

Handle Mechanisms Overview

Handle mechanisms are used to operate Moulded case circuit breakers, Moulded case switches and motor circuit protectors. They are available in three basic configurations — Flange Mounted, Through-the-Door and Direct (Close-Coupled) — providing safe, dependable operation and ease of installation.

Flange Mounted

- Flex Shaft

Through-the-Door

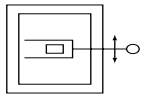
- Universal Rotary

Direct (Close Coupled)

- Universal Direct
- Euro IEC

Handle mechanisms are typically used on enclosed circuit breakers, control panels and motor control centers in many different applications. Eaton Electrical has a handle mechanism for virtually any need.

Flange Mounted Handle Mechanisms



The Flex Shaft™

Flange Mounted handle mechanisms mount on the flange of an enclosure door. The Flex Shaft is an extra heavy-duty mechanism that includes a flexible shaft in various lengths, 0.9 m (3 feet) through 3 m (10 feet) for use with various size enclosures.

The Flex Shaft handle will accept up to three padlock shackles, each with a maximum diameter of 9.5 mm (3/8 inch). Can be used with NEMA 12 fabricated enclosures. An optional handle is available for Flex Shaft that is suitable for use with NEMA 4 environments.

Flex Shaft comes preset from the factory, requiring only minor field adjustments on installation, which takes about 10 minutes — a significant time savings compared to installation of other types of flange handle mechanisms. The Flex Shaft mechanism also takes up less interior enclosure space than competitive designs and the handle fits standard flange cutouts. Flex Shaft handle can be remotely mounted from breaker, where an operator can use it by “funneling” the cable through conduit.

Flex Shaft is UL listed under File E64893 and meets CSA requirements.

Flex Shaft Ordering Information

Table 77. Flex Shaft Ordering Information

Breaker Frame	Flexible Shaft Length in Meters (Feet)							
	Catalogue Number							
	0.9 (3)	1.2 (4)	1.3 (5)	1.8 (6)	2.1 (7)	2.4 (8)	2.7 (9)	3.1 (10)
GE	EHMFS03	EHMFS04	EHMFS05	EHMFS06	EHMFS07	EHMFS08	EHMFS09	EHMFS10
GJ	JHMFS03	JHMFS04	JHMFS05	JHMFS06	JHMFS07	JHMFS08	JHMFS09	JHMFS10
GL	—	LHMFS04	—	—	LHMFS07	—	—	LHMFS10
GN	N/A	F5S04CI	F5S05CI	F5S06CI	N/A	N/A	N/A	F5S10CI
GR	N/A	F6S04	F6S05	F6S06	N/A	N/A	N/A	N/A

Note: Add Suffix L to the complete Catalogue Number for 152.4 mm (6-inch) handle.

Flex Shaft Accessories (E- through R-Frame)

Table 78. Standard Door Hardware (Required Adapter Kit)

Latch	Panel Height in mm (Inches)	Catalogue Number
2 Point	Up to 762.0 (30.00)	DH1R
2 Point	Up to 1016.0 (40.00)	DH2R
3 Point	Over 1016.0 (40.00)	DH3R

Table 79. Door Hardware Adapter Kit (Required on Standard Door Hardware)

Description	Catalogue Number
Door Hardware Adapter Kit	AMTDHA

Table 80. NEMA 12 Safety Door Hardware for Flex Shaft ①

Handle Length in mm (Inches)	Catalogue Number ②
101.6 (4.00)	C361KJ4
152.4 (6.00)	C361KJ6
Roller Latch ③	C361KR

① Customer: Consult with box manufacturer for correct door hardware and any adapters required for assembly.

② The 6.35 x 12.7 mm (1/4-inch x 1/2-inch) standard mill rectangular locking bar is not supplied with these kits.

③ Third roller latch for use with 101.6 or 152.4 mm (4- or 6-inch) handle when 3 point latching is required.

Table 81. NEMA — IP Crossover

NEMA Type	IP Type
1	IP20
3R	IP55
12	IP54
4/4X	IP66

Note: NEMA 4X handle mechanisms are available. Add Suffix X to the complete Catalogue Number.

Original narrow handle design (No C Suffix) is available. Remove C from Catalogue Number.

Note: When selecting the length of shaft, ensure minimum bending radius of 4 inches (101.6 mm) is maintained to operate properly.

The standard method of shipment includes the mechanism preset at the factory; however, minor field adjustments may be required.