

# EATON | Cutler-Hammer

## Series G Handle Mechanism

Product Focus



### Handle Mechanism Overview

Handle mechanisms are used to operate molded case circuit breakers, molded 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.

Handle mechanisms are used on enclosed circuit breakers, control panels and motor control centers in many different applications. Eaton 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, 3 feet (0.9 m) through 10 feet (3 m) for use with various size enclosures.

The Flex Shaft handle will accept up to three padlock shackles, each with a maximum diameter of 3/8-inch (9.5 mm). Can be used with NEMA® 12 (IP54) 12 fabricated enclosures.

An optional handle is available for the Flex Shaft that is suitable for use with NEMA 4 and 4X (IP66) 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. The Flex Shaft handle can be remotely mounted from the 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.

**Note:** When selecting the length of shaft, ensure a 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.

### Direct (Close-Coupled) Handle Mechanisms



#### Universal Direct (E – L Frames)

Direct (Close-Coupled) Handle Mechanisms mount directly to the circuit breaker. They are used in shallow enclosures where the standard variable depth Through-the-Door type mechanism is not practical or cannot be used. They are typically for applications where high volume, standardized enclosures are being fabricated.

### Through-the-Door Handle Mechanisms

#### Universal Rotary/Vari-depth



The Universal Rotary/Vari-depth is suitable for use with NEMA 12 (IP54) enclosure types. An optional NEMA 4/4X (IP66) handle mechanism is also available. All rotary handle mechanisms include a handle “lock off,” to prevent turning the breaker ON while in the OFF position. All rotary handles indicate N/OFF/Tripped/Reset positions, however, Universal Rotary has the added feature of international markings for ON (I) and OFF (O). The Universal Rotary is made of molded material.

The Universal Rotary mechanisms for E, J and L Frame MCCBs can be operated by hand with the door open or “locked off” to prevent operation with the door open.



#### JG & LG 4X (IP66) Handle Mechanism



#### EG 4X (IP66) Handle Mechanism

## Rotary/Vari-depth

FRAME	COLOR	SIZE INCHES (MM)	ENCLOSURE RATING		CATALOG NUMBER	
			NEMA	IP		
E	Black	6.00 (152.4)	1/12	20/54	EHMVD06B	
	Black	12.00 (304.8)	1/12	20/54	EHMVD12B	
	Black	24.00 (609.6)	1/12	20/54	EHMVD24B	
	Red	6.00 (152.4)	1/12	20/54	EHMVD06R	
	Red	12.00 (304.8)	1/12	20/54	EHMVD12R	
	Red	24.00 (609.6)	1/12	20/54	EHMVD24R	
	Black	6.00 (152.4)	3R/4X	55/66	EHMVD06BX	
	Black	12.00 (304.8)	3R/4X	55/66	EHMVD12BX	
	Black	24.00 (609.6)	3R/4X	55/66	EHMVD24BX	
	Red	6.00 (152.4)	3R/4X	55/66	EHMVD06RX	
	Red	12.00 (304.8)	3R/4X	55/66	EHMVD12RX	
	Red	24.00 (609.6)	3R/4X	55/66	EHMVD24RX	
J	Black	6.00 (152.4)	1/12	20/54	FJMVD06B	
	Black	12.00 (304.8)	1/12	20/54	FJMVD12B	
	Black	24.00 (609.6)	1/12	20/54	FJMVD24B	
	Red	6.00 (152.4)	1/12	20/54	FJMVD06R	
	Red	12.00 (304.8)	1/12	20/54	FJMVD12R	
	Red	24.00 (609.6)	1/12	20/54	FJMVD24R	
	Black	6.00 (152.4)	3R/4X	55/66	FJMVD06BX	
	Black	12.00 (304.8)	3R/4X	55/66	FJMVD12BX	
	Black	24.00 (609.6)	3R/4X	55/66	FJMVD24BX	
	Red	6.00 (152.4)	3R/4X	55/66	FJMVD06RX	
	Red	12.00 (304.8)	3R/4X	55/66	FJMVD12RX	
	Red	24.00 (609.6)	3R/4X	55/66	FJMVD24RX	
L	Black	6.00 (152.4)	1/12	20/54	KLMVD06B	
	Black	12.00 (304.8)	1/12	20/54	KLMVD12B	
	Black	24.00 (609.6)	1/12	20/54	KLMVD24B	
	Red	6.00 (152.4)	1/12	20/54	KLMVD06R	
	Red	12.00 (304.8)	1/12	20/54	KLMVD12R	
	Red	24.00 (609.6)	1/12	20/54	KLMVD24R	
	Black	6.00 (152.4)	3R/4X	55/66	KLMVD06BX	
	Black	12.00 (304.8)	3R/4X	55/66	KLMVD12BX	
	Black	24.00 (609.6)	3R/4X	55/66	KLMVD24BX	
	Red	6.00 (152.4)	3R/4X	55/66	KLMVD06RX	
	Red	12.00 (304.8)	3R/4X	55/66	KLMVD12RX	
	Red	24.00 (609.6)	3R/4X	55/66	KLMVD24RX	
N	Black	6.00 (152.4)	1/12	20/54	HMVD5B	
	Black	6.00 (152.4)	1/12/3R	20/54/55	WHM5R06	
	Black	12.00 (304.8)	1/12/3R	20/54/55	WHM5R12	
	Black	16.00 (406.4)	1/12/3R	20/54/55	WHM5R16	
	Red	24.00 (609.6)	1/12/3R	20/54/55	WHM5R24	
	Black	6.00 (152.4)	4/4X	66	WHM5R06X	
	Black	12.00 (304.8)	4/4X	66	WHM5R12X	
	Black	16.00 (406.4)	4/4X	66	WHM5R16X	
	Red	24.00 (609.6)	4/4X	66	WHM5R24X	
	R	Black	9.00 (228.6)	1/12	20/54	HMVD6B

## Direct Mount

FRAME	DESCRIPTION	ENCLOSURE RATING	CATALOG NUMBER
E	White Handle, with Interlock	N/A	EHMCCBI
	White Handle, without Interlock	N/A	EHMCCB
	Red Handle, without Interlock	N/A	EHMCCR
J	White Handle, with Interlock	N/A	JHMCCBI
	White Handle, without Interlock	N/A	JHMCCB
	Red Handle, without Interlock	N/A	JHMCCR
L	White Handle, with Interlock	N/A	LHMCCBI
	White Handle, without Interlock	N/A	LHMCCB
	Red Handle, without Interlock	N/A	LHMCCR

## Flex Shafts

FRAME	FLEXIBLE NEMA SHAFT LENGTH IN FEET (M)	ENCLOSURE RATING		CATALOG NUMBER
		NEMA	IP	
E	2 (.6)	1/12	20/54	EHMFS02
	3 (.9)	1/12	20/54	EHMFS03
	4 (1.2)	1/12	20/54	EHMFS04
	5 (1.5)	1/12	20/54	EHMFS05
	6 (1.8)	1/12	20/54	EHMFS06
	7 (2.1)	1/12	20/54	EHMFS07
	8 (2.4)	1/12	20/54	EHMFS08
	9 (2.7)	1/12	20/54	EHMFS09
	10 (3.0)	1/12	20/54	EHMFS10
	J	2 (.6)	3R/4X	55/66
3 (.9)		3R/4X	55/66	EHMFS03X
4 (1.2)		3R/4X	55/66	EHMFS04X
5 (1.5)		3R/4X	55/66	EHMFS05X
6 (1.8)		3R/4X	55/66	EHMFS06X
7 (2.1)		3R/4X	55/66	EHMFS07X
8 (2.4)		3R/4X	55/66	EHMFS08X
9 (2.7)		3R/4X	55/66	EHMFS09X
10 (3.0)		3R/4X	55/66	EHMFS10X
L		3 (.9)	1/12	20/54
	4 (1.2)	1/12	20/54	JHMFS04
	5 (1.5)	1/12	20/54	JHMFS05
	6 (1.8)	1/12	20/54	JHMFS06
	7 (2.1)	1/12	20/54	JHMFS07
	8 (2.4)	1/12	20/54	JHMFS08
	9 (2.7)	1/12	20/54	JHMFS09
	10 (3.0)	1/12	20/54	JHMFS10
	3 (.9)	3R/4X	55/66	JHMFS03X
	4 (1.2)	3R/4X	55/66	JHMFS04X
5 (1.5)	3R/4X	55/66	JHMFS05X	
6 (1.8)	3R/4X	55/66	JHMFS06X	
N	7 (2.1)	3R/4X	55/66	JHMFS07X
	8 (2.4)	3R/4X	55/66	JHMFS08X
	9 (2.7)	3R/4X	55/66	JHMFS09X
	10 (3.0)	3R/4X	55/66	JHMFS10X
	4 (1.2)	1/12	20/54	LHMFS04
	7 (2.1)	1/12	20/54	LHMFS07
	10 (3.0)	1/12	20/54	LHMFS10
	4 (1.2)	3R/4X	IP55/66	LHMFS04X
	7 (2.1)	3R/4X	IP55/66	LHMFS07X
	10 (3.0)	3R/4X	IP55/66	LHMFS10X
R	4 (1.2)	1/12/3R	20/54/55	F5S04CI
	5 (1.5)	1/12/3R	20/54/55	F5S05CI
	6 (1.8)	1/12/3R	20/54/55	F5S06CI
	10 (3.0)	1/12/3R	20/54/55	F5S010CI
	4 (1.2)	4/4X	66	F5S04CXI
	5 (1.5)	4/4X	66	F5S05CXI
	6 (1.8)	4/4X	66	F5S06CXI
	10 (3.0)	4/4X	66	F5S010CXI
	4 (1.2)	1/12	20/54	F6S04
	5 (1.5)	1/12	20/54	F6S05
6 (1.8)	1/12	20/54	F6S06	
R	4 (1.2)	4/4X	66	F6S04X
	5 (1.5)	4/4X	66	F6S05X
	6 (1.8)	4/4X	66	F6S06X
	6 (1.8)	4/4X	66	F6S06X

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