

30 AMP CIRCUIT- LOCK™ DISCONNECT SWITCH WITH LED INDICATORS FOR HBLDS3P, HBLDS3SSP, AND HBLDS3SSRP

GENERAL INFORMATION

CAUTION: Disconnect Power Before Servicing.

WARNING: For use with three-phase Y configuration only. Do not use with delta configuration.

HBLDS3P LED indicators (See Figure A). Perform wiring instructions per PD1782. Provided.*

HBLDS3SSP LED indicators (See Figure B). Perform wiring instructions per PD2520. Provided.*

HBLDS3SSRP LED indicators (See Figure C). Perform wiring instructions per PD2665. Provided.*

* Complete assembly steps up to cover installation.

CIRCUIT BOARD WIRING INSTRUCTIONS:

1. See figures A, B, or C. **WARNING: Accidental dropping or rough handling of cover during installation can cause damage.**

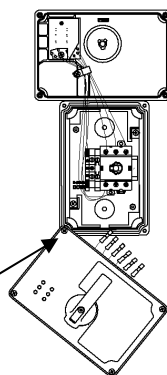
To aid installation place cover as shown. (See Figures A, B, or C).

2. Loosen terminal screws and secure (6) black wires with male tabs marked L1, L2, L3, T1, T2, T3 to corresponding terminations on switch. Tighten terminal screws to 18 pound-inches (2.0 N-m). Secure green ground wire from circuit board to thinner (width) ground buss. Tighten grounding buss terminal screw to 7.1 pound-inches (.800 N-m).

3. Install cover. The handle must be in the OFF position. Tighten the four (4) cover screws to 18 pound-inches (2.0 N-m) for HBLDS3P, and 24 pound-inches (2.7 N-m) for HBLDS3SSP and HBLDS3SSRP.

CAUTION:

When completed with wiring fully remove support screw and remove cover for re-installation. **DO NOT ROTATE** into position. Rotating into position can result in damage to the circuit board assembly underneath the cover.



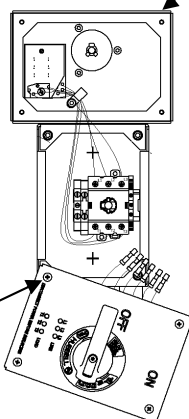
If a bottom feed conduit application is desired you may place cover on top of enclosure temporarily while installing circuit board wires or servicing switch.

For top feed or bottom feed conduit application it is recommended to screw in bottom screw a few threads to hold cover temporarily while installing circuit board wires or servicing switch.

Figure A

CAUTION:

When completed with wiring fully remove support screw and remove cover for re-installation. **DO NOT ROTATE** into position. Rotating into position can result in damage to the circuit board assembly underneath the cover.



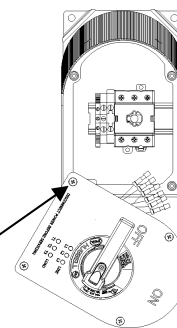
If a bottom feed conduit application is desired you may place cover on top of enclosure temporarily while installing circuit board wires or servicing switch.

For top or bottom feed application it is recommended to screw in bottom screw a few threads to hold cover temporarily while installing circuit board wires or servicing switch.

Figure B

CAUTION:

When completed with wiring fully remove support screw and remove cover for re-installation. **DO NOT ROTATE** into position. Rotating into position can result in damage to the circuit board assembly underneath the cover.



Screw in bottom screw a few threads to hold cover temporarily while installing circuit board wires or servicing switch.

Figure C

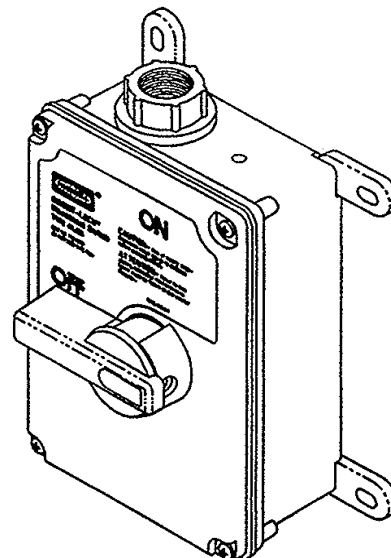
30 AMP CIRCUIT- LOCK™ DISCONNECT SWITCH

Installation Instructions

This enclosure provides ON-OFF Switched control of a directly Connected load and meets the Requirements of Outdoor/Indoor (Type 4X, Watertight, Corrosion Resistant) and Indoor (Type 12K Dust Tight) installations.

GENERAL INFORMATION

1. **NOTICE:** For installation only by a qualified electrician in accordance with the National Electrical Code® or the Canadian Electrical Code, local codes, and the instructions on the following pages.
2. **CAUTION: RISK OF ELECTRIC SHOCK. MORE THAN ONE SUPPLY DISCONNECT MAY BE REQUIRED TO DE-ENERGIZE THIS EQUIPMENT BEFORE SERVICING. DISCONNECT ALL POWER SUPPLIES TO ENCLOSURE BEFORE EXPOSING INTERIOR.**
ATTENTION: RISQUE DE CHOC ÉLECTRIQUE. IL PEUT-ÊTRE NÉCESSAIRE DE DÉBRANCHER PLUS D'UN DISJONCTEUR D'ALIMENTATION AFIN DE METTRE HORS-TENSION L'ÉQUIPEMENT AVANT D'EN FAIRE L'ENTRETIEN. DÉBRANCHER TOUS LES GROUPE D'ALIMENTATION AU BOÎTIER AVANT DE L'OUVRIER ET D'EN EXPOSER L'INTÉRIEUR.
3. **NOTICE:** Separate overcurrent protection must be provided in accordance with National Electrical code® Article 220 or Canadian Electrical Code, Section B, as appropriate.
4. Suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes, 600 VAC maximum. For all catalogs, except HBLDS33ACNK, suitable for use on a circuit capable of delivering not more than 65,000 rms symmetrical amperes, 600 VAC maximum when protected by Class J fuses rated 30 amperes maximum.
5. This enclosure includes a lockout provision: ON-OFF control knob (in the OFF position) accepts up to a 5/16 inch (8mm) diameter shackle of a suitable padlock Lockout device to isolate energy from the connected equipment as a method of compliance to OSHA Lockout/Tagout Regulation 29 CFR Part 1910.147. This feature, however, does NOT isolate the power supplied to the enclosure during internal servicing of the enclosure.



CLEANING PROCEDURES:

6. Follow the general cleaning procedures established by your facility for your specific application.
7. This product is certified by NSF International for use in food processing Splash Zone Areas, the following cleaning practice is recommended for this product:

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

CAUTION: Risk of electric shock. Do not clean this product while undergoing electrical maintenance or service.

ATTENTION - Utiliser des produits chimiques et des solutions de nettoyage compatibles avec les joints en plastique et en caoutchouc.

ATTENTION - Risque de choc électrique. Ne pas nettoyer ce produit pendant qu'on y effectue des travaux électriques ou de maintenance.

- a. Use hose directed water or cleaning solution to remove any collected soil or contaminants from behind this enclosure. Care must be exercised to apply the water spray in such a manner to completely wash the area between the enclosure and the wall onto which it is mounted.
- b. Use hose directed water or cleaning solution to wash away soil or contaminants from the exterior surfaces of the enclosure.
- c. **CAUTION:** Do not direct or concentrate high pressure water or cleaning solution on the lid and box gasket seams, switch handle area or on any applied labels.
ATTENTION - Ne pas diriger ou concentrer le jet d'eau ou la solution de nettoyage à haute pression sur le couvercle, les joints du boîtier, la manette de l'interrupteur ou sur toute autre étiquette en place.
- d. After using hose directed water or cleaning solutions, use a clean damp cloth to manually remove any soil or other contaminants from the gasket seam area, handle area or other necessary areas.
- e. Use a dry clean cloth to wipe away any excess water.



30 AMP CIRCUIT- LOCK™ DISCONNECT SWITCH

This enclosure may be mounted for top, bottom, back, or dual conduit entrances. It is supplied ready for top conduit entrance.

A. MOUNTING INSTRUCTIONS

1. For Type 4X and Type 12K applications, enclosure must be mounted by means of mounting feet. DO NOT drill, punch, or nail mounting holes through the enclosure.
2. Mount the feet to the enclosure using the screws provided. Tighten to 18 lb.-in. (2.0 N · m). See Fig. M-2.
3. Mounting feet will accept up to ¼ inch (6mm) screws (not provided). Mounting pattern is shown in Fig. M-1.
4. Remove the four (4) cover mounting screws.
5. For bottom feed, remove frame retention screws, remove frame from box, turn box 180°, replace frame and replace frame retention screws. Bottom feed is shown in Figs. M-3 and M-5.
6. For back feed or for dual conduit entry, see Section B and Figs. M-4 and M-5 for instructions.
7. Install the conduit fitting. Be sure that the “O” ring is properly seated in its groove. Tighten the conduit fitting.

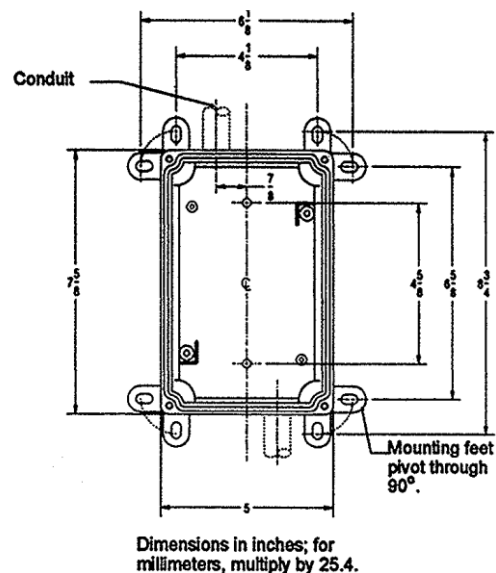


Fig. M-1

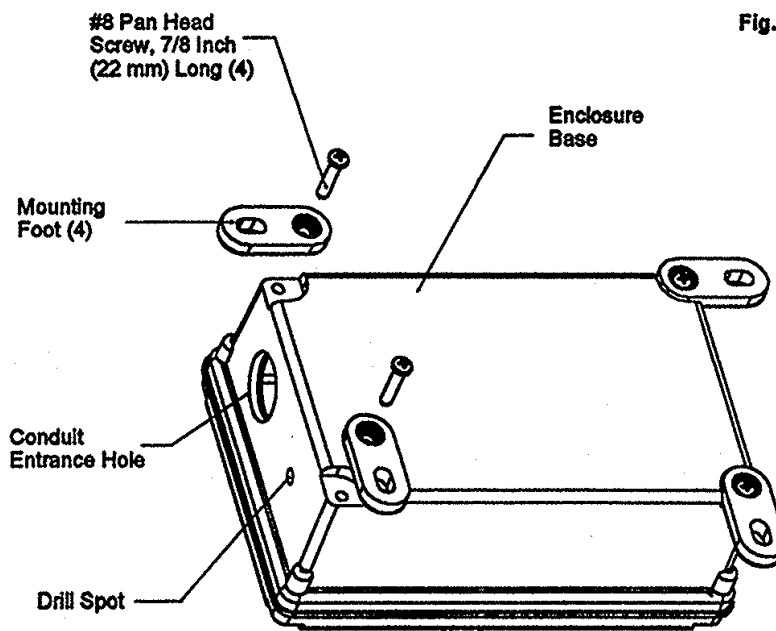
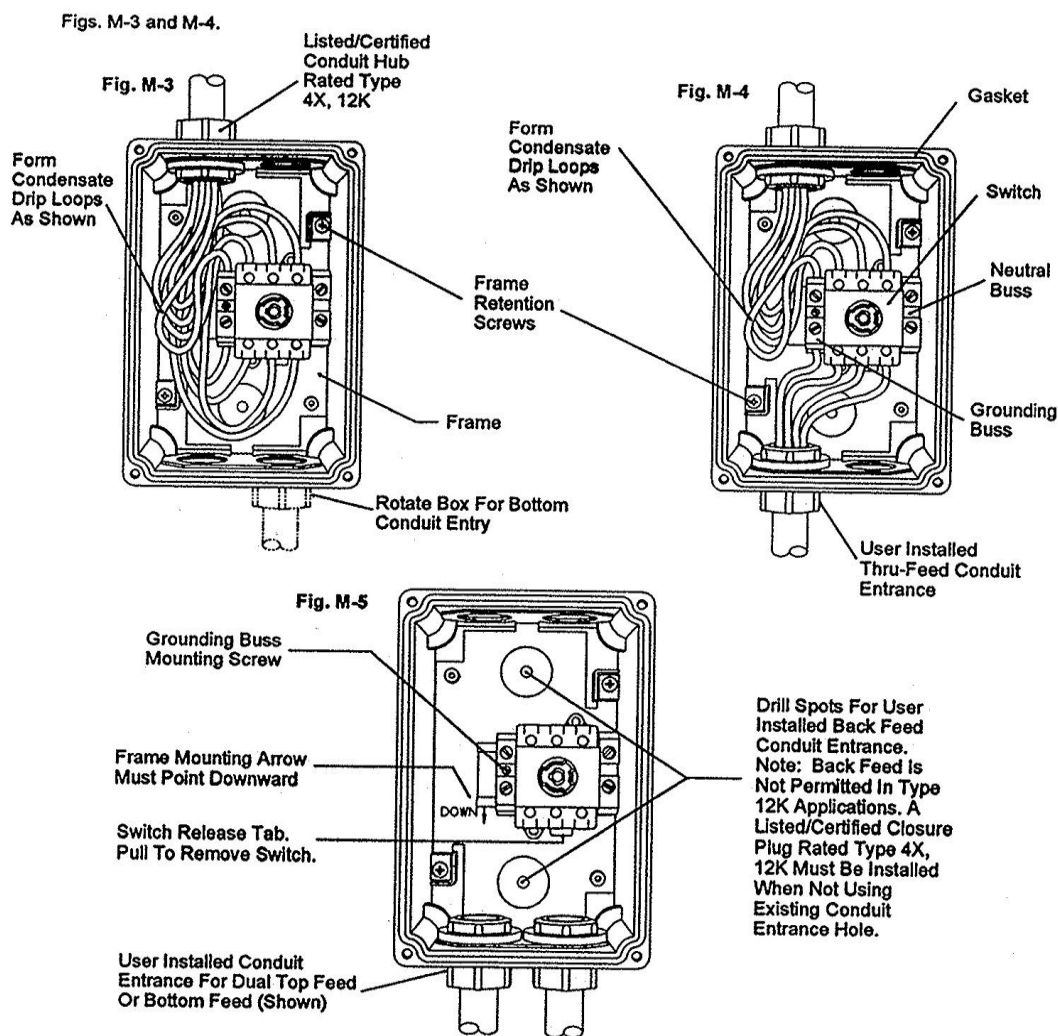


Fig. M-2

30 AMP CIRCUIT- LOCK™ DISCONNECT SWITCH

B. DUAL CONDUIT ENTRY AND BACK FEED: See Figs. M-1 and M-2.

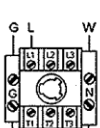
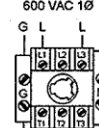
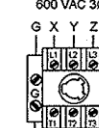
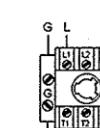
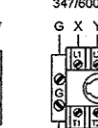
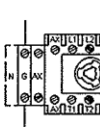
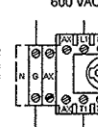
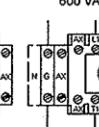
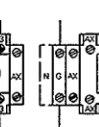
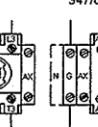
1. NOTE: Back feed is NOT permitted in Type 12K applications. Back feed is permitted in Type 4X applications.
2. Remove frame retention screws and remove frame.
3. Drill or punch a 1.109 inch diameter (3/4" trade size) hole at the desired conduit entrance location. Use drill spots to accurately locate hole.
4. Use ONLY Listed/Certified conduit hub rated for Type 4X and Type 12K applications.
5. Any unused conduit entrance holes must be sealed with Listed/Certified closure plugs rated Type 4X and Type 12K.
6. Use of user-installed conduit entrances above the switch are not recommended in applications where condensation may be present in conduit. When using the top feed conduit entrance, drip loops must always be formed as indicated in Figs. M-3 and M-4.



30 AMP CIRCUIT- LOCK™ DISCONNECT SWITCH

C. WIRING INSTRUCTIONS

1. Use conductors with ins Insulation rated 90°C or higher, having sufficient ampacity in accordance with the 60°C column of Table 310-16 of the National Electrical Code® or Table 2 of the Canadian Electrical Code.
2. **CAUTION:** Use copper conductors only.
ATTENTION: Employer Uniquement avec fil de cuiver.
3. **DO NOT** tin conductors.
4. Make sure that the connected device rating does not exceed the rating of this device. See General information # 4 regarding overcurrent protection.
5. For all catalogs, except HBLDS33ACNK, switch terminals will accept wire size range from # 8-14 AWG; ground terminals from # 6-16 AWG; and neutral terminals from # 8-22 AWG.
6. For catalog HBLDS33ACNK only, switch terminals will accept wire size range from #8-14 AWG; ground terminals from #6-16 AWG.
7. For all catalog's except HBLDS33ACNK; Strip length of all conductors is ½ inch (13 mm). For catalog HBLDS33ACNK, strip length of all conductors is .35 inch (9mm).
8. For all catalog suffix ending in -J or -H refer to selector switch instruction below. See torque setting below.
http://literature.rockwellautomation.com/idc/groups/literature/documents/td/800-td008_-en-p.pdf
http://literature.rockwellautomation.com/idc/groups/literature/documents/td/800-td009_-en-p.pdf
800H selector switch terminal screw torque 6-8 lb-in (0.7-0.9 N-m) of torque. Wire gauge #18-10awg.
800FP-SL32 selector switch terminal screw torque 6-8 lb-in (0.7-0.9 N-m) of torque. Wire gauge #18-12awg.
9. Select the correct wiring diagram and wire the switch as shown.
10. For all catalog's, except HBLDS33ACNK: Tighten the switch terminal screws to 12-15lb.-in. (1.4-1.7 N-m); For catalog HBLDS33ACNK tighten the switch terminal screws to 11lb.-in.(1.25 N-m). For all catalogs: Tighten ground terminal screws 14.2lb.-in.(1.6N-m); and neutral terminal screws 14.2lb. – in.(1.6N-m).
11. Tighten the grounding buss mounting screw to 4.4-8.9lb. – in.(0.5-1.0 N-m).
12. Take extra caution that there are no loose wire strands.
13. Reinstall the cover. The handle must be in the off position. Make sure the rope gasket is properly seated in the groove. Tighten the four cover screws to 18 lb. – in. (2.0 N-m).
14. Consult factory for auxiliary contact availability.

Wiring diagrams for all Catalogs, except HBLDS33ACNK					<p style="font-size: small;">NOTICE: This manual motor controller carries a maximum rating of:</p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <tr><td>30 Amp</td><td>600 VAC</td></tr> <tr><td>1 HP</td><td>120 VAC 1Ø</td></tr> <tr><td>3 HP</td><td>200-240 VAC 1Ø</td></tr> <tr><td>5 HP</td><td>480 VAC 1Ø</td></tr> <tr><td>7.5 HP</td><td>200-240 VAC 3Ø</td></tr> <tr><td>15 HP</td><td>480 VAC 3Ø</td></tr> <tr><td>15 HP</td><td>600 VAC 3Ø</td></tr> </table>	30 Amp	600 VAC	1 HP	120 VAC 1Ø	3 HP	200-240 VAC 1Ø	5 HP	480 VAC 1Ø	7.5 HP	200-240 VAC 3Ø	15 HP	480 VAC 3Ø	15 HP	600 VAC 3Ø
30 Amp	600 VAC																		
1 HP	120 VAC 1Ø																		
3 HP	200-240 VAC 1Ø																		
5 HP	480 VAC 1Ø																		
7.5 HP	200-240 VAC 3Ø																		
15 HP	480 VAC 3Ø																		
15 HP	600 VAC 3Ø																		
<p style="font-size: x-small;">125 VAC 1Ø 240 VAC 1Ø</p> 	<p style="font-size: x-small;">240 VAC 1Ø 480 VAC 1Ø 600 VAC 1Ø</p> 	<p style="font-size: x-small;">240 VAC 3Ø 480 VAC 3Ø 600 VAC 3Ø</p> 	<p style="font-size: x-small;">125/240 VAC 1Ø</p> 	<p style="font-size: x-small;">120/208 VAC 3ØY 240/480 VAC 3ØY 347/600 VAC 3ØY</p> 															
<p>Note: "G" designates ground wire and yellow and green grounding buss.</p>																			
Wiring diagrams for catalog HBLDS33ACNK only.					<p style="font-size: small;">NOTICE: This manual motor controller carries a maximum rating of:</p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <tr><td>30 Amp</td><td>600 VAC</td></tr> <tr><td>1 HP</td><td>120 VAC 1Ø</td></tr> <tr><td>2.5 HP</td><td>220-277 VAC 1Ø</td></tr> <tr><td>5 HP</td><td>480 VAC 1Ø</td></tr> <tr><td>5 HP</td><td>208-240 VAC 3Ø</td></tr> <tr><td>10 HP</td><td>480 VAC 3Ø</td></tr> <tr><td>10 HP</td><td>600 VAC 3Ø</td></tr> </table>	30 Amp	600 VAC	1 HP	120 VAC 1Ø	2.5 HP	220-277 VAC 1Ø	5 HP	480 VAC 1Ø	5 HP	208-240 VAC 3Ø	10 HP	480 VAC 3Ø	10 HP	600 VAC 3Ø
30 Amp	600 VAC																		
1 HP	120 VAC 1Ø																		
2.5 HP	220-277 VAC 1Ø																		
5 HP	480 VAC 1Ø																		
5 HP	208-240 VAC 3Ø																		
10 HP	480 VAC 3Ø																		
10 HP	600 VAC 3Ø																		
<p style="font-size: x-small;">125 VAC 1Ø 240 VAC 1Ø</p> 	<p style="font-size: x-small;">240 VAC 1Ø 480 VAC 1Ø 600 VAC 1Ø</p> 	<p style="font-size: x-small;">240 VAC 3Ø 480 VAC 3Ø 600 VAC 3Ø</p> 	<p style="font-size: x-small;">125/240 VAC 1Ø</p> 	<p style="font-size: x-small;">120/208 VAC 3ØY 240/480 VAC 3ØY 347/600 VAC 3ØY</p> 															
<p>Note: "G" designates ground wire and yellow and green grounding buss. Note: "N" represents optional neutral buss.</p>																			