

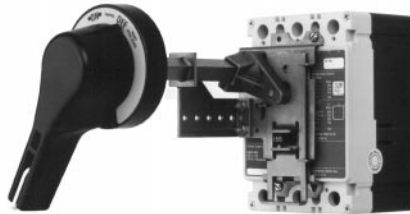
**Handle Mechanisms**

**Through-the-Door  
Handle Mechanisms**

Eaton's Cutler-Hammer through-the-door handle mechanisms mount on the front of an enclosure or cabinet door and externally operate the circuit breaker via a variable depth shaft or a linear operator (Type MC). Each rotary type handle mechanism includes a handle, base operating mechanism and shaft that can be cut to various lengths.

Series C Rotary and Universal Rotary handle mechanisms are for use with Molded Case Circuit Breakers (G, F, J, K, L, MDL), Molded Case Switches and Motor Circuit Protectors.

Series C Rotary and Universal Rotary, are UL listed and meet CSA requirements. Universal Rotary also meets IEC947-1/2 for international compliance. Rotary UL File Number is E64983.



*Series C Rotary*

Type 4/4X handles are similar to standard handles except they include an internal neoprene gasket. Type 4/4X handle style number is 6648C22G03. Due to gasketing effect between the handle and the housing, the handle may not indicate a tripped position.

**Series C Rotary Accessories**

As an option, an auxiliary switch is offered so that the control panel builder may electrically indicate the status of the breaker. This accessory would be mounted on the mechanism and comes with 24-inch (609.6 mm) pigtail leads.

**Table 12-271. Series C Auxiliary Switch**

Catalog Number	Price U.S. \$
5108A61G01	

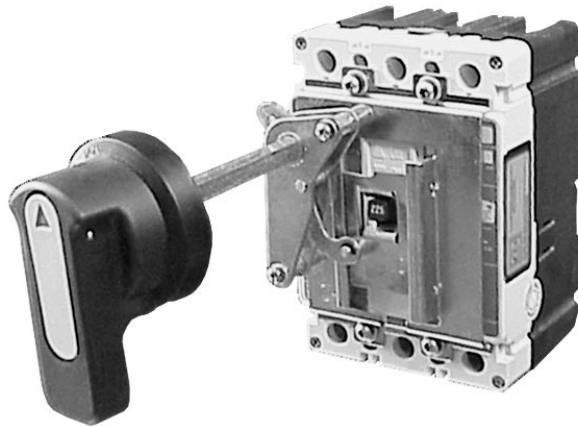
**Table 12-272. Series C Rotary Ordering Information**

Shaft Length Inches (mm)	Complete Catalog Number ①	Price U.S. \$	Separate Catalog Number				Catalog Number					
			Standard Handle ②	Price U.S. \$	Breaker Mechanism ③	Price U.S. \$	Shaft ④	Price U.S. \$	IEC IP65 ⑤⑥	Price U.S. \$	IEC IP66 ⑤⑥	Price U.S. \$
<b>F-Frame</b>												
6 (152.4)	HM1R06		6648C22G01		6648C23G11		4217B37G04		WHM1R06		WHM1R06X	
12 (304.8)	HM1R12		6648C22G01		6648C23G11		4217B37G01		WHM1R12		WHM1R12X	
16 (406.4)	HM1R16		6648C22G01		6648C23G11		4217B37G02		WHM1R16		WHM1R16X	
24 (609.6)	HM1R24		6648C22G01		6648C23G11		4217B37G03		WHM1R24		WHM1R24X	
<b>J-Frame</b>												
6 (152.4)	HM2R06		6648C22G01		6648C23G21		4217B37G04		WHM2R06		WHM2R06X	
12 (304.8)	HM2R12		6648C22G01		6648C23G21		4217B37G01		WHM2R12		WHM2R12X	
16 (406.4)	HM2R16		6648C22G01		6648C23G21		4217B37G02		WHM2R16		WHM2R16X	
24 (609.6)	HM2R24		6648C22G01		6648C23G21		4217B37G03		WHM2R24		WHM2R24X	
<b>K-Frame</b>												
6 (152.4)	HM3R06		6648C22G01		6648C23G25		4217B37G04		WHM3R06		WHM3R06X	
12 (304.8)	HM3R12		6648C22G01		6648C23G25		4217B37G01		WHM3R12		WHM3R12X	
16 (406.4)	HM3R16		6648C22G01		6648C23G25		4217B37G02		WHM3R16		WHM3R16X	
24 (609.6)	HM3R24		6648C22G01		6648C23G25		4217B37G03		WHM3R24		WHM3R24X	
<b>L- and MDL-Frame</b>												
6 (152.4)	HM4R06		6648C22G11		6648C23G19		4217B37G04		WHM4R06		WHM4R06X	
12 (304.8)	HM4R12		6648C22G11		6648C23G19		4217B37G01		WHM4R12		WHM4R12X	
16 (406.4)	HM4R16		6648C22G11		6648C23G19		4217B37G02		WHM4R16		WHM4R16X	
24 (609.6)	HM4R24		6648C22G11		6648C23G19		4217B37G03		WHM4R24		WHM4R24X	
<b>MD/MDS</b>												
6 (152.4)	HM7R06		6648C22G21		6648C23G17		4217B37G04		—		—	
12 (304.8)	HM7R12		6648C22G21		6648C23G17		4217B37G01		—		—	
16 (406.4)	HM7R16		6648C22G21		6648C23G17		4217B37G02		—		—	
24 (609.6)	HM7R24		6648C22G21		6648C23G17		4217B37G03		—		—	
<b>N-Frame</b>												
6 (152.4)	HM5R06		6648C22G21		6648C23G08		4217B37G04		WHM5R06		WHM5R06X	
12 (304.8)	HM5R12		6648C22G21		6648C23G08		4217B37G01		WHM5R12		WHM5R12X	
16 (406.4)	HM5R16		6648C22G21		6648C23G08		4217B37G02		WHM5R16		WHM5R16X	
24 (609.6)	HM5R24		6648C22G21		6648C23G08		4217B37G03		WHM5R24		WHM5R24X	

- ① Complete catalog number includes the standard handle, mechanism, shaft and support brace/bracket.
- ② Handle is designed suitable for NEMA Types 1, 3R and 12 enclosures. Use style number **6648C22G03** for Type 4/4X handle or add **X** Suffix to complete catalog number. Handle is cast aluminum.
- ③ Breaker mechanism includes a shaft support bracket and its parts. Shaft is .50-inch (12.7 mm).
- ④ Longer shafts, 16-inch (406.4 mm) and 24-inch (609.6 mm), include an adjustable support extension.
- ⑤ IEC Handle Mechanism supplied with Metric thread mounting hardware.
- ⑥ Complete catalog number includes a handle, mechanism and shaft.

Discount Symbol ..... **CB-2**

Handle Mechanisms



Universal Rotary F-Frame

Table 12-273. Series C Universal Rotary Ordering Information ①

Shaft Length in Inches (mm)	Handle Color	Complete Catalog Number	Price U.S. \$
<b>F-Frame</b>			
6 (152.4)	Black	FHMVD06B	
12 (304.8)	Black	FHMVD12B	
6 (152.4)	Red	FHMVD06R	
12 (304.8)	Red	FHMVD12R	
<b>G-Frame</b>			
6 (152.4)	Black	GHMVD06B	
12 (304.8)	Black	GHMVD12B	
6 (152.4)	Red	GHMVD06R	
12 (304.8)	Red	GHMVD12R	
<b>J-Frame</b>			
6 (152.4)	Black	JHMVD06B	
12 (304.8)	Black	JHMVD12B	
6 (152.4)	Red	JHMVD06R	
12 (304.8)	Red	JHMVD12R	
<b>K-Frame</b>			
6 (152.4)	Black	KHMVD06B	
12 (304.8)	Black	KHMVD12B	
6 (152.4)	Red	KHMVD06R	
12 (304.8)	Red	KHMVD12R	
<b>L-Frame</b>			
6 (152.4)	Black	LHMVD06B	
12 (304.8)	Black	LHMVD12B	
6 (152.4)	Red	LHMVD06R	
12 (304.8)	Red	LHMVD12R	
<b>MDL-Frame</b>			
6 (152.4)	Black	MHMVD06B	
12 (304.8)	Black	MHMVD12B	
6 (152.4)	Red	MHMVD06R	
12 (304.8)	Red	MHMVD12R	

① Only available as complete handle mechanism. Parts not sold separately.

Table 12-274. Series C G-Frame Vari-Depth Handle Mechanism (Not Shown)

For Use With:		Handle Color	Complete Catalog Number
Enclosure	Breaker	Black	
NEMA 1 NEMA 1 NEMA 3R/12/4X NEMA 3R/12/4X	GC/GHC/GD GC/GHC/GD GC/GHC/GD GC/GHC/GD	Yellow Black Yellow Black	HRGCV11L HRGCV31L HRGCV14L HRGCV34L
NEMA 1 NEMA 1 NEMA 3R/12/4X NEMA 3R/12/4X	GMCP GMCP GMCP GMCP	Yellow Black Yellow Black	HRGMV11L HRGMV31L HRGMV14L HRGMV34L

Table 12-275. Features Comparison of Series C Rotary and Universal Rotary Handle Mechanism

Rotary	Number of Poles	NEMA Enclosure Type				Handle Lock-Off ②	Handle Indication: ON/OFF TRIPPED/RESET	International Markings ON (I) OFF (O)	Handle Material	Available Handle Colors	Handle Rotation ③	Shaft Lengths (Inches)
		1	3R	12	4/4X ①							
Series C Rotary		X	X	X	X	X	X	—	Metal	Black	45 deg.	6, 12, 16, 24
Universal Rotary		X	—	X	—	X	X	X	Molded Plastic	Yellow/Red	90 deg.	6, 12

① Type 4/4X application requires special handle. See "Ordering Information."

② All rotary handle mechanisms include a handle "Lock Off" to prevent turning the breaker ON while in the OFF position.

③ Series C Rotary handle was ergonomically designed with extra clearance for a "gloved hand" to operate. Handle has a 45-degree rotation. Universal Rotary has a 90-degree rotation ("pipe valve" operation) where ON is vertical and OFF is horizontal. Shafts include a support brace to ensure proper alignment.