

WARNINGS:

- **TO AVOID FIRE, SHOCK, OR DEATH, TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING OR SERVICING DEVICE.**
- **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.**
- Separate over-current protection must be provided in accordance with the NEC® Article 220 or CEC, Section B, as appropriate.
- This enclosure includes a lockout provision (in the OFF position) for a suitable padlock. USE ONLY a padlock with a shackle diameter of 1/4 in. (6.35 mm.) to isolate power from the connected equipment, in compliance with OSHA Lockout/Tagout Regulation 29 CFR Part 1910.147.

NOTE: Lockout feature does NOT interrupt the power supplied to the switch within the enclosure.

CAUTIONS:

- For installation ONLY by an electrician, in accordance with the National Electrical Code® (NEC), the Canadian Electrical Code (CEC), and local codes.
- Use this device with **copper or copper-clad wire only.**
- Ensure that the rating marked on the device is correct for the intended installation.
- Suitable as Motor Disconnect on a circuit capable of delivering not more than:
 - **MDS3-AC, MDS3-AX** - 10kA rms symmetrical amperes, 600V max., when protected by 60A, Class J fuses.
 - **MDS3-ST, MDS3-AST** - 10kA rms symmetrical amperes, 600V max., when protected by 60A, Class J fuses.
 - **MDS6-AC, MDS6-AX** - 100kA rms symmetrical amperes, 600V max., when protected by 100A, Class J or T fuses.
 - **MDS6-ST, MDS6-AST** - 100kA rms symmetrical amperes, 600V max., when protected by 100A, Class J or T fuses.
 - **MDS8-AC, MDS8-AX** - 100kA rms symmetrical amperes, 600V max., when protected by 100A, Class J or T fuses.
 - **MDS1-AC, MDS1-AX** - 65kA rms symmetrical amperes, 600V max., when protected by 100A, Class J fuses.

INSTALLATION INSTRUCTIONS

ENGLISH

FEATURES

- Provides ON/OFF switched control of a directly connected load.
- Meets the requirements of Outdoor/Indoor (IP66, IP67, IP68, IP69K NEMA Type 3R, 4X, 12, 13 Watertight, Corrosion-Resistant) and Indoor (Type 12 Dust-Tight) installations.
- The cover cannot be opened or removed when the handle is in the "ON" position.
- This product is certified by NSF® International, for use in food processing facilities.
- Normally open and normally closed auxiliary contact (if used) is rated 10A-600VAC.

INSTALLATION

STEPS

1. Mount Safety Disconnect Switch.
2. Remove enclosure cover by loosening two cover screws and lifting cover off hinges.
3. Remove switch (see **REMOVE SWITCH section**). This is recommended to prevent steel debris from entering switch components.
4. Drill or punch conduit hole in desired location(s). See **Table 1** for fitting size.
NOTE: If you have a slope top version (MDS3-ST, MDS3-AST, MDS6-ST, MDS6-AST), top feeding wiring is NOT an option.
5. Install conduit fitting. Ensure "O" ring is properly seated and that the inside locking ring is seated tightly against the inside surface of enclosure, to ensure proper grounding.
6. Re-install switch (see **REPLACE SWITCH section**).
7. Connect wires (see **WIRING section**).
8. Replace cover and hand thread screws to engagement.
NOTE: Handle must be in the "OFF" position to close cover. Tighten screws to 15-18 in.-lbs. (1.7-2.0 N-m) torque.

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.

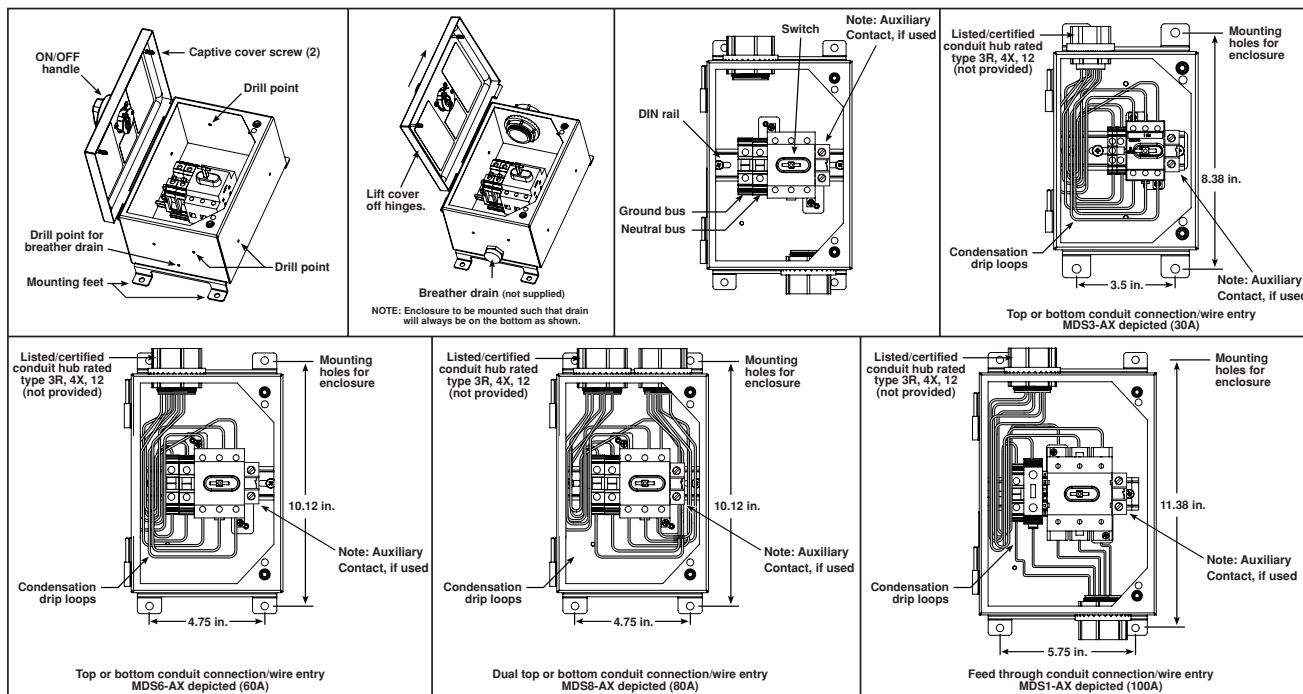
1. Follow general cleaning procedures established by your facility.
2. This product is certified by NSF® International to NSF/ANSI/3-A 14159-1.
3. Recommended cleaning procedures are:
 - a. Use hose-directed water or a cleaning solution to remove any collected contaminants from behind the enclosure. Ensure water completely cleans the area between the enclosure and the mounting surface.
 - b. Use hose-directed water or a cleaning solution to remove soil and contaminants from the exterior surfaces of the enclosure.
 - c. **CAUTION: DO NOT** direct or concentrate high-pressure water or cleaning solution on the enclosure gasket seams, switch handle area, or exterior labels.
 - d. After cleaning the exterior surfaces of the enclosure, open the enclosure door and use a clean, damp cloth to manually remove any soil or contaminants from the gasket seam area and flanged lip on enclosure body.
 - e. If needed, the door can be lifted off the enclosure body to clean hinge cavities.
 - f. Use a dry, clean cloth to wipe away any excess water.

NOTES:

- For NEMA Type 4X, Type 12 and IP69K applications, enclosure must be mounted by means of mounting feet.
- Do not drill or punch any holes into enclosure for mounting purposes.
- Use of a UL Listed Watertight conduit fitting required to maintain the NEMA Type 4X, Type 12 and IP69K ratings. Leviton conduit hubs (see **Table 1**) are rated for Type 4X and Type 12 applications. **NOTE:** If required, use only a listed/certified breather drain rated for Type 4X, Type 12 and/or IP69K depending on required environmental application. Drill or punch a 0.796 in. (20.2 mm) diameter hole through the bottom of the enclosure at the drill point provided.
- Mounting feet will accept up to 1/4 in. (6 mm) screws.
- Drill points provided for conduit entry.
- When using top or side feed conduit entrance, always form condensation drip loops in wiring as shown.

TABLE 1

Cat. No.	Hub Trade Size	Min QTY Required	Leviton Cat. No.	Conduit Hole
MDS3	3/4 in (19.05 mm)	1	HUB-034	1.05 in (26.67 mm)
MDS6	1-1/4 in (31.75 mm)	1	HUB-114	1.66 in (42.16 mm)
MDS8	1-1/4 in (31.75 mm)	2	HUB-114	1.66 in (42.16 mm)
MDS1	1-1/4 in (31.75 mm)	2	HUB-114	1.66 in (42.16 mm)



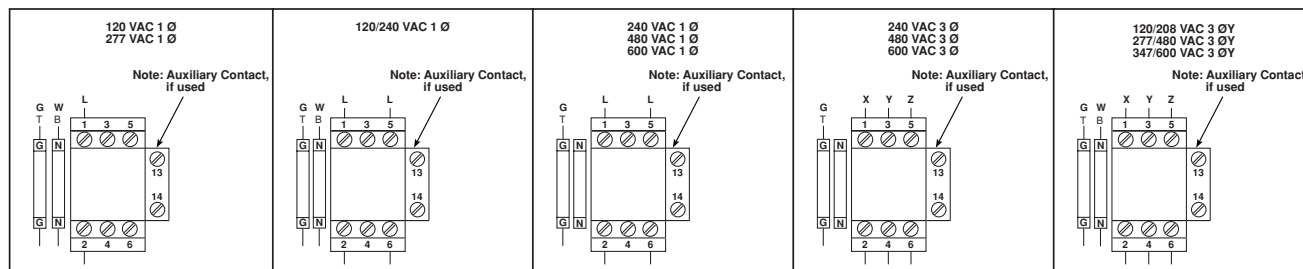
WIRING

NOTE: Use conductors with insulation rated 167°F (75°C) or higher, having sufficient ampacity in accordance with the 140°F (60°C) column of Table 310.15(B)(16) of the 2014 NEC® or Table 2 of the Canadian Electrical Code.

- NOTE:** Ensure that there are no stray conductor strands DO NOT tin conductors.
1. **WARNING: TO AVOID FIRE, SHOCK, OR DEATH, TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING OR SERVICING DEVICE.**
 2. Strip all conductors approximately 1/2 in. (13.0 mm.).
 3. Connect conductors per appropriate **WIRING DIAGRAM** (see reverse side).
 4. Tighten all terminal screws per specific torque values below:

WIRING DIAGRAMS

Break All Lines



MDS3-AX, MDS3-AC, MDS3-ST, MDS3-AST

Torque:
 Switch terminals: 7 in.-lbs. (0.8 N-m)
 Neutral terminals: 15 in.-lbs. (1.7 N-m)
 Ground terminals: 15 in.-lbs. (1.7 N-m)
 Auxiliary contact*: 7 in.-lbs. (0.8 N-m)
 *(if used)

Conductor sizes accepted:
 Switch terminals: #14 - #8 AWG
 Neutral terminals: #14 - #8 AWG
 Ground terminals: #14 - #8 AWG
 Auxiliary contact*: #18 - #14 AWG
 *(if used)

MDS3-AX - SSCR Rating:
 Suitable for use on a circuit capable of delivering not more than 10kA rms symmetrical amperes, 600V max., when protected by 60A, Class J fuses.

Short circuit ratings at 600VAC		
kA	Fuse / A	Class of fuse
10	60	J

HP Rating: 30/32A-600VAC Max.

Rating	Poles	HP Rating	
30/32A	2	120 VAC 1 Ø	2 HP
30/32A	2	208-240 VAC 1Ø	5 HP
30/32A	2	480 VAC 1 Ø	5 HP
30/32A	2	600 VAC 1 Ø	5 HP
30/32A	3	120/208 VAC 3 Ø	10 HP
30/32A	3	208-240 VAC 3 Ø	10 HP
30/32A	3	480 VAC 3 Ø	20 HP
30/32A	3	600 VAC 3 Ø	25 HP
Auxiliary Contact Rating			
10A	1	600 VAC	

MDS6-AX, MDS6-AC, MDS6-ST, MDS6-AST

Torque:
 Switch terminals: 18 in.-lbs. (2 N-m)
 Neutral terminals: 31 in.-lbs. (3.5 N-m)
 Ground terminals: 31 in.-lbs. (3.5 N-m)
 Auxiliary contact*: 7 in.-lbs. (0.8 N-m)
 *(if used)

Conductor sizes accepted:
 Switch terminals: #14 - #4 AWG
 Neutral terminals: #14 - #1/0 AWG
 Ground terminals: #14 - #2 AWG
 Auxiliary contact*: #18 - #14 AWG
 *(if used)

MDS6-AX - SSCR Rating:
 Suitable for use on a circuit capable of delivering not more than 100kA rms symmetrical amperes, 600V max., when protected by 100A, Class J or T fuses.

Short circuit ratings at 600VAC		
kA	Fuse / A	Class of fuse
100	100	J or T

HP Rating: 60A-600VAC Max.

Rating	Poles	HP Rating	
60A	2	120 VAC 1 Ø	2 HP
60A	2	208-240 VAC 1 Ø	10 HP
60A	2	480 VAC 1 Ø	20 HP
60A	2	600 VAC 1 Ø	20 HP
60A	3	208-240 VAC 3 Ø	20 HP
60A	3	480 VAC 3 Ø	40 HP
60A	3	600 VAC 3 Ø	40 HP
Auxiliary Contact Rating			
10A	1	600 VAC	

MDS8-AX, MDS8-AC

Torque:
 Switch terminals: 18 in.-lbs. (2 N-m)
 Neutral terminals: 31 in.-lbs. (3.5 N-m)
 Ground terminals: 31 in.-lbs. (3.5 N-m)
 Auxiliary contact*: 7 in.-lbs. (0.8 N-m)
 *(if used)

Conductor sizes accepted:
 Switch terminals: #14 - #4 AWG
 Neutral terminals: #14 - #1/0 AWG
 Ground terminals: #14 - #2 AWG
 Auxiliary contact*: #18 - #14 AWG
 *(if used)

MDS8-AX - SSCR Rating:
 Suitable for use on a circuit capable of delivering not more than 100kA rms symmetrical amperes, 600V max., when protected by 100A, Class J or T fuses.

Short circuit ratings at 600VAC		
kA	Fuse / A	Class of fuse
100	100	J or T

HP Rating: 80A-600VAC Max.

Rating	Poles	HP Rating	
80A	2	120 VAC 1 Ø	2 HP
80A	2	208-240 VAC 1 Ø	10 HP
80A	2	480 VAC 1 Ø	20 HP
80A	2	600 VAC 1 Ø	20 HP
80A	3	208-240 VAC 3 Ø	20 HP
80A	3	480 VAC 3 Ø	40 HP
80A	3	600 VAC 3 Ø	40 HP
Auxiliary Contact Rating			
10A	1	600 VAC	

MDS1-AX, MDS1-AC

Torque:
 Switch terminals: 27 in.-lbs. (3 N-m)
 Neutral terminals: 53 in.-lbs. (6.0 N-m)
 Ground terminals: 31 in.-lbs. (3.5 N-m)
 Auxiliary contact*: 7 in.-lbs. (0.8 N-m)
 *(if used)

Conductor sizes accepted:
 Switch terminals: #8 - #1/0 AWG
 Neutral terminals: #6 - #1/0 AWG
 Ground terminals: #14 - #2 AWG
 Auxiliary contact*: #18 - #12 AWG
 *(if used)

MDS1-AX - SSCR Rating:
 Suitable for use on a circuit capable of delivering not more than 65kA rms symmetrical amperes, 600V max., when protected by 100A, Class J fuses.

Short circuit ratings at 600VAC		
kA	Fuse / A	Class of fuse
65	100	J

HP Rating: 100A-600VAC Max.

Rating	Poles	HP Rating	
100A	2	110-120 VAC 1 Ø	7.5 HP
100A	2	220-240 VAC 1 Ø	20 HP
100A	2	277 VAC 1 Ø	25 HP
100A	2	440-480 VAC 1 Ø	30 HP
100A	3	550-600 VAC 3 Ø	30 HP
100A	3	110-120 VAC 3 Ø	15 HP
100A	3	220-240 VAC 3 Ø	40 HP
100A	3	440-480 VAC 3 Ø	60 HP
100A	3	550-600 VAC 3 Ø	50 HP
Auxiliary Contact Rating			
10A	1	600 VAC	

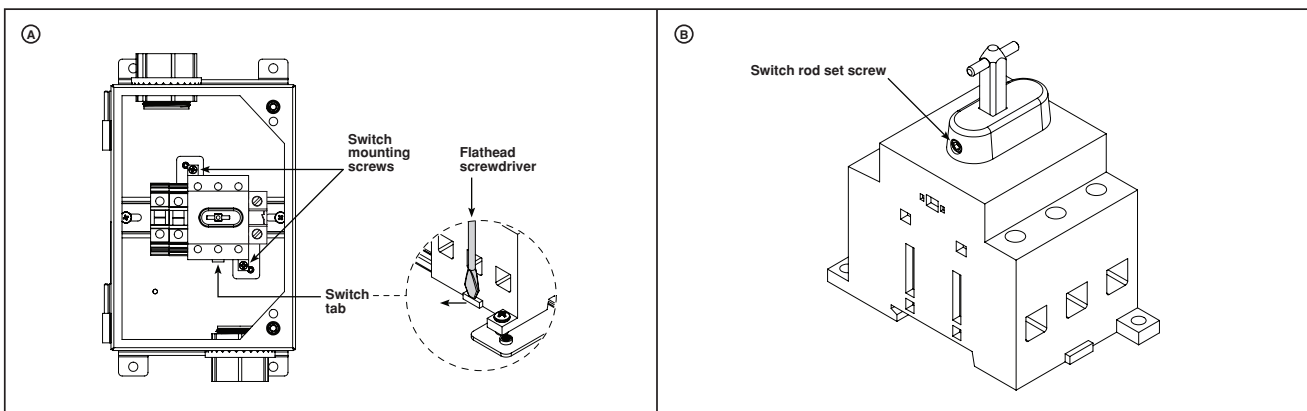
REMOVE SWITCH

NOTE: DO NOT REMOVE DIN RAIL.

- Remove both mounting screws securing the switch.
- Insert a flathead screwdriver into switch tab (A). Gently pull tab outward, while pulling switch up, beginning with the tab side and then the opposite side.

NOTE: If replacing the switch component, remove switch rod by loosening set screw (B), pulling rod out of switch, and setting rod aside.

NOTE: If replacing the switch component, you can remove auxiliary contact on switch, by inserting flathead screwdriver tip between switch and auxiliary contact, and pressing outward.



REPLACE SWITCH

NOTE: If replacing the switch component, re-install switch rod, ensuring it is fully seated in bottom of pocket. Tighten set screw to 8-10 in.-lbs. (0.9-1.1 N-m).

NOTE: If replacing the switch component, attach auxiliary contact (if applicable) to switch, by fitting the tabs on top and pressing in the auxiliary contact in a downward motion.

- Mount switch onto DIN rail by hooking back side hinge onto DIN rail, and then gently pull switch tab outward and push switch down, until it snaps into place.
- Slide switch into position and align the two screw holes with threaded holes in base plate. Tighten 2 mounting screws to 6-8 in.-lbs. (0.67-0.9 N-m).
- Verify switch cover properly mates with switch mechanism with cover closed, and that ON/OFF handle moves freely.

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Patents covering this product, if any, can be found on Leviton.com/patents.

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.

LIMITED 3 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 three years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option. For details visit www.leviton.com or call 1-800-824-3005. 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 three 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.

For Technical Assistance Call: 1-800-824-3005 (USA Only) or 1-800-405-5320 (Canada Only) www.leviton.com