

GE Fastrac Program Service Lighting Contactors

New to the GE Fastrac Program are a wide variety of the most popular mechanically and electrically held lighting contactors.

Standard cycle: 2 weeks
GE Fastrac Program: 1 day

Reference:

DEP-015 GE Fastrac Program for NEMA Controls

To order GE Fastrac lighting contactors, select and price items required that are printed in red. Clearly indicate on the order that Fastrac service is required.

GE lighting contactors are designed for industrial, commercial, and outdoor applications where efficient control is required of tungsten and ballast loads as well as noninductive loads. Numerous modifications are available which add flexibility to customizing the control to the application.



CR460, CR463 Series

Introduction - 2-12 Pole, 30 Amp.....	3-2
Components (CR463).....	3-6
Electrically Held, Standard Assembled Forms (CR463L).....	3-8
Electrically Held, Modified Assembled Forms (CR463L).....	3-10
Mechanically Held, Standard Assembled Forms (CR463M).....	3-12
Mechanically Held, Modified Assembled Forms (CR463M).....	3-14
Electrically Held/Mechanically Held - Wiring Diagrams (CR463L, CR463M).....	3-16
Electrically Held/Mechanically Held - Outlines and Dimensions (CR463L, CR463M).....	3-17
Electrically Held/Mechanically Held - Technical Data (CR460, CR463 Series).....	3-20

CR360L Series

Electrically Held, 2-4 Pole, 30-300 Amp (CR360L).....	3-21
Electrically Held - Outlines, Dimensions and Weights (CR360L).....	3-24

CR160 Series

Mechanically Held, 2-3 Pole, 30-225 Amps (CR160MC).....	3-26
Mechanically Held - Outlines, Dimensions and Weights (CR160MC).....	3-30

CR360ML Series

Mechanically Held, 2-3 Pole, 400-1000 Amps (CR360ML).....	3-32
Mechanically Held - Outlines, Dimensions and Weights (CR360ML).....	3-36

Reference Publications

See Publication Index, Section 17.

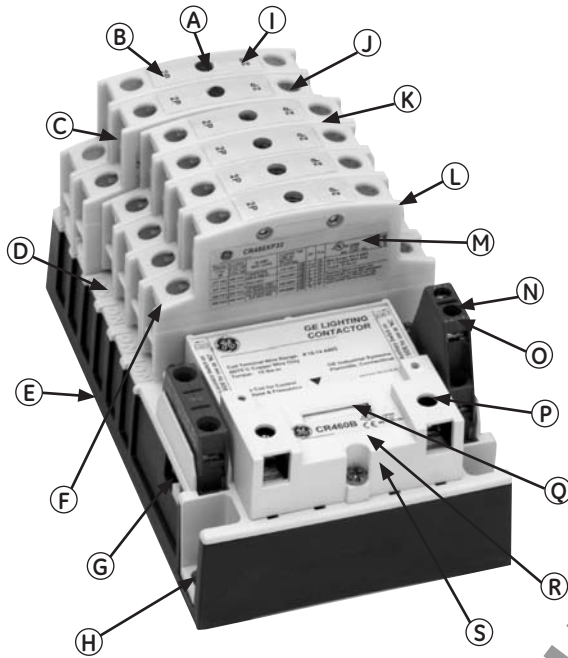


Lighting Contactors CR460, CR463 Series

Introduction
2-12 Pole, 30 Amp

Section 3

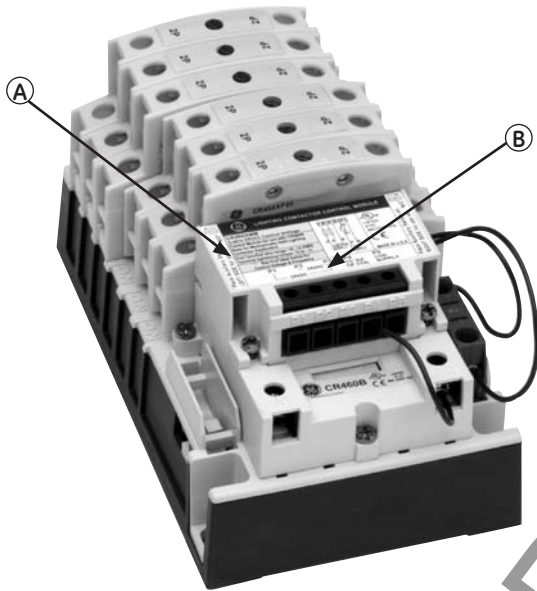
GE's new CR460 Series lighting contactors deliver unprecedented versatility in application, simplicity in configuration and performance in operation. Ingenious design, rugged construction and a host of truly useful features make them uniquely appealing to all those who use them.



Electrically Held Contactor

- (A) Contact position indication—when button protrudes, contact is closed.
- (B) Power poles are available as single or double poles, creating 74 different circuit combinations.
- (C) Convenient side access field power wiring
- (D) Contact configuration indicator
- (E) Standard base for all pole configurations
- (F) Robust pole terminals accept up to two #8 AWG wires
- (G) Manual operator
- (H) Fast, sure three-point mounting
- (I) Enclosed contacts resist contaminants for greater reliability
- (J) Combination slotted/#2 Phillips screws
- (K) Common, easily installed power poles change from NO to NC (or vice versa) simply by unlatching and rotating 180°.
- (L) Power poles rated for the range of tasks:
 - 30A rated contacts
 - 15A motor rated
 - Pilot duty rated
- (M) Easy-to-read rating label
- (N) Auxiliary contacts, rated A600, are suitable for use on low level circuits down to 12V, 5mA
- (O) Plug-in auxiliary contacts are NO when installed on the left side of the base, NC on the right
- (P) Finger and back-of-hand safe power terminals
- (Q) Quick-view coil voltage
- (R) Easy-change coil
- (S) Low magnetic noise results in quiet operation

Mechanically held contactors also feature:



Mechanically Held Contactor

- Ⓐ Two-or-three-wire control module:
- low input VA permits long wire runs
 - verifies contact status and has built-in delays that minimize excessively frequent signals from faulty controllers
 - come in a wide range of input voltages. Four modules cover input voltages from 24-277 VAC and 12-24 VDC. All modules may be used with coil voltage from 24 VAC-277 VAC.

- Ⓑ Clear labeling shows control module rating, wire size and torque

Field configurable from standard electrically held contactor with simple, easy-to-install kits of control modules, latch mechanisms and auxiliary contacts.



Lighting Contactors

CR460 Series

The ultimate in versatility, simplicity and performance

Section 3

All CR460 Series lighting contactors deliver unprecedented versatility in application, simplicity in configuration and performance in operation. Their revolutionary design and unique features meet most lighting control needs better than ever before.

- Modular design permits fast, on-site configuration
- 2-12 power poles
- 30 amp rating
- Snap-in auxiliary contacts
- Common components for both electrically and mechanically held versions
- Continuously rated, interchangeable coils
- Finger-safe terminals

Contactor Application

CR463 lighting contactors switch ballast (fluorescent or HID), tungsten and general use loads and carry motor load, resistive and pilot duty ratings as well.

CR463L Electrically Held Contactors

Operational Mode

1. 3-wire control is typically used when control is desired from multiple locations. The contactor is operated from a momentary pilot device and requires an auxiliary contact to be used as a holding interlock.
2. 2-wire control is used for single location control with power continuously supplied to the coil for contactor operation.

CR463M Mechanically Held Contactors

A mechanical latch with a 2- or 3-wire electronic control module delivers reliable performance and protection from such application abnormalities as line noise, leakage currents from controller outputs, or short repetitive commands burst from faulty controllers.

Mechanical Operation

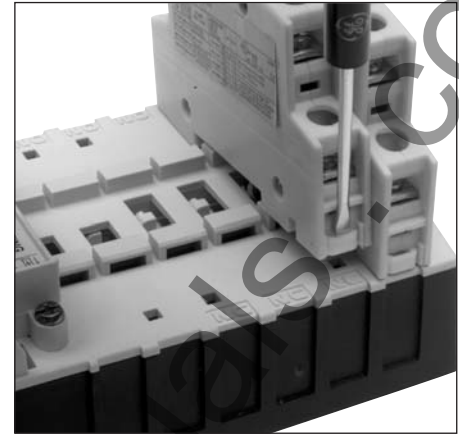
1. Latches after contactor command and removes coil from circuit for noise-free operation
2. Eliminates all coil losses after contactor is latched

Control Module

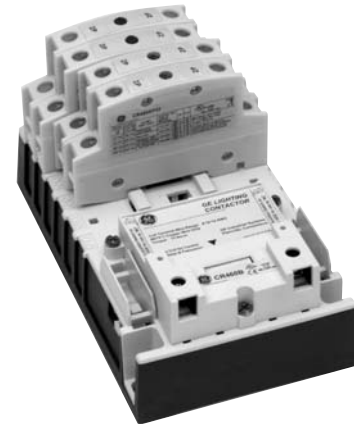
1. Coil operation and control circuit at same or different voltages
2. Allows longer control wiring runs
3. Microprocessor validates control signal before operation
 - will not respond to momentary voltage spikes or noise
 - operation command has built in delay (0.4 sec) to avoid multiple short-term commands that can cause contactor fatigue or failure
 - feedback loop prevents contactor from getting out of sequence with switches, even after power failures

Operational Modes

1. 3 wire control is the choice for use with momentary devices allowing operation from multiple locations
 - a momentary pulse of energy operates contactor; a second pulse on alternate leg returns contactor to original state
2. 2-wire control is the choice for single-output automatic operation or for operation from single-pole devices
 - latches contactor into position when voltage is applied to input terminals (coil is removed from circuit while control voltage is continuously supplied); disengages latch and returns contactor to original state when control voltage is removed.



Power poles latch easily onto the base, and designating them as NO or NC is a simple matter of left or right positioning. Additional poles may be added at any time.



CR463L Electrically Held



CR463M Mechanically Held

Lighting Contactors

CR460 Series

The choice is yours:

3 ways to order CR460 Series Lighting Contactors

Ordering the correct contactor for your application may be accomplished in any of three ways. Choose the one that's right for you.

1. Order components and assemble on-site in minutes (see pages 3-6 and 3-7).

- Cost-effective
- Allows late-point configuration
- Greatest flexibility
- Parts in stock for immediate delivery

2. Order standard assembled contactor and rotate poles to meet pole requirements (see pages 3-8 through 3-15).

- Available from stock or short cycle for timely delivery
- Single product number to order—see product numbers in bold or red type on pages 3-8, 3-9, 3-12 and 3-13
- Allows local stocking of most common assembled forms via pole reconfiguration

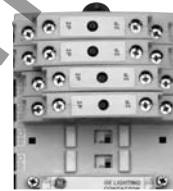
To order standard assembled contactors, select the product number from the table below that corresponds to the number of NO and NC contacts required.

When you receive the contactor, simply reconfigure it to the NO-NC arrangement you require by rotating the appropriate power poles. It just takes a minute.

Example: 4NO-4NC required. Order CR463L80AJA.



CR463L80AJA (8NO)



Contactor reconfigured as 4NO-4NC

NO Contacts	NC Contacts	Order Product No.	NO Contacts	NC Contacts	Order Product No.	NO Contacts	NC Contacts	Order Product No.
	2	CR463*02-		0	CR463*30-		0	CR463*60-
	3	CR463*03-		1	CR463*31-		1	CR463*61-
	4	CR463*04-		2	CR463*32-		2	CR463*62-
0	5	CR463*05-		3	CR463*33-	6	3	CR463*63-
	6	CR463*06-	3	4	CR463*34-		4	CR463*64-
	7	CR463*07-		5	CR463*35-		5	CR463*65-
	8	CR463*08-		6	CR463*36-		6	CR463*66-
	1	CR463*11-		7	CR463*37-		0	CR463*70-
	2	CR463*12-		8	CR463*38-		1	CR463*71-
	3	CR463*13-		0	CR463*40-	7	2	CR463*72-
1	4	CR463*14-		1	CR463*41-		3	CR463*73-
	5	CR463*15-		2	CR463*42-		4	CR463*74-
	6	CR463*16-		3	CR463*43-		0	CR463*80-
	7	CR463*17-	4	4	CR463*44-		1	CR463*81-
	8	CR463*18-		5	CR463*45-	8	2	CR463*82-
	0	CR463*20-		6	CR463*46-		3	CR463*83-
	1	CR463*21-		7	CR463*47-		4	CR463*84-
	2	CR463*22-		8	CR463*48-		0	CR463*90-
	3	CR463*23-		0	CR463*50-	9	1	CR463*91-
2	4	CR463*24-		1	CR463*51-		2	CR463*92-
	5	CR463*25-		2	CR463*52-		0	CR463*B0-
	6	CR463*26-	5	3	CR463*53-	10	1	CR463*B1-
	7	CR463*27-		4	CR463*54-		2	CR463*B2-
	8	CR463*28-		5	CR463*55-	11	0	CR463*C0-
				6	CR463*56-	12	0	CR463*D0-

Replace asterisk (*) in product number with L for electrically held and M for mechanically held. See pages 3-8, 3-9, 3-12 and 3-13 to complete product number.

3. Order assembled contactor configured to the exact application need (see pages 3-8 through 3-15).

- Order contactor as required by application
- Arrives fully assembled, ready to install



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

Section 3

CR463

Components

GE Fastrac Program items are printed in red type.

Basic Contactor

Combined with other appropriate components, basic contactors allow configuration into any available electrically or mechanically held model. Includes two power poles.

Contact Configuration	Product Number	List Price GO-10MB
1NO-1NC	CR463L11A*A	\$165.00
2NO	CR463L20A*A	\$160.00

Replace * in the product number with the appropriate digits from the Coil Voltage table. The resulting product number will be for an assembled contactor with no additional auxiliary contacts, pilot devices, pilot lights, control circuit fuses or CPTs. There is no list price adder to Coil Selection.

Coil Voltage

AC, 60Hz	AC, 50Hz	Electrically Held	Mechanically Held	Coil Digit
24V	20V	√	√	C
28V	24V	√	√	D
115-120V	110V	√	√	J
200-208V	—	√	√	L
230-240V	220V	√	√	S
277V	240V	√	√	N
347V	—	√	1	T
460-480V	440V	√	1	U
575-600V	550V	√	1	Y

¹Control module switching device rated 277V max; use CPT for higher voltage

Power Poles

CR460 Series basic contactors accept up to 6 single- or double-pole power poles. These can be used to form up to:

- 12 NO poles when 6 double-poles are used in the NO positions (1-6) or
- 8 NC poles with 4 double-poles in the NC positions (1-4) + 4 NO poles with 2 double-poles in the 2 NO positions (5-6)

Type	Product Number	List Price GO-10MB
Single Pole	CR460XP31	\$43.00
Double Pole	CR460XP32	\$82.00

Packaged individually and overpacked in multiple of 5.

Conversion Kits for Mechanically Held Contactors

Kits for converting electrically held contactors to a mechanically held version. Kits includes control module, latch, latch cover and auxiliary contact(s) plus installation instructions. Conversion kits are suitable for coil voltages 277V and below. Use CPT to reduce coil voltage if line voltage is higher than 277V.

Coil Voltage Range	Control Circuit Wiring	Auxiliary Contacts ¹	Control Circuit Voltage	Product Number	List Price GO-10MB
24-277 Vac	2-wire	(1) 1 Pole	24 Vac	CR460XMB	\$105.00
24-277 Vac	2-wire	(1) 1 Pole	110-120 Vac	CR460XMC	\$105.00
24-277 Vac	2-wire	(1) 1 Pole	200-277 Vac	CR460XMD	\$105.00
24-277 Vac	2-wire	(1) 1 Pole	12-28 Vdc	CR460XME	\$105.00
24-277 Vac	3-wire	(2) 1 Pole	24 Vac	CR460XMM	\$115.00
24-277 Vac	3-wire	(2) 1 Pole	110-120 Vac	CR460XMN	\$115.00
24-277 Vac	3-wire	(2) 1 Pole	200-277 Vac	CR460XMP	\$115.00
24-277 Vac	3-wire	(2) 1 Pole	12-28 Vdc	CR460XMR	\$115.00

¹Auxiliary contact block required for feedback loop, alternate 2 pole blocks may be required for status feedback and/or pilot lights. See Fuse and Transformer Kits table on page 3-7 for CPT selection. See wiring diagrams on page 3-16.

Auxiliary Contacts

Each contactor may use one single or one double auxiliary contact block on each side of the base. When installed on the left side the contacts are NO, when installed on the right side the contacts are NC. This allows a total of 2NO + 2NC contacts maximum.

Type	Product Number	List Price GO-10MB
Single Pole	CR460XB1	\$9.00
Double Pole	CR460XB2	\$17.00

See Additional Auxiliary Contacts tables on pages 3-11 and 3-15 for contact selection data.

Enclosure Kits

Description	Enclosure Type	Product Number	List Price GO-10MB
With no CPT or pilot device	NEMA Type 1	CR460XE1B	\$43.00
With no CPT or pilot device	NEMA Type 1 Flush Mount	CR460XE8B	\$80.00
With no CPT or pilot device	NEMA Type 12/3R	CR460XE2B	\$100.00
With provision for CPT and/or pilot devices, lights	NEMA Type 1	CR460XE1D	\$83.00
With provision for CPT and/or pilot devices, lights	NEMA Type 12/3R	CR460XE2D	\$140.00
With provision for CPT and/or pilot devices, lights	NEMA Type 4	CR460XE4D	\$235.00

See pages 3-18 to 3-19 for enclosure dimensions.

Product Number Selection Instructions: See page 3-5

Lighting Contactors

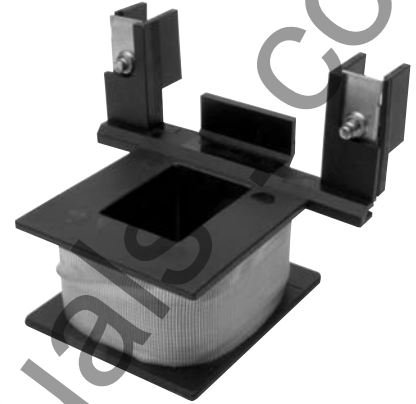
CR463

Components

Enclosure Accessories—Pilot Devices

Pilot Device Type	For Use With	Product Number	List Price GO-10MB
ON/OFF Push Button (Momentary)	Electrically Held with Interlock Aux. Mechanically Held 3-wire Control Module	CR460XP1	\$122.00
ON/OFF or OFF/AUTO Selector Switch (Maintained)	Electrically Held w/o Interlock Aux. Mechanically Held 2-wire Control Module Mechanically Held 3-wire Control Module	CR460XP2	\$122.00
ON/OFF Selector Switch, Spring Return to Center	Electrically Held with Interlock Aux. Mechanically Held 3-wire Control Module	CR460XP3	\$122.00
H-O-A or ON/OFF/AUTO Selector Switch	Electrically Held w/o Interlock Aux. Mechanically Held 3-wire Control Module	CR460XP4	\$122.00
H-O-A or ON/OFF/AUTO Keyed Selector Switch (Key Removal All Positions)	Electrically Held w/o Interlock Aux. Mechanically Held 3-wire Control Module	CR460XP5	\$158.00

Enclosure accessory kits contain accessory and complete installation wiring and hardware. Some kits contain multiple nameplates for alternate markings.



CR460XC Spare Coils

Enclosure Accessories—Pilot Lights

Pilot Light Type	Nameplate	Product Number	List Price GO-10MB
Standard	ON or OFF	CR460XLB*	\$152.00
Push-to-Test	ON or OFF	CR460XLD*	\$170.00

Pilot light kits come with interchangeable red and green lenses. Pilot lights may require auxiliary contacts. Replace * in pilot light product number with appropriate voltage digit from the table below. See extra contact limitations in the Additional Auxiliary Contacts tables on pages 3-11 and 3-15.

Pilot Light Voltage

Voltage	Digit
24 Vac/dc	C
120 Vac	J
208 Vac	L
240 Vac	S
277 Vac	N
347 Vac	T
480 Vac	U
600 Vac	Y

Transformer Kits

	CPT Primary Volts	CPT Secondary Volts	Product Number	List Price GO-10MB
100VA CPT Kit ¹	208V	120V	CR460XTB	\$347.00
100VA CPT Kit ¹	220-240V	120V	CR460XTC	\$347.00
100VA CPT Kit ¹	277V	120V	CR460XTD	\$347.00
100VA CPT Kit ¹	440-480V ²	120V	CR460XTE	\$347.00
100VA CPT Kit ¹	600V	120V	CR460XTF	\$347.00
100VA CPT Kit ¹	120V	24V	CR460XTL	\$347.00
100VA CPT Kit ¹	208V	24V	CR460XTM	\$347.00
100VA CPT Kit ¹	220-240V ²	24V	CR460XTN	\$347.00
100VA CPT Kit ¹	277V	24V	CR460XTP	\$347.00
100VA CPT Kit ¹	440-480V	24V	CR460XTR	\$347.00
100VA CPT Kit ¹	600V	24V	CR460XTS	\$347.00

¹Includes 2 primary and 1 secondary fuse

²May be reconnected in field for 440-480 volts; requires substitution of two 0.5 amp primary fuses.

Control Circuit Fuse Kit

For Use With	Product Number	List Price GO-10MB
Contactors Without CPT	CR460XF	\$155.00

Spare Coils

Coil Voltage @ 60 Hz	Coil Voltage @ 50 Hz	Product Number	List Price GO-10MB
24	20	CR460XCC	\$45.00
28	24	CR460XCD	\$45.00
115-120	110	CR460XCJ	\$45.00
200-208	—	CR460XCL	\$45.00
230-240	220	CR460XCS	\$45.00
277	240	CR460XCN	\$45.00
347	—	CR460XCT	\$45.00
460-480	440	CR460XCU	\$45.00
575-600	500	CR460XCY	\$45.00



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

CR463

Electrically Held Contactors
CR463L - 30A (2-12 pole)
Standard Assembled Forms



Product Number Selection Instructions

Replace * in the product number with the appropriate digits from the Coil Voltage table. The resulting product number will be for an assembled contactor with no additional auxiliary contacts, pilot devices, pilot lights, control circuit fuses or CPTs. There is no list price adder for Coil Selection.

For modified assembled forms with those modifications, see pages 3-10 and 3-11.

- Items listed here are the most common pole configurations.
- Combinations of contactors and coil voltages shown in red are Fastrac or stock items.
- Poles may be reconfigured by the user into alternative combinations of NO and NC contacts.
- All configurations are available as factory-assembled forms.

To order:

Use the modified assembled forms selection data on pages 3-10 and 3-11, or use the web wizard at <http://www.geindustrial.com/industrialsystems/wizards/csp/home.htm?pagesetid=lightingcontactors>, or contact your nearest GE sales office.

Open

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463L11A*	\$165.00
2	2NO	CR463L20A*	\$160.00
3	3NO	CR463L30A*	\$204.00
4	3NO-1NC	CR463L31A*	\$248.00
4	4NO	CR463L40A*	\$243.00
5	5NO	CR463L50A*	\$287.00
6	5NO-1NC	CR463L51A*	\$331.00
6	6NO	CR463L60A*	\$326.00
7	7NO	CR463L70A*	\$370.00
8	7NO-1NC	CR463L71A*	\$414.00
8	8NO	CR463L80A*	\$409.00
9	9NO	CR463L90A*	\$453.00
10	9NO-1NC	CR463L91A*	\$497.00
10	10NO	CR463L80A*	\$492.00
11	11NO	CR463LCOA*	\$536.00
12	12NO	CR463LD0A*	\$575.00

Enclosed NEMA Type 1 Surface Mount

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463L11A*A10A0	\$183.00
2	2NO	CR463L20A*A10A0	\$178.00
3	3NO	CR463L30A*A10A0	\$222.00
4	3NO-1NC	CR463L31A*A10A0	\$266.00
4	4NO	CR463L40A*A10A0	\$261.00
5	5NO	CR463L50A*A10A0	\$335.00
6	5NO-1NC	CR463L51A*A10A0	\$379.00
6	6NO	CR463L60A*A10A0	\$374.00
7	7NO	CR463L70A*A10A0	\$418.00
8	7NO-1NC	CR463L71A*A10A0	\$462.00
8	8NO	CR463L80A*A10A0	\$457.00
9	9NO	CR463L90A*A10A0	\$501.00
10	9NO-1NC	CR463L91A*A10A0	\$545.00
10	10NO	CR463L80A*A10A0	\$540.00
11	11NO	CR463LCOA*A10A0	\$584.00
12	12NO	CR463LD0A*A10A0	\$623.00

Enclosed NEMA Type 1 Surface Mount (Oversize)¹

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463L11A*A10AA	\$223.00
2	2NO	CR463L20A*A10AA	\$218.00
3	3NO	CR463L30A*A10AA	\$262.00
4	3NO-1NC	CR463L31A*A10AA	\$306.00
4	4NO	CR463L40A*A10AA	\$301.00
5	5NO	CR463L50A*A10AA	\$375.00
6	5NO-1NC	CR463L51A*A10AA	\$419.00
6	6NO	CR463L60A*A10AA	\$414.00
7	7NO	CR463L70A*A10AA	\$458.00
8	7NO-1NC	CR463L71A*A10AA	\$502.00
8	8NO	CR463L80A*A10AA	\$497.00
9	9NO	CR463L90A*A10AA	\$541.00
10	9NO-1NC	CR463L91A*A10AA	\$585.00
10	10NO	CR463L80A*A10AA	\$580.00
11	11NO	CR463LCOA*A10AA	\$624.00
12	12NO	CR463LD0A*A10AA	\$663.00

¹Oversize enclosures required for field installed pilot devices, pilot lights and control power transformers.

Enclosed NEMA Type 1 Flush Mount

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463L11A*A80A0	\$245.00
2	2NO	CR463L20A*A80A0	\$240.00
3	3NO	CR463L30A*A80A0	\$284.00
4	3NO-1NC	CR463L31A*A80A0	\$328.00
4	4NO	CR463L40A*A80A0	\$323.00
5	5NO	CR463L50A*A80A0	\$367.00
6	5NO-1NC	CR463L51A*A80A0	\$411.00
6	6NO	CR463L60A*A80A0	\$406.00
7	7NO	CR463L70A*A80A0	\$450.00
8	7NO-1NC	CR463L71A*A80A0	\$494.00
8	8NO	CR463L80A*A80A0	\$489.00
9	9NO	CR463L90A*A80A0	\$533.00
10	9NO-1NC	CR463L91A*A80A0	\$577.00
10	10NO	CR463L80A*A80A0	\$572.00
11	11NO	CR463LCOA*A80A0	\$616.00
12	12NO	CR463LD0A*A80A0	\$655.00

Coil Voltage

Insert coil digit in place of * in digit 10.

Coil Voltage	AC, 60Hz	AC, 50Hz	Coil Digit
24V	24V	20V	C
28V	28V	24V	D
115-120V	110V	110V	J
200-208V	—	—	L
230-240V	220V	220V	S
277V	240V	240V	N
347V	—	—	T
460-480V	440V	440V	U
575-600V	550V	550V	Y

Lighting Contactors CR463

Electrically Held Contactors
CR463L - 30A (2-12 pole)
Standard Assembled Forms

Enclosed NEMA Type 12/3R

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463L11A*A20A0	\$275.00
2	2NO	CR463L20A*A20A0	\$270.00
3	3NO	CR463L30A*A20A0	\$314.00
4	3NO-1NC	CR463L31A*A20A0	\$358.00
4	4NO	CR463L40A*A20A0	\$353.00
5	5NO	CR463L50A*A20A0	\$397.00
6	5NO-1NC	CR463L51A*A20A0	\$441.00
6	6NO	CR463L60A*A20A0	\$436.00
7	7NO	CR463L70A*A20A0	\$480.00
8	7NO-1NC	CR463L71A*A20A0	\$524.00
8	8NO	CR463L80A*A20A0	\$519.00
9	9NO	CR463L90A*A20A0	\$563.00
10	9NO-1NC	CR463L91A*A20A0	\$607.00
10	10NO	CR463L80A*A20A0	\$602.00
11	11NO	CR463LC0A*A20A0	\$646.00
12	12NO	CR463LD0A*A20A0	\$685.00

Enclosed NEMA Type 12/3R (Oversize)¹

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463L11A*A20AA	\$315.00
2	2NO	CR463L20A*A20AA	\$310.00
3	3NO	CR463L30A*A20AA	\$354.00
4	3NO-1NC	CR463L31A*A20AA	\$398.00
4	4NO	CR463L40A*A20AA	\$353.00
5	5NO	CR463L50A*A20AA	\$437.00
6	5NO-1NC	CR463L51A*A20AA	\$481.00
6	6NO	CR463L60A*A20AA	\$476.00
7	7NO	CR463L70A*A20AA	\$520.00
8	7NO-1NC	CR463L71A*A20AA	\$564.00
8	8NO	CR463L80A*A20AA	\$559.00
9	9NO	CR463L90A*A20AA	\$603.00
10	9NO-1NC	CR463L91A*A20AA	\$647.00
10	10NO	CR463LB0A*A20AA	\$642.00
11	11NO	CR463LC0A*A20AA	\$686.00
12	12NO	CR463LD0A*A20AA	\$725.00

¹Oversize enclosures required for field installed pilot devices, pilot lights and control power transformers.

Enclosed NEMA Type 4/4X

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463L11A*A40A0	\$369.00
2	2NO	CR463L20A*A40A0	\$364.00
3	3NO	CR463L30A*A40A0	\$408.00
4	3NO-1NC	CR463L31A*A40A0	\$452.00
4	4NO	CR463L40A*A40A0	\$447.00
5	5NO	CR463L50A*A40A0	\$491.00
6	5NO-1NC	CR463L51A*A40A0	\$535.00
6	6NO	CR463L60A*A40A0	\$530.00
7	7NO	CR463L70A*A40A0	\$574.00
8	7NO-1NC	CR463L71A*A40A0	\$618.00
8	8NO	CR463L80A*A40A0	\$613.00
9	9NO	CR463L90A*A40A0	\$657.00
10	9NO-1NC	CR463L91A*A40A0	\$701.00
10	10NO	CR463LB0A*A40A0	\$696.00
11	11NO	CR463LC0A*A40A0	\$740.00
12	12NO	CR463LD0A*A40A0	\$779.00

Coil Voltage

Insert coil digit in place of * in digit 10.

Coil Voltage AC, 60Hz	AC, 50Hz	Coil Digit
24V	20V	C
28V	24V	D
115-120V	110V	J
200-208V	—	L
230-240V	220V	S
277V	240V	N
347V	—	T
460-480V	440V	U
575-600V	550V	Y



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

Section 3

CR463

Electrically Held Contactors

CR463L - 30A (2-12 pole)

Modified Assembled Forms

CR463L Electrically Held Contactors

Follow the diagram and tables below to select the options and corresponding product number digits for your modified contactor. Total the prices for each selection to arrive at the total list price, GO-10MB.

7 & 8 Power Pole Contact Configuration

The number of NO contacts is digit 7 and the number of NC contacts is digit 8.

¹For digit 7 with 10 NO contacts, use B; for 11 NO contacts, use C; for 12 NO contacts, use D.

10 Coil Voltage

There is no price adder to coil selection.

12 Enclosures

Product Number Selection Instructions: See page 3-8

11 Additional Auxiliary Contacts

Each side of the contactor base will accept one single- or double-pole auxiliary contact block, for a maximum of 2NO-2NC contacts. Enclosures with OFF pilot lights require 1NC contact. Specify an additional 1NO contact if a holding interlock is required and "not" selected as part of Digit 13 (1 or 3). For open forms, this is the final digit.

13 Pilot Devices

Heavy-duty, 30mm pilot devices. Not available in Type 1 flush enclosure.

14 Pilot Lights

Heavy-duty 30mm pilot lights with interchangeable red and green lenses. See the Additional Auxiliary Contacts table above for contact limitations. OFF light includes extra auxiliary contact. Not available in Type 1 flush enclosure.

15 Circuit Fuses/Control Power Transformers

CPT secondary voltage must match control voltage. Not available in Type 1 flush enclosure.



Lighting Contactors

CR463

Mechanically Held Contactors
CR463M - 30A (2-12 pole)
Standard Assembled Forms

Product Number Selection Instructions

To specify control and coil voltage, replace ** in the product number with the appropriate digits from the Control Circuit table, and add the price adder (if any) to the contactor list price. The resulting product number will be for an assembled contactor with no additional auxiliary contacts, pilot devices, pilot lights, control circuit fuses or CPTs. If coil supply voltage is greater than 277V, use a CPT.

For modified assembled forms with those modifications, see pages 3-14 and 3-15. Items listed here are the most common pole configurations. **Combinations of contactors and control circuits shown in red are Fastrac or stock items.**

Poles may be reconfigured by user into alternative combinations of NO and NC contacts. All configurations are available as factory-assembled forms. To order: Use the modified assembled forms selection data on pages 3-14 and 3-15, or use the web wizard at <http://www.geindustrial.com/industrialsystems/wizards/csp/home.htm?pagesetid=lightingcontactors>, or contact your nearest GE sales office.

Open

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463M11**A	\$275.00
2	2NO	CR463M20**A	\$270.00
3	3NO	CR463M30**A	\$314.00
4	3NO-1NC	CR463M31**A	\$358.00
4	4NO	CR463M40**A	\$353.00
5	5NO	CR463M50**A	\$397.00
6	5NO-1NC	CR463M51**A	\$441.00
6	6NO	CR463M60**A	\$436.00
7	7NO	CR463M70**A	\$480.00
8	7NO-1NC	CR463M71**A	\$524.00
8	8NO	CR463M80**A	\$519.00
9	9NO	CR463M90**A	\$563.00
10	9NO-1NC	CR463M91**A	\$607.00
10	10NO	CR463MB0**A	\$602.00
11	11NO	CR463MC0**A	\$646.00
12	12NO	CR463MD0**A	\$685.00

Enclosed NEMA Type 1 Surface Mount

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463M11**A10A0	\$293.00
2	2NO	CR463M20**A10A0	\$288.00
3	3NO	CR463M30**A10A0	\$332.00
4	3NO-1NC	CR463M31**A10A0	\$376.00
4	4NO	CR463M40**A10A0	\$371.00
5	5NO	CR463M50**A10A0	\$445.00
6	5NO-1NC	CR463M51**A10A0	\$489.00
6	6NO	CR463M60**A10A0	\$484.00
7	7NO	CR463M70**A10A0	\$528.00
8	7NO-1NC	CR463M71**A10A0	\$572.00
8	8NO	CR463M80**A10A0	\$567.00
9	9NO	CR463M90**A10A0	\$611.00
10	9NO-1NC	CR463M91**A10A0	\$655.00
10	10NO	CR463MB0**A10A0	\$650.00
11	11NO	CR463MC0**A10A0	\$694.00
12	12NO	CR463MD0**A10A0	\$733.00

Enclosed NEMA Type 1 Surface Mount (Oversize)¹

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463M11**A10AA	\$333.00
2	2NO	CR463M20**A10AA	\$328.00
3	3NO	CR463M30**A10AA	\$372.00
4	3NO-1NC	CR463M31**A10AA	\$416.00
4	4NO	CR463M40**A10AA	\$411.00
5	5NO	CR463M50**A10AA	\$485.00
6	5NO-1NC	CR463M51**A10AA	\$529.00
6	6NO	CR463M60**A10AA	\$524.00
7	7NO	CR463M70**A10AA	\$568.00
8	7NO-1NC	CR463M71**A10AA	\$612.00
8	8NO	CR463M80**A10AA	\$607.00
9	9NO	CR463M90**A10AA	\$651.00
10	9NO-1NC	CR463M91**A10AA	\$695.00
10	10NO	CR463MB0**A10AA	\$690.00
11	11NO	CR463MC0**A10AA	\$734.00
12	12NO	CR463MD0**A10AA	\$773.00

¹Oversize enclosures required for field installed pilot devices, pilot lights and control power transformers.

Enclosed NEMA Type 1 Flush Mount

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463M11**A80A0	\$355.00
2	2NO	CR463M20**A80A0	\$350.00
3	3NO	CR463M30**A80A0	\$394.00
4	3NO-1NC	CR463M31**A80A0	\$438.00
4	4NO	CR463M40**A80A0	\$433.00
5	5NO	CR463M50**A80A0	\$477.00
6	5NO-1NC	CR463M51**A80A0	\$421.00
6	6NO	CR463M60**A80A0	\$516.00
7	7NO	CR463M70**A80A0	\$560.00
8	7NO-1NC	CR463M71**A80A0	\$604.00
8	8NO	CR463M80**A80A0	\$599.00
9	9NO	CR463M90**A80A0	\$643.00
10	9NO-1NC	CR463M91**A80A0	\$687.00
10	10NO	CR463MB0**A80A0	\$682.00
11	11NO	CR463MC0**A80A0	\$726.00
12	12NO	CR463MD0**A80A0	\$765.00

Insert control module/coil digit in place of the ** in digit 9 and 10 of product number.

Control Circuit Ratings

Control	Control Module Input	Product No. Digits by Coil Voltage (60 Hz) ²		
		115-120 Vac	277 Vac	List Price Adder
2 Wire	110-120 Vac	CJ	—	\$0.00
	200-277 Vac	—	DN	\$0.00
3 Wire	110-120 Vac	NJ	—	\$10.00
	200-277 Vac	—	PN	\$10.00

²For 50 Hz coil ratings see coil table, page 3-8.

Lighting Contactors CR463

Mechanically Held Contactors
CR463M - 30A (2-12 pole)
Standard Assembled Forms

Enclosed NEMA Type 12/3R

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463M11**A20A0	\$385.00
2	2NO	CR463M20**A20A0	\$380.00
3	3NO	CR463M30**A20A0	\$424.00
4	3NO-1NC	CR463M31**A20A0	\$468.00
4	4NO	CR463M40**A20A0	\$463.00
5	5NO	CR463M50**A20A0	\$507.00
6	5NO-1NC	CR463M51**A20A0	\$551.00
6	6NO	CR463M60**A20A0	\$546.00
7	7NO	CR463M70**A20A0	\$590.00
8	7NO-1NC	CR463M71**A20A0	\$634.00
8	8NO	CR463M80**A20A0	\$629.00
9	9NO	CR463M90**A20A0	\$673.00
10	9NO-1NC	CR463M91**A20A0	\$717.00
10	10NO	CR463MB0**A20A0	\$712.00
11	11NO	CR463MC0**A20A0	\$756.00
12	12NO	CR463MD0**A20A0	\$795.00

Enclosed NEMA Type 12/3R (Oversize)¹

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463M11**A20AA	\$425.00
2	2NO	CR463M20**A20AA	\$420.00
3	3NO	CR463M30**A20AA	\$464.00
4	3NO-1NC	CR463M31**A20AA	\$508.00
4	4NO	CR463M40**A20AA	\$503.00
5	5NO	CR463M50**A20AA	\$547.00
6	5NO-1NC	CR463M51**A20AA	\$591.00
6	6NO	CR463M60**A20AA	\$586.00
7	7NO	CR463M70**A20AA	\$630.00
8	7NO-1NC	CR463M71**A20AA	\$674.00
8	8NO	CR463M80**A20AA	\$669.00
9	9NO	CR463M90**A20AA	\$713.00
10	9NO-1NC	CR463M91**A20AA	\$757.00
10	10NO	CR463MB0**A20AA	\$752.00
11	11NO	CR463MC0**A20AA	\$796.00
12	12NO	CR463MD0**A20AA	\$839.00

¹Oversize enclosures required for field installed pilot devices, pilot lights and control power transformers.

Enclosed NEMA Type 4/4X

No. of Poles	Contact Configuration	Product Number	List Price GO-10MB
2	1NO-1NC	CR463M11**A40A0	\$479.00
2	2NO	CR463M20**A40A0	\$474.00
3	3NO	CR463M30**A40A0	\$518.00
4	3NO-1NC	CR463M31**A40A0	\$562.00
4	4NO	CR463M40**A40A0	\$557.00
5	5NO	CR463M50**A40A0	\$610.00
6	5NO-1NC	CR463M51**A40A0	\$645.00
6	6NO	CR463M60**A40A0	\$640.00
7	7NO	CR463M70**A40A0	\$484.00
8	7NO-1NC	CR463M71**A40A0	\$728.00
8	8NO	CR463M80**A40A0	\$723.00
9	9NO	CR463M90**A40A0	\$767.00
10	9NO-1NC	CR463M91**A40A0	\$811.00
10	10NO	CR463MB0**A40A0	\$806.00
11	11NO	CR463MC0**A40A0	\$850.00
12	12NO	CR463MD0**A40A0	\$889.00

Insert control module/coil digit in place of the ** digit 9 and 10 of product number.

Control Circuit Ratings

Control	Control Module Input	Product No. Digits by Coil Voltage (60 Hz) ²		
		115-120 Vac	277 Vac	List Price Adder
2 Wire	110-120 Vac	CJ	—	\$0.00
	200-277 Vac	—	DN	\$0.00
3 Wire	110-120 Vac	NJ	—	\$10.00
	200-277 Vac	—	PN	\$10.00

²For 50 Hz coil ratings see coil table, page 3-8.



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

Section 3

CR463

Mechanically Held Contactors

CR463M - 30A (2-12 pole)

Modified Assembled Forms

CR463M Mechanically Held Contactors

Follow the diagram and tables below to select the options and corresponding product number digits for your modified contactor. Total the prices for each selection to arrive at the total list price, GO-10MB.

7 & 8 Power Pole Contact Configuration

The number of NO contacts is digit 7 and the number of NC contacts is digit 8.

¹For digit 7 with 10 NO contacts, use B; for 11 NO contacts, use C; for 12 NO contacts, use D.

9 & 10 Control Circuit

If coil supply voltage is greater than 277V, use CPT.

11 Additional Auxiliary Contacts

Each side of the contactor base will accept one single- or double-pole auxiliary contact block, for a maximum of 2NO-2NC contacts. The 2-wire control module uses 1NC contact and the 3-wire uses 1NO-1NC for feedback and control. The table below indicates the additional auxiliary contacts available for customer or field use when factory-assembled forms are supplied. For open forms, this is the final digit.

12 Enclosures

13 Pilot Devices

Heavy-duty, 30mm pilot devices. Not available in Type 1 flush enclosure.

15 Control Circuit Fuses/Control Power Transformers

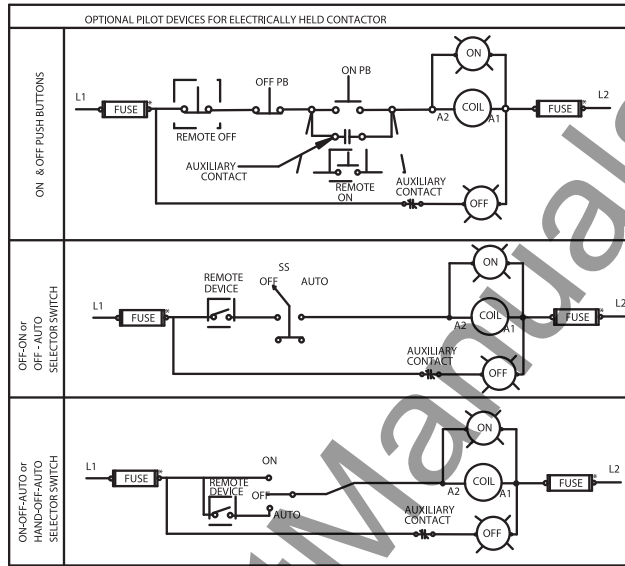
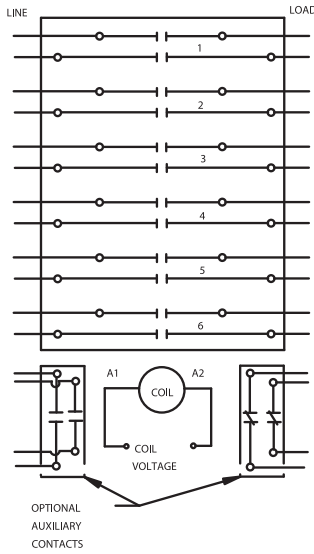
CPT secondary voltage must match control voltage. Not available in Type 1 flush enclosure.

14 Pilot Lights

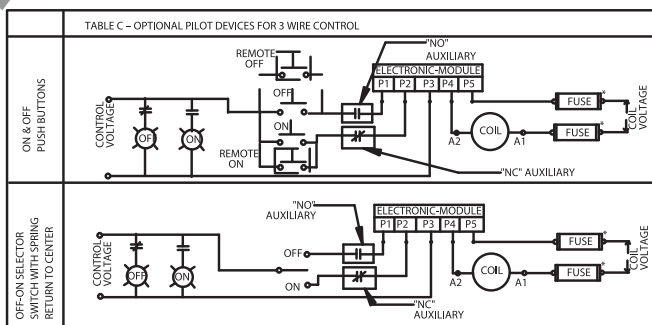
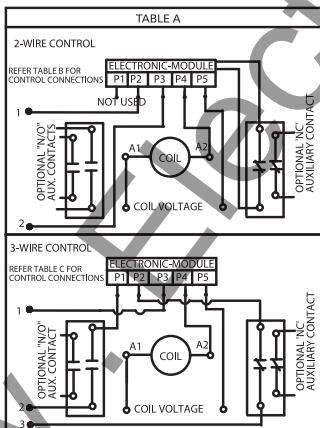
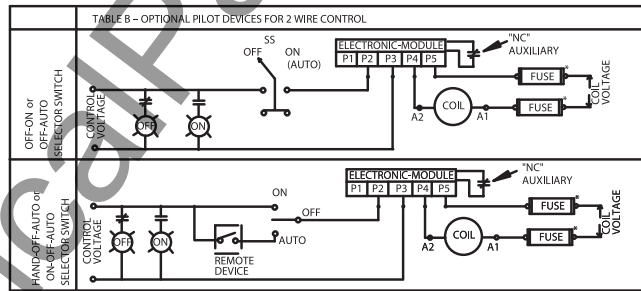
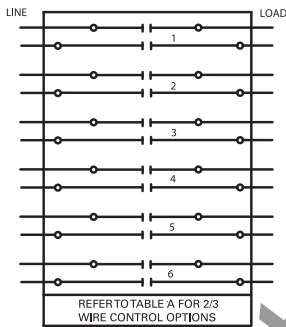
Heavy-duty 30mm pilot lights with interchangeable red and green lenses. See the Additional Auxiliary Contacts table above for contact limitations. OFF light includes auxiliary contact. Not available in Type 1 flush enclosure.



Publications and Reference: See Section 17 for a complete list of additional product-related publications



CR463L Electrically Held

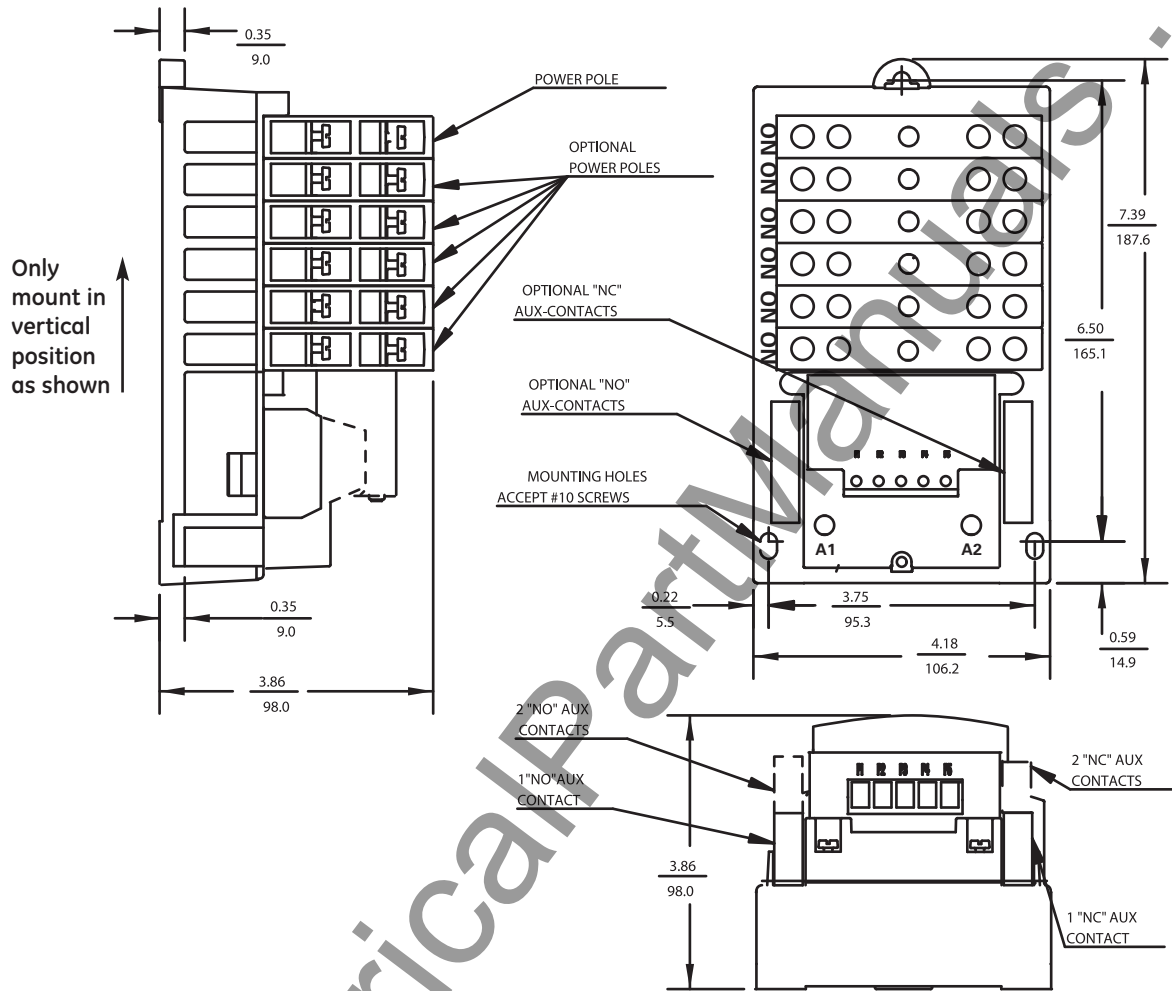


CR463M Mechanically Held

Lighting Contactors

CR463L, CR463M

Outlines and Dimensions (in/mm) For Estimating Only



Contactor CR463L...CR463M, Drawing #55-217114P01

Note:

- 1 Mounting Dimensions remain the same for 1 to 12 Poles
- 2 Line and Load terminals are interchangeable
- 3 Up to 2NO and 2NC auxiliary contacts can be added onto the base product
- 4 Same Power Pole can be configured as NO type or NC type in pole positions 1-4; NO type only in positions 5-6.



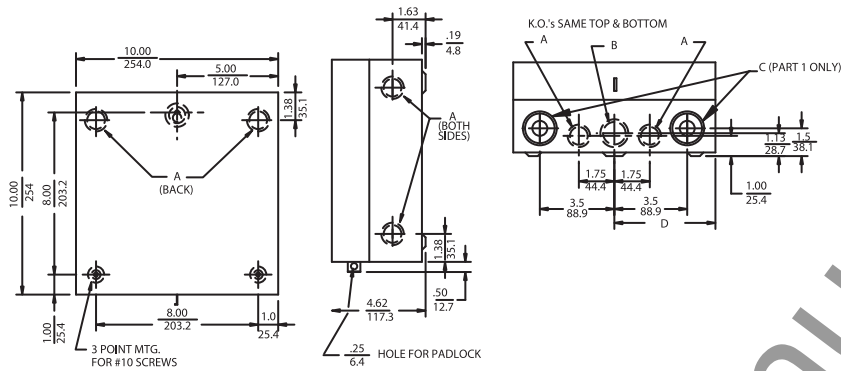
Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

CR463L, CR463M

Outlines and Dimensions (in/mm) For Estimating Only

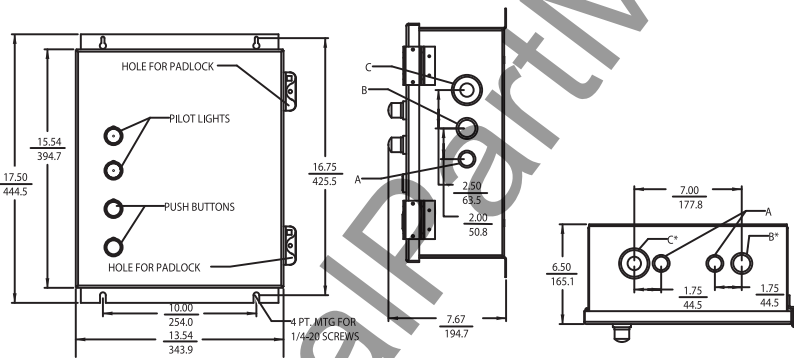
Section 3



NEMA Type 1 with no CPT, pilot devices or pilot lights, Drawing #55-217069 (CR460XE1B)

K.O.'s same top and bottom

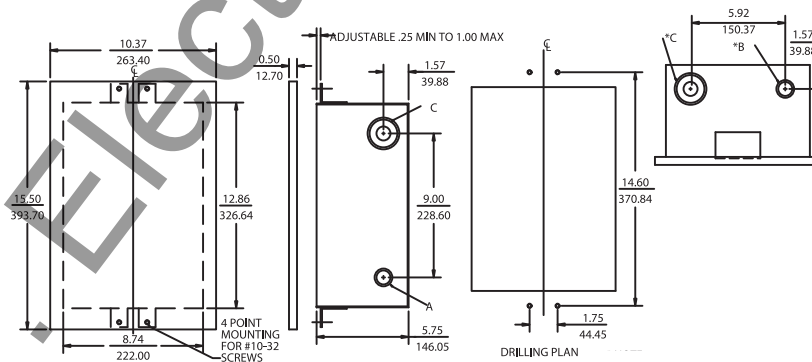
- A. Combination knockout for 1/2 or 3/4-inch conduit
- B. Combination knockout for 3/4 or 1-inch conduit
- C. Combination knockout for 1/2, 1-1/4 or 1-1/2-inch conduit



NEMA Type 1 oversized or with provision for CPT and/or pilot device/pilot lights, Drawing #55-217105 (CR460XE1D)

- A. Combination knockout for 1/2 or 3/4-inch conduit
- B. Combination knockout for 3/4 or 1-inch conduit
- C. Combination knockout for 1/2, 1-1/4 or 1-1/2-inch conduit

*Note: Knockouts reversed on bottom



NEMA Type 1 Flush Drawing #55-217108 (CR460XE8B)

- A. Combination knockout for 1/2 or 3/4-inch conduit
- B. Combination knockout for 3/4 or 1-inch conduit
- C. Combination knockout for 1/2, 1-1/4 or 1-1/2-inch conduit

*Note: Knockouts reversed on bottom

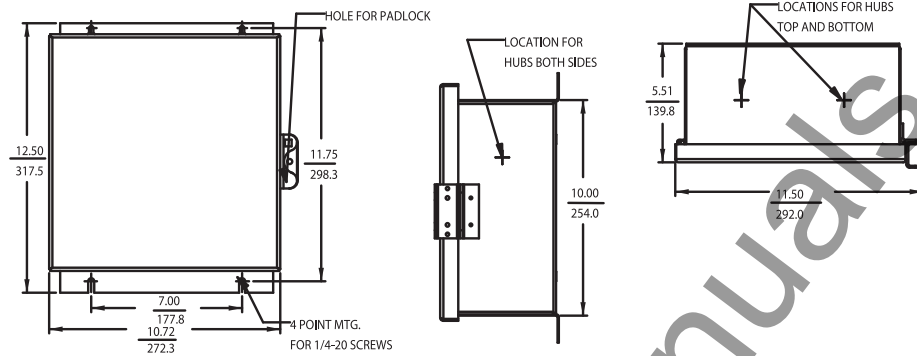
Product Number Selection Instructions: See page 3-5

Lighting Contactors

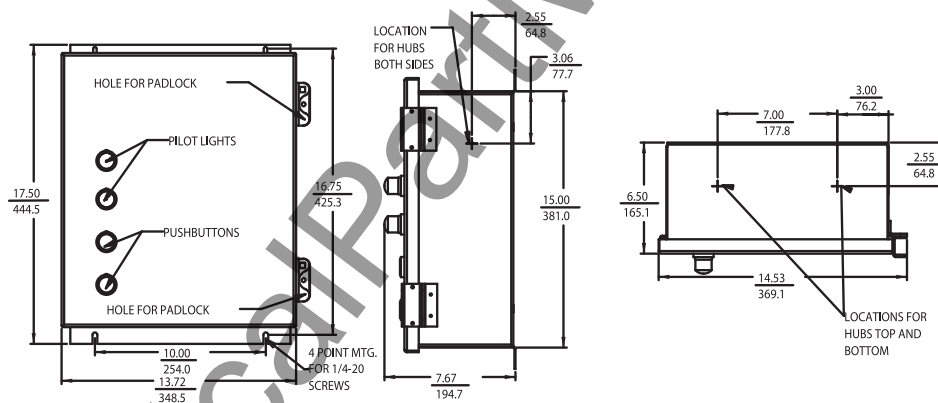
CR463L, CR463M

Outlines and Dimensions (in/mm) For Estimating Only

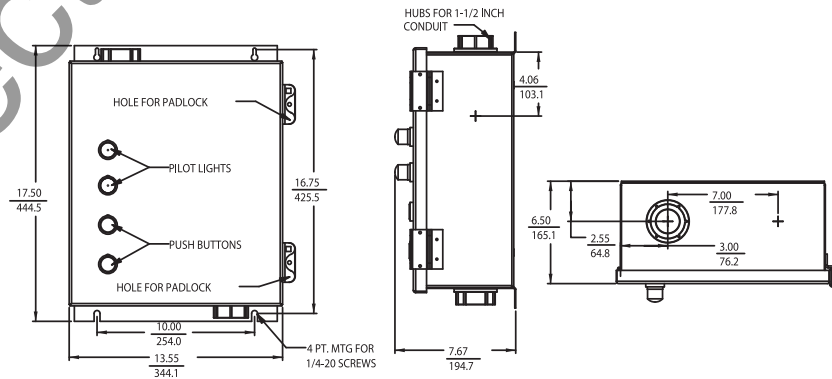
Section 3



NEMA Type 12/3R with no CPT, pilot device or pilot lights, Drawing #55-217109 (CR460XE2B)



NEMA Type 12/3R oversized with provision for CPT and/or pilot device/pilot lights, Drawing #55-217106 (CR460XE2D)



NEMA Type 4/4X oversized with provision for CPT and/or pilot devices/pilot lights, Drawing #55-217107 (CR460XE4D)



Lighting Contactors

CR460, CR463

Technical Data

Section 3

Main Power Poles Ratings

Maximum AC Voltage and Amp Ratings

Load Type	Amps Continuous	Poles	
		1 Phase	3 Phase
Ballast	30	347 Vac	600 Vac
Tungsten	20	277 Vac	480 Vac
General Use/AC Resistive	30	600 Vac	600 Vac

Maximum Horsepower Rating (Normal Starting Duty)

	1 Pole Single Phase			3 Poles, Three Phase		
	Volts	HP		Volts	HP	
	110-120V	220-240V	200-208V	220-240V	440-480V	550-600V
	1	2	3	5	10	15

Withstand Current Ratings

For 463 Series Contactors Available Amps (RMS) Symmetrical

Circuit Breakers Inverse Trip Type	Enclosure Type CR460X*B		Enclosure Type CR460X*D or Larger				
	TEY/ THHQB	All other inverse trip breakers	THHQB	TEY	SE	All other inverse trip breakers	
240	30	22,000	14,000	22,000	65,000	100,000	22,000
	40	14,000	10,000	22,000	65,000	100,000	22,000
277	30	14,000 ¹	10,000	N/A	14,000	30,000	14,000
	40	14,000 ¹	5,000	N/A	14,000	30,000	14,000
480	40	N/A	5,000	N/A	N/A	30,000	14,000
600	40	N/A	5,000	N/A	N/A	14,000	10,000

¹TEY only

Withstand Current Ratings

For 463 Series Contactors - Available Amps (RMS) Symmetrical Fuses

AC Service Voltage	Fuse Size	Enclosure Type CR460X*B		Enclosure Type CR460X*D or Larger		
		J	RK1	J/RK1/RK5	K	H
600 and below	30	100,000	50,000	100,000	50,000	10,000

Control Circuit Characteristics

Coil

Inrush	248 VA
Sealed	28 VA

Control Module

Input Voltage	Steady State Current @ Rated Voltage (mA)	Maximum VA
12-28 VDC	42	2
24 VAC	80	5
115-120 VAC	83	12
200-277 VAC	91	30

Minimum pulse duration (3-wire control module)	250 ms
Maximum allowable leakage current	1.8 mA
EMI	35 V/m
Surge transient peak	6 kV
Frequency range	40-70 Hz

Auxiliary Contacts Rating

A600, 24VDC, 24Va

Wire Size Ratings

Component	Number of Cables	Wire Range (AWG) (Solid or Stranded)	Wire Temp.
Power Poles	1	#14-8	75°C Cu
Power Poles	2	#14-8 ¹	75°C Cu
Coil	1 or 2	#18-14	60°/75°C Cu
Control Module	1 or 2	#22-12	60°/75°C Cu
Auxiliary Contacts	1 or 2	#22-12	60°/75°C Cu

¹#8 AWG stranded only.

Standards and Listings

UL508 File, E1811 Vol 19, cUL, CE

Ambient Operating Temperature

-25° to 40°C

Reference Publications

Instructions DEH-40460

Product Number Selection Instructions: See page 3-5

Lighting Contactors

CR360L

Electrically Held Contactors

CR360L - 30A - 300A (2, 3 & 4 pole)

GE Fastrac Program items are printed in red type.

Application

These CR360L magnetic electrically held lighting contactors are specifically rated for 30-, 60-, 100-, 200-, and 300-ampere tungsten-, fluorescent-, mercury arc-, and sodium-lamp loads. They are available open or enclosed.

They may be controlled by a remote push button, toggle, or selector switch or other pilot device.

Ratings

Open or enclosed ratings are 30-, 60-, 100-, 200-, and 300-ampere, ac full-load current.

Maximum AC Voltage Rating

Lighting Load	Line	Load
Tungsten	480	480
Ballast: Fluorescent, Mercury, Sodium, e.g.	600	600

DC Tungsten Rating

Contactor Size, Continuous Ampere Rating	No. Poles in Series for:	
	125 V Maximum	250 V Maximum
30	2	3
60	2	4
100-300	2	2

Product Number Selection Instructions

Order by complete product number.

- Select rating and enclosure from Table 1.
- Select coil voltage from Table 2.
- For additionally modified enclosed forms, use Tables 2a, 3, 4, and 5.

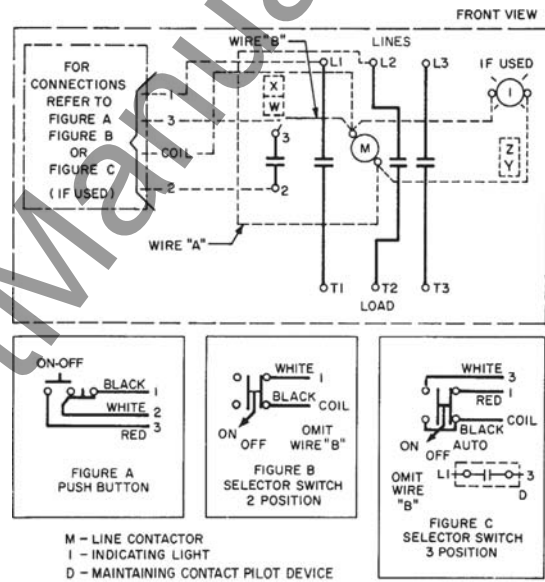
Note: Coils will be connected line-to-line unless otherwise specified. Complete product number must contain 15 digits.

Reference Publications

Instructions	CR360L Contactors
Continuous Ampere Rating	
30	GEH-5099
60	GEH-5100
100	GEH-5101
200	GEH-5102
300	GEH-5103

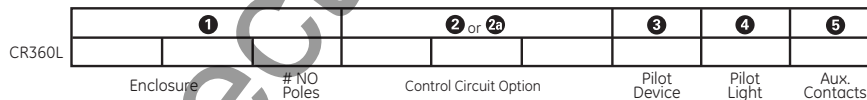


Open 60-Amp Electrically Held Lighting Contactor

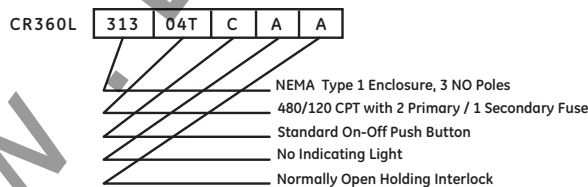


Typical Schematic Diagram for CR360L Lighting Contactor

Product Number



Example: 30-ampere, three-pole lighting contactor in a NEMA Type 1 enclosure with a 480/120 Volt CPT, 2 primary, 1 secondary fuse, standard-duty on/off push button with holding interlock.



List Price, GO-10MB

+ 1	\$
+ 2	\$
+ 3	\$
+ 4	\$
+ 5	\$
=	\$

List Price, GO-10MB

+ 1	\$ 216.00
+ 2	\$ 367.00
+ 3	\$ 60.00
+ 4	\$ 0.00
+ 5	\$ 82.00
=	\$ 725.00



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors CR360L

Electrically Held Contactors
CR360L - 30A - 300A (2, 3 & 4 pole)

GE Fastrac Program items are printed in red type.

1 Select Size, Number of Poles, and Enclosure

Open

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR360L302	\$186.00
30A	3	CR360L303	\$204.00
30A	4	CR360L304	\$252.00
60A	2	CR360L402	\$348.00
60A	3	CR360L403	\$372.00
60A	4	CR360L404	\$480.00
100A	2	CR360L502	\$552.00
100A	3	CR360L503	\$600.00
100A	4	CR360L504	\$768.00
200A	2	CR360L602	\$1332.00
200A	3	CR360L603	\$1440.00
200A	4	CR360L604	\$2004.00
300A	2	CR360L702	\$2886.00
300A	3	CR360L703	\$3138.00
300A	4	CR360L704	\$5766.00

Enclosed NEMA Type 3R

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR360L362	\$288.00
30A	3	CR360L363	\$306.00
30A	4	CR360L364	\$354.00
60A	2	CR360L462	\$573.00
60A	3	CR360L463	\$597.00
60A	4	CR360L464	\$705.00
100A	2	CR360L562	\$867.00
100A	3	CR360L563	\$915.00
100A	4	CR360L564	\$1083.00
200A	2	CR360L662	\$2229.00
200A	3	CR360L663	\$2337.00
200A	4	CR360L664	\$2901.00
300A	2	CR360L762	\$4998.00
300A	3	CR360L763	\$5250.00
300A	4	CR360L764	\$8340.00

Enclosed NEMA Type 1

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR360L312	\$198.00
30A	3	CR360L313	\$216.00
30A	4	CR360L314	\$264.00
60A	2	CR360L412	\$408.00
60A	3	CR360L413	\$432.00
60A	4	CR360L414	\$540.00
100A	2	CR360L512	\$672.00
100A	3	CR360L513	\$720.00
100A	4	CR360L514	\$888.00
200A	2	CR360L612	\$1584.00
200A	3	CR360L613	\$1692.00
200A	4	CR360L614	\$2256.00
300A	2	CR360L712	\$3348.00
300A	3	CR360L713	\$3600.00
300A	4	CR360L714	\$6690.00

Enclosed NEMA Type 4, SS

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR360L342	\$468.00
30A	3	CR360L343	\$486.00
30A	4	CR360L344	\$534.00
60A	2	CR360L442	\$948.00
60A	3	CR360L443	\$972.00
60A	4	CR360L444	\$1080.00
100A	2	CR360L542	\$1437.00
100A	3	CR360L543	\$1485.00
100A	4	CR360L544	\$1653.00
200A	2	CR360L642	\$2889.00
200A	3	CR360L643	\$2997.00
200A	4	CR360L644	\$3561.00
300A	2	CR360L742	\$4998.00
300A	3	CR360L743	\$5250.00
300A	4	CR360L744	\$8340.00

Enclosed NEMA Type 12

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR360L322	\$288.00
30A	3	CR360L323	\$306.00
30A	4	CR360L324	\$354.00
60A	2	CR360L422	\$573.00
60A	3	CR360L423	\$597.00
60A	4	CR360L424	\$705.00
100A	2	CR360L522	\$867.00
100A	3	CR360L523	\$915.00
100A	4	CR360L524	\$1083.00
200A	2	CR360L622	\$2229.00
200A	3	CR360L623	\$2337.00
200A	4	CR360L624	\$2901.00
300A	2	CR360L722	\$4998.00
300A	3	CR360L723	\$5250.00
300A	4	CR360L724	\$8340.00

2 Select Coil Voltage

Voltage	Product Number Digits
24	24A
120	02A
208 ¹	23A
240 ¹	03A
277 ¹	13A
480 ¹	04A

¹Control circuit fuses required for 200 and 300 amp forms if pilot devices selected in steps 3 or 4.

Lighting Contactors CR360L

Electrically Held Contactors

CR360L - 30A - 300A (2, 3 & 4 pole)

GE Fastrac Program items are printed in red type.

2a Select Control Circuit Type (Following available only with Enclosure)

		Continuous Ampere Rating									
		30A		60A		100A		200A		300A	
Control Circuit Options	Coil Voltage	Product Number Digits	List Price Adder, GO-10MB	Product Number Digits	List Price Adder, GO-10MB	Product Number Digits	List Price Adder, GO-10MB	Product Number Digits	List Price Adder, GO-10MB	Product Number Digits	List Price Adder, GO-10MB
2 Control	24	24D	\$165.00	24D	\$165.00	24D	\$165.00	24D	\$165.00	24D	\$165.00
Circuit Fuses	120	02D	\$165.00	2D	\$165.00	02D	\$165.00	02D	\$165.00	02D	\$165.00
	208	23D	\$165.00	23D	\$165.00	23D	\$165.00	23D	\$165.00	23D	\$165.00
	240	03D	\$165.00	03D	\$165.00	03D	\$165.00	03D	\$165.00	03D	\$165.00
	277	13D	\$165.00	13D	\$165.00	13D	\$165.00	13D	\$165.00	13D	\$165.00
	480	04D	\$165.00	04D	\$165.00	04D	\$165.00	04D	\$165.00	04D	\$165.00
CPT Primary											
Volts											
CPT w/120V secondary,	208	82T	\$367.00	82T	\$440.00	62T	\$585.00	48T	\$675.00	40T	\$743.00
includes 2 primary, 1 secondary fuse	240	03T	\$367.00	03T	\$440.00	03T	\$585.00	03T	\$675.00	03T	\$743.00
	277	61T	\$367.00	61T	\$440.00	61T	\$585.00	61T	\$675.00	61T	\$743.00
	480	04T	\$367.00	04T	\$440.00	04T	\$585.00	04T	\$675.00	04T	\$743.00

3 Select Push Buttons or Selector Switch

Push Button, Selector Switch Options	NEMA Type 1 Only Standard-Duty		Any Enclosure Heavy-Duty	
	Product No. Digit	List Price GO-10MB	Product No. Digit	List Price GO-10MB
None	A	\$0.00	A	\$0.00
On-Off Push Button	C**	\$60.00	K	\$166.00
Hand-Off-Auto Selector Switch	D	\$60.00	L	\$165.00
Off-On Selector Switch	E	\$60.00	M	\$165.00
Hand-Off-Auto Selector Switch With Key	-	-	N	\$210.00
On-Off-Auto Selector Switch	F	\$60.00	P	\$165.00

**Add holding interlock with this modification

4 Select Indicating Lights

Light Option	NEMA Type 1 Only Standard-Duty		Any Enclosure Heavy-Duty	
	Product No. Digit	List Price GO-10MB	Product No. Digit	List Price GO-10MB
None	A	\$0.00	A	\$0.00
Red Across Coil	B	\$112.00	J	\$202.00
Green Across Coil	-	-	K	\$202.00

5 Select Auxiliary Contacts

	Product Number Digit	List Price GO-10MB
None	Z	-
Holding Interlock	A	\$82.00
Holding Interlock Plus 1 NO	B	\$164.00
Holding Interlock Plus 1 NC	C	\$164.00
Holding Interlock Plus 1 NO, 1 NC	D	\$246.00
Holding Interlock Plus 2 NO	E	\$246.00
Holding Interlock Plus 2 NC	F	\$246.00
Holding Interlock Plus 2 NO, 1 NC	G	\$328.00



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

CR360L

Electrically Held Contactors

Outlines, Dimensions in.(mm) and Weights (For Estimating Only)

Section 3

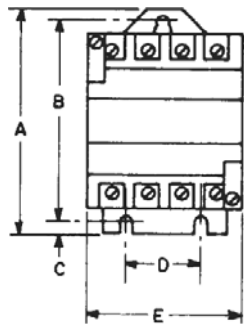


Fig. 1, Open CR360L 30- to 300-Ampere
2- and 3-Pole Forms

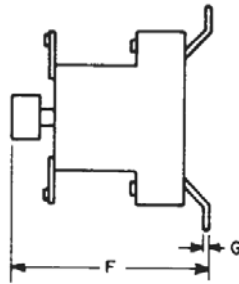


Fig. 2, Enclosed CR360L Type 1,30-100A
w/ Standard Pilot Devices

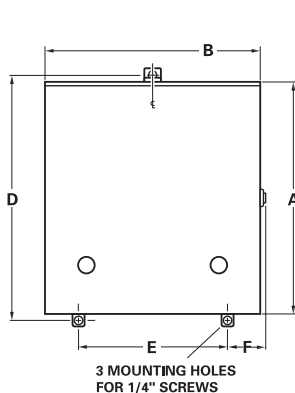


Fig. 3, Enclosed CR360L Type 12,
3R, 4/4X 3-Point Mounting

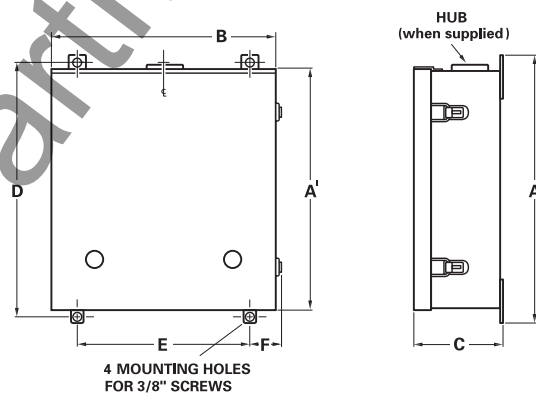


Fig. 4, Enclosed CR360L Type 1, 12, 3R,
4/4X 4-Point Mounting

Open CR360L - 30A - 300A (2, 3 & 4 pole)

Product Number	Figure No.	Dimension in.(mm) A	Dimension in.(mm) B	Dimension in.(mm) C	Dimension in.(mm) D	Dimension in.(mm) E	Dimension in.(mm) F	Dimension in.(mm) G	Approx. Shipping Wt. (Lbs)
CR360L302	1	4.50 (114.3)	4.00 (101.6)	0.25 (6.4)	1.50 (38.1)	3.06 (77.7)	3.81 (96.7)	0.06 (1.5)	2.8
CR360L402	1	6.63 (168.4)	6.00 (152.4)	0.31 (7.8)	2.00 (50.8)	3.75 (95.2)	5.38 (136.6)	0.09 (2.2)	7
CR360L502	1	8.75 (222.2)	7.75 (196.8)	0.63 (16.0)	4.50 (114.3)	5.75 (146.0)	6.50 (165.1)	—	17.5
CR360L602	1	12.00 (304.8)	10.88 (276.4)	0.63 (16.0)	3.00 (76.2)	11.50 (292.1)	9.00 (228.6)	0.12 (3.0)	48
CR360L702	1	12.00 (304.8)	10.88 (276.4)	0.63 (16.0)	3.00 (76.2)	11.50 (292.1)	9.00 (228.6)	0.12 (3.0)	50

Product Number Selection Instructions: See page 3-21

Lighting Contactors

CR360L

Electrically Held Contactors
Outlines, Dimensions in.(mm) and Weights (For Estimating Only)

Enclosed CR360L NEMA Type 1

Device	Fig. No.	Hub Size	Dimension in.(mm)		Dimension in.(mm)		Dimension in.(mm)		Dimension in.(mm)		Approx. Shipping Wt. (Lbs.)
			A	A'	B	C	D	E	F		
(30 A) w/o CPT	2	—	10 (254)	—	6 (152.4)	4.63 (117.6)	8 (203.2)	4 (101.6)	1 (25.4)	6	
(30 A) w/ CPT	2	—	10 (254)	—	10 (254)	4.63 (117.6)	8 (203.2)	8 (203.2)	1 (25.4)	10	
(30 A) w/ Heavy Duty Pilot Devices	4	—	17.4 (442)	14.75 (374.7)	13 (330.2)	5.14 (130.6)	16.4 (416.6)	8 (203.2)	3.25 (82.6)	18	
(60 A) w/o CPT, 2- to 3-Pole	2	—	13.25 (336.6)	—	7.38 (187.5)	6.13 (155.7)	11 (279.4)	5 (127)	1.19 (30.2)	13	
(60 A) w/ CPT	2	—	13.25 (336.6)	—	12 (304.8)	6.13 (155.7)	11 (279.4)	9 (228.6)	1.5 (38.1)	18	
(60 A) w/ Heavy Duty Pilot Devices	4	—	19.4 (492.8)	16.68 (423.7)	15 (381)	6.62 (168.1)	18.4 (467.4)	10 (254)	3.25 (82.6)	27	
(100 A) w/o CPT, 2- to 3-Pole	2	—	20.25 (514.4)	—	8.75 (222.3)	7.31 (185.7)	17 (431.8)	5.75 (146.1)	1.5 (38.1)	35	
(100 A) All other	2	—	24.2 (614.7)	21.62 (549.1)	18 (457.2)	8.4 (213.4)	23.2 (589.3)	13 (330.2)	3.25 (82.6)	50	
(200 A) w/o CPT, 2- to 3-Pole	4	—	45.5 (1155.7)	42.75 (1085.9)	17 (431.8)	10.75 (273.1)	44.5 (1130.3)	12 (304.8)	2.5 (63.5)	38	
(200 A) All other	4	—	45.5 (1155.7)	42.75 (1085.9)	23 (584.2)	10.75 (273.1)	44.5 (1130.3)	18 (457.2)	2.5 (63.5)	55	
(300 A) w/o CPT, 2- to 3-Pole	4	—	45.5 (1155.7)	42.75 (1085.9)	17 (431.8)	10.75 (273.1)	44.5 (1130.3)	12 (304.8)	2.5 (63.5)	130	
(300 A) All other	4	—	45.5 (1155.7)	42.75 (1085.9)	23 (584.2)	10.75 (273.1)	44.5 (1130.3)	18 (457.2)	2.5 (63.5)	140	

Enclosed CR360L NEMA Type 12

Device	Fig. No.	Hub Size	Dimension in.(mm)		Dimension in.(mm)		Dimension in.(mm)		Dimension in.(mm)		Approx. Shipping Wt. (Lbs.)
			A	A'	B	C	D	E	F		
(30 A) w/o CPT	3	—	15.62 (396.7)	14.25 (362)	6.28 (159.5)	5.5 (139.7)	15 (381)	3 (76.2)	2.26 (57.4)	16	
(30 A) All other	3	—	15.62 (396.7)	14.25 (362)	14.25 (362)	5.5 (139.7)	15 (381)	11 (279.4)	2.26 (57.4)	20	
(60 A) w/o CPT, 2- to 3-Pole	3	—	17.62 (447.5)	16.25 (412.8)	7.63 (193.8)	6.25 (158.8)	17 (431.8)	4.38 (111.3)	2.26 (57.4)	29	
(60 A) All other	3	—	17.62 (447.5)	16.25 (412.8)	12.25 (311.2)	6.25 (158.8)	17 (431.8)	9 (228.6)	2.26 (57.4)	38	
(100 A) w/o CPT, 2- to 3-Pole	4	—	30 (762)	27.25 (692.2)	10.5 (266.7)	7.25 (184.2)	29 (736.6)	5.75 (146.1)	3.25 (82.6)	40	
(100 A) All other	4	—	24 (609.6)	21.38 (543.1)	18 (457.2)	7.88 (200.2)	23 (584.2)	13 (330.2)	3.25 (82.6)	55	
(200 A) w/o CPT, 2- to 3-Pole	4	—	45.5 (1155.7)	42.75 (1085.9)	17 (431.8)	10.25 (260.4)	44.5 (1130.3)	12 (304.8)	3.25 (82.6)	44	
(200 A) All other	4	—	45.5 (1155.7)	42.75 (1085.9)	23 (584.2)	10.25 (260.4)	44.5 (1130.3)	18 (457.2)	3.25 (82.6)	60	
(300 A) w/o CPT, 2- to 3-Pole	4	—	45.5 (1155.7)	42.75 (1085.9)	17 (431.8)	10.25 (260.4)	44.5 (1130.3)	12 (304.8)	3.25 (82.6)	140	
(300 A) All other	4	—	45.5 (1155.7)	42.75 (1085.9)	23 (584.2)	10.25 (260.4)	44.5 (1130.3)	18 (457.2)	3.25 (82.6)	150	

Enclosed CR360L NEMA Type 3R

Device	Fig. No.	Hub Size	Dimension in.(mm)		Dimension in.(mm)		Dimension in.(mm)		Dimension in.(mm)		Approx. Shipping Wt. (Lbs.)
			A	A'	B	C	D	E	F		
(30 A) w/o CPT	3	1"	15.62 (396.7)	14.5 (368.3)	6.88 (174.8)	5.5 (139.7)	15 (381)	3 (76.2)	2.31 (58.7)	16	
(30 A) All other	3	1"	15.62 (396.7)	14.5 (368.3)	10.38 (263.7)	5.5 (139.7)	15 (381)	7 (177.8)	2.31 (58.7)	20	
(60 A) w/o CPT	3	1.5"	17.62 (447.5)	16.5 (419.1)	7.84 (199.1)	6.5 (165.1)	17 (431.8)	4.38 (111.3)	2.32 (58.9)	29	
(60 A) All other	3	1.5"	17.62 (447.5)	16.5 (419.1)	12.5 (317.5)	6.5 (165.1)	17 (431.8)	8 (203.2)	2.88 (73.2)	38	
(100 A) All	4	2"	24.5 (622.3)	22 (558.8)	17.2 (436.9)	7.25 (184.2)	23.5 (596.9)	11 (279.4)	3.62 (91.9)	55	
(200 A) All	4	3"	44.5 (1130.3)	41.5 (1054.1)	22 (558.8)	10.25 (260.4)	43.5 (1104.9)	16 (406.4)	3.62 (91.9)	60	
(300 A) All	4	3"	44.5 (1130.3)	42 (1066.8)	22 (558.8)	10.25 (260.4)	43.5 (1104.9)	16 (406.4)	3.62 (91.9)	150	

Enclosed CR360L NEMA Type 4/4X

Device	Fig. No.	Hub Size	Dimension in.(mm)		Dimension in.(mm)		Dimension in.(mm)		Dimension in.(mm)		Approx. Shipping Wt. (Lbs.)
			A	A'	B	C	D	E	F		
(30 A) w/o CPT	3	1"	15.62 (396.7)	14.5 (368.3)	6.38 (162.1)	5.5 (139.7)	15 (381)	3 (76.2)	1.69 (42.9)	16	
(30 A) All other	3	1"	15.52 (394.2)	14.5 (368.3)	10.38 (263.7)	5.5 (139.7)	15 (381)	7 (177.8)	1.69 (42.9)	20	
(60 A) w/o CPT	3	1.5"	17.62 (447.5)	16.5 (419.1)	7.75 (196.9)	6.5 (165.1)	17 (431.8)	4.38 (111.3)	1.69 (42.9)	29	
(60 A) All other	3	1.5"	17.62 (447.5)	16.5 (419.1)	12.5 (317.5)	6.25 (158.8)	17 (431.8)	8 (203.2)	2.25 (57.2)	38	
(100 A) All	4	2"	24.5 (622.3)	22 (558.8)	17 (431.8)	7.25 (184.2)	23.5 (596.9)	11 (279.4)	3 (76.2)	55	
(200 A) All	4	3.5"	44.5 (1130.3)	41.5 (1054.1)	22 (558.8)	10.25 (260.4)	43.5 (1104.9)	16 (406.4)	3 (76.2)	60	
(300 A) All	4	3.5"	44.5 (1130.3)	41.5 (1054.1)	22 (558.8)	10.25 (260.4)	43.5 (1104.9)	16 (406.4)	3 (76.2)	150	



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

CR160MC

Mechanically Held Contactors

CR160MC shallow mount 30A - 225A (2 & 3 pole)

Section 3



CR160MC Lighting Contactor for Bus Mounting

Application

The CR160MC mechanically held lighting contactors are designed for control of lighting loads such as tungsten, fluorescent, mercury, and sodium, as well as for general noninductive loads. The shallow-type design makes these contactors particularly adaptable for wall-cavity mounting applications.

The silver cadmium oxide main contacts and silver tungsten arcing contacts give the devices capability of handling a wide variety of lighting loads. Built-in clearing interlocks allow control from either momentary or maintained pilot devices.

Features

- Can be mounted in enclosures that fit six-inch thick walls.
- Device is listed by Underwriters Laboratories, Inc.
- Front connected—for convenient wiring.
- Manually operated—by screwdriver or similar tool which reduces chances of tampering.
- Direct bus-mounted forms—for space savings, reduced mounting and wiring costs.
- Withstand current rating—22,000 amperes rms symmetrical at 480 Volts ac maximum and when used with molded case circuit breaker.

Maximum AC Voltage Ratings

Type of Load	Maximum AC Volts		
	Line	Load	Load
Tungsten	480	277	480
Ballast	600	277	600
General Use	600	277	600

Control Line Wiring

Control lines extending several hundred feet from the voltage source and pilot device(s) to the lighting contactor may require special consideration. Select a wire size adequate to provide not less than 85% of rated coil voltage at the coil, for pickup, while passing inrush current through the control circuit. Suggested wire sizes, for use with a "stiff" source of control voltage, are listed below. 2-wire or 3-wire control relays are available for greater distances, and for use with pilot devices having ratings lower than those required for direct operation of the contactor coils.

Contactor Size	Wire Size	Approx. Resistance of Single Conductor Copper Wire Ohms/1000 Ft	Max. Control Line Distance ¹	
			115V-60 Hz	230V-60 Hz
30-225A	10	1	500 ft	1500 ft
30-225A	12	1.6	315 ft	950 ft
30-225A	14	2.5	200 ft	600 ft

¹The use of two contactors on one remote control station would reduce the maximum control line distance to 1/2 the specified table value, etc.

Coil Inrush Current and Recommended Control Circuit Fuse Size

Voltage 60 Hertz	Inrush (Amperes)		NEC Fuse Size (Amperes)	
	CR160MC	CR160MC	CR160MC	CR160MC
115	26	26	8	8
230	13	13	4	4
277 ²	10	10	3	3
460 ²	7	7	2	2

²Breaking all lines

Note: Use of energy management systems, multiple control stations, or signals require prime control logic or use of a 2-wire control relay/module, to assure that on and off signals are never applied simultaneously to a mechanically held contactor.

Control Transformer Data

When the lighting contactor is used on the secondary of a transformer, the transformer must be sized to provide the required inrush current with 90% voltage applied to the transformer primary. As an alternative, utilize an interposing relay with a lower VA CPT. Connect the circuit with the line voltage driving the coil and the control voltage driving the relay coil.

Reference Publications

Instructions

GEH-3202

Lighting Contactors

CR160MC

Mechanically Held Contactors

CR160MC shallow mount 30A - 225A (2 & 3 pole)

GE Fastrac Program items are printed in red type.

Product Number Selection Instructions

Order by complete product number.

1. Select rating and enclosure from Table 1.
2. Select coil suffix from Table 1a.
3. Select neutral terminal option from Table 1b for basic device.
4. Select control circuit option from Table 2.
5. For additional modifications to enclosed forms, make selection from Tables 3, 4 and 5.
6. Add appropriate list price adders to the basic device.

1 Select Size, Number of Poles, and Enclosure

Open Bus Mounting

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR160MC35**2	\$832.00
30A	3	CR160MC35**A	\$944.00
60A	2	CR160MC45**2	\$861.00
60A	3	CR160MC45**A	\$986.00
75A	2	CR160MC85**2	\$861.00
75A	3	CR160MC85**A	\$986.00
100A	2	CR160MC55**2	\$985.00
100A	3	CR160MC55**A	\$1128.00
150A	2	CR160MC65**2	\$1230.00
150A	3	CR160MC65**A	\$1560.00
200A	2	CR160MC75**2	\$1412.00
200A	3	CR160MC75**A	\$1765.00
225A	2	CR160MC95**2	\$1646.00
225A	3	CR160MC95**A	\$2088.00

Open Sub Panel

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR160MC31**2	\$985.00
30A	3	CR160MC31**A	\$1110.00
60A	2	CR160MC41**2	\$1037.00
60A	3	CR160MC41**A	\$1190.00
75A	2	CR160MC81**2	\$1037.00
75A	3	CR160MC81**A	\$1190.00
100A	2	CR160MC51**2	\$1173.00
100A	3	CR160MC51**A	\$1378.00
150A	2	CR160MC61**2	\$1464.00
150A	3	CR160MC61**A	\$1880.00
200A	2	CR160MC71**2	\$1646.00
200A	3	CR160MC71**A	\$2085.00
225A	2	CR160MC91**2	\$2091.00
225A	3	CR160MC91**A	\$2523.00

Enclosed NEMA Type 1

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR160MC32**2	\$1195.00
30A	3	CR160MC32**A	\$1320.00
60A	2	CR160MC42**2	\$1253.00
60A	3	CR160MC42**A	\$1406.00
75A	2	CR160MC82**2	\$1253.00
75A	3	CR160MC82**A	\$1406.00
100A	2	CR160MC52**2	\$1417.00
100A	3	CR160MC52**A	\$1622.00
150A	2	CR160MC62**2	\$1786.00
150A	3	CR160MC62**A	\$2202.00
200A	2	CR160MC72**2	\$1969.00
200A	3	CR160MC72**A	\$2408.00
225A	2	CR160MC92**2	\$2737.00
225A	3	CR160MC92**A	\$2846.00

Enclosed NEMA Type 12

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR160MC3D**2	\$1872.00
30A	3	CR160MC3D**A	\$1997.00
60A	2	CR160MC4D**2	\$1994.00
60A	3	CR160MC4D**A	\$2147.00
75A	2	CR160MC8D**2	\$1994.00
75A	3	CR160MC8D**A	\$2147.00
100A	2	CR160MC5D**2	\$2278.00
100A	3	CR160MC5D**A	\$2483.00
150A	2	CR160MC6D**2	\$2889.00
150A	3	CR160MC6D**A	\$3305.00
200A	2	CR160MC7D**2	\$3071.00
200A	3	CR160MC7D**A	\$3510.00
225A	2	CR160MC9D**2	\$3516.00
225A	3	CR160MC9D**A	\$3948.00

Enclosed NEMA Type 3R

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR160MC3E**2	\$1667.00
30A	3	CR160MC3E**A	\$1792.00
60A	2	CR160MC4E**2	\$1773.00
60A	3	CR160MC4E**A	\$1926.00
75A	2	CR160MC8E**2	\$1773.00
75A	3	CR160MC8E**A	\$1926.00
100A	2	CR160MC5E**2	\$2023.00
100A	3	CR160MC5E**A	\$2228.00

(continued on page 3-28)



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

CR160MC

Mechanically Held Contactors

CR160MC shallow mount 30A - 225A (2 & 3 pole)

Section 3

Enclosed NEMA Type 4/4X

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR160MC3F**2	\$2568.00
30A	3	CR160MC3F**A	\$2693.00
60A	2	CR160MC4F**2	\$2678.00
60A	3	CR160MC4F**A	\$2831.00
75A	2	CR160MC8F**2	\$2678.00
75A	3	CR160MC8F**A	\$2831.00
100A	2	CR160MC5F**2	\$2925.00
100A	3	CR160MC5F**A	\$3130.00
150A	2	CR160MC6F**2	\$3583.00
150A	3	CR160MC6F**A	\$3999.00
200A	2	CR160MC7F**2	\$3765.00
200A	3	CR160MC7F**A	\$4204.00
225A	2	CR160MC9F**2	\$4210.00
225A	3	CR160MC9F**A	\$4642.00

Enclosed NEMA Type 1 Sound-Proof

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR160MC3I**2	\$1513.00
30A	3	CR160MC3I**A	\$1638.00
60A	2	CR160MC4I**2	\$1557.00
60A	3	CR160MC4I**A	\$1682.00
75A	2	CR160MC8I**2	\$1609.00
75A	3	CR160MC8I**A	\$1762.00
100A	2	CR160MC5I**2	\$1609.00
100A	3	CR160MC5I**A	\$1762.00
150A	2	CR160MC6I**2	\$2093.00
150A	3	CR160MC6I**A	\$2298.00
200A	2	CR160MC7I**2	\$2384.00
200A	3	CR160MC7I**A	\$2800.00
225A	2	CR160MC9I**2	\$2566.00
225A	3	CR160MC9I**A	\$3005.00

Enclosed NEMA Type 1 Flush Mount

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR160MC3G**2	\$1582.00
30A	3	CR160MC3G**A	\$1707.00
60A	2	CR160MC4G**2	\$1640.00
60A	3	CR160MC4G**A	\$1793.00
75A	2	CR160MC8G**2	\$1640.00
75A	3	CR160MC8G**A	\$1793.00
100A	2	CR160MC5G**2	\$1804.00
100A	3	CR160MC5G**A	\$2009.00
150A	2	CR160MC6G**2	\$2251.00
150A	3	CR160MC6G**A	\$2667.00
200A	2	CR160MC7G**2	\$2434.00
200A	3	CR160MC7G**A	\$2873.00
225A	2	CR160MC9G**2	\$3202.00
225A	3	CR160MC9G**A	\$3311.00

Enclosed Sub Panel w/ Baseplate

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
30A	2	CR160MC3H**2	\$1100.00
30A	3	CR160MC3H**A	\$1200.00
60A	2	CR160MC4H**2	\$1100.00
60A	3	CR160MC4H**A	\$1200.00
75A	2	CR160MC8H**2	\$1100.00
75A	3	CR160MC8H**A	\$1200.00
100A	2	CR160MC5H**2	\$1200.00
100A	3	CR160MC5H**A	\$1500.00
150A	2	CR160MC6H**2	\$1600.00
150A	3	CR160MC6H**A	\$2000.00
200A	2	CR160MC7H**2	\$1800.00
200A	3	CR160MC7H**A	\$2200.00
225A	2	CR160MC9H**2	\$2400.00
225A	3	CR160MC9H**A	\$2600.00

Product Number Selection Instructions

Order by complete product number.

1. Select rating and enclosure from Table 1a.
2. Select neutral terminal option for basic device from Table 1b.
3. Select control circuit option from Table 2.
3. For additionally modified enclosed forms, use Tables 3, 4 and 5.
5. Add appropriate list price adders to the basic device.

Product Number

CR160MC	1	1a or 1b	1	2	3	4	5	
	Size	Enclosure	Control Voltage	# of Poles	Control Power	Pilot Device	Pilot Light	Auxiliary Contacts

List Price, GO-10MB

+ 1	\$
1a or 1b	0.00
+ 2	\$
+ 3	\$
+ 4	\$
+ 5	\$
=	\$

Example: 30-Ampere, three-pole contactor mechanically held in a Type 1 enclosure with a 480/120 Volt CPT, 2 primary, 1 secondary fuse, on/off selector switch and red pilot light.

CR160MC 32 98 A EC C B A

- 32 30 Amp 3-Pole Type 1
- 98 480/120 Control
- A CPT 2 Primary-1 Secondary
- EC On-Off Selector Switch
- C Red On Pilot Light
- B No Auxiliary Contacts
- A

List Price, GO-10MB

+	\$	1320.00
	\$	0.00
+	\$	577.00
+	\$	165.00
+	\$	202.00
	\$	0.00
=	\$	2264.00

Lighting Contactors

CR160MC

Mechanically Held Contactors
 CR160MC shallow mount 30A - 225A (2 & 3 pole)
 GE Fastrac Program items are printed in red type.

1a **Coil Suffix

Contactor Voltage-Control Voltage	Product No. Digit
115-120 V 60 Hz Coil	02
230-240 V 60 Hz Coil	03
460-480 V 60 Hz Coil	04
265-277 V 60 Hz Coil	82
200-208 V 60 Hz Coil	23
24 V 60 Hz Coil	24
120 V Coil 24 Vdc Control Relay	40 ¹
208 V Coil 24 Vdc Control Relay	42 ¹
240 V Coil 24 Vdc Control Relay	44 ¹
277 V Coil 24 Vdc Control Relay	46 ¹
480 V Coil 24 Vdc Control Relay	48 ¹

¹12- or 3-wire control required for 40, 42, 44, 46, and 48.

CPT Primary Control Voltage	Product No. Digit
208 V Primary 120 Vac Control	92
240 V Primary 120 Vac Control	94
277 V Primary 120 Vac Control	96
480 V Primary 120 Vac Control	98
120 V Primary 24 Vac Control	60
208 V Primary 24 Vac Control	62
240 V Primary 24 Vac Control	64
277 V Primary 24 Vac Control	66
480 V Primary 24 Vac Control	68

Note: For standard devices, only the 5 digits of selection 1 are required.

2 Select CPT and Control Circuit Fusing

Control Circuit Fusing & CPT	Standard		2-Wire Control		3-Wire Control	
	Product No. Digit	List Price, GO-10MB	Product No. Digit	List Price, GO-10MB	Product No. Digit	List Price, GO-10MB
No CPT						
No Fusing	AA	\$0.00	AB	\$382.00	AC	\$764.00
2 Control Circuit Fuses	BA ²	\$165.00	BB ²	\$547.00	BC ²	\$929.00
250 V Fuse Clip, Device-Mounted	CA ³	\$84.00	CB ³	\$466.00	CC ³	\$929.00
CPT Forms						
2 Primary and 1 Secondary Fuse	EA	\$577.00	EB	\$959.00	EC	\$1341.00

²Available only when there is an enclosure or baseplate.

³Bus-mount or sub-panel forms only.

3 Select Push Button/Selector Switch in Cover

(Available only when there is an enclosure.)

	Product No. Digit	List Price, GO-10MB NO CPT	
None	A	—	Cannot use with option EA in step 2 above.
On-Off Push Button	B	\$248.00	Can be used with options BA, CA, & EA only in step 2 above.
On-Off Selector Switch	C	\$165.00	Can be used with options BA, CA, & EA only in step 2 above.
On-Off-Auto Selector Switch	D	\$165.00	Cannot use with option EA in step 2 above.
Hand-Off-Auto Selector Switch	E	\$165.00	Cannot be used with option EA in step 2 above.

5 Select Additional Auxiliary Contacts

	Product No. Digit	List Price, GO-10MB
None	A	—
1 NC Extra	B	\$154.00
1 NO Extra	C	\$154.00
1 NO and 1 NC Extra	D	\$308.00

Note that auxiliary contacts are limited by pilot device requirements.

1b Neutral Terminal Option

Use in place of the last 2 or A in Product Tables.

	Product No. Digit	List Price, GO-10MB
30 to 100 Amps, 2-Pole + N TB	7	\$50.00
30 to 100 Amps, 3-Pole + N TB	8	\$50.00
150 to 225 Amps, 2-Pole N TB	7	\$100.00
150 to 225 Amps, 3-Pole N TB	8	\$100.00

Control Circuit Wiring

Standard		2-Wire Control		3-Wire Control	
Product No. Digit	List Price, GO-10MB	Product No. Digit	List Price, GO-10MB	Product No. Digit	List Price, GO-10MB
AA	\$0.00	AB	\$382.00	AC	\$764.00
BA ²	\$165.00	BB ²	\$547.00	BC ²	\$929.00
CA ³	\$84.00	CB ³	\$466.00	CC ³	\$929.00
EA	\$577.00	EB	\$959.00	EC	\$1341.00

4 Select Pilot Lights in Cover

(Available only when there is an enclosure.)

	Product No. Digit	List Price, GO-10MB
None	A	—
Red "ON when energized" Indicating Light	B	\$202.00
Green "ON when energized" Indicating Light	C	\$202.00
Red "ON when energized" PTT Indicating Light	D	\$220.00
Green "ON when energized" PTT Indicating Light	E	\$220.00
Red "ON when energized" and Green "OFF" Indicating Lights	F	\$404.00
Green "ON when energized" and Red "OFF" Indicating Lights	G	\$404.00
Green "ON when energized" and Red "OFF" PTT Indicating Lights	I	\$440.00

Note: "ON" indicating lights use 1 NO auxiliary contact if 2-wire is not selected. All "OFF" indicating lights use 1 NC auxiliary contact.

Accessories - 160 Line

Accessory Type	For Use With	Product Number	List Price GO-10MB
Coil Kit	CR160MC Lighting Contactors	CR160MCX1**	\$598.00

This coil changeout kit for CR160MC forms is furnished complete with necessary components for installation.

Note: Use Coil Suffix Selection Table 1a.



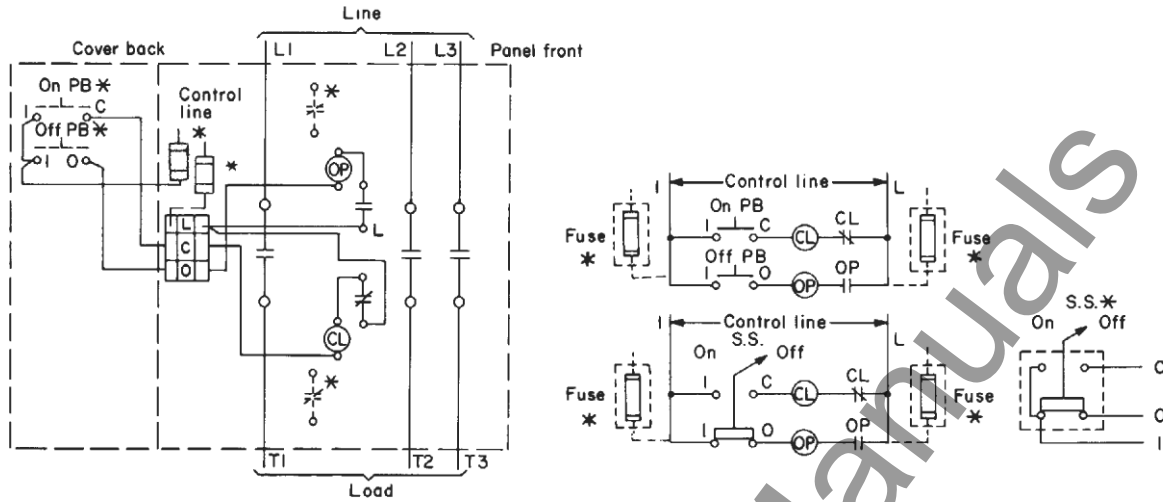
Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

CR160MC

Mechanically Held Contactors

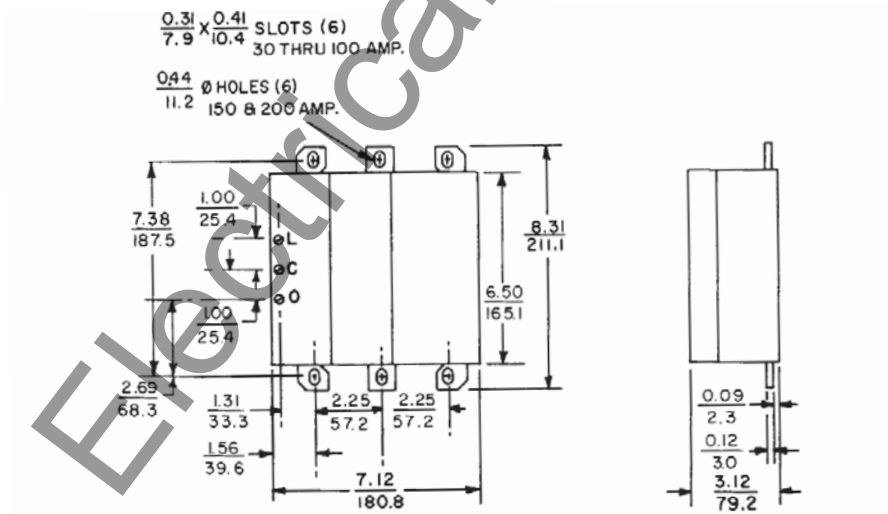
Outlines, Dimensions (in mm) and Weights (For Estimating Only)



Typical Schematic Diagram for CR160MC

Abbreviation and Symbol Code

- SS—selector switch
- PB—push button
- OP—opening coil
- CL—closing coil
- *—when ordered
- Device is shown latched in the open position.



30-, 60-, 75-, and 100-Ampere Contactor Only for Bus Mounting Approx. shipping wt., 9 lbs.

Lighting Contactors

CR160MC

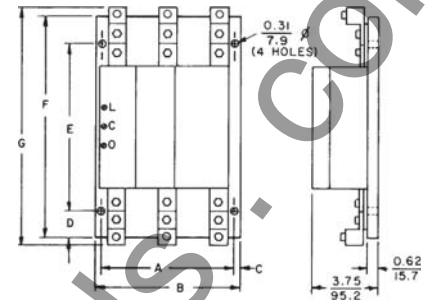
Mechanically Held Contactors

Outlines, Dimensions (in./mm) and Weights (For Estimating Only)

Section 3

Open with Sub Panel

Continuous Amp Rating	Dimension in. (mm) A	Dimension in. (mm) B	Dimension in. (mm) C	Dimension in. (mm) D	Dimension in. (mm) E	Dimension in. (mm) F	Dimension in. (mm) G	Approx. Shipping Wt., Lbs.
30	6.50 (165.1)	7.50 (190.5)	0.50 (12.7)	0.50 (12.7)	9.00 (228.5)	10.00 (254.0)	10.50 (266.7)	13
60-75-100	6.75 (171.4)	7.75 (196.8)	0.50 (12.7)	0.62 (15.7)	9.75 (247.6)	11.00 (279.4)	11.38 (289.0)	14
150	8.00 (203.2)	9.00 (228.5)	0.50 (12.7)	3.25 (82.6)	5.50 (139.7)	12.00 (304.8)	13.25 (336.6)	16 1/2
200, 225	8.00 (203.2)	9.00 (228.5)	0.50 (12.7)	3.25 (82.6)	5.50 (139.7)	12.00 (304.8)	14.00 (355.6)	16 1/2



Contactor with Sub-Panel

Enclosed NEMA Type 1

Continuous Amp Rating	Figure No.	Dimension in. (mm) A	Dimension in. (mm) A'	Dimension in. (mm) B	Dimension in. (mm) C	Dimension in. (mm) D	Dimension in. (mm) E	Dimension in. (mm) F	Approx. Shipping Wt. (Lbs)
30-75A	1	21.38 (543.1)	18.75 (476.3)	14.00 (355.6)	6.25 (158.8)	20.38 (517.7)	9.00 (228.6)	3.25 (82.6)	30
100A	1	27.09 (688.1)	24.75 (628.7)	16.00 (406.4)	6.50 (165.1)	26.09 (662.7)	11.00 (279.4)	3.25 (82.6)	40
150A	1	31.40 (797.6)	28.75 (730.3)	16.00 (406.4)	6.25 (158.8)	30.40 (772.2)	11.00 (279.4)	3.25 (82.6)	45
200-225A	1	43.40 (1102.4)	40.75 (1035.1)	16.00 (406.4)	6.25 (158.8)	42.40 (1077.0)	11.00 (279.4)	3.25 (82.6)	45

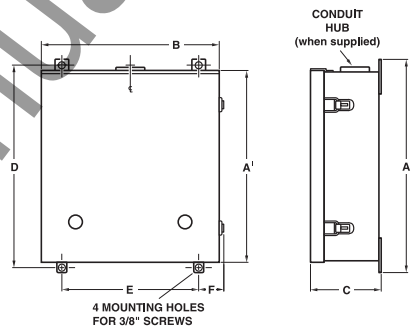


Fig. 1: CR160MC Type 1, 12, 3R, 4/4X 4-Point Mounting

Enclosed NEMA Type 12

Continuous Amp Rating	Figure No.	Dimension in. (mm) A	Dimension in. (mm) A'	Dimension in. (mm) B	Dimension in. (mm) C	Dimension in. (mm) D	Dimension in. (mm) E	Dimension in. (mm) F	Approx. Shipping Wt. (Lbs)
30-75A	2	17.62 (447.5)	16.25 (412.8)	16.25 (412.8)	6.25 (158.8)	17.00 (431.8)	12.00 (304.8)	2.26 (57.4)	40
100-225A	1	34.00 (863.6)	31.38 (797.1)	22.00 (558.8)	7.88 (200.2)	33.00 (838.2)	17.00 (431.8)	3.25 (82.6)	55

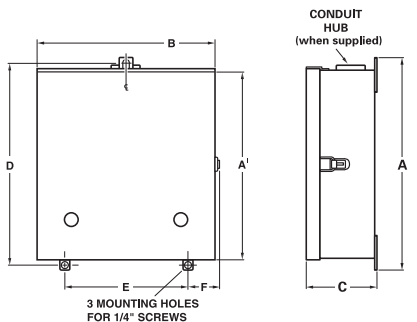


Fig. 2: CR160MC Type 12, 4/4X 3-Point Mounting

Enclosed NEMA Type 3R

Continuous Amp Rating	Figure No.	Dimension in. (mm) A	Dimension in. (mm) A'	Dimension in. (mm) B	Dimension in. (mm) C	Dimension in. (mm) D	Dimension in. (mm) E	Dimension in. (mm) F	Approx. Shipping Wt. (Lbs)
30-100A	1	28.50 (723.9)	26.00 (660.4)	17.19 (436.6)	7.25 (184.2)	27.50 (698.5)	11.00 (279.4)	3.62 (91.9)	45

Enclosed NEMA Type 4/4X

Continuous Amp Rating	Figure No.	Dimension in. (mm) A	Dimension in. (mm) A'	Dimension in. (mm) B	Dimension in. (mm) C	Dimension in. (mm) D	Dimension in. (mm) E	Dimension in. (mm) F	Approx. Shipping Wt. (Lbs)
30-75A	2	18.00 (457.2)	16.38 (416.1)	12.38 (314.5)	6.25 (158.8)	17.24 (437.9)	8.00 (203.2)	3.62 (91.9)	40
100-225A	1	33.00 (838.2)	28.75 (730.3)	21.25 (539.8)	6.60 (167.6)	32.00 (812.8)	15.00 (381.0)	3.62 (91.9)	55

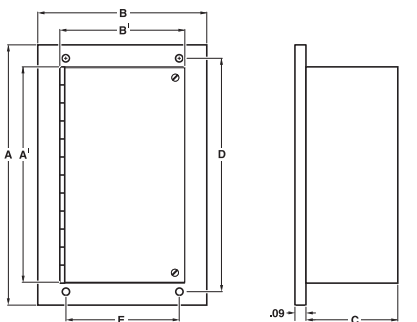


Fig. 2: CR160MC Type 12, 4/4X 3-Point Mounting

Enclosed NEMA Type 1 Flush Mount

Continuous Amp Rating	Figure No.	Dimension in. (mm) A	Dimension in. (mm) A'	Dimension in. (mm) B	Dimension in. (mm) B'	Dimension in. (mm) C	Dimension in. (mm) D	Dimension in. (mm) E	Dimension in. (mm) F	Approx. Shipping Wt. (Lbs)
30-100A	3	19.18 (487.2)	15.38 (390.7)	19.18 (487.2)	15.38 (390.7)	6.16 (156.5)	17.69 (449.3)	17.69 (449.3)	0.75 (19.1)	30
150-225A	3	28.18 (715.8)	24.38 (619.3)	19.18 (487.2)	15.38 (390.7)	6.60 (167.6)	26.69 (677.9)	17.69 (449.3)	0.75 (19.1)	35



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

CR360ML

Mechanically Held Contactors
CR360ML - 400A - 1000A (2 & 3 pole)

Section 3

Description

GE RC Switches Adapt to Your Application and Your Imagination

In commercial or industrial environments where you need to control power, heating and lighting loads from across the floor, across the plant, or across the world, the CR360ML RC switches from GE are a great solution. These electromagnetically operated, mechanically held switches, unlike other devices, will not open or close if the power fails.

By allowing convenient and automatic control of lighting circuits through wall stations, timers, photocells, or energy management control systems, GE RC switches provide savings in energy costs by being the most economical and reliable switching means in any power distribution system. Because the operator is energized only during the instant the switch changes position, there is no ac hum or chatter. Furthermore, because constant power is not required, an even greater energy savings can be realized along with lower operating costs. These units are ideally suited for energy management applications because they are able to handle all classes of loads up to 1000 amps.

Circuit breakers were designed for overload protection, not for repetitively turning blocks of lighting on and off on a daily basis. GE RC switches provide the most reliable, convenient, and economical means to control lighting, leaving the circuit breakers for the purpose of overload protection.

GE RC switches work effectively in a broad range of applications including tungsten, ballast lighting, motor, general use, and total system loads.

Application Information

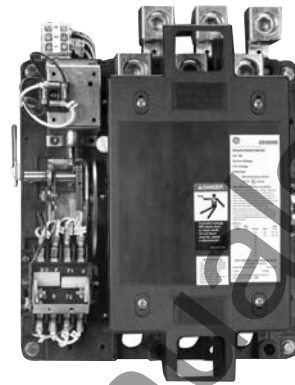
Tungsten loads are made up entirely of tungsten filament lamps, where the inrush current may be as high as 20 times the steady state current and have a duration of up to 14 cycles.

Ballast lighting (electric discharge lamp) loads are made up entirely of electric discharge lamps such as fluorescent or mercury vapor lamps. Depending on the type of ballast used, the power factor can range from 0.4 to 0.9 or better.

Motor loads are made up entirely of motors capable of drawing locked rotor current of six times normal running current at 0.4 to 0.5 power factor.

General use loads are made up of heaters, incandescent lamps, and other resistive loads, in addition to small reactive loads such as office machinery where the power factor can range from 0.7 to 0.8.

Total system loads are made up from all of the above. The sum of the motor full load current and the current of the other loads shall not exceed the amp rating of the switch, and the tungsten load shall not exceed 30% of the switch rating unless the switch has been found to be suitable for a higher tungsten load. GE RC switches are rated for 100% tungsten load in ratings through 400 amps.



CR360ML RC Switch

The GE CR360ML RC switch reduces wear on the overcurrent protective devices, provides more flexibility, and increases system reliability. It can be used for remotely controlled feeder disconnect applications such as energy management and bulk load control.

- These units are suitable for heating, ballast lighting, or motor loads to 480 Vac, in either open or enclosed forms.
- They will also handle 100% tungsten loads rated at 250 Vac up to 400 amps, and 30% tungsten loads at 600 amps and up.
- Units are UL listed and (WCR) Withstand Current Rated.
- Not only is the interrupting capacity 600% of the rated current at 480 Vac at a 0.4 to 0.5 power factor, but their thermal capacity is 20 times the full load rating.
- With contacts that are power-driven and locked into place by a reliable single-solenoid operator, the GE CR360ML has no continuous control power consumption, and its rugged construction allows it to be mounted in any position with its flush dead back.
- There are no extra wires or contacts needed to install signal lamps at single or multiple control stations.

Lighting Contactors CR360ML

Mechanically Held Contactors
CR360ML - 400A - 1000A (2 & 3 pole)
Pricing Schedule for Options 1, 2, 3

Product Number Selection Instructions

Selection and Pricing—Assembled Forms

Here is an easy, step-by-step way to select and order assembled forms of GE CR360ML switches. In each step, find the options—amperes, enclosures, voltages, etc., that you need. Transfer the product number digits to the corresponding boxes in the product number line on page 3-34 and the price to the appropriate boxes in the price column. (Photocopying the blank product number line and price column will allow for repeated use.) When you have finished, you will have built a complete product number for your RC switch and established the prices that add up to the total List Price, GO-10MB.

1 Select Current Rating

Select the current rating for the RC switch from the table below. Transfer the corresponding product number digit to the box marked ① on the product number line on page 3-34.

Current Rating	Product Number Digit
400 Amperes	4
600 Amperes	6
800 Amperes	8
1000 Amperes	1

2 Select Enclosure

Select the type of enclosure, if any, for the RC switch from the table below. Transfer the corresponding product number digit to the box marked ② on the product number line.

Enclosure	Product Number Digit
Open (No Enclosure)	0
NEMA Type 1	1
NEMA Type 12	2
NEMA Type 3R	6

3 Select Number of Poles

Select either a 2-pole or 3-pole configuration from the table below. Transfer the corresponding product number digit to the box marked ③ on the product number line.

Number of Poles	Product Number Digit
2 Poles	2
3 Poles	3

Open

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
400A	2	CR360ML402	\$6850.00
600A	2	CR360ML602	\$8800.00
800A	2	CR360ML802	\$10750.00
1000A	2	CR360ML102	\$19950.00
400A	3	CR360ML403	\$8025.00
600A	3	CR360ML603	\$10125.00
800A	3	CR360ML803	\$12225.00
1000A	3	CR360ML103	\$22975.00

Enclosed NEMA Type 1

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
400A	2	CR360ML412	\$8750.00
600A	2	CR360ML612	\$10750.00
800A	2	CR360ML812	\$12750.00
1000A	2	CR360ML112	\$27750.00
400A	3	CR360ML413	\$9925.00
600A	3	CR360ML613	\$12075.00
800A	3	CR360ML813	\$14275.00
1000A	3	CR360ML113	\$31025.00

Enclosed NEMA Type 12

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
400A	2	CR360ML422	\$10350.00
600A	2	CR360ML622	\$12350.00
800A	2	CR360ML822	\$14250.00
1000A	2	CR360ML122	\$29950.00
400A	3	CR360ML423	\$11525.00
600A	3	CR360ML623	\$13725.00
800A	3	CR360ML823	\$15875.00
1000A	3	CR360ML123	\$33425.00

Enclosed NEMA Type 3R

Continuous Amp Rating	No. of Poles	Product Number	List Price GO-10MB
400A	2	CR360ML462	\$10350.00
600A	2	CR360ML622	\$12350.00
800A	2	CR360ML862	\$14250.00
1000A	2	CR360ML162	\$29950.00
400A	3	CR360ML463	\$11525.00
600A	3	CR360ML663	\$13725.00
800A	3	CR360ML863	\$15875.00
1000A	3	CR360ML163	\$33425.00

(continued on page 3-34)



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

CR360ML

Mechanically Held Contactors
CR360ML - 400A - 1000A (2 & 3 pole)

Section 3

4 Select Contactor Coil Voltage Rating

Select the voltage rating of the RC switch from the table below. Transfer the corresponding product number digit to the box marked 4 on the product number line.

Voltage Rating (Coil)	Product Number Digit
110 to 120 Volts AC	31
208 to 240 Volts AC	6
265 to 277 Volts AC	7
440 to 480 Volts AC	9

5 Select Auxiliary Contacts and Neutral Options

Select the desired configuration of the RC switch from the table below. Transfer the corresponding product number to the box marked 5 on the product number line on the next page and the price to the box marked 5 in the price column.

Auxiliary/Neutral Options	Product Number Digit	List Price Adder, GO-10MB
No Auxiliary Contact or Neutral Plate	A	\$0.00
Auxiliary Contacts: Closed—Main Contacts: Closed (1A)	B	\$75.00
Auxiliary Contacts: Closed—Main Contacts: Open (1B)	C	\$75.00
Fully Rated Neutral Plate	D	\$225.00
Auxiliary Contacts (1A) with Neutral	E	\$295.00
Auxiliary Contacts (1B) with Neutral	F	\$295.00

6 Select Auxiliary Relays

Select the auxiliary relay configuration needed for the RC switch from the table below. Transfer the corresponding product number digit to the box marked 6 on the product number line and the price to the box marked 6 in the price column.

Auxiliary Relays	Product Number Digit	List Price Adder, GO-10MB
No Option—Standard	1	\$0.00
Auxiliary Control Relay—2-Wire	2	\$625.00
Auxiliary Control Relay—3-Wire	3	\$1075.00
Auxiliary Control Relay—Form 3 Control	4	\$125.00

¹Only available on CR360L4 Series

7 Select Contactor Coil Control Voltage

Select the control voltage for driving the contactor coil through an interposing relay. Transfer the corresponding product number digit to the box marked 7 on the product number line and the price to the box marked 7 in the price column.

Control Voltage (Relay)	Product Number Digit	List Price Adder, GO-10MB
No Option	A	\$0.00
24 Volts AC	B	\$0.00
120 Volts AC	C	\$0.00
208 Volts AC	D	\$100.00
240 Volts AC	E	\$100.00
277 Volts AC	F	\$100.00
24 Volts DC	G	\$0.00
110 Volts DC	H	\$0.00

Note: Boxes 1 through 4 must be filled in. If no options are selected for 5, 6, or 7, the trailing characters can be omitted, and the product number would be complete after the last non-blank character.

Product Number

	1	2	3	4	5	6	7
CR360ML							

Example:

	1	2	3	4	5	6	7
CR360ML	6	2	2	6	D	2	D

- ~~600 Ampere Rating~~
- ~~NEMA Type 12 Enclosure~~
- ~~2 Pole Configuration~~
- ~~208V-240V Voltage Rating~~
- ~~Fully Rated Neutral Plate~~
- ~~Aux. Control Relay: 2-Wire~~
- ~~208V Control Voltage~~

List Price, GO-10MB

1	\$	0.00
2	\$	0.00
3	\$	12,350.00
4	\$	0.00
5	\$	225.00
6	\$	625.00
7	\$	100.00
=	\$	13,300.00

List Price, GO-10MB

1	\$	0.00
2	\$	0.00
+ 3	\$	
4	\$	0.00
+ 5	\$	
+ 6	\$	
+ 7	\$	
=	\$	

Product Number Selection Instructions: See page 3-33

Lighting Contactors

CR360ML

Mechanically Held Contactors
CR360ML - 400A - 1000A (2 & 3 pole)
Technical Data

Electrical Characteristics

Wire Size for Service and Control Connections

Continuous Amp Rating	400A	600A	800A	1000A
Number of Cables	Al or Cu Terminal Lug Wire Range			
1	4 AWG - 600 MCM			
2	1/0 AWG - 250 MCM	2 AWG - 600 MCM		
4			1/0 AWG - 750 MCM	1/0 AWG - 750 MCM

Control circuit connections designated 1, 2 and 3 will accommodate a wire range of #14 AWG to #10 AWG copper wire.

Coil Inrush Current Values and Minimum Recommended Control Circuit Fuse Size

Continuous Amp Rating	400A		600A, 800A, 1000A	
	Inrush	Fuse ¹	Inrush	Fuse ¹
120V	41	10	-	-
240V	12	3	18	10

¹Fuse must be rated for 100,000 amperes symmetrical @ 600V

Overcurrent protective device ratings for control circuits should be selected and installed in accordance with the NEC.

This table shows the minimum permissible control circuit fuse size, based on the operating coil's inrush current.

Max. Distance Between Control Station and One RC Switch with Source Line Voltage at 90% of Normal

Switch Rating (Amps)	Distance in Feet					
	120V 60Hz			240V 60Hz		
	14 AWG	12 AWG	10 AWG	14 AWG	12 AWG	10 AWG
400A	95	150	240	660	1050	1650
600A - 1000A	-	-	-	320	510	810

For 208 Volt system, reduce 240 Volt values by 15%. If the control device does not have adequate current-carrying capacity to control the switch directly, or the control station is to be located a greater distance from the switch than is allowed in the above table, auxiliary relays for 2-wire or 3-wire control are available.

Control Relays (Optional)

Two Wire Control	Relay Control Voltage		Burden of Relay	
	AC 60Hz	DC	AC	DC
	24	24	3va	2.5 watts
	120	120	3va	2.5 watts
	208, 240, 277 ¹	N/A	3va	N/A
Three Wire Control	Relay Control Voltage		Burden of Relay	
	AC 60Hz	DC	AC	DC
	24, 120, 208, 240, 277 VAC		2va	
		24, 125 VDC		1.2 watts

¹Transformer Design

Screw type terminals accept 22-12 AWG



Publications and Reference: See Section 17 for a complete list of additional product-related publications

Lighting Contactors

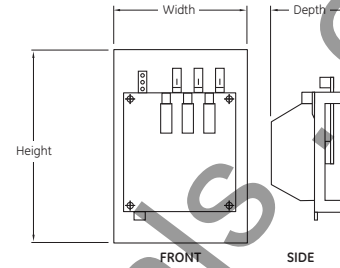
CR360ML

Mechanically Held Contactors
CR360ML - 400A - 1000A (2 & 3 pole)
Outlines, Dimensions (in/mm) and Weights (For Estimating Only)

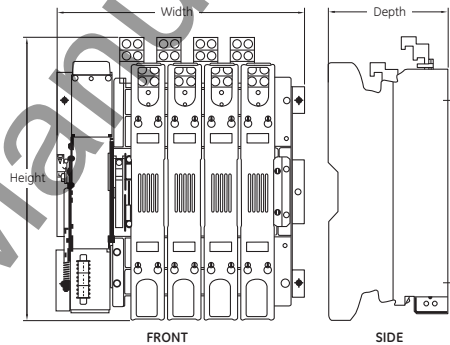
Section 3

Open

Continuous Amp Rating	Width in. (mm)	Depth in. (mm)	Height in. (mm)	Weight lbs (kg)	
				2-pole	3-pole
400A	12 (305)	6.87 (175)	18.5 (470)	21 (9.6)	21 (9.6)
600A	26.93 (684)	12.69 (322.5)	30.94 (786)	115 (52)	125 (57)
800A	26.93 (684)	12.69 (322.5)	30.94 (786)	116 (52)	126 (57)
1000A	26.93 (684)	12.69 (322.5)	30.94 (786)	117 (52)	127 (57)



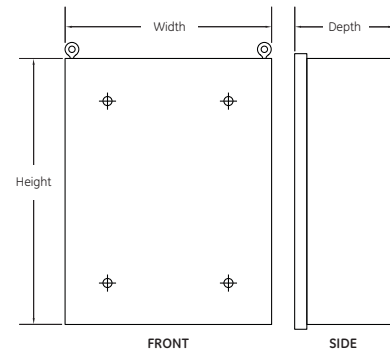
Open 400A



Open 600A, 800A, 1000A

Enclosed NEMA Type 1

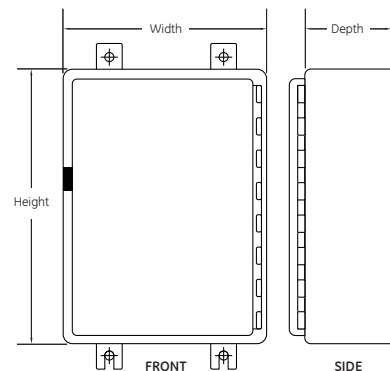
Continuous Amp Rating	Width in. (mm)	Depth in. (mm)	Height in. (mm)	Weight lbs (kg)	
				2-pole	3-pole
400A	18 (457)	13 (330)	48 (1219)	107 (49)	107 (49)
600A, 800A, 1000A	34 (864)	20 (508)	72 (1829)	122 (55)	122 (55)



Enclosed NEMA Type 1

Enclosed NEMA Type 3R, 4, 12

Continuous Amp Rating	Width in. (mm)	Depth in. (mm)	Height in. (mm)	Weight lbs (kg)	
				2-pole	3-pole
400A	18 (457)	13 (330)	48 (1219)	475 (215.5)	475 (215.5)
600A, 800A, 1000A	34 (864)	20 (508)	75 (1905)	475 (215.5)	475 (215.5)



Enclosed NEMA Type 3R, 4, 12