



KILLARK®

HUBBELL ELECTRICAL PRODUCTS
A Division of HUBBELL INCORPORATED (Delaware)
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St. Louis, Missouri 63113 USA

INSTALLATION, OPERATION & MAINTENANCE DATA SHEET B7NFD COMPACT SERIES IEC DISCONNECT INSTALLATION

For use in Class I, Groups B, C & D, Type 3, 4 & 4X and Class II, Groups E, F & G, and Class III Hazardous Locations, as defined by the Canadian Electrical Code and the National Electrical Code.

READ THIS SHEET CAREFULLY BEFORE BEGINNING INSTALLATION.

IMPORTANT: This enclosure and device must be installed by trained, qualified and competent personnel. Installation must comply with local, state and national regulations, as well as safety practices for this type of equipment.

WARNING: Electrical power must be OFF during installation, or performing any maintenance. Disconnect primary power source and lock out.

The mounting location must be flat and provide proper clearance, rigidity and strength to support the enclosure and all contained devices.

Securely fasten the enclosure to the mounting location. Install sealing fittings, cable glands, unions and/or conduit, using an approved electrical conducting type lubricant on the threads. The conduit thread connections must be tapered pipe thread conforming to ANSI B1.20.1. A minimum of (5) full threads engagement is required for all conduit connections. Conduit sealing fittings must be installed within 18 inches of the enclosure. Sealing fittings must be approved for the specific hazardous location where the enclosure is used. All unused conduit openings must be plugged using Killark "CUP" close-up plugs. Plugs must be tightly installed with a minimum engagement of (5) full threads.

NOTE: If installing a breather and/or a drain, make certain they are suitable for the specific hazardous location where they are to be used. Some drains/breathers may not comply with Nema 3 & 4 standards. Also, provide a protective covering to shield the breather and drain during hose-down operations.

For "factory complete" units, follow the instructions at • and dis-regard the mounting instructions/drawings.

If **not** a "factory complete" unit, install the IEC Disconnect of your choice per the instructions provided with the device and the drawings shown on following pages. In the drawings, locate manufacturer of device being installed and note the specific holes being used to mount device din rail into enclosure box. The din rail numbers correspond with a mounting location in the enclosure box and are specific to each device. Install din rail in correct location, then install and align Disconnect and end blocks (where needed) onto din rail, following the drawings provided. Secure end blocks permanently on both sides of disconnect by using a screw driver and tightening the recessed screws. Cut "square shaft" (21872) provided, to the over-all length dimension shown in the chart on page 3, for the specific device being used. (NOTE: smooth out the cut edge of the shaft). Insert the cut shaft, allowing it to rest at the bottom of the device interface opening and in the orientation shown in the "Disconnect Mounting" pictures that follow.

• Wire the Disconnect as required. Factory installed rotary operator is mounted into cover and aligned at the factory to interface with Disconnect, once din rail and enclosure cover are installed onto box.

▲ Inspect and clean the machined flange flame joint surfaces of both the cover and the box. Surfaces must be smooth, free of nicks, scratches, dirt or any foreign particle build-up that would prevent a proper seal. Surfaces must seat fully against each other to provide a proper explosion-proof joint. Clean surfaces by wiping with a clean, lint-free cloth.

Apply a light coating of Killark "LUBG" lubricant to flange surfaces and close the cover. Tighten all cover bolts. Use only those bolts supplied with the enclosure. Check the bolted joint with a .0015 thick feeler gauge. The gauge must not enter the joint more than 1/8" at any point. **NOTE:** Loose bolts or an improper joint can result in an explosion, creating a potential for physical injury and property damage.

MAINTENANCE DATA

After installation, this enclosure should be inspected at regular intervals. A visual inspection should ascertain that all cover bolts are still tight; that all conduit connections are intact and free of corrosion, and that the enclosure mounting bolts are tight and in good condition.

If the enclosure must be opened for servicing, to check or replace internal devices and apparatus, the following procedures should be followed:

WARNING: Before servicing the enclosure, be sure the electrical power is **OFF**. **Disconnect** the enclosure from the primary power source and **lock-out**.

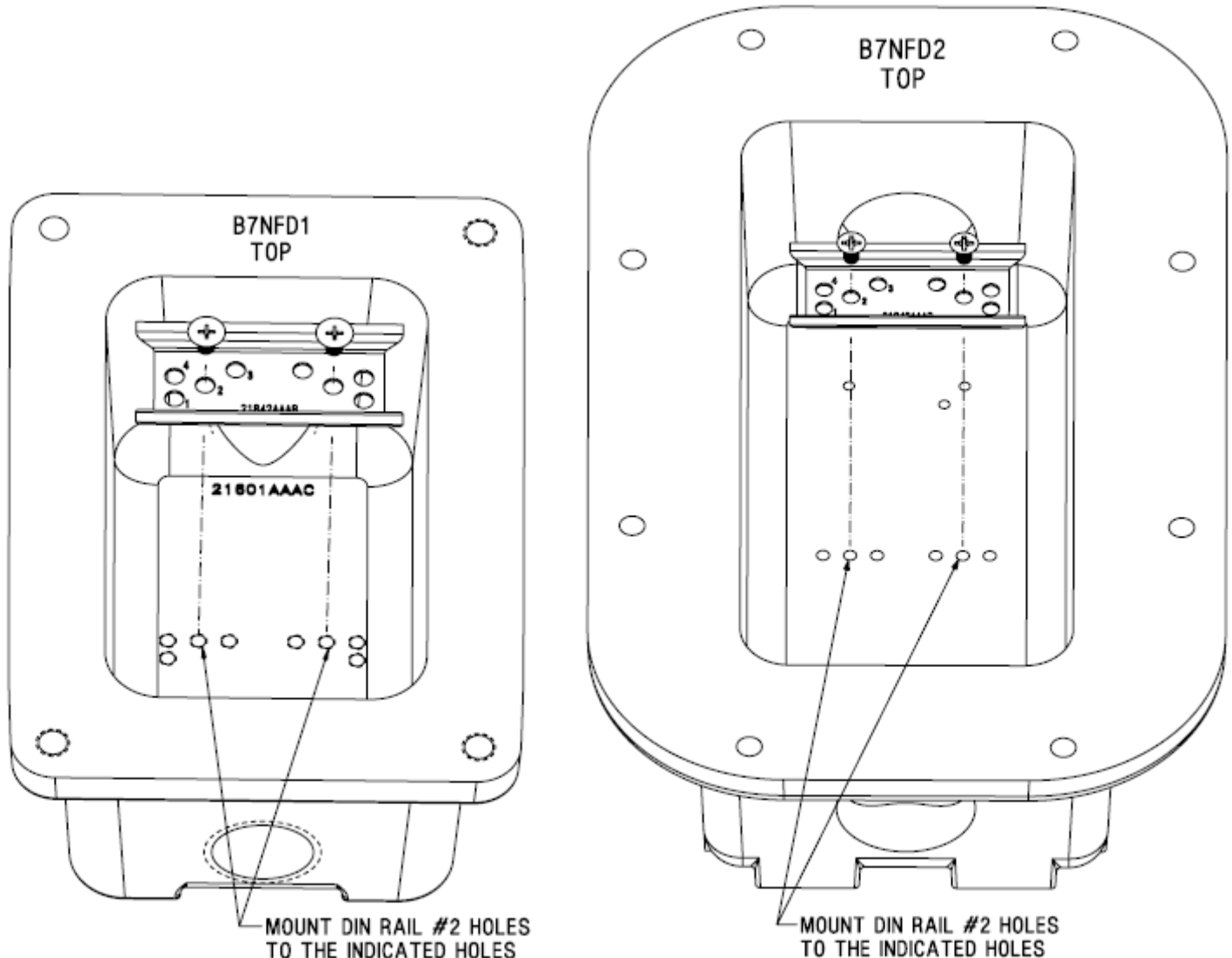
Loosen cover bolts. Replace any corroded, bent or otherwise damaged bolts with new, factory authorized bolts obtained from an authorized Killark distributor.

Open enclosure. Do not use hammer, screwdriver or any prying tool to open cover.

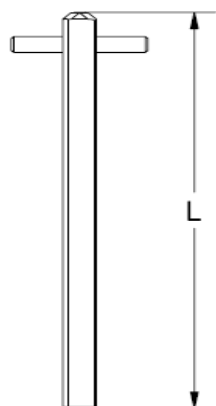
Inspect machined, flame joint flange surfaces. Surfaces must be smooth, free of nicks, scratches, dirt or any foreign particle build-up that would prevent a proper seal. Should surface be damaged, contact factory. Never attempt to rework surfaces by sanding, grinding, etc. Surfaces must seat fully against each other to provide a proper explosion-proof joint.

Inspect water exclusion gasket. If gasket is damaged, do not attempt field replacement or repair. Contact a factory authorized representative for a replacement cover. The damaged gasket can be removed from the cover, and the cover without gasket can be used until a replacement is obtained. The cover, without gasket, can be safely used in Class I & II hazardous (classified) locations, however, the enclosure may not be rain-tight or hose-down tight. Follow Installation Instructions at ▲ on Page 1.

DIN RAIL MOUNTING

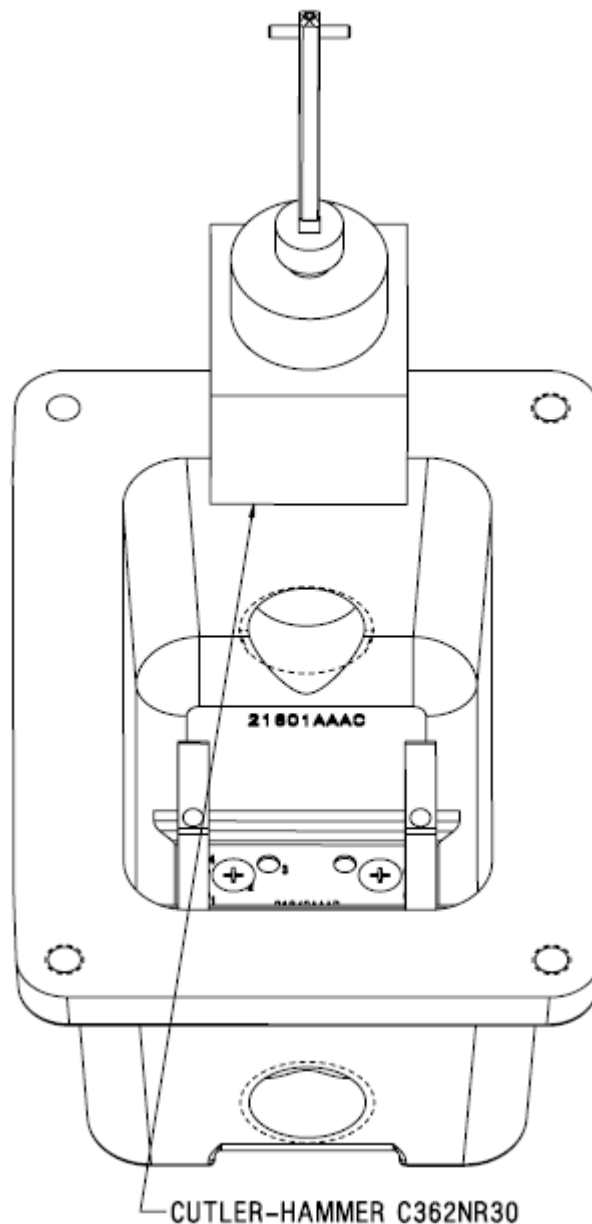
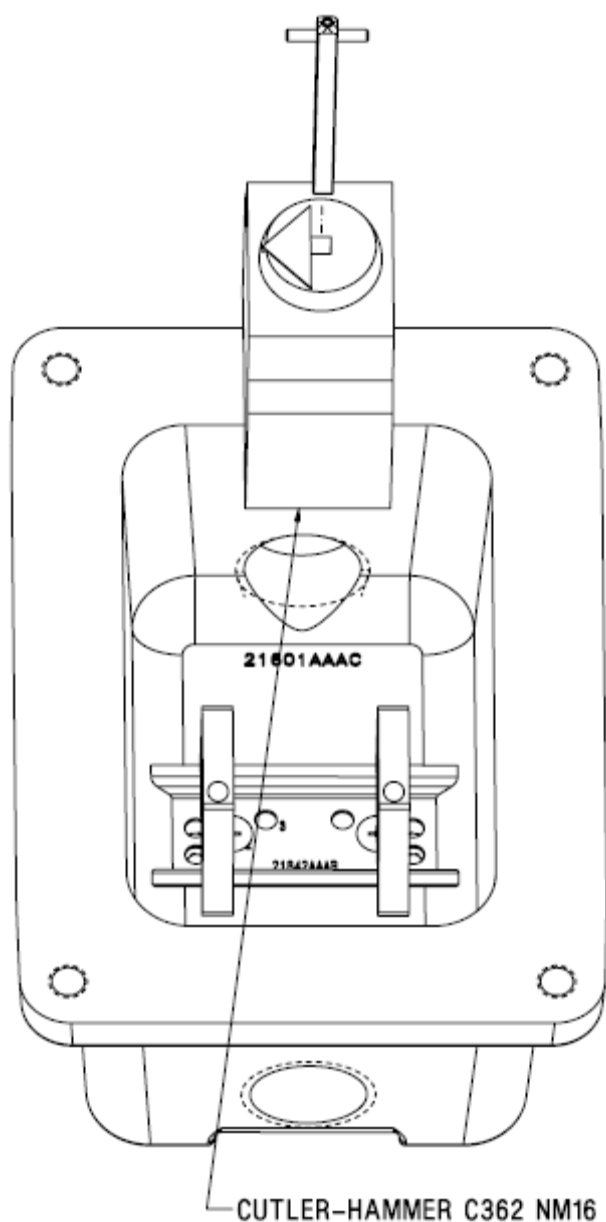


DISCONNECT SHAFT LENGTHS – (21873 SQUARE SHAFT)

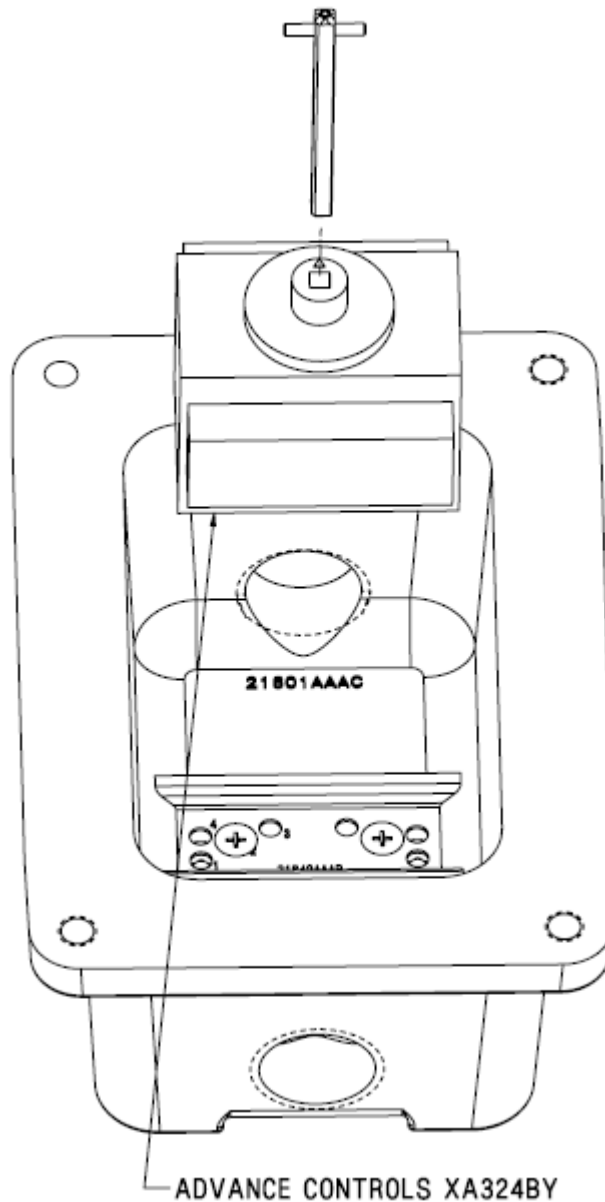
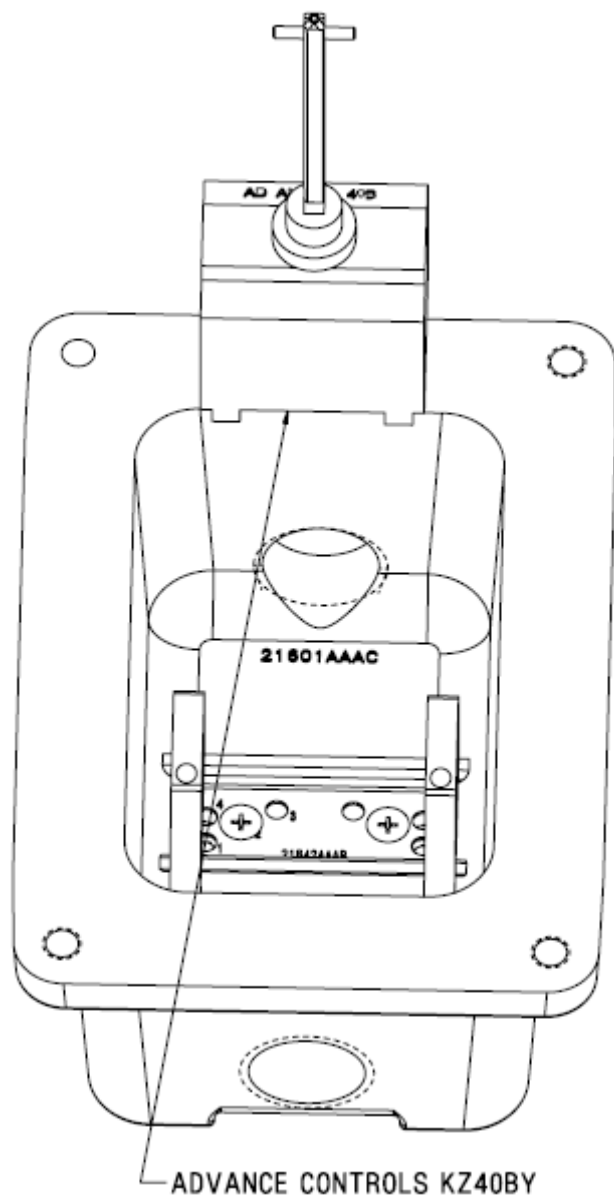


DISCONNECT MFG.	CAT # (SERIES)	DIM. "L"		ENCLOSURE
CUTLER-HAMMER	C362NM16	1.92"	1 15/16"	B7NFD1
CUTLER-HAMMER	C362NR30	1.77"	1 25/32"	B7NFD1
ADVANCE CONTROLS	KZ40BY	3.65"	3 21/32"	B7NFD1
ADVANCE CONTROLS	XA324BY	3.63"	3 5/8"	B7NFD1
TECHNOELECTRIC	SD1-016-BR	1.64"	1 21/32"	B7NFD1
ABB	OT30F3	2.00"	2"	B7NFD1
ABB	OT 16F3/OT 25F3	2.75"	2 3/4"	B7NFD1
ABB	OT 40F3	4.13"	4 1/8"	B7NFD2
ABB	OT 63F3/OT 80F3	3.38"	3 3/8"	B7NFD2
ABB	OT 60F3/OT 100F3	3.28"	3 9/32"	B7NFD2
ADVANCE CONTROLS	XA0633BY	3.26"	3 1/4"	B7NFD2
CUTLER-HAMMER	C362NW60	3.17"	3 3/16"	B7NFD2
TECHNOELECTRIC	SD2-063-BR	3.16"	3 5/32"	B7NFD2

B7NFD1 - IEC DISCONNECT MOUNTING



B7NFD1 - IEC DISCONNECT MOUNTING



B7NFD1 - IEC DISCONNECT MOUNTING

Align ABB switch per sht.8, then utilize molded mounting hole (top of switch) and #10-24 hole (provided in box) to anchor the switch in place with a #10-24 x 3/8" L screw.

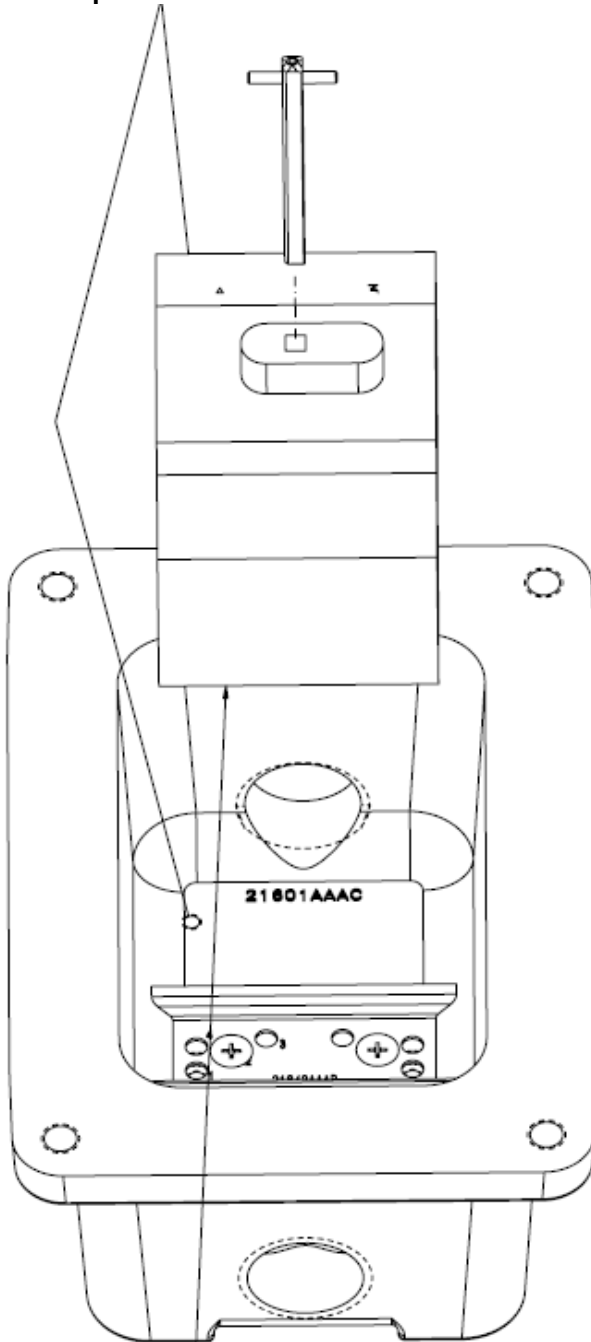
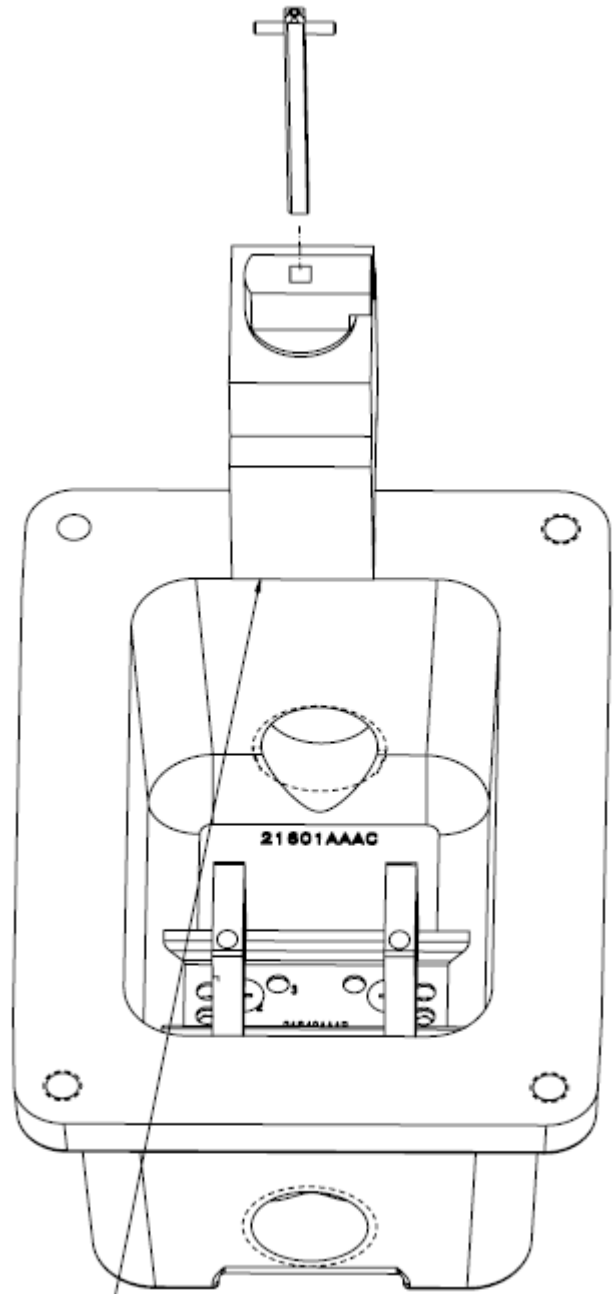


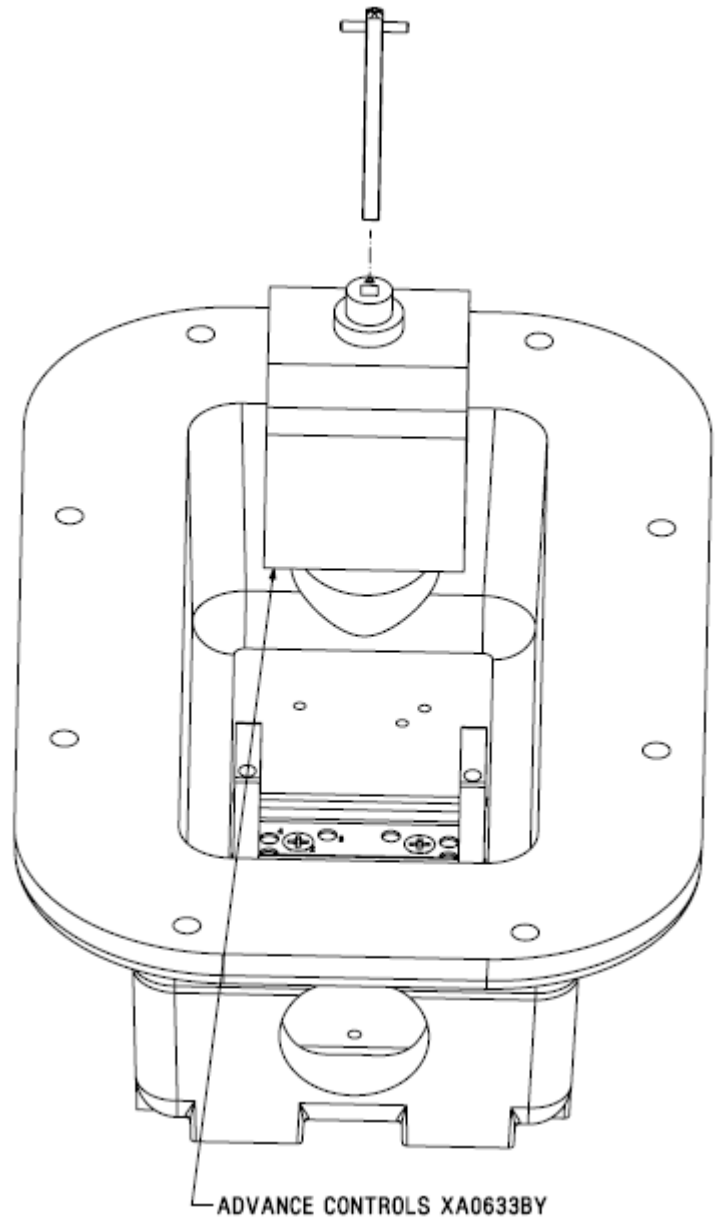
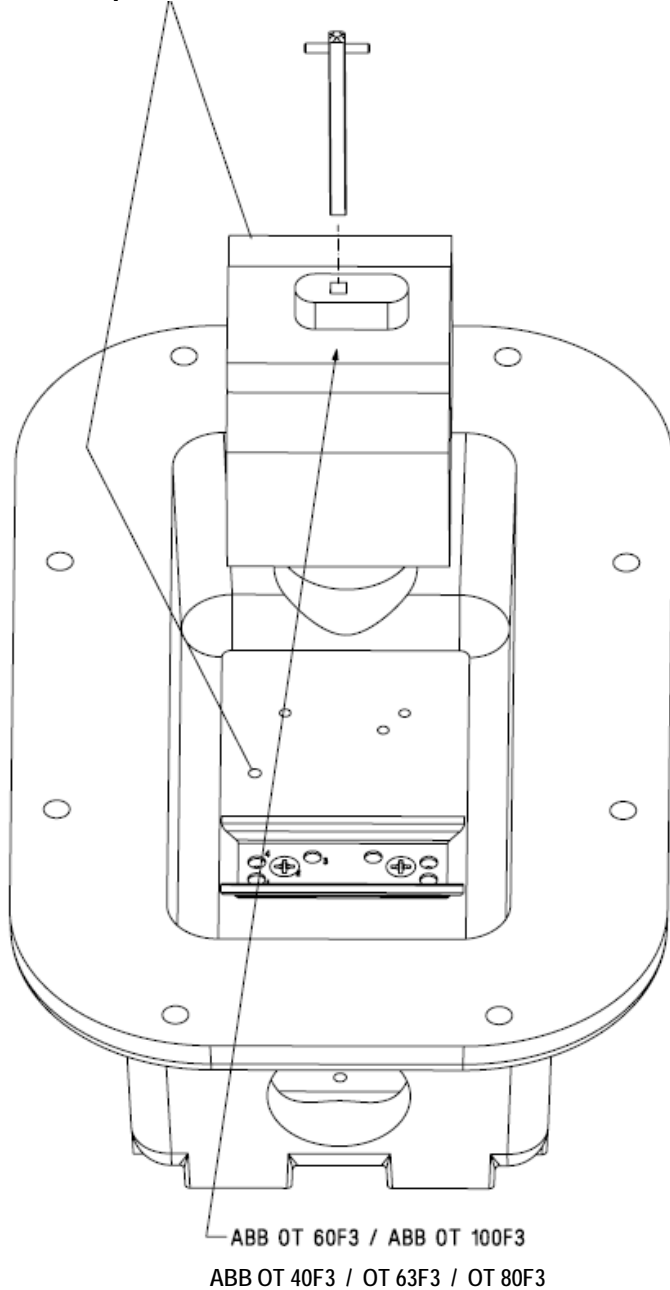
ABB OT 30F3
ABB OT 16F3 / OT 25F3



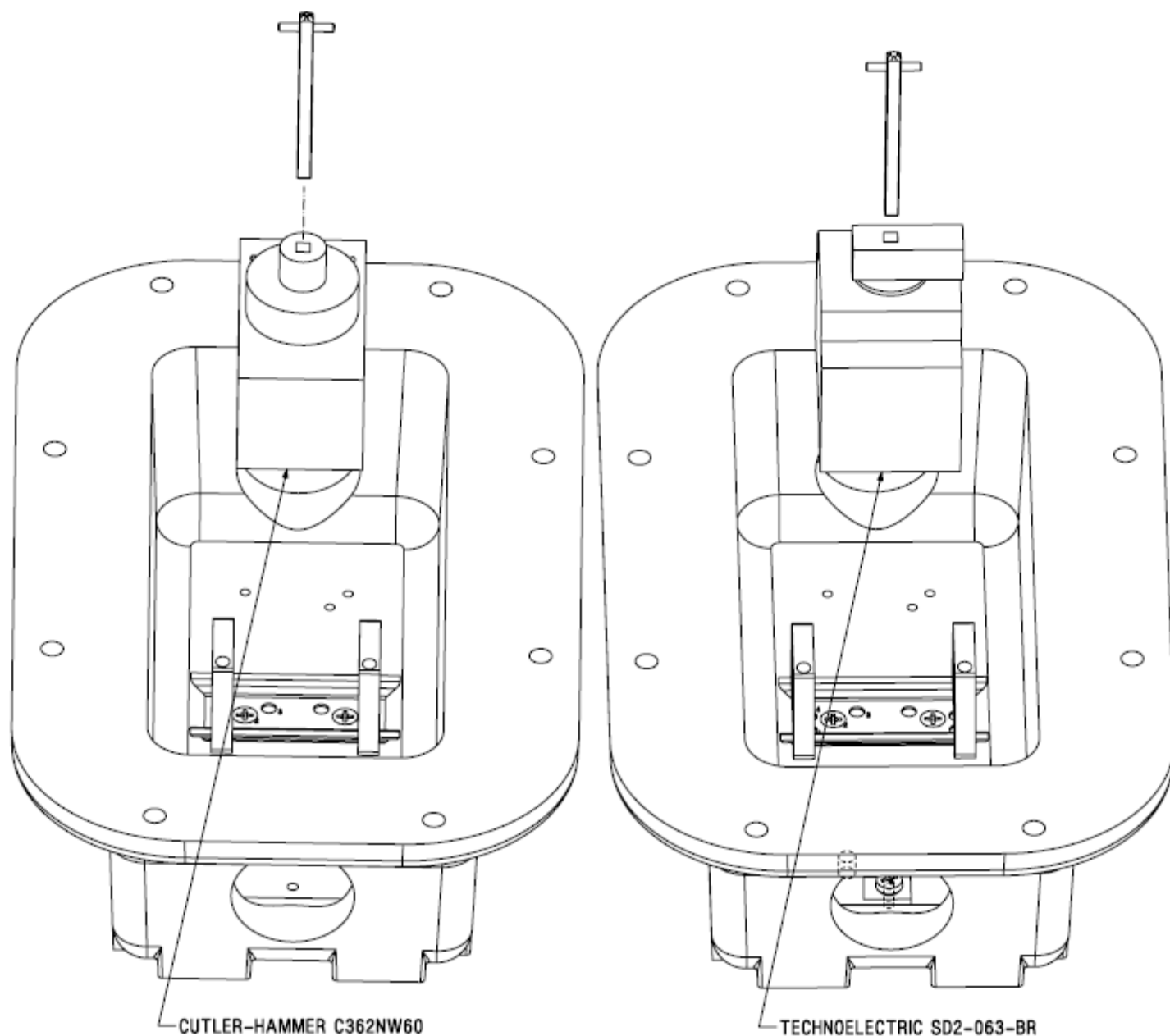
TECHNOELECTRIC SD1-016-BR

B7NFD2 - IEC DISCONNECT MOUNTING

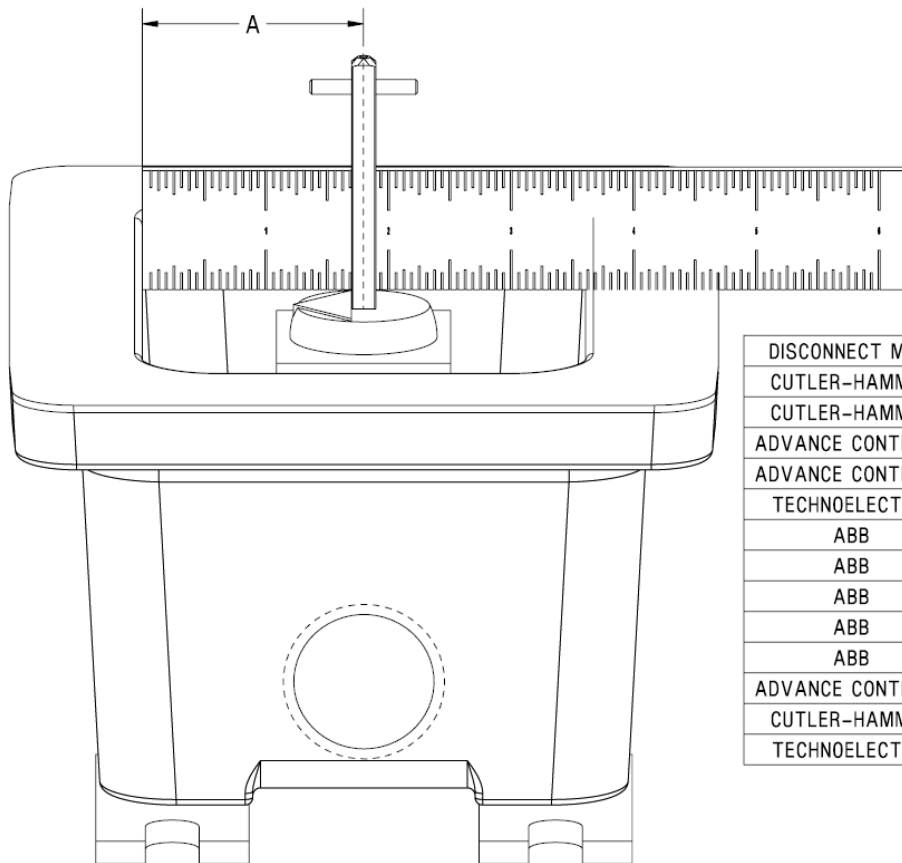
Align ABB switch per sht.8, then utilize molded mounting hole (top of switch) and #10-24 hole (provided in box) to anchor the switch in place with a #10-24 x 3/8" L screw.



B7NFD2 - IEC DISCONNECT MOUNTING



B7NFD - IEC DISCONNECT ALIGNMENT



NOTE:

1. DIMENSION SHOWN IS LOCATED FROM THE INSIDE EDGE OF THE BOX TO THE DISCONNECT'S CENTER OF ROTATION.

DISCONNECT MFG.	CAT # (SERIES)	DIM. "A"	ENCLOSURE
CUTLER-HAMMER	C362NM16	1 13/16"	B7NFD1
CUTLER-HAMMER	C362NR30	1 13/16"	B7NFD1
ADVANCE CONTROLS	KZ40BY	1 13/16"	B7NFD1
ADVANCE CONTROLS	XA324BY	1 13/16"	B7NFD1
TECHNOELECTRIC	SD1-016-BR	1 13/16"	B7NFD1
ABB	OT 30F3	1 13/16"	B7NFD1
ABB	OT 16F3/OT 25F3	1 13/16"	B7NFD1
ABB	OT 40F3	2 1/8"	B7NFD2
ABB	OT 63F3/OT 80F3	2 1/8"	B7NFD2
ABB	OT 60F3/OT 100F3	2 1/8"	B7NFD2
ADVANCE CONTROLS	XA0633BY	2 1/8"	B7NFD2
CUTLER-HAMMER	C362NW60	2 1/8"	B7NFD2
TECHNOELECTRIC	SD2-063-BR	2 1/8"	B7NFD2

Technical information, advice and recommendations contained in these documents is based on information that Killark believes to be reliable. All the information and advice contained in these documents is intended for use by persons having been trained and possessing the requisite skill and know-how and to be used by such persons only at their own discretion and risk. The nature of these instructions is informative only and does not cover all of the details, variations or combinations in which this equipment may be used, its storage, delivery, installation, check out, safe operation and maintenance.

There are no warranties, expressed or implied, except that all goods shall conform to their description, subject however to commercial tolerances and variations.

All sales are made on the express understanding that there are no express warranties other than those contained in a specific agreement between Seller and Buyer and that there are no implied warranties that the goods shall be merchantable, nor are there any warranties which extend beyond the description on the face hereof. In the event of the breach of any warranty or alleged breach of any warranty by Killark, the Buyer shall not be entitled to consequential or incidental damages. The obligation of Killark under its warranty shall be limited to repairing or replacing FOB Killark's plant or allowing credit at Killark's option, any part or parts which may prove to be thus defective, provided the Buyer(s) gives Killark prompt notice of the defect or defects. It is expressly agreed and understood that this remedy of repair or replacement or credit at Killark's option is the exclusive remedy of the Buyer of this product.

Since conditions of use of the product are outside of the care, custody and control of Killark, the purchaser should determine the suitability of the product for his intended use, and assumes all risk and liability whatsoever in connection therewith.

MAINTENANCE MANAGER: Please record the following information for your records:

COMPLETE CATALOG NO. _____
(As shown on nameplate)

INSTALLED BY _____

DATE OF INSTALLATION _____