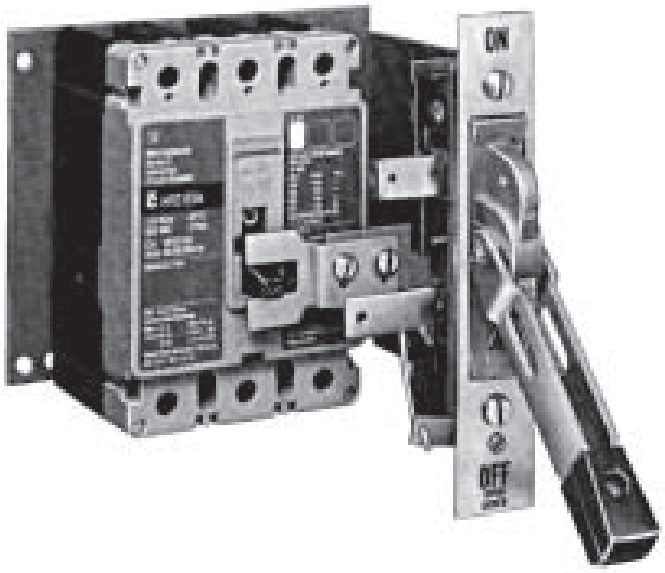
Instruction Leaflet **IL14439F**

Effective July 2011
Supersedes IL14439E 06/1986

Instructions for Type SM Safety Handle Mechanisms for Types EB, EHB, FB, and F-Frame Series C-Circuit Breakers, and Types MCP and Hmcp (Sizes 0-4) Motor Circuit Protectors, Circuit Breakers/MCP'S plus Current Limiter, and 30-100 Amp FB Tri-Pac Breaker Type DS Switches, Fusible and Non-Fusible



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WARNING

DO NOT ATTEMPT TO INSTALL OR PERFORM MAINTENANCE ON EQUIPMENT WHILE IT IS ENERGIZED. DEATH, SEVERE PERSONAL INJURY, OR SUBSTANTIAL PROPERTY DAMAGE CAN RESULT FROM CONTACT WITH ENERGIZED EQUIPMENT. ALWAYS VERIFY THAT NO VOLTAGE IS PRESENT BEFORE PROCEEDING WITH THE TASK, AND ALWAYS FOLLOW GENERALLY ACCEPTED SAFETY PROCEDURES.
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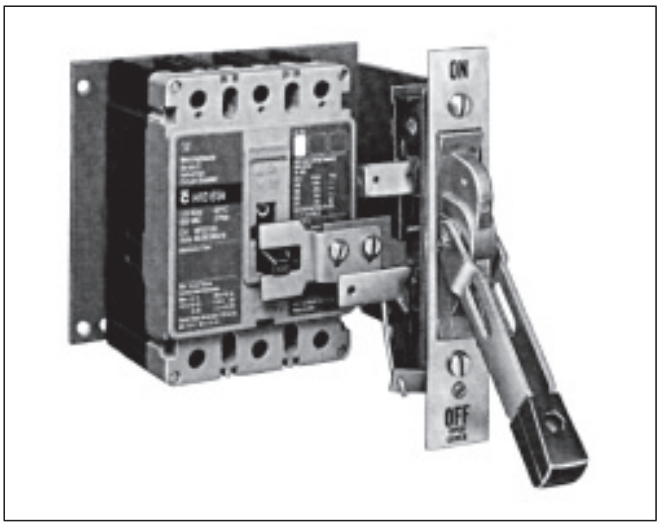


Fig. 1 Typical Installation of Breaker

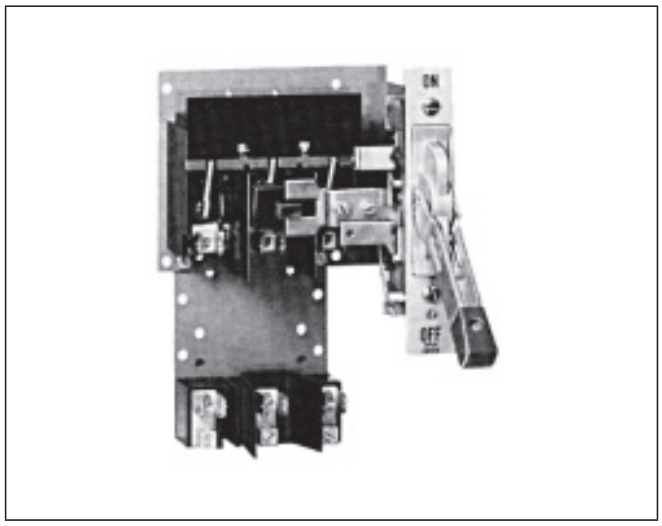


Fig. 2 Typical Installation of Type DS Switch

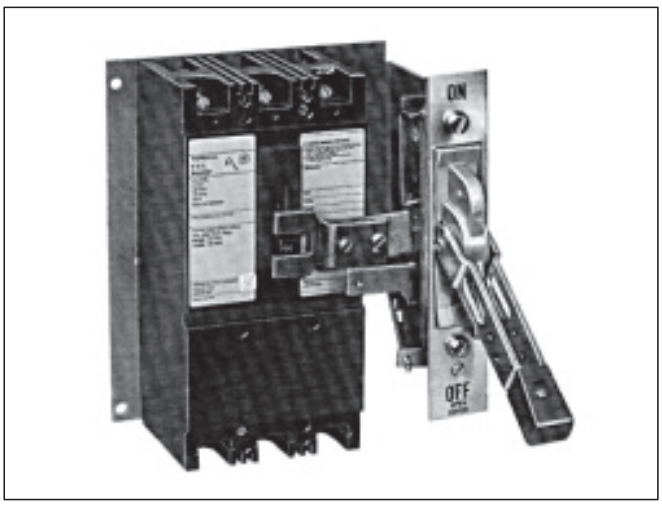


Fig. 3 Typical Installation of Tri-Pac or FCL Breaker

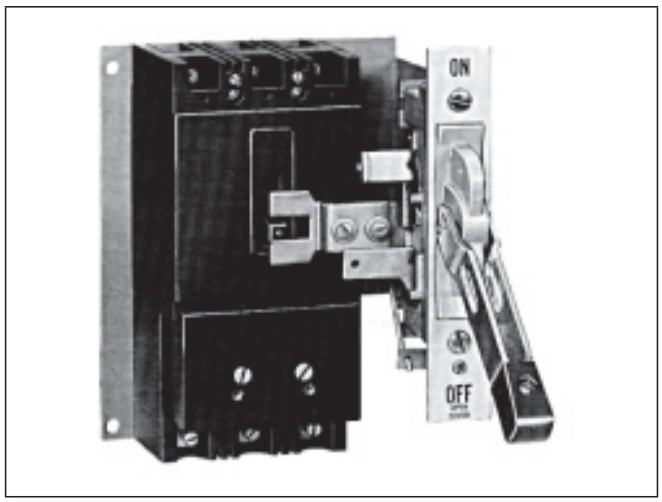
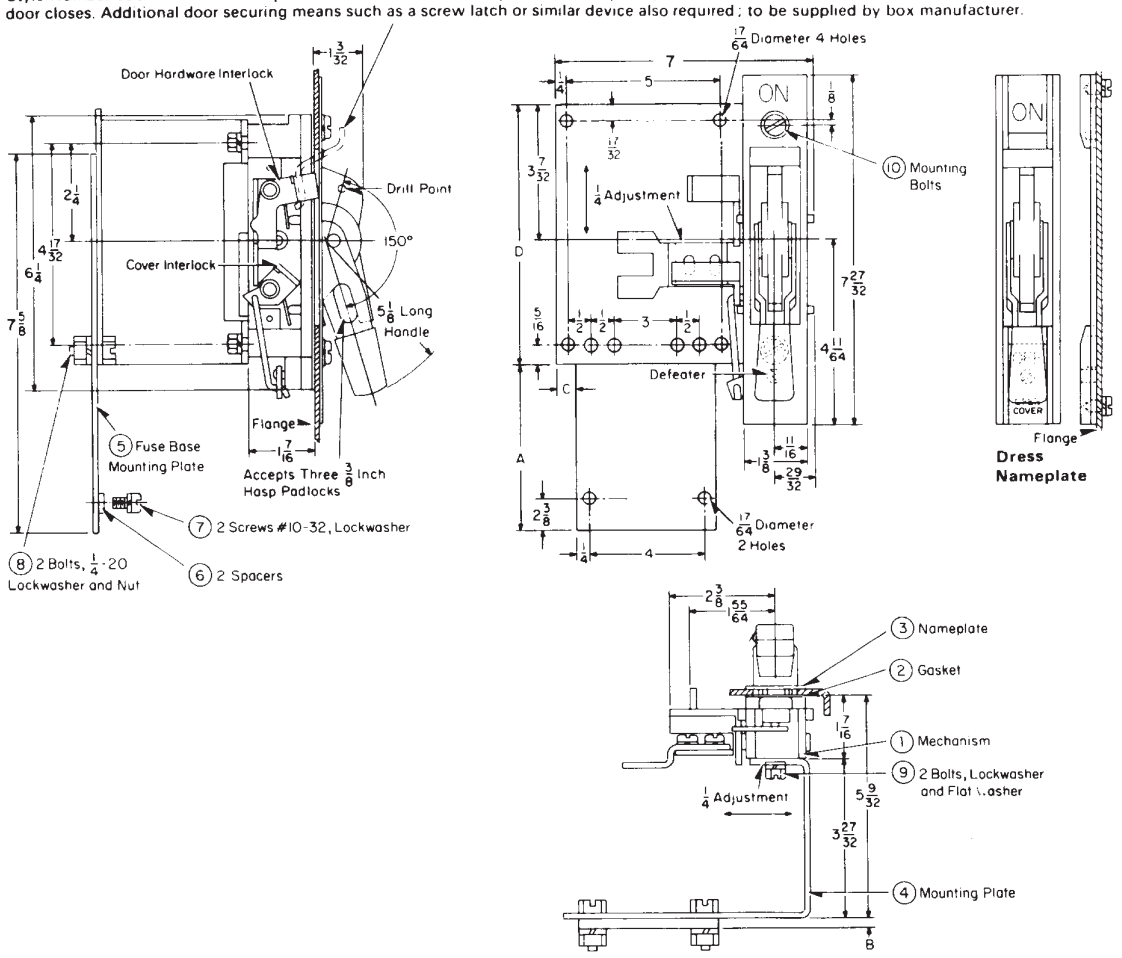


Fig. 4 Typical Installation of Breaker plus Current Limiter

The Type SM Handle Mechanism is designed to prevent tampering by unauthorized individuals. Used in conjunction with Type SM door hardware, it provides the optimum in personnel safety.

Accessories, such as electrical interlock and dress plate, make this mechanism the most versatile mechanism in the industry.

Style Number 623B214G02 door operated interlock defeater kit (field mounted)—required when door hardware is not used—operates as door closes. Additional door securing means such as a screw latch or similar device also required; to be supplied by box manufacturer.



SM SAFETY HANDLING MECHANISMS

Catalog Number	Disconnect or Breaker	Dimensions				
		A	B	C	D	Fuse
SM150R, SM150L	EB, EHB, FB, HFB, EHD, FDB, FD, HFD, FDC, FW, HFW, FWC, MCP, HMCP, DS16U, DS26U, DS36U Switch©	—	—	—	5 27/32	—
SM100SFR, SM100SFL	DS121	1 13/16	1/8	1/2	5 27/32	Class H
SM100SFR, SM100SFL	DS122, DS222	2 11/16	1/8	1/2	5 27/32	Class H
SM100SFR, SM100SFL	DS161	4 13/16	1/8	1/2	5 27/32	Class H
SM100SFR, SM100SFL	DS161, DS262	2 1/16	1/8	1/2	5 27/32	Class J
SM100SFR, SM100SFL	DS162, DS262	5 3/16	1/8	1/2	5 27/32	Class H
SM100SFR, SM100SFL	DS363	4 15/16	1/8	1/2	5 27/32	Class H. 250V.
SM100SFR, SM100SFL	DS363, DS263	6 15/16	1/8	1/2	5 27/32	Class H 600V.
SM100SFR, SM100SFL	DS363	3 11/16	1/8	1/2	5 27/32	Class J
SM101PR, SM101PL	FCL, FB Tri-Pac and FB/FD/MCP with Current Limiter©	—	—	—	8 5/8	—

Fig. 5 Outline and Assembly of Mechanism

Mounting plate is included. Omit the mounting plate if the switch or breaker is to be installed directly to the box manufacturer's panel. Refer to installation instructions below for drilling and location of holes for switch or breaker.

1.0 INSTALLATION

1. Locate, drill and cut out enclosure flange as shown in Figures 5 and 6. The dimensions for the left-hand mechanism are the same as shown except opposite view.

If mounting plate (4) is not used, refer to Figure 6 and Figures 9 or 10 for additional drilling for breaker or disconnect switch hole locations.

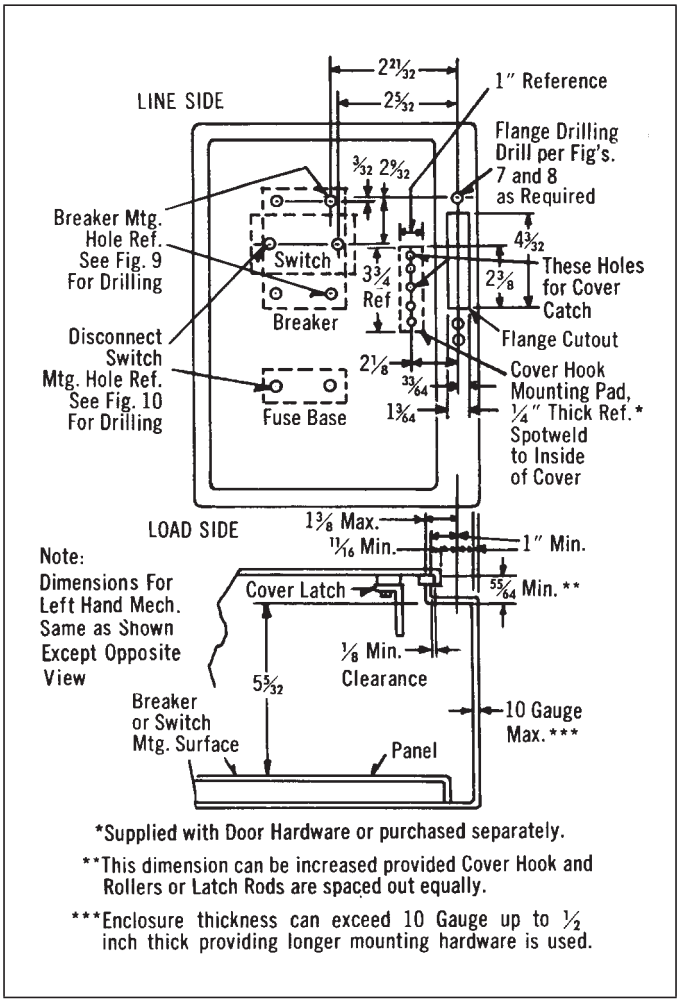


Fig. 6 Recommended Enclosure Dimensions and Flange Cutout

2. *Fusible Switch:* When mounting plate (4) is used attach fuse base mounting plate (5) in desired location to agree with fuse rating. Set "A" dimension as shown in Figure 5 and fasten plate (5) to (4) with two 1/4-20 bolts (8) in the two pairs of holes that line up.

3. Remove nameplate (3) from mechanism (1) and insert mechanism with gasket through cut-out from inside of enclosure.

4. Place nameplate (3) over handle and assemble to mechanism with two bolts (10) supplied. See Figure 5.

5. Fasten mounting plate (4) to mechanism (1) with two bolts (9). See Figure 5.

6. Mount breaker or disconnect switch in position. See Figures 1 through 4 for typical installations.

7. *Fusible Switch:* Mount fuse base and spacer (6) with hardware (7).

   If mounting plate (4) is not used, omit spacer (6).

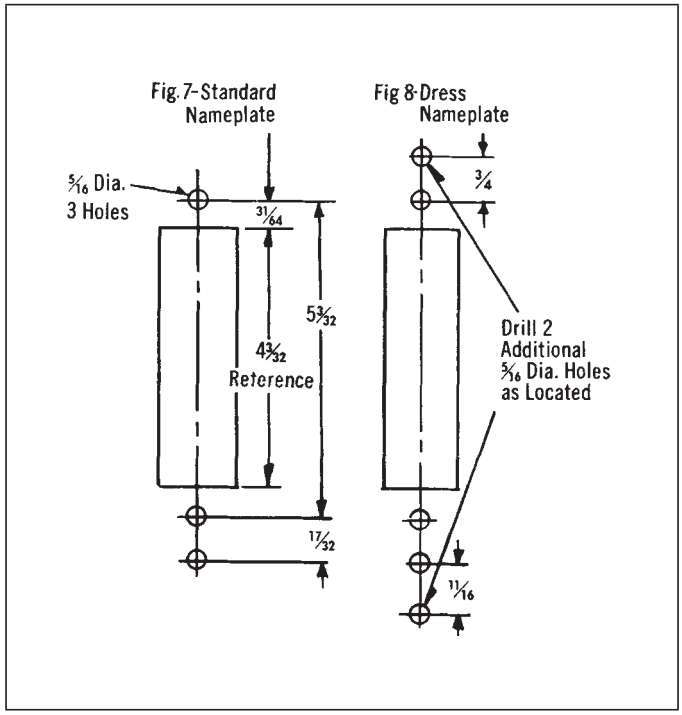
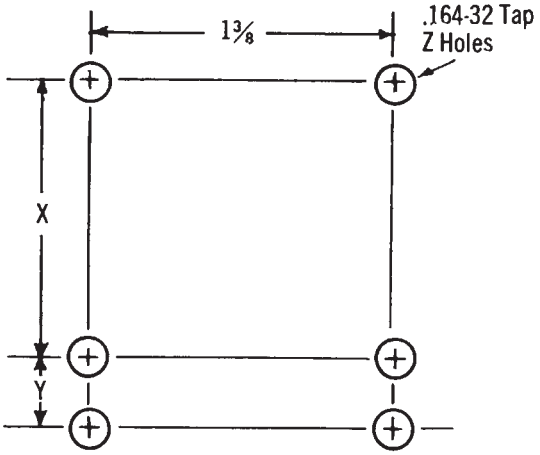
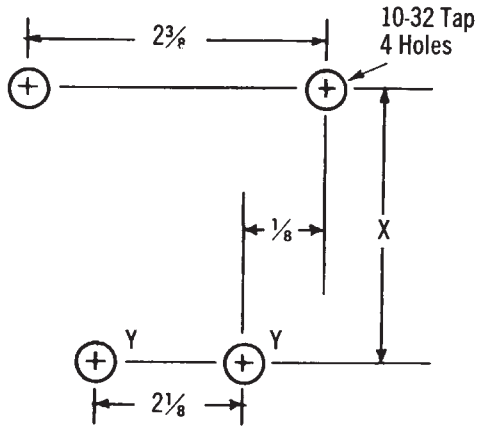


Fig. 7 and 8 Flange Cutouts for Standard and Dress Nameplates



Type	X Dimension	Y Dimension	Z Holes
EB, EHB, FB, HFB, EHD, FDB, FD, HFD, FDC, FW, HFW, FWC, MCP, HMCP©	4½	—	4
FB Tri-Pac, FCL	7¼	—	4
Circuit Breaker/ MCP and Current Limiter©	4½	2¾	6

Fig. 9 Breaker Location



FUSE RATING

Cat. No.	Fuse	X Dimension
DS16U,	—	*
DS26U,	—	*
DS36U	—	*
DS121	30A. 250V. Class "H"	4$\frac{7}{32}$
DS161	30A. 600V. Class "H"	7$\frac{7}{32}$
DS161	30A. Class "J"	4$\frac{15}{32}$
DS122	60A. 250V. Class "H"	5$\frac{3}{32}$
DS262	60A. 600V. Class "H"	7$\frac{19}{32}$
DS262	60A. Class "J"	4$\frac{15}{32}$
DS363	100A. 250V. Class "H"	7$\frac{9}{32}$
DS363	100A. 600V. Class "H"	9$\frac{9}{32}$
DS363	100A. Class "J"	6$\frac{3}{32}$
DS364	200A. 250V. Class "H"	**
DS364	200A. 600V. Class "H"	**

*Unfused—omit holes Y
**Refer to outline supplied with disconnect switch for fuse base drilling.

Fig. 10 Disconnect Switch Location

Notes:

Notes:

The instructions for installation, testing, maintenance, or repair herein are provided for the use of the product in general commercial applications and may not be appropriate for use in nuclear applications. Additional instructions may be available upon specific request to replace, amend, or supplement these instructions to qualify them for use with the product in safety-related applications in a nuclear facility.

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