

EID Series Disconnect Assembly

Installation & Maintenance Information

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

APPLICATION

EID Series disconnect switches are used to provide a suitable means for disconnecting power to electrical equipment.

The EID disconnect switch is suitable and rated for Class I, Division 1 & 2, Groups B, C, D; Class II, Division 1, Groups E, F, G; Class II, Division 2, Groups F, G; Class III; and Zone 1 & Zone 2, Groups IIB+H₂, as defined by the National Electrical Code® as well as in damp, wet, or corrosive locations. Additionally, this series is suitable for NEMA Type 3, 4, or 4X* applications.

The EID Series disconnect should be installed, maintained, and operated by qualified and competent personnel only.

*when ordered with epoxy powder coat

INSTALLATION

⚠ WARNING

To avoid risk of electrical shock, electrical power must be OFF before and during product installation and maintenance. Failure to comply can result in damage to equipment or injury to personnel.

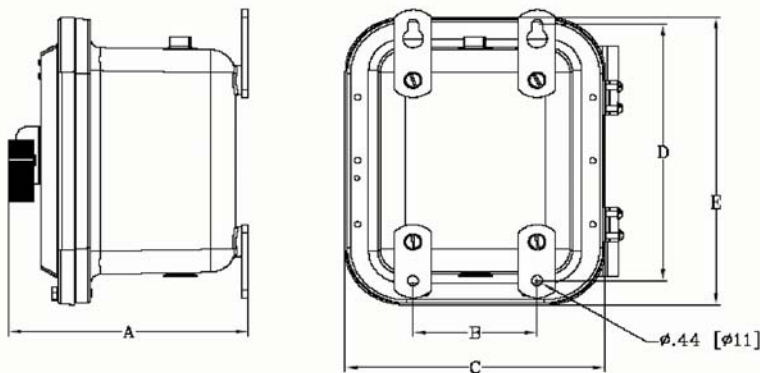
⚠ CAUTION

To avoid risk of ignition: hazardous location information indicating class and group listing of each device is marked on the nameplate of each enclosure. Make sure that product is installed in appropriate area classifications.

⚠ CAUTION

To avoid risk of ignition: hammers or prying tools must not be allowed to damage the flat machined-joint surfaces or cover gasket. Do not handle covers roughly or place them on surfaces that might damage or scratch the flat-machined joint surfaces.

1. Select a mounting location that will provide suitable strength and rigidity for supporting the EID product. Weights and dimensions are listed below.



Series	A		B		C		D		E		Weight	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	lbs	kg
EIDA	9.65	245	5.00	127	10.47	266	11.13	283	12.47	317	36	16
EIDB	11.75	298	7.00	178	12.53	318	15.13	384	16.53	420	62	28

2. Make sure that handle is in OFF position. Unscrew and remove cover bolts that are securing cover. Carefully open cover fully to prevent damage to the flat joint flame path and cover gasket. Remove mounting feet and hardware from inside of enclosure.

⚠ WARNING

Do not scratch or damage ground joint flame path surface. Failure to comply could result in damage to equipment or injury to personnel.

3. Using the hardware provided, install mounting feet on enclosure. Be sure to mount enclosure with hinges on left side of enclosure and tighten mounting bolts to 12 ft. lbs. (1.6 kg.m). To prevent damage to ground joint flame path, close and bolt cover shut prior to mounting.
4. Securely fasten enclosure to the mounting location, then attach into conduit system. For Class I applications, install approved conduit or cable sealing fittings in all conduit entries within 18 inches (46 cm) of enclosure per the National Electrical Code requirements.
5. For EID enclosures furnished with disconnect, please view Step 6. For EID enclosures furnished without disconnect, select appropriate disconnect from Table 1 below (ordered separately).

EIDA

Amperage	Manufacturer	Part Number	HP Rating at:				
			200V	208V	240V	480V	600V
30	ABB	OT30E3	10	10	10	20	30
60	ABB	OT60E3	20	20	20	40	40

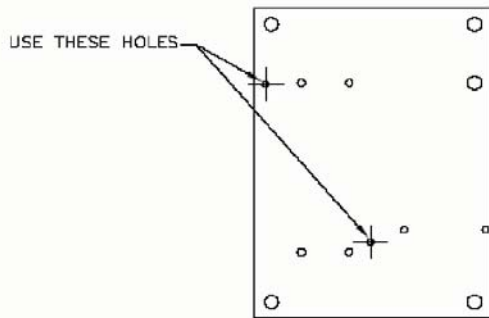
EIDB

Amperage	Manufacturer	Part Number	HP Rating at:				
			200V	208V	240V	480V	600V
100	ABB	OT100E3	25	25	30	50	50

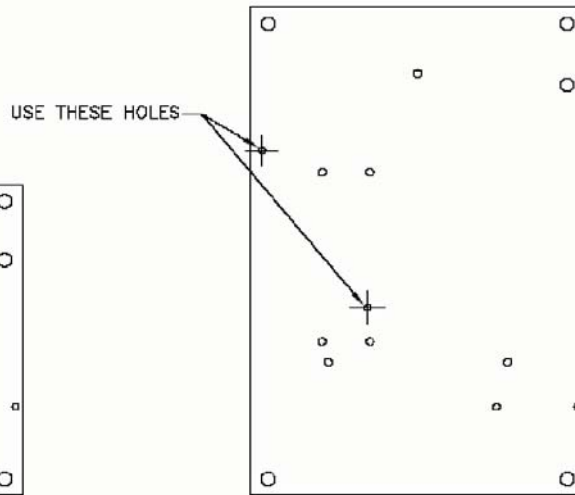
Table 1: Ordering Information

- a. Fully insert the metallic switch flag into the actuator of the switch and tighten set screw to 1.5 ft. lbs. (.2 kg.m).
- b. Using hardware provided, securely mount switch on mounting plate with "L" terminals on top and "T" terminals on bottom (labeled on switch). Use existing holes in mounting plate; please refer to the following Mounting Plate drawing. Be sure to tighten screws to 3 ft. lbs. (0.4 kg.m).

Mounting Plate Drawing



EIDA MTG PLT



EIDB MTG PLT

6. Make electrical connections utilizing the wiring scheme established for the disconnect. See Table 2. Connect green equipment grounding conductor to the ground lug on mounting plate.

Table 2

Part #	Amperage	Wire Size	Terminal Torque Value	
			Ft.lbs.	Kg.m
OT30E3	30	10 AWG	2.92	0.4
OT60E3	60	6 AWG	3.75	0.52
OT100E3	100	3 AWG	4.16	0.57

7. Test wiring for correctness by performing a continuity check. Also, check for unwanted grounds with an insulation resistance tester.

⚠ CAUTION

To avoid risk of ignition: clean both machined-joint surfaces of body and cover before closing. Dirt or foreign material must not accumulate on flat machined-joint surfaces. Surfaces must seat fully against each other to provide a proper explosionproof joint.

8. Make sure that external operator handle and fork are in the OFF position. Make sure disconnect is in OFF position. Fully tighten all cover bolts: EIDA 20-25 ft. lbs. (2.76-3.45 kg.m), EIDB 35-40 ft. lbs. (4.83-5.52 kg.m).

⚠ CAUTION

Hazardous location information specifying class and group listing of each device is marked on the nameplate of each enclosure. Conduit sealing fittings MUST be installed in each attached conduit run within 18 inches of the enclosure per the National Electrical Code for Class I area locations. All unused conduit openings must be closed properly with an approved plug, drain, or breather such as the Cooper Crouse-Hinds PLG Series plugs or ECD Series Breather/Drains.
NO CONDUIT OPENINGS ARE TO BE ADDED IN THE FIELD.

MAINTENANCE

⚠ WARNING

To avoid risk of electrical shock, electrical power must be OFF before and during product installation and maintenance. Failure to comply can result in damage to equipment or injury to personnel.

1. Electrical and mechanical inspections must be done on a regular basis. It is recommended that inspections be performed a minimum of once a year.
2. If necessary to open enclosure for inspection or service, always disconnect primary power source and refer to cautionary statement or nameplate before opening cover. Please make sure that **switch is in the OFF position prior to opening cover.**
3. Perform visual check for undue heating evidenced by discoloration of wires or other components, damaged or worn parts, or leakage evidenced by water or corrosion in the interior. Damaged or worn parts should be replaced.
4. Electrically check to make sure that all connections are clean and tight, and that contacts in the components make and break as required.
5. Mechanically check that all parts are properly assembled and operating mechanisms move freely.

Cooper Crouse-Hinds recommends an Electrical Preventative Maintenance Program as described in the National Fire Protection Association Bulletin NFPA 70B.

⚠ CAUTION

To avoid risk of ignition: clean both machined-joint surfaces of body and cover before closing. Dirt or foreign material must not accumulate on flat machined-joint surfaces. Surfaces must seat fully against each other to provide a proper explosion-proof joint.

All statements, technical information and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof are not guaranteed. In accordance with Crouse-Hinds "Terms and Conditions of Sale," and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability whatsoever in connection herewith.