200-208 VAC 3 Ø	25 HP
100	3	240 VAC 3 Ø	30 HP
100	3	480 VAC 3 Ø	50 HP
100	3	600 VAC 3 Ø	50 HP
AUXILIARY CONTACT RATING			
10	1	600 V AC	

*Consult Factory

Disconnect



LIMITED 2 YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for two years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option, if within such two year period the product is returned prepaid, with proof of purchase date, and a description of the problem to **Leviton Mfg. Co., Inc. 201 North Service Road, Melville, N.Y. 11747**. This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. **There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose**, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to two years. **Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation.** The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.