

FUSED DISCONNECT SWITCH

30, 60, 100 AMP.

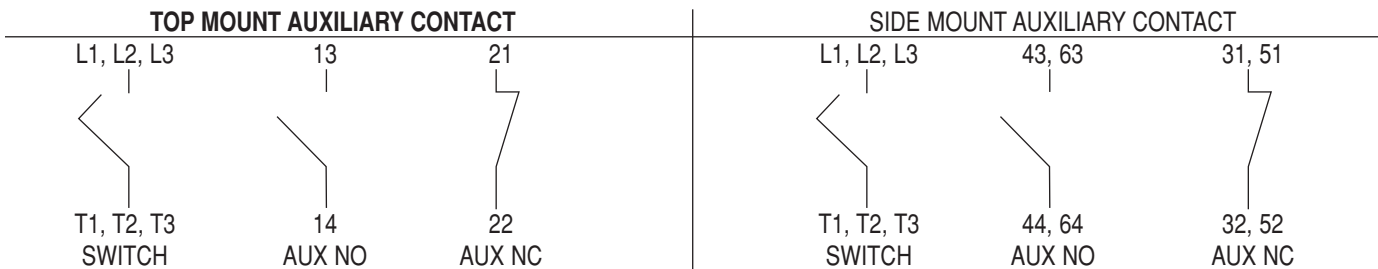
OUTDOOR/INDOOR (TYPE 4X WATERTIGHT, CORROSION RESISTANT).

INDOOR (TYPE 12K DUST TIGHT).

WIRING GENERAL INSTRUCTIONS

NOTICE: READ BEFORE INSTALLING DEVICE

- NOTICE:** For installation only by a qualified electrician in accordance with the National Electrical Code®. Canadian Electrical Code, Local codes, and the instructions on this sheet.
- DANGER:** RISK OF ELECTRICAL SHOCK- TURN **OFF SWITCH** prior to removing or installing fuses.
- CAUTION:** RISK OF ELECTRICAL SHOCK- More than one disconnect switch may be required to deenergize the enclosure before servicing. DISCONNECT POWER SUPPLY(S) TO ENCLOSURE BEFORE REMOVING COVER AND EXPOSING INTERIOR.
- CAUTION:** Connected equipment electrical rating **MUST NOT** exceed the ampere rating of this device.
- CAUTION:** Nonmetallic enclosure does not provide grounding between conduit connection. Use supplied ground plate(s) with jumper wires, and install under each conduit locknut inside enclosure. Tighten locknut securely to ensure watertight/dusttight seal and ground connection.
- This device must NOT be used as a junction box for feed-thru connections.
- Suitable for use on a circuit capable of providing not more than 10,000 rms symmetrical amperes, 600 VAC maximum.
- This enclosure includes a provision for locking the switch handle in the “OFF” position. This feature accepts up to a 5/16” (8mm) diameter padlock shackle. This lockout feature is designed to isolate power from the connected equipment as a means of compliance with OSHA Lockout/Tagout regulation 29CFR part 1910.147. This feature DOES NOT isolate power supplied to the device during internal servicing of the enclosure.
- The switch in this device is provided with a “Pre-break” auxiliary contact. The rating is 600VAC, 10 amps. The Pre-break feature allows the auxiliary contacts to open slightly prior to the main contacts opening. This is useful for signaling computer controlled equipment that power will be disconnected. It may be wired with 1 normally open and 1 normally closed contacts. (See diagram below for wiring).



INSTALLATION INSTRUCTIONS

- Loosen (do not remove) the six (eight for 100amp) captivated enclosure cover screws and lift off cover.
- Remove feet and screws from poly bag and mount the feet to the device in the desired position using the screws provided. Torque to 10-12 in. lbs. (1.1-1.4 N•m) see fig. B for mounting dimensions.

- NOTE: - The device must always be mounted vertically, with the line side at the top.
 - Device must be mounted using mounting feet. **DO NOT** drill mounting holes thru enclosure.
 - Mounting feet will accept up to 3/8" screws (not provided).
3. Drill or punch the appropriate hole size (per Table 1 below) at the desired conduit entry location(s). Drill centers are provided at Top and Bottom of enclosure.
 NOTE: - The 100 amp device is supplied with a 1-1/2" hub, the 100 amp enclosure will also accommodate a 2" hub (not supplied)- see Table 1 for appropriate drill hole size. Use only a Listed/Certified conduit hub rated for Type 4X and/or Type 12K applications (depending on installation requirements) such as: T&B #H200-TB 2" trade size. When using a 2" hub, the grounding plate must be modified to remove the six break-out tabs. Break the tabs off along the score mark provided.

TABLE 1

	30 amp	60 amp	100 amp	100 amp
Hub trade size	1"	1-1/4"	1-1/2"	2" (not supplied)
Appropriate hole size	1-3/8" (34.9 mm) diameter	1-3/4" (44.4 mm) diameter	2" (50.8 mm) diameter	2-1/2" (63.5 mm) diameter

4. Install conduit hub, be sure o-ring is in place between hub and enclosure and the wire grounded plate is installed under the conduit locknut inside enclosure. Tighten locknut securely to ensure watertight/dusttight seal and ground connection.
5. Mount unit as intended on equipment, wall or other location after pre-drilling for screws per selected pattern table dimensions (see figure B).

WIRING INSTRUCTIONS

Wire size may vary with application. 30-60 amp devices are rated 60/75°C, select conductor in accordance with ampacity Table 310-16 of the National Electrical Code or Table 2 of the Canadian Electrical Code. The 100amp device is rated 75° C only, select conductor with insulation rated 75°C or higher having sufficient ampacity in accordance with the 75°C column of Table 310-16 of the National Electrical Code or Table 2 of the Canadian Electrical Code.

1. **CAUTION:** Use copper conductors only.
2. Terminals will accept wire sizes listed in Table 2.
3. Cleanly cut and strip 1/2" [13mm] of insulation from end of cable (3/4" [19mm] for the 100amp fuse block). **DO NOT TIN CONDUCTORS.**
4. Select correct wiring diagram from TABLE 3 on last page and wire switch and fuse block as illustrated, making sure to provide condensation drip loop as shown in figure B or D. Insert stripped cables fully into terminal openings and then tighten terminal screws per TABLE 2.
CAUTION: Ensure that the line side is wired into the switch and the load side is wired into the fuse block. Failure to wire properly can cause the fuse block to be live during fuse replacement.
5. Replace enclosure cover – make sure o-ring is seated properly in groove provided around cover. Tighten enclosure cover screws to 12-15 in. lbs. (1.4-1.7 N•m).
6. Turn the two (2) fastener screws a 1/4 turn counter clockwise to open fuse access door. Install appropriate Class "J" fuses (not supplied) into supplied fuse-puller and install into fuse block ensuring the arrows on the fuse-puller are pointing up.
CAUTION: Amperage rating of fuses MUST NOT exceed the maximum ampere rating of this device (see Table 3).
7. Close fuse access door & turn the two (2) fastener screws a 1/4 turn clockwise.

TABLE 2

AMPS	SWITCH		GROUND		NEUTRAL		AUXILIARY		FUSEBLOCK	
	TERMINAL CAPACITY	SCREW TORQUE	TERMINAL CAPACITY	SCREW TORQUE	TERMINAL CAPACITY	SCREW TORQUE	TERMINAL CAPACITY	SCREW TORQUE	TERMINAL CAPACITY	SCREW TORQUE
30	#8-14 AWG	13-16 in. lbs. (1.5-1.8 N•m)	#6-14 AWG	14-16 in. lbs. (1.6-1.8 N•m)	#6-14 AWG	16-20 in. lbs. (1.8-2.3 N•m)	#12 AWG	5-7 in. lbs. (0.6-0.8 N•m)	#6-14 AWG	25-27 in. lbs. (2.8-3.0 N•m)
60	#2-10 AWG	25-27 in. lbs. (2.8-3.0 N•m)	#4-10 AWG	16-20 in. lbs. (1.8-2.3 N•m)	#4-10 AWG	16-20 in. lbs. (1.8-2.3 N•m)	#12 AWG	5-7 in. lbs. (0.6-0.8 N•m)	#2-10 AWG	45-47 in. lbs. (5.0-5.3 N•m)
100	#2-10 AWG	25-27 in. lbs. (2.8-3.0 N•m)	#0-10 AWG	22-26 in. lbs. (2.5-2.9 N•m)	#0-10 AWG	22-26 in. lbs. (2.5-2.9 N•m)	#12 AWG	5-7 in. lbs. (0.6-0.8 N•m)	#2/0-10 AWG	120-125 in. lbs. (13.5-14.1 N•m)

FUSE AND SHORT CIRCUIT INFORMATION

Fuse Type: Class J

CAUTION: Continuity testing before replacing fuses can detect a device mis-wiring which can result in the fuse-block being live.

Horsepower Ratings: The high inrush current of a motor starting greater than the standard horsepower rating may require the use of fuses with appropriate time delay characteristics (see Table 3 for standard and maximum allowable horsepower ratings).

Replacements: Fuse block replacement must be the same type Littelfuse® block as original and have equal or greater short circuit current withstand rating.

Figure A
Bottom Feed
One Hub
30, 60 Amp Shown

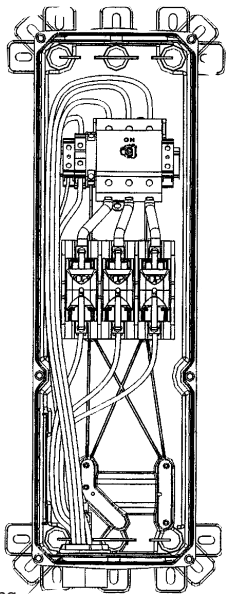


Figure B
Top Feed
One Hub
30, 60 Amp Shown
100A Dimensions
Shown in Parentheses

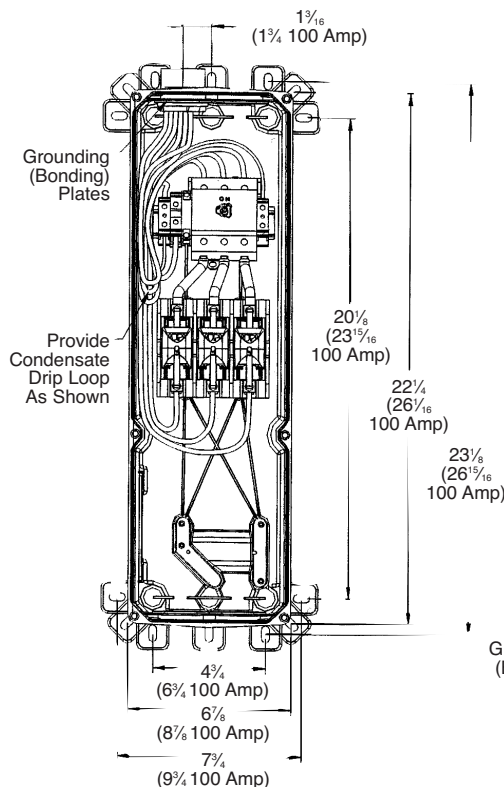


Figure C
Bottom Feed
Two Hubs
30, 60 Amp Shown

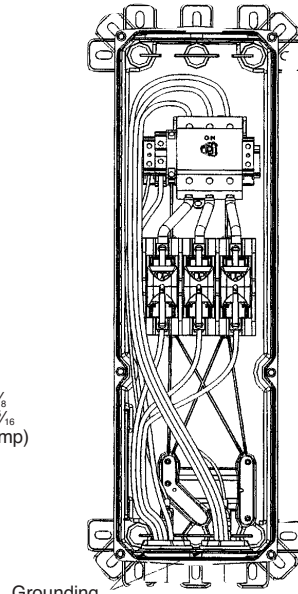
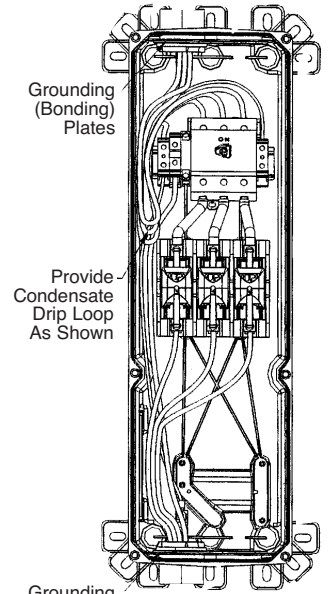


Figure D
Top Feed &
Bottom Feed
30, 60 Amp Shown



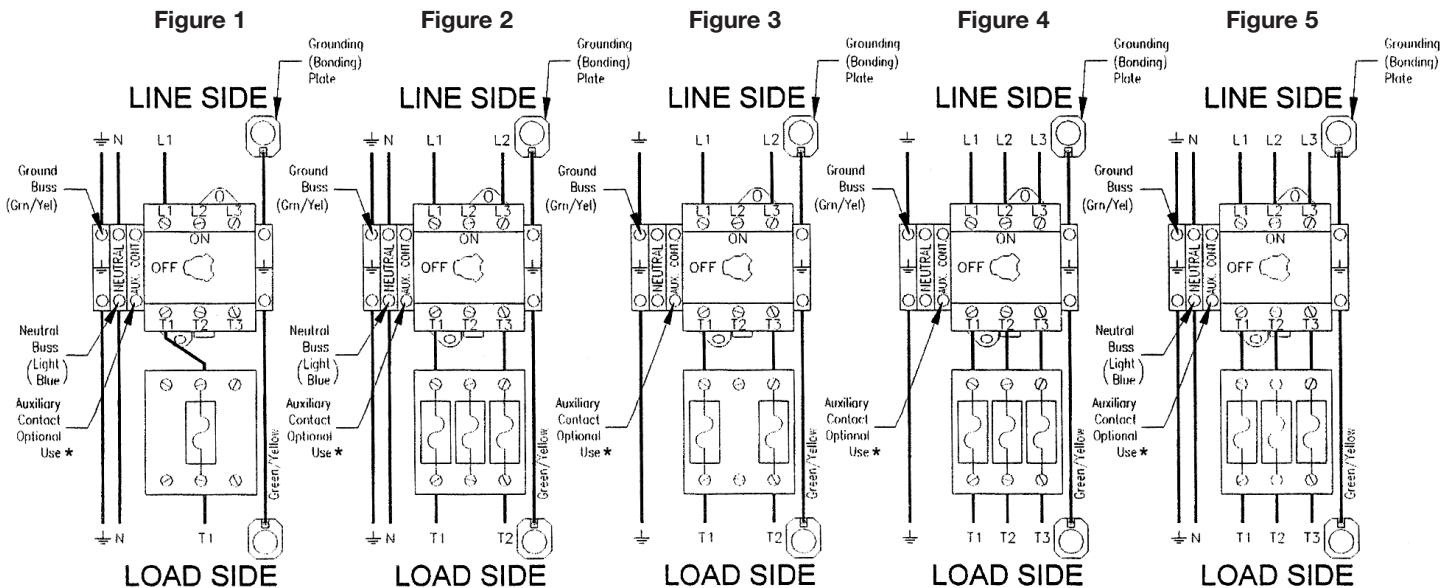
Grounding (Bonding) Plates

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TABLE 3

Maximum Rating	Catalog Number	Voltage	Standard Horsepower	Maximum Horsepower	Wire per Fig. Number	Replacement Fuse Puller	Replacement Door Cat.#
30 AMP 600 VAC	PS30FSS	120 VAC	½ HP	2 HP	1	PSFP30	PSFD
		208 VAC	1 HP	3 HP	3		
		240 VAC	1½ HP	3 HP	3		
		277 VAC	1½ HP	3 HP	1		
		480 VAC	3 HP	7½ HP	3		
		120/240 VAC	½ HP @ 120VAC 1½ HP @ 240VAC	2 HP @ 120VAC 3 HP @ 240VAC	2		
		3Ø 240 VAC	3 HP	7½ HP	4		
		3Ø 480 VAC	5 HP	15 HP	4		
		3Ø 600 VAC	7½ HP	15 HP	4		
		3ØY 120/208 VAC	2 HP	5 HP	5		
		3ØY 277/480 VAC	5 HP	15 HP	5		
3ØY 347/600 VAC	7½ HP	15 HP	5				
60 AMP 600 VAC	PS60FSS	120 VAC	1½ HP	3 HP	1	PSFP60	PSFD
		208 VAC	3 HP	7½ HP	3		
		240 VAC	3 HP	7½ HP	3		
		277 VAC	3 HP	10 HP	1		
		480 VAC	5 HP	20 HP	3		
		120/240 VAC	1½ HP @ 120VAC 3 HP @ 240VAC	3 HP @ 120VAC 7½ HP @ 240VAC	2		
		3Ø 240 VAC	5 HP	15 HP	4		
		3Ø 480 VAC	10 HP	30 HP	4		
		3Ø 600 VAC	15 HP	40 HP	4		
		3ØY 120/208 VAC	5 HP	15 HP	5		
		3ØY 277/480 VAC	10 HP	30 HP	5		
3ØY 347/600 VAC	15 HP	40 HP	5				
100 AMP 600 VAC	PS100FSS	120 VAC	2 HP	5 HP	1	PSFP100	PSFD100
		208 VAC	5 HP	10 HP	3		
		240 VAC	5 HP	15 HP	3		
		277 VAC	7½ HP	15 HP	1		
		480 VAC	10 HP	30 HP	3		
		120/240 VAC	2 HP @ 120VAC 5 HP @ 240VAC	5 HP @ 120VAC 15 HP @ 240VAC	2		
		3Ø 240 VAC	10 HP	25 HP	4		
		3Ø 480 VAC	20 HP	50 HP	4		
		3Ø 600 VAC	30 HP	50 HP	4		
		3ØY 120/208 VAC	10 HP	20 HP	5		
		3ØY 277/480 VAC	20 HP	50 HP	5		
3ØY 347/600 VAC	30 HP	50 HP	5				



*Auxiliary contact may be located on the side (as shown) or on the top. See page 1 for Auxiliary Contact Wiring Scheme.