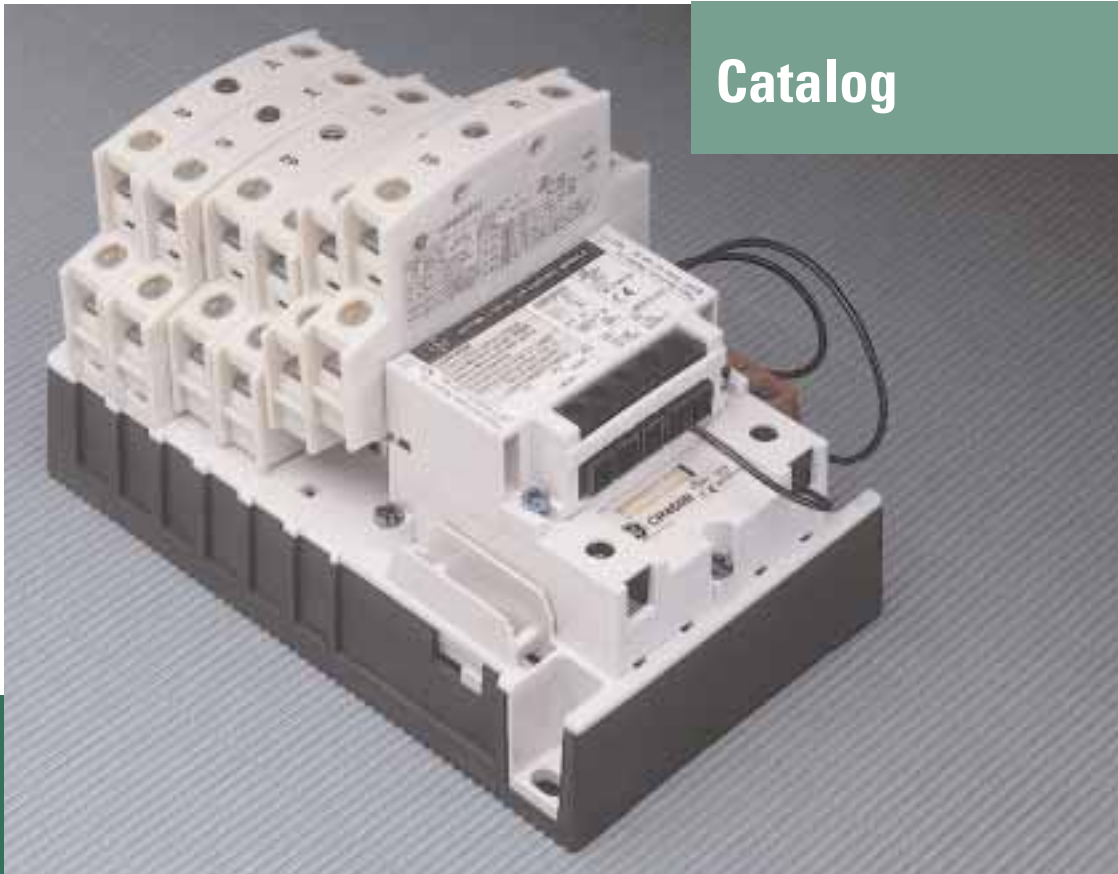




CONTROL

**GE Industrial Systems**

**Catalog**



## ***CR460 Series Lighting Contactors***

***The ultimate in versatility, simplicity  
and performance***

***Also featuring:***

- ***CR360L Electrically Held Lighting Contactors***
- ***CR360MA Mechanically Held Lighting Contactors***
- ***CR160MC Mechanically Held Lighting Contactors***
- ***CR360ML RC Switches***



## Check out these useful lighting contactor-related tools on the web!



Find out what makes CR460 Series Lighting Contactors the ultimate in versatility, simplicity and performance.

<http://www.geindustrial.com/cwc/products?pnlid=3&famid=11&catid=88&id=c-light>

Select a CR460 Series Lighting Contactor for your specific application.

<http://www.geindustrial.com/industrialsystems/wizards/csp/home.htm?pagesetid=lighting-contactors>



Find the CR460 Series equivalent of a competitive catalog number (either directly through this address or through EliteNet).

<http://catalog.geindustrial.com/xref.jsp>

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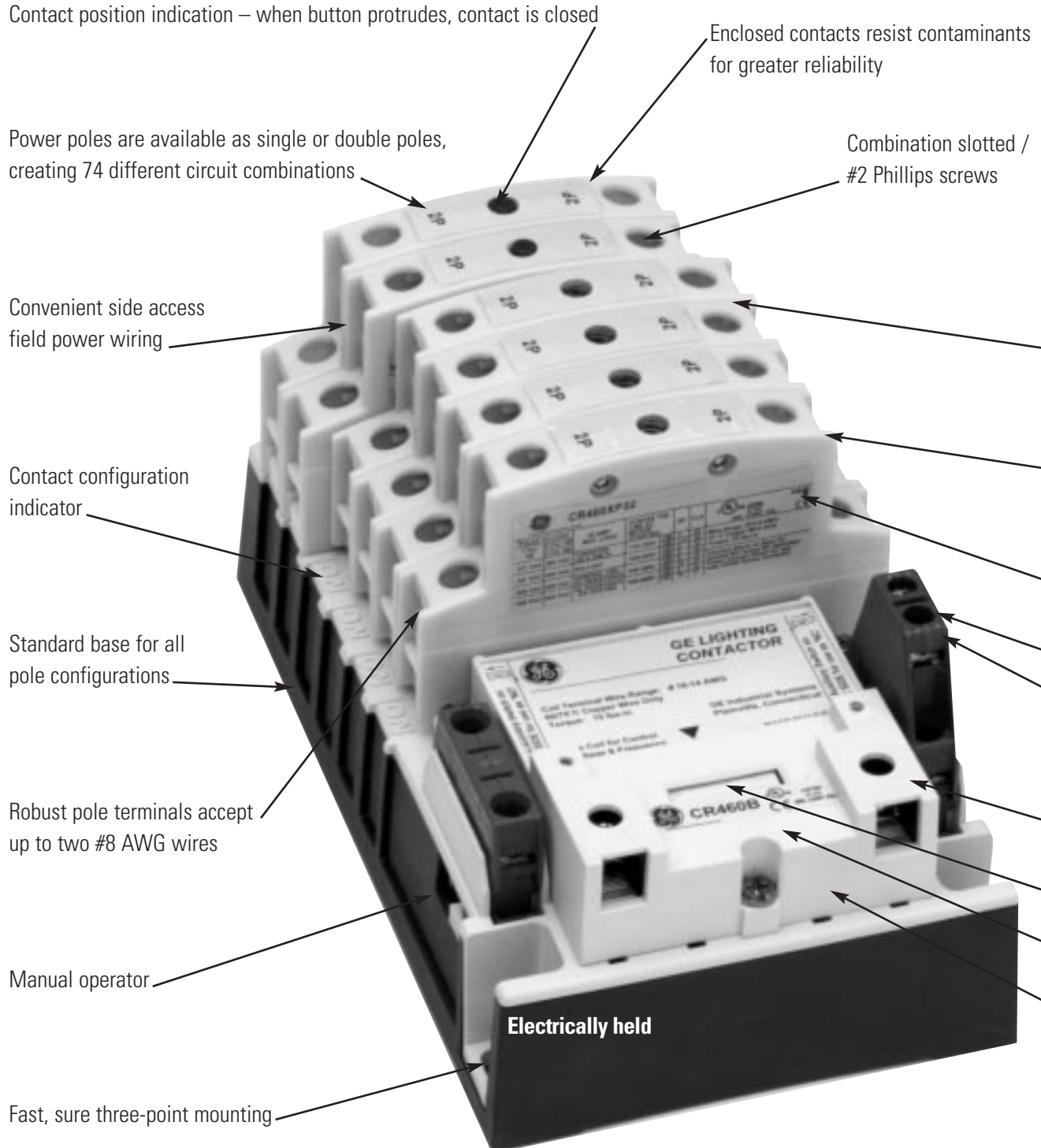
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## CR460 Series Lighting Contactors

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.



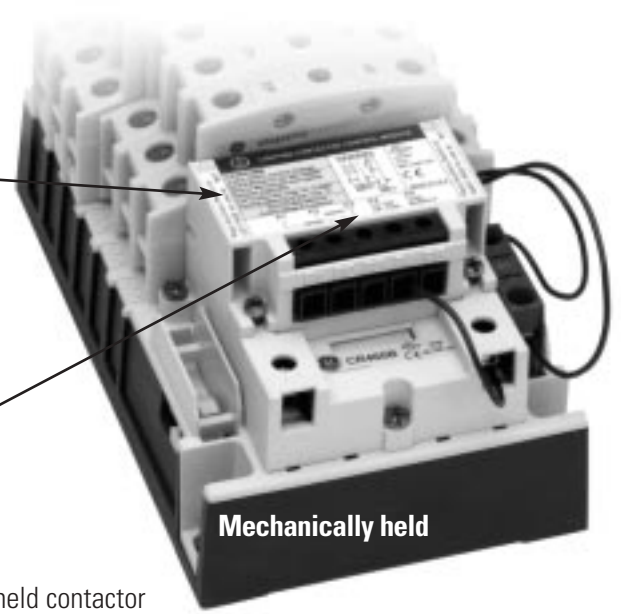
**Mechanically held contactors also feature:**

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 and with coils from 24Vac to 277Vac and 12Vdc to 24Vdc

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, protected latch mechanisms and auxiliary contacts



Common, easily installed power poles change from NO to NC (or vice versa) simply by unlatching and rotating 180°

Power poles rated for the range of tasks:

- 30A rated contacts
- 15A motor rated
- Pilot duty rated

Easy-to-read rating label

Auxiliary contacts, rated A600, are suitable for use on low level circuits down to 12V, 5mA

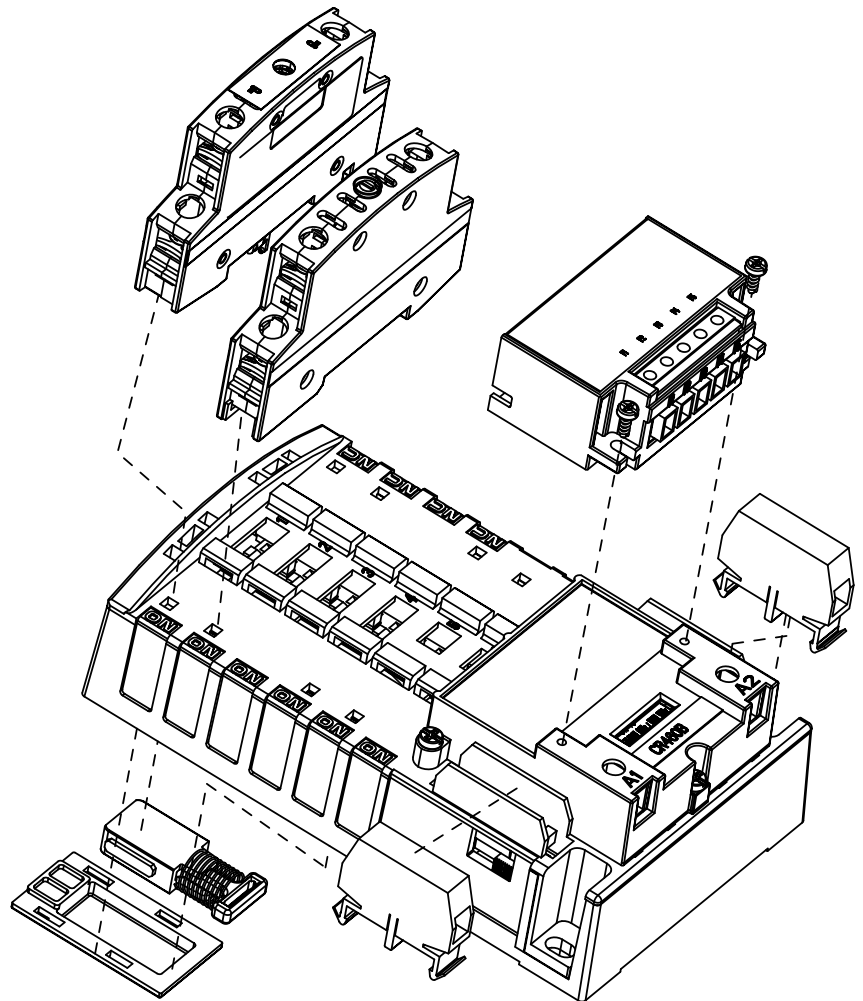
Plug-in auxiliary contacts are NO when installed on the left side of the base, NC on the right

Finger and back-of-hand safe power terminals

Quick-view coil voltage

Easy-change coil

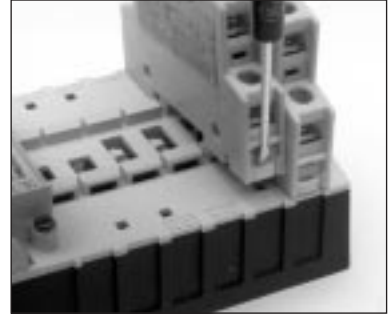
Low magnetic noise results in quiet operation



## The ultimate in versatility, simplicity and performance

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.

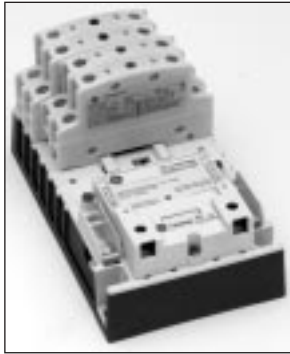
- Modular design permits fast, on-site configuration
- 2-12 power poles
- 30 amp rating
- Snap-in auxiliary contacts
- Common components for both electrically and mechanically held versions
- Continuously rated, interchangeable coils
- Finger-safe terminals



*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.*

### 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

- 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-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

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

##### Control Module

- Coil operation and control circuit at same or different voltages
- Allows longer control wiring runs
- 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 contact fatigue or failure
  - feedback loop prevents contactor from getting out of sequence with switches, even after power failures

##### Operational Modes

- 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-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.

# 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 6-7).

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

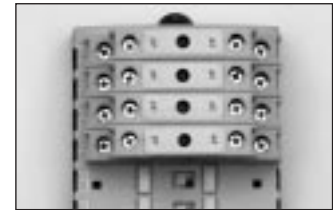
### 2. Order standard assembled contactor and rotate poles to meet pole requirements (see pages 8-9).

- Available from stock or short cycle for timely delivery
- Single catalog number to order – see catalog numbers in **bold type** on pages 8 and 9
- Allows local stocking of most common assembled forms via pole reconfiguration

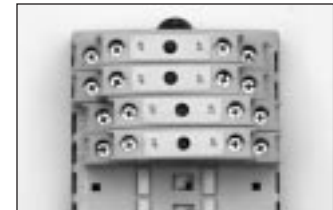
To order standard assembled contactors, select the catalog number from the table below that corresponds to the number of NO and NC contacts required. When you receive the contactor, simply reconfigure it to the NO-NC arrangement you require by rotating the appropriate power poles. It just takes a minute.

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

Replace asterisk (\*) in catalog number with L for electrically held and M for mechanically held. See pages 9-10 to complete catalog number.



*CR463L80AJA (8NO)*



*Contactor reconfigured as 4NO-4NC*

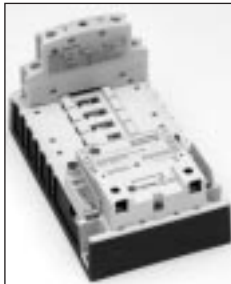
NO Contacts	NC Contacts	Order Cat. No.	NO Contacts	NC Contacts	Order Cat. No.	NO Contacts	NC Contacts	Order Cat. No.
0	2	CR463*20-	3	0	CR463*30-	6	0	CR463*60-
	3	CR463*21-		1	CR463*31-		1	CR463*70-
	4	CR463*40-		2	CR463*50-		2	CR463*80-
	5	CR463*41-		3	CR463*51-		3	CR463*90-
	6	CR463*60-		4	CR463*70-		4	CR463*B0-
	7	CR463*61-		5	CR463*71-		5	CR463*C0-
	8	CR463*80-		6	CR463*90-		6	CR463*D0-
	1	CR463*11-		7	CR463*91-		0	CR463*70-
1	2	CR463*21-	4	8	CR463*CO-	7	1	CR463*71-
	3	CR463*31-		0	CR463*40-		2	CR463*90-
	4	CR463*50-		1	CR463*50-		3	CR463*91-
	5	CR463*51-		2	CR463*60-		4	CR463*C0-
	6	CR463*70-		3	CR463*70-	0	CR463*80-	
	7	CR463*71-		4	CR463*80-	1	CR463*90-	
	8	CR463*90-		5	CR463*90-	2	CR463*B0-	
	0	CR463*20-		6	CR463*B0-	3	CR463*C0-	
2	1	CR463*30-	5	7	CR463*CO-	8	4	CR463*D0-
	2	CR463*40-		8	CR463*D0-		0	CR463*90-
	3	CR463*50-		0	CR463*50-		1	CR463*91-
	4	CR463*60-		1	CR463*51-		2	CR463*C0-
	5	CR463*70-		2	CR463*70-	0	CR463*B0-	
	6	CR463*80-		3	CR463*71-	1	CR463*C0-	
	7	CR463*90-		4	CR463*90-	2	CR463*D0-	
	8	CR463*B0-		5	CR463*91-	0	CR463*C0-	
		6	CR463*CO-	11	0	CR463*C0-		
				12	0	CR463*D0-		

### 3. Order assembled contactor configured to the exact application need (see pages 10-13).

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

# Components – CR460 Series Lighting Contactors

## Basic Contactor



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

Description	Cat. No.	List Price, GO-10MB
Base with 1NO-1NC	CR463L11A*A	\$165.00
Base with 2NO	CR463L20A*A	160.00

## Coil Voltage

Replace \* in base catalog number with appropriate coil digit from the table below. There is no price adder for coil selection.

	Coil Voltage		Coil Digit
	AC, 60 Hz	AC, 50 Hz	
Suitable for electrically or mechanically held contactors	24V	20V	C
	28V	24V	D
	115-120V	110V	J
	200-208V	—	L
	230-240V	220V	S
Suitable for electrically held contactors. CPT required when used with mechanically held contactors	277V	240V	N
	347V	—	T
	460-480V	440V	U
	575-600V	550V	Y

## 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)

Power Poles	Cat. No.	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 include control module, latch, latch cover and auxiliary contacts 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 (see Fuse and Transformer Kits table on page 7 for CPT selection).

Coil Volts	Control	Control Volts	Cat. No.	List Price, GO-10MB
24-277Vac	2-wire	24 Vac	CR460XMB	\$105.00
		110-120 Vac	CR460XMC	105.00
		200-277 Vac	CR460XMD	105.00
		12-24 Vdc	CR460XME	105.00
	3-wire	24 Vac	CR460XMM	115.00
		110-120 Vac	CR460XMN	115.00
		200-277 Vac	CR460XMP	115.00
		12-24 Vdc	CR460XMR	115.00

## 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. See Additional Auxiliary Contacts tables on pages 11 and 13 for contacts data.

Auxiliary Block	Cat. No.	List Price, GO-10MB
Single Pole	CR460XB1	\$9.00
Double Pole	CR460XB2	17.00

## Enclosure Kits

See pages 17-18 for enclosure dimensions.

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

## Enclosure Accessory Kits

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

### Pilot Devices

Pilot Device	Application				Cat. No.	List Price, GO-10MB
	Electrically Held		Mechanically Held			
	Without Interlock Aux.	With Interlock Aux.	2-wire Control Module	3-wire Control Module		
ON/OFF Push Button (Momentary)		X		X	CR460XP1	\$122.00
ON/OFF or OFF/AUTO Selector Switch (Maintained)	X		X	X	CR460XP2	122.00
ON/OFF Selector Switch, Spring Return to Center		X		X	CR460XP3	122.00
H-O-A or ON/OFF/AUTO Selector Switch	X		X		CR460XP4	122.00
H-O-A or ON/OFF/AUTO Keyed Selector Switch (Removal All Positions)	X		X		CR460XP5	158.00

### Pilot Lights

Pilot light kits come with interchangeable red and green lenses. Pilot lights may require auxiliary contacts. See extra contact limitations in the Additional Auxiliary Contacts tables on pages 11 and 13.

Type	Nameplate	Cat. No.	List Price, GO-10MB
Standard	ON or OFF	CR460XLB*	\$152.00
Push-to-Test	ON or OFF	CR460XLD*	170.00

### Pilot Light Voltage

Replace \* in pilot light catalog number with appropriate voltage digit from the table below.

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

## Fuse and Transformer Kits

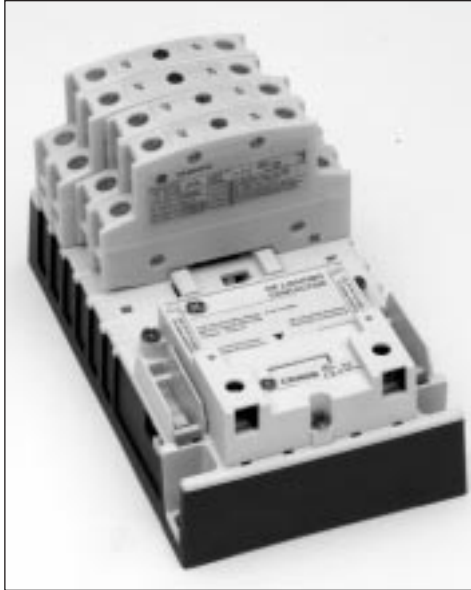
Contactor Type	Kit		Cat. No.	List Price, GO-10MB
Without CPT	Control Circuit Fuses Kit		CR460XF	\$155.00
With 100VA CPT (includes 2 primary and 1 secondary fuse)	CPT Primary Volts (60Hz)	CPT Secondary Volts		
	208	120V	CR460XTB	\$347.00
	220-240 <sup>Ⓛ</sup>		CR460XTC	347.00
	277		CR460XTD	347.00
	440-480		CR460XTE	347.00
	600		CR460XTF	347.00
	120	24V	CR460XTL	347.00
	208		CR460XTM	347.00
	220-240 <sup>Ⓛ</sup>		CR460XTN	347.00
	277		CR460XTP	347.00
	440-480		CR460XTR	347.00
	600		CR460XTS	347.00

<sup>Ⓛ</sup> May be reconnected in the field for 440-480 volts, but will require two 0.5 amp primary fuses.

## Spare Coils



Coil Voltage		Cat. No.	List Price, GO-10MB
AC, 60 Hz	AC, 50 Hz		
24V	20V	CR460XCC	\$45.00
28V	24V	CR460XCD	45.00
115-120V	110V	CR460XCJ	45.00
200-208V	—	CR460XCL	45.00
230-240V	220V	CR460XCS	45.00
277V	240V	CR460XCN	45.00
347V	—	CR460XCT	45.00
460-480V	440V	CR460XCU	45.00
575-600V	500V	CR460XCY	45.00



## Standard Assembled Forms

### CR463L Electrically Held Contactors

Replace \* in the catalog number with the appropriate digits from the Coil Voltage table. The resulting catalog number will be for an assembled contactor with no additional auxiliary contacts, pilot devices, pilot lights, control circuit fuses or CPTs. For modified assembled forms with those elements, see pages 10-11.

No. of Poles	NO	NC	Open Type		Type 1 Surface <sup>①</sup>		Type 1 Flush		Type 12/3R <sup>①</sup>		Type 4/4X	
			Cat. No. CR463L-	List Price, GO-10MB	Cat. No. CR463L-	List Price, GO-10MB	Cat. No. CR463L-	List Price, GO-10MB	Cat. No. CR463L-	List Price, GO-10MB	Cat. No. CR463L-	List Price, GO-10MB
2	1	1	<b>11A*A</b>	\$165.00	<b>11A*A10A0</b>	\$183.00	11A*A80A0	\$245.00	11A*A20A0	\$275.00	11A*A40A0	\$369.00
	2	0	<b>20A*A</b>	160.00	<b>20A*A10A0</b>	178.00	20A*A80A0	240.00	20A*A20A0	270.00	20A*A40A0	364.00
3	3	0	<b>30A*A</b>	204.00	<b>30A*A10A0</b>	222.00	30A*A80A0	284.00	30A*A20A0	314.00	30A*A40A0	408.00
4	3	1	<b>31A*A</b>	248.00	<b>31A*A10A0</b>	266.00	31A*A80A0	328.00	31A*A20A0	358.00	31A*A40A0	452.00
	4	0	<b>40A*A</b>	243.00	<b>40A*A10A0</b>	261.00	40A*A80A0	323.00	40A*A20A0	353.00	40A*A40A0	447.00
5	5	0	<b>50A*A</b>	287.00	<b>50A*A10A0</b>	335.00	50A*A80A0	367.00	50A*A20A0	397.00	50A*A40A0	491.00
6	5	1	<b>51A*A</b>	331.00	<b>51A*A10A0</b>	379.00	51A*A80A0	411.00	51A*A20A0	441.00	51A*A40A1	535.00
	6	0	<b>60A*A</b>	326.00	<b>60A*A10A0</b>	374.00	60A*A80A0	406.00	60A*A20A0	436.00	60A*A40A0	530.00
7	7	0	<b>70A*A</b>	370.00	<b>70A*A10A0</b>	418.00	70A*A80A0	450.00	70A*A20A0	480.00	70A*A40A0	574.00
8	7	1	<b>71A*A</b>	414.00	<b>71A*A10A0</b>	462.00	71A*A80A0	494.00	71A*A20A0	524.00	71A*A40A0	618.00
	8	0	<b>80A*A</b>	409.00	<b>80A*A10A0</b>	457.00	80A*A80A0	489.00	80A*A20A0	519.00	80A*A40A0	613.00
9	9	0	<b>90A*A</b>	453.00	<b>90A*A10A0</b>	501.00	90A*A80A0	533.00	90A*A20A0	563.00	90A*A40A0	657.00
10	9	1	<b>91A*A</b>	497.00	<b>91A*A10A0</b>	545.00	91A*A80A0	577.00	91A*A20A0	607.00	91A*A40A0	701.00
	10	0	<b>B0A*A</b>	492.00	<b>B0A*A10A0</b>	540.00	B0A*A80A0	572.00	B0A*A20A0	602.00	B0A*A40A0	696.00
11	11	0	<b>C0A*A</b>	536.00	<b>C0A*A10A0</b>	584.00	C0A*A80A0	616.00	C0A*A20A0	646.00	C0A*A40A0	740.00
12	12	0	<b>D0A*A</b>	575.00	<b>D0A*A10A0</b>	623.00	D0A*A80A0	655.00	D0A*A20A0	685.00	D0A*A40A0	779.00

<sup>①</sup> For oversized enclosures, change last three digits of catalog number (0A0) to 0AA and add \$40.00 to the List Price, GO-10MB. Oversized enclosures are normal cycle.

### Digit (10) Coil Voltage

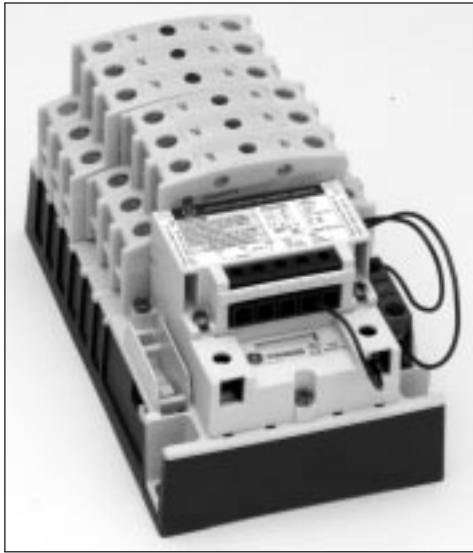
Replace digit 10 (\*) in the contactor catalog number with appropriate coil digits. There is no price adder to coil selection.

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

- Items listed here are the most common pole configurations.
- Combinations of contactors and coil voltages shown in **bold** are short cycle 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 10-11, or
- use the web wizard at <http://www.geindustrial.com/industrialsystems/wizards/csp/home.htm?pagesetid=lightingcontactors>, or
- contact your nearest GE sales office.



## Standard Assembled Forms

### CR463M Mechanically Held Contactors

Replace \*\* in the catalog number with the appropriate digits from the Control Circuit table. The resulting catalog number will be for an assembled contactor with no additional auxiliary contacts, pilot devices, pilot lights, control circuit fuses or CPTs. For modified assembled forms with those elements, see pages 12-13.

No. of Poles	NO	NC	Open Type		Type 1 Surface <sup>①</sup>		Type 1 Flush		Type 12/3R <sup>①</sup>		Type 4/4X	
			Cat. No. CR463M	List Price, GO-10MB	Cat. No. CR463M	List Price, GO-10MB	Cat. No. CR463M	List Price, GO-10MB	Cat. No. CR463M	List Price, GO-10MB	Cat. No. CR463M	List Price, GO-10MB
2	1	1	<b>11**A</b>	\$275.00	<b>11**A10A0</b>	\$293.00	11**A80A0	\$355.00	11**A20A0	\$385.00	11**A40A0	\$479.00
	2	0	<b>20**A</b>	270.00	<b>20**A10A0</b>	288.00	20**A80A0	350.00	20**A20A0	380.00	20**A40A0	474.00
3	3	0	<b>30**A</b>	314.00	<b>30**A10A0</b>	332.00	30**A80A0	394.00	30**A20A0	424.00	30**A40A0	518.00
4	3	1	<b>31**A</b>	358.00	<b>31**A10A0</b>	376.00	31**A80A0	438.00	31**A20A0	468.00	31**A40A0	562.00
	4	0	<b>40**A</b>	353.00	<b>40**A10A0</b>	371.00	40**A80A0	433.00	40**A20A0	463.00	40**A40A0	557.00
5	5	0	<b>50**A</b>	397.00	<b>50**A10A0</b>	445.00	50**A80A0	477.00	50**A20A0	507.00	50**A40A0	601.00
6	5	1	<b>51**A</b>	441.00	<b>51**A10A0</b>	489.00	51**A80A0	521.00	51**A11A0	551.00	51**A40A0	645.00
	6	0	<b>60**A</b>	436.00	<b>60**A10A0</b>	484.00	60**A80A0	516.00	60**A20A0	546.00	60**A40A0	640.00
7	7	0	<b>70**A</b>	480.00	<b>70**A10A0</b>	528.00	70**A80A0	560.00	70**A20A0	590.00	70**A40A0	684.00
8	7	1	<b>71**A</b>	524.00	<b>71**A10A0</b>	572.00	71**A80A0	604.00	71**A20A0	634.00	71**A40A0	728.00
	8	0	<b>80**A</b>	519.00	<b>80**A10A0</b>	567.00	80**A80A0	599.00	80**A20A0	629.00	80**A40A0	723.00
9	9	0	<b>90**A</b>	563.00	<b>90**A10A0</b>	611.00	90**A80A0	643.00	90**A20A0	673.00	90**A40A0	767.00
10	9	1	<b>91**A</b>	607.00	<b>91**A10A0</b>	655.00	91**A80A0	687.00	91**A20A0	717.00	91**A40A0	811.00
	10	0	<b>B0**A</b>	602.00	<b>B0**A10A0</b>	650.00	B0**A80A0	682.00	B0**A20A0	712.00	B0**A40A0	806.00
11	11	0	<b>C0**A</b>	646.00	<b>C0**A10A0</b>	694.00	C0**A80A0	726.00	C0**A20A0	756.00	C0**A40A0	850.00
12	12	0	<b>D0**A</b>	685.00	<b>D0**A10A0</b>	733.00	D0**A80A0	765.00	D0**A20A0	795.00	D0**A40A0	889.00

<sup>①</sup> For oversized enclosures, change last three digits of catalog number (0A0) to 0AA and add \$40.00 to the List Price, GO-10MB. Oversized enclosures are normal cycle.

### Control Circuit

To specify control and coil voltage, replace the \*\* in the contactor catalog with the appropriate digits from the table below and add the price adder (if any) to the contactor list price. If coil supply voltage is greater than 277V, use CPT.

Control	Control Module Input	Cat. No. Digits by Coil Voltage (60Hz) <sup>①</sup>		List Price Adder
		115-120 Vac	277 Vac	
2 Wire	110-120 Vac	<b>CJ</b>	—	\$0.00
	200-277 Vac	—	<b>DN</b>	0.00
3 Wire	110-120 Vac	<b>NJ</b>	—	10.00
	200-277 Vac	—	<b>PN</b>	10.00

<sup>①</sup> For 50Hz coil ratings, see page 8.

- Items listed here are the most common pole configurations.
- Combinations of contactors and control circuits shown in **bold** 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 12-13, or use the web wizard at <http://www.geindustrial.com/industrialsystems/wizards/csp/home.htm?pagesetid=lightingcontactors>, or contact your nearest GE sales office.

# Modified Assembled Forms – Electrically Held

## CR463L Electrically Held Contactors

Follow the diagram and tables below to select the options and corresponding catalog 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. For digit 7 with 10 NO contacts, use B; for 11 NO contacts, use C; for 12 NO contacts, use D.

NO Contacts (Digit 7)	List Price Adder, GO-10MB								
	NC Contacts (Digit 8)								
	0	1	2	3	4	5	6	7	8
0	—	—	\$83.00	\$127.00	\$166.00	\$210.00	\$249.00	\$293.00	\$332.00
1	—	\$88.00	127.00	171.00	210.00	254.00	293.00	337.00	376.00
2	\$83.00	127.00	166.00	210.00	249.00	293.00	332.00	376.00	415.00
3	127.00	171.00	210.00	254.00	293.00	337.00	376.00	420.00	459.00
4	166.00	210.00	249.00	293.00	332.00	376.00	415.00	459.00	498.00
5	210.00	254.00	293.00	337.00	376.00	420.00	459.00	—	—
6	249.00	293.00	332.00	376.00	415.00	459.00	498.00	—	—
7	293.00	337.00	376.00	420.00	459.00	—	—	—	—
8	332.00	376.00	415.00	459.00	498.00	—	—	—	—
9	376.00	420.00	459.00	—	—	—	—	—	—
10 (B)	415.00	459.00	498.00	—	—	—	—	—	—
11 (C)	459.00	—	—	—	—	—	—	—	—
12 (D)	498.00	—	—	—	—	—	—	—	—

Digit & Meaning	List Price, GO-10MB	Cat. No.
①	<b>\$77.00</b>	<b>C</b>
② Electrically held		<b>R</b>
③		<b>4</b>
④ contactor		<b>6</b>
⑤		<b>3</b>
⑥		<b>L</b>
⑦ Power pole NO contacts	<b>\$</b>	
⑧ Power pole NC contacts		
⑨ Standard control	<b>\$0.00</b>	<b>A</b>
⑩ Coil	<b>\$0.00</b>	
⑪ Aux. contacts	<b>\$</b>	
⑫ Enclosure	<b>\$</b>	
⑬ Pilot devices	<b>\$</b>	
⑭ Pilot lights	<b>\$</b>	
⑮ CPT	<b>\$</b>	
<b>Total</b>	<b>\$</b>	

### ⑩ Coil Voltage

There is no price adder to coil selection.

Coil Voltage		Digit 10
AC, 60Hz	AC, 50Hz	
24V	20V	C
28V	24V	D
<b>115-120V</b>	<b>110V</b>	<b>J</b>
200-208V	—	L
230-240V	220V	S
<b>277V</b>	<b>240V</b>	<b>N</b>
347V	—	T
460-480V	440V	U
575-600V	550V	Y

### ⑫ Enclosures

Enclosure Type	Digit 12	List Price Adder, GO-10MB
Type 1 Surface for 2-4 pole contactors	1	\$18.00
Type 1 Surface for 5-12 pole contactors	1	48.00
Type 1 Flush	8	80.00
Type 12/3R	2	110.00
Type 4/4X	4	204.00

### 11 Additional Auxiliary Contacts

Each side of a 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. For open forms, this is the final digit.

Additional (field use) Aux. Contacts	Digit 11	Open Type	Available with								List Price Adder, GO-10MB
			Enclosed with								
			When Digit 13 Below = 0, 2, 4, 5, 6, 7, 8				When Digit 13 Below = 1, 3				
			No pilot devices or pilot lights (Digit 14 = A)	ON light across coil (Digit 14 = B, D)	OFF light thru NC contact (Digit 14 = C, E)	ON light across coil and OFF light thru NC contact (Digit 14 = F, G)	No pilot devices or pilot lights (Digit 14 = A)	ON light across coil (Digit 14 = B, D)	OFF light thru NC contact (Digit 14 = C, E)	ON light across coil and OFF light thru NC contact (Digit 14 = F, G)	
None	A	✓	✓	✓	✓	✓	✓	✓	✓	✓	\$0.00
1NO	B	✓	✓	✓	✓	✓	✓	✓	✓	✓	\$10.00
1NC	C	✓	✓	✓	✓	✓	✓	✓	✓	✓	\$10.00
1NO-1NC	D	✓	✓	✓	✓	✓	✓	✓	✓	✓	\$20.00
2NO	E	✓	✓	✓	✓	—	—	—	—	—	\$20.00
2NO-1NC	F	✓	✓	✓	✓	—	—	—	—	—	\$30.00
2NC	G	✓	✓	✓	—	—	—	✓	✓	—	\$20.00
1NO-2NC	H	✓	✓	✓	—	—	—	✓	✓	—	\$30.00
2NO-2NC	J	✓	✓	✓	—	—	—	—	—	—	\$40.00

### 13 Pilot Devices

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

Pilot Device	Holding Interlock		Digit 13	List Price Adder, GO-10MB
	Not Required	Included <sup>①</sup>		
None			0	\$0.00
ON/OFF Push Button (Momentary)		X	1	142.00
ON/OFF Selector Switch (Maintained)	X		2	132.00
ON-OFF Selector Switch, Spring Return to Center		X	3	142.00
H-O-A Selector Switch	X		4	132.00
ON-OFF-AUTO Keyed Selector Switch (Removal All Positions)	X		5	168.00
H-O-A Keyed Selector Switch (Removal All Positions)	X		6	168.00
OFF-AUTO Selector Switch	X		7	132.00
ON-OFF-AUTO Selector Switch	X		8	132.00

① One holding interlock is included in pilot device digit and pricing.

### 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.

Type	Pilot Light(s) <sup>①</sup>	Digit 14	List Price Adder, GO-10MB
—	None	A	\$0.00
Standard	ON	B	152.00
	OFF	C	162.00
	ON and OFF	F	314.00
	ON	D	170.00
Push-to-Test	OFF	E	180.00
	ON and OFF	G	350.00

① ON is across coil; OFF is through NC contact, which is included in pilot light digit and pricing.

### 15 Control Circuit Fuses/Control Power Transformers

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

Contactor Type	Description		Digit 15	List Price Adder, GO-10MB
—	None	—	0	\$0.00
Without CPT	Control Circuit Fuses		1	165.00
With 100VA CPT	CPT Primary Volts	CPT Secondary Volts		
	208	120	B	367.00
	220-240		C	367.00
	277		D	367.00
	440-480		E	367.00
	600		F	367.00
	120		L	367.00
	208	24	M	367.00
	220-240		N	367.00
	277		P	367.00
	440-480		R	367.00
	600		S	367.00

# Modified Assembled Forms – Mechanically Held

## CR463M Mechanically Held Contactors

Follow the diagram and tables below to select the options and corresponding catalog 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. For digit 7 with 10 NO contacts, use B; for 11 NO contacts, use C; for 12 NO contacts, use D.

NO Contacts (Digit 7)	List Price Adder, GO-10MB								
	NC Contacts (Digit 8)								
	0	1	2	3	4	5	6	7	8
0	—	—	\$83.00	\$127.00	\$166.00	\$210.00	\$249.00	\$293.00	\$332.00
1	—	\$88.00	127.00	171.00	210.00	254.00	293.00	337.00	376.00
2	\$83.00	127.00	166.00	210.00	249.00	293.00	332.00	376.00	415.00
3	127.00	171.00	210.00	254.00	293.00	337.00	376.00	420.00	459.00
4	166.00	210.00	249.00	293.00	332.00	376.00	415.00	459.00	498.00
5	210.00	254.00	293.00	337.00	376.00	420.00	459.00	—	—
6	249.00	293.00	332.00	376.00	415.00	459.00	498.00	—	—
7	293.00	337.00	376.00	420.00	459.00	—	—	—	—
8	332.00	376.00	415.00	459.00	498.00	—	—	—	—
9	376.00	420.00	459.00	—	—	—	—	—	—
10 (B)	415.00	459.00	498.00	—	—	—	—	—	—
11 (C)	459.00	—	—	—	—	—	—	—	—
12 (D)	498.00	—	—	—	—	—	—	—	—

Digit & Meaning	List Price, GO-10MB	Cat. No.
①	<b>\$187.00</b>	<b>C</b>
②		<b>R</b>
③		<b>4</b>
④		<b>6</b>
⑤		<b>3</b>
⑥		<b>M</b>
⑦	<b>\$</b>	
⑧		
⑨	<b>\$</b>	
⑩		
⑪		
⑫		
⑬		
⑭	<b>\$</b>	
⑮	<b>\$</b>	
<b>Total</b>	<b>\$</b>	

### ⑨ & ⑩ Control Circuit

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

Control	Control Module Input	Digits 9 & 10 by Coil Voltage (60Hz) <sup>①</sup>					List Price Adder, GO-10MB
		24 Vac	115-120 Vac	200-208 Vac	230-240 Vac	277 Vac	
2 Wire	24 Vac	BC	BJ	BL	BS	BN	\$0.00
	110-120 Vac	—	CJ	CL	CS	CN	0.00
	200-277 Vac	—	—	DL	DS	DN	0.00
	12-28 Vdc	EC	EJ	EL	ES	EN	0.00
3 Wire	24 Vac	MC	MJ	ML	MS	MN	10.00
	110-120 Vac	—	NJ	NL	NS	NN	10.00
	200-277 Vac	—	—	PL	PS	PN	10.00
	12-28 Vdc	RC	RJ	RL	RS	RN	10.00

① For 50Hz coil ratings, see page 8.

### 11 Additional Auxiliary Contacts

Each side of a 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.

Additional (field use) Aux. Contacts	Digit 11	Open Type	Available with										List Price Adder, GO-10MB
			2-wire control (when Digit 9 = B, C, D, E)					3-wire control (when Digit 9 = M, N, P, R)					
			Enclosed (when Digit 13 below = 0, 2, 4-8)					Enclosed (when Digit 13 below = 1-3)					
			No pilot lights (Digit 14 = A)	ON light thru NO contact (Digit 14 = B, D)	OFF light thru NC contact (Digit 14 = C, E)	ON light thru NO contact and OFF light thru NC contact (Digit 14 = F, G)	Open Type	No pilot devices or pilot lights (Digit 14 = A)	ON light thru NO contact (Digit 14 = B, D)	OFF light thru NC contact (Digit 14 = C, E)	ON light thru NO contact and OFF light thru NC contact (Digit 14 = F, G)		
None	A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	\$0.00	
1NO	B	✓	✓	✓	✓	✓	✓	—	✓	—	—	\$10.00	
1NC	C	✓	✓	✓	—	—	✓	✓	—	—	—	\$10.00	
1NO-1NC	D	✓	✓	—	—	—	✓	—	—	—	—	\$20.00	
2NO	E	✓	✓	—	✓	—	—	—	—	—	—	\$20.00	

### 12 Enclosures

Enclosure Type	Digit 12	List Price Adder, GO-10MB
Type 1 Surface for 2-4 pole contactors	1	\$18.00
Type 1 Surface for 5-12 pole contactors	1	48.00
Type 1 Flush	8	80.00
Type 12/3R	2	110.00
Type 4/4X	4	204.00

### 13 Pilot Devices

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

Pilot Device	Control Module		Digit 13	List Price Adder, GO-10MB
	2-wire	3-wire		
None			0	\$0.00
ON/OFF Push Button (Momentary)		X	1	132.00
ON/OFF Selector Switch (Maintained)	X	X	2	132.00
ON-OFF Selector Switch, Spring Return to Center		X	3	132.00
H-O-A Selector Switch	X		4	132.00
ON-OFF-AUTO Keyed Selector Switch (Removal All Positions)	X		5	168.00
H-O-A Keyed Selector Switch (Removal All Positions)	X		6	168.00
OFF-AUTO Selector Switch	X		7	132.00
ON-OFF-AUTO Selector Switch	X		8	132.00

### 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.

Type	Pilot Light(s) <sup>①</sup>	Digit 14	List Price Adder, GO-10MB
—	None	A	\$0.00
Standard	ON	B	162.00
	OFF	C	162.00
	ON and OFF	F	324.00
	ON	D	180.00
Push-to-Test	OFF	E	180.00
	ON and OFF	G	360.00

① ON is through NO contact; OFF is through NC contact. Auxiliary contacts are included in pilot light digit and pricing.

### 15 Control Circuit Fuses/Control Power Transformers

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

Contactor Type	Description		Digit 15	List Price Adder, GO-10MB
—	None	—	0	\$0.00
Without CPT	Control Circuit Fuses		1	165.00
With 100VA CPT	CPT Primary Volts	CPT Secondary Volts		
	208	120	B	367.00
	220-240		C	367.00
	277		D	367.00
	440-480		E	367.00
	600		F	367.00
	120	24	L	367.00
	208		M	367.00
	220-240		N	367.00
	277		P	367.00
	440-480		R	367.00
	600		S	367.00

## Technical Data

### Main Power Poles

#### Maximum AC Voltage and Amp Ratings

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

#### Maximum Horsepower Rating (Normal Starting Duty)

Volts	1 Pole Single Phase		3 Poles, Three Phase			
	1	2	3	5	10	15
HP	1	2	3	5	10	15

Pilot Duty Rating: A600

Withstand Current Ratings for CR463 Series Contactors - Available Amps (RMS) Symmetrical  
Circuit Breakers - Inverse Trip Type

AC Service Voltage	Breaker Size	Enclosure Type CR460XE*B		Enclosure Type CR460XE*D or Larger			
		TEY/ THHQB	All other inverse trip breakers	THHQB	TEY	SE	All other inverse trip breakers
240V	30A	22,000	14,000	22,000	65,000	100,000	22,000
	40A	14,000	10,000	22,000	65,000	100,000	22,000
277V	30A	14,000 <sup>①</sup>	10,000	N/A	14,000	30,000	14,000
	40A	14,000 <sup>①</sup>	5,000	N/A	14,000	30,000	14,000
480V	40A	N/A	5,000	N/A	N/A	30,000	14,000
600V	40A	N/A	5,000	N/A	N/A	14,000	10,000

① TEY only.

#### Fuses

AC Service Voltage	Fuse Size	Enclosure Type CR460XE*B		Enclosure Type CR460XE*D or Larger		
		J	RK1	J/RK1/RK5	K	H
600V and below	30A	100,000	50,000	100,000	50,000	10,000

### Control Circuit Characteristics

#### Coil

Inrush 248VA  
Sealed 28VA

#### Control Module

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

Minimum pulse duration (3-wire control module) 250ms  
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

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

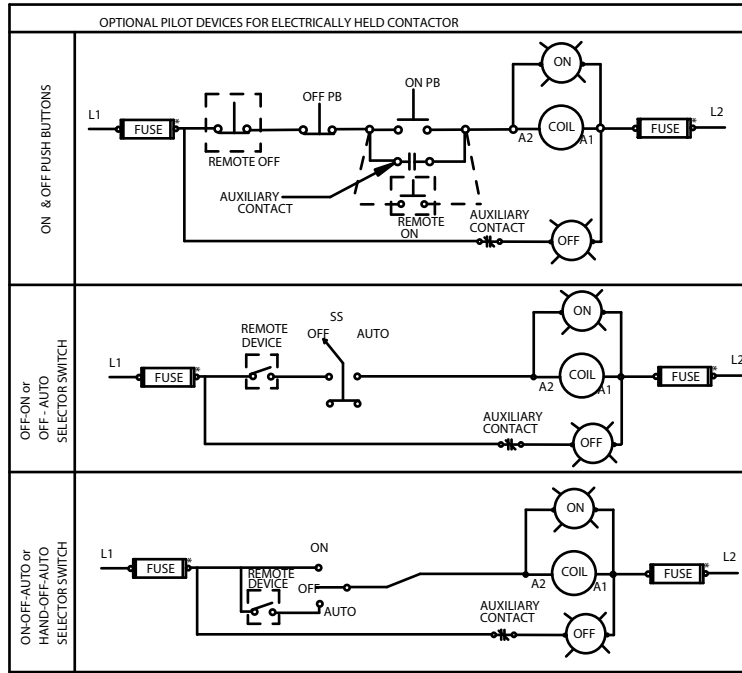
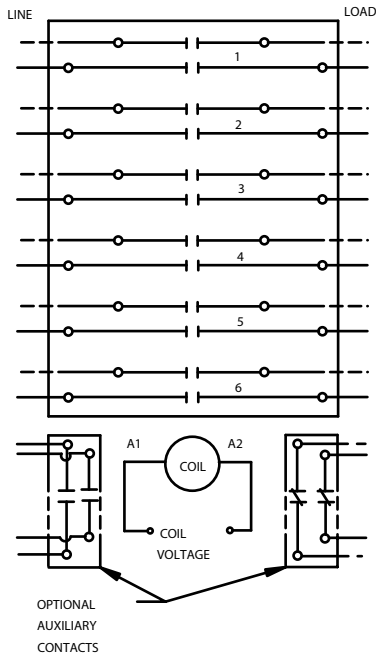
① #8 AWG stranded only.

Ambient Temperature: -25° to 40°C

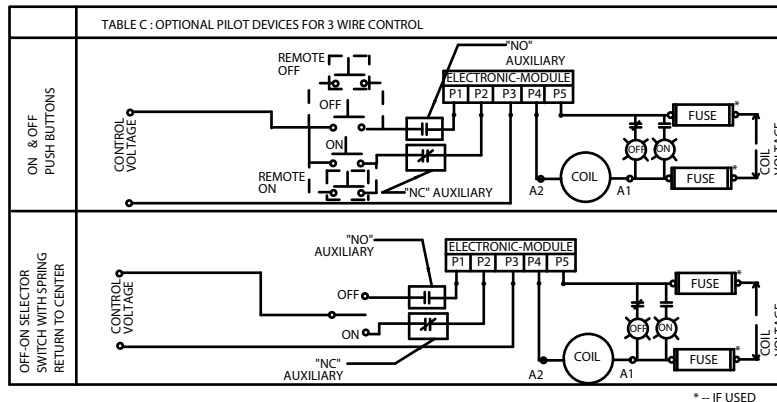
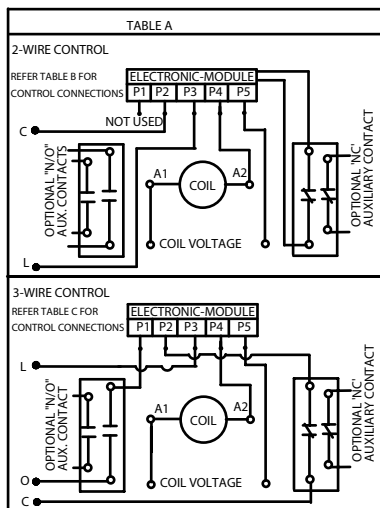
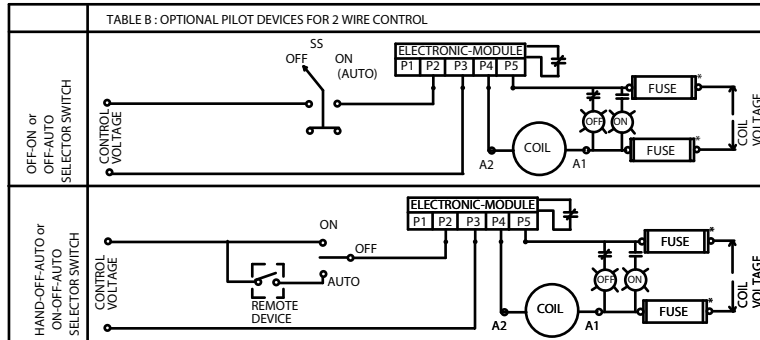
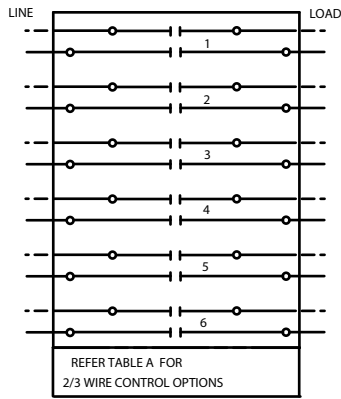
Standards: UL508, cUL, C€

Instructions: DEH-40460

## CR463L Electrically Held



## CR463M Mechanically Held

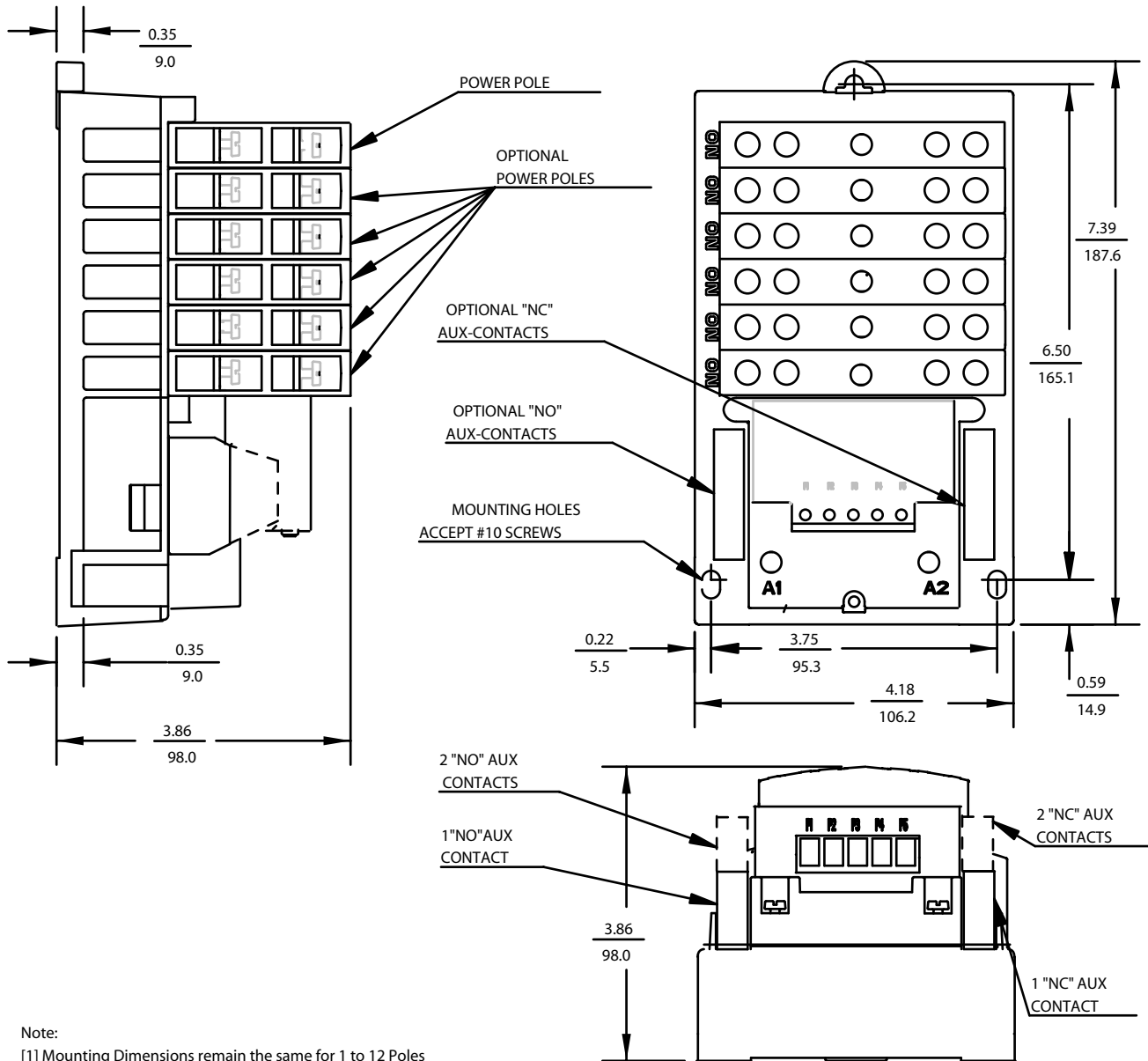


\* -- IF USED

# DIMENSIONS

Dual Dimensions  $\frac{\text{Inches}}$  (For estimating only)  
 $\frac{\text{Millimeters}}$

## CR463L/CR463M Contactors Drawing # 55-217114P01

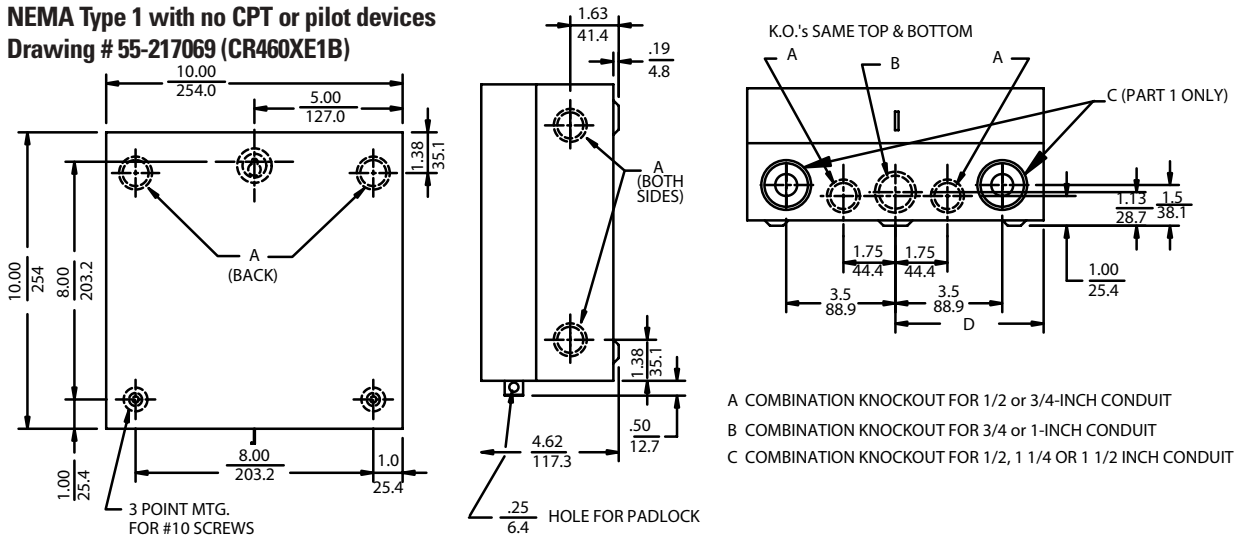


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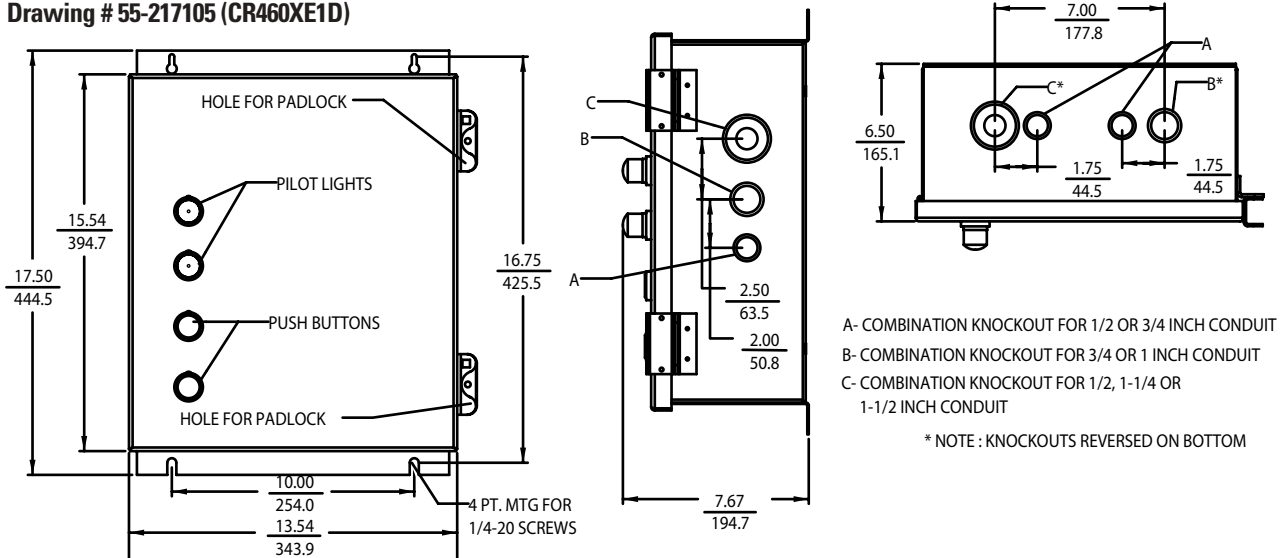
- [1] Mounting Dimensions remain the same for 1 to 12 Poles
- [2] Line and Load terminals are interchangeable
- [3] Up to 2NO and 2NC auxiliary contacts can be added onto the base product
- [4] Same Power Pole can be configured as NO type or NC type in pole positions 1-4; NO type only in positions 5-6.

Dual Dimensions Inches (For estimating only)  
Millimeters

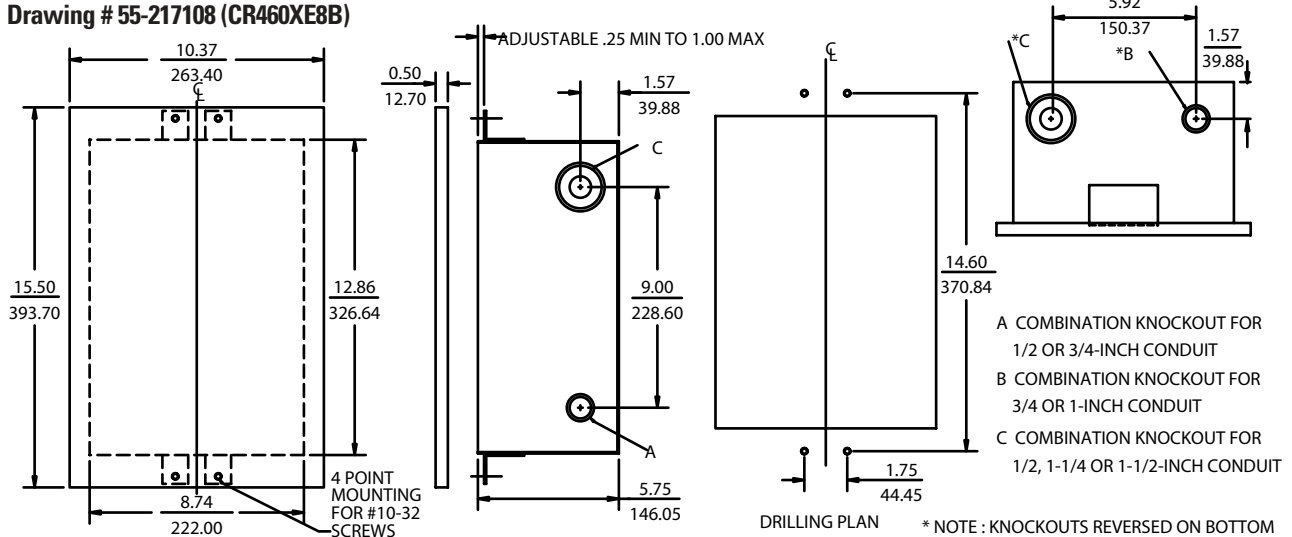
**NEMA Type 1 with no CPT or pilot devices**  
**Drawing # 55-217069 (CR460XE1B)**



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



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

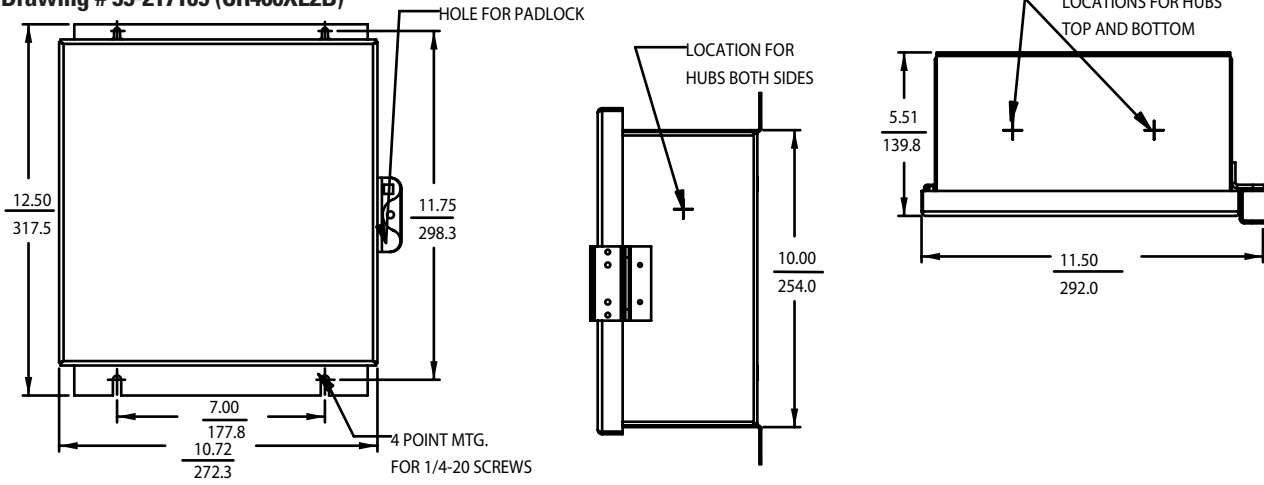


# DIMENSIONS

Dual Dimensions   Inches   (For estimating only)  
  Millimeters  

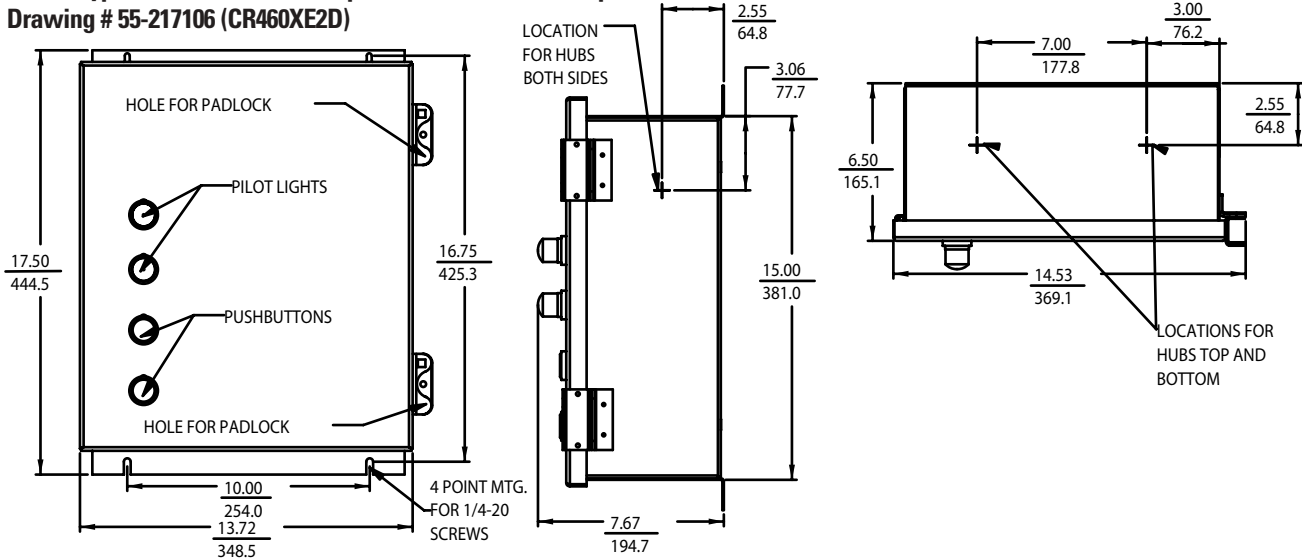
## NEMA Type 12/3R with no CPT or pilot device

Drawing # 55-217109 (CR460XE2B)



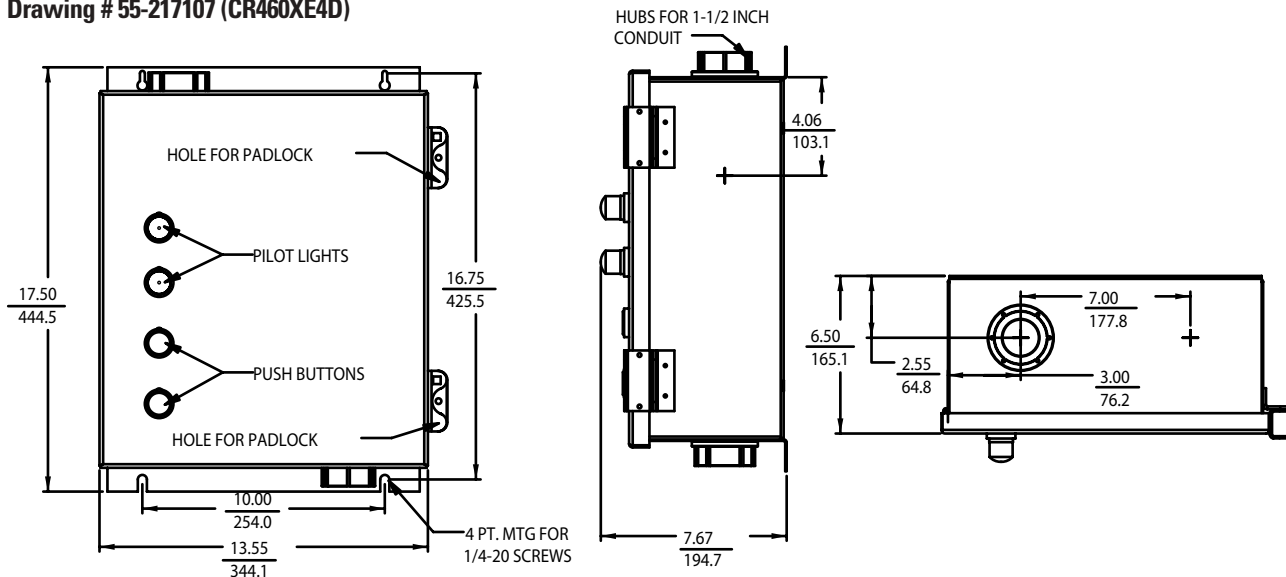
## NEMA Type 12/3R oversized with provision for CPT and/or pilot devices

Drawing # 55-217106 (CR460XE2D)



## NEMA Type 4/4X oversized with provision for CPT and/or pilot devices

Drawing # 55-217107 (CR460XE4D)





Open 60-Amp Electrically Held Lighting Contactor

## CR360L Electrically Held Contactors

### 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.

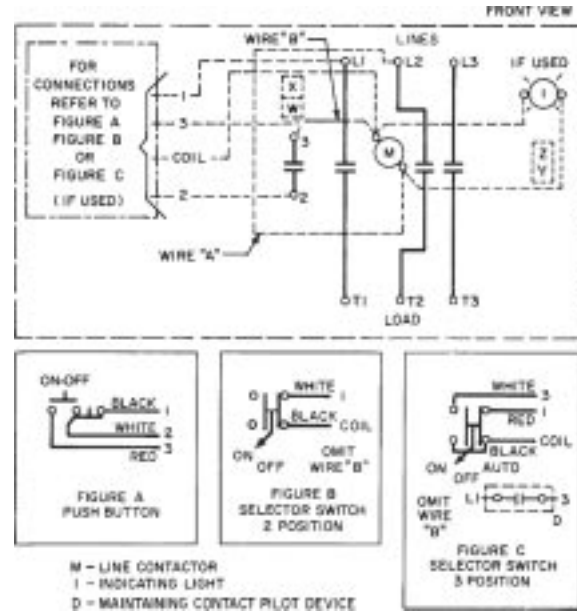
### Maximum AC Voltage Rating

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

### DC Tungsten Rating

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

### Schematic Diagram



Typical Schematic Diagram For CR360L Lighting Contactor

### Ordering Directions

Order by complete catalog number. Select rating and enclosure from Table 1 on page 20. 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 Catalog Number must contain 15 digits.

CR360L	①	② or ②a	③	④	⑤	
	Enclosure	# NO Poles	Control Circuit Option	Pilot Device	Pilot Light	Aux. Contacts

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.

CR360L	313	04T	C	A	A	
						List Price, GO-10MB
						NEMA Type 1 Enclosure, 3 NO Poles + \$ 216.00
						480/120 CPT 480/120 with 2 Primary / 1 Secondary Fuse + \$ 367.00
						Standard On-Off Push Button + \$ 60.00
						No Indicating Light \$ 0.00
						Normally Open Holding Interlock + \$ 82.00
						Total = \$ 725.00

### List Price, GO-10MB

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

### References

#### Instructions

Continuous Ampere Rating	Publication Number
30	GEH-5099
60	GEH-5100
100	GEH-5101
200	GEH-5102
300	GEH-5103

Dimensions — See page 21.

## CR360L Electrically Held Contactors

### 1 Select Size, Number of Poles and Enclosure

Continuous Ampere Rating	No. of Poles	Open		NEMA 1		NEMA 12		NEMA 3R		NEMA 4, SS	
		Cat. No. Digits CR360L	List Price, GO-10MB	Cat. No. Digits CR360L	List Price, GO-10MB	Cat. No. Digits CR360L	List Price, GO-10MB	Cat. No. Digits CR360L	List Price, GO-10MB	Cat. No. Digits CR360L	List Price, GO-10MB
30	2	<b>302</b>	\$186.00	<b>312</b>	\$198.00	<b>322</b>	\$288.00	<b>362</b>	\$288.00	<b>342</b>	\$468.00
	3	<b>303</b>	204.00	<b>313</b>	216.00	<b>323</b>	306.00	<b>363</b>	306.00	<b>343</b>	486.00
	4	<b>304</b>	252.00	<b>314</b>	264.00	<b>324</b>	354.00	<b>364</b>	354.00	<b>344</b>	534.00
60	2	<b>402</b>	348.00	<b>412</b>	408.00	<b>422</b>	573.00	<b>462</b>	573.00	<b>442</b>	948.00
	3	<b>403</b>	372.00	<b>413</b>	432.00	<b>423</b>	597.00	<b>463</b>	597.00	<b>443</b>	972.00
	4	<b>404</b>	480.00	<b>414</b>	540.00	<b>424</b>	705.00	<b>464</b>	705.00	<b>444</b>	1080.00
100	2	<b>502</b>	552.00	<b>512</b>	672.00	<b>522</b>	867.00	<b>562</b>	867.00	<b>542</b>	1437.00
	3	<b>503</b>	600.00	<b>513</b>	720.00	<b>523</b>	915.00	<b>563</b>	915.00	<b>543</b>	1485.00
	4	<b>504</b>	768.00	<b>514</b>	888.00	<b>524</b>	1083.00	<b>564</b>	1083.00	<b>544</b>	1653.00
200	2	<b>602</b>	1332.00	<b>612</b>	1584.00	<b>622</b>	2229.00	<b>662</b>	2229.00	<b>642</b>	2889.00
	3	<b>603</b>	1440.00	<b>613</b>	1692.00	<b>623</b>	2337.00	<b>663</b>	2337.00	<b>643</b>	2997.00
	4	<b>604</b>	2004.00	<b>614</b>	2256.00	<b>624</b>	2901.00	<b>664</b>	2901.00	<b>644</b>	3561.00
300	2	<b>702</b>	2886.00	<b>712</b>	3348.00	<b>722</b>	4998.00	<b>762</b>	4998.00	<b>742</b>	4998.00
	3	<b>703</b>	3138.00	<b>713</b>	3600.00	<b>723</b>	5250.00	<b>763</b>	5250.00	<b>743</b>	5250.00
	4	<b>704</b>	5766.00	<b>714</b>	6690.00	<b>724</b>	8340.00	<b>764</b>	8340.00	<b>744</b>	8340.00

### 2 Select Coil Voltage

Voltage	Cat. No. Digits
24	24A
120	<b>02A</b>
208 <sup>D</sup>	<b>23A</b>
240 <sup>D</sup>	<b>03A</b>
277 <sup>D</sup>	<b>13A</b>
480 <sup>D</sup>	<b>04A</b>

<sup>D</sup> Control circuit fuses required for 200A and 300A forms if pilot devices are selected in Steps 3 or 4.

### 2a Select Size, Number of Poles and Enclosure

Control Circuit Options	Coil Voltage for Control Circuit Fuses, Primary Voltage for CPT	Continuous Ampere Rating									
		30A		60A		100A		200A		300A	
		Cat. No. Digits CR360L	List Price, GO-10MB	Cat. No. Digits CR360L	List Price, GO-10MB	Cat. No. Digits CR360L	List Price, GO-10MB	Cat. No. Digits CR360L	List Price, GO-10MB	Cat. No. Digits CR360L	List Price, GO-10MB
2 Control Circuit Fuses	24	24D	\$165.00	24D	\$165.00	24D	\$165.00	24D	\$165.00	24D	\$165.00
	120	<b>02D</b>	165.00	<b>02D</b>	165.00	<b>02D</b>	165.00	<b>02D</b>	165.00	<b>02D</b>	165.00
	208	<b>23D</b>	165.00	<b>23D</b>	165.00	<b>23D</b>	165.00	<b>23D</b>	165.00	<b>23D</b>	165.00
	240	<b>03D</b>	165.00	<b>03D</b>	165.00	<b>03D</b>	165.00	<b>03D</b>	165.00	<b>03D</b>	165.00
	277	<b>13D</b>	165.00	<b>13D</b>	165.00	<b>13D</b>	165.00	<b>13D</b>	165.00	<b>13D</b>	165.00
	480	<b>04D</b>	165.00	<b>04D</b>	165.00	<b>04D</b>	165.00	<b>04D</b>	165.00	<b>04D</b>	165.00
CPT with 120V Secondary – includes 2 Primary and 1 Secondary Fuse	208	<b>82T</b>	367.00	<b>82T</b>	440.00	<b>62T</b>	585.00	<b>48T</b>	675.00	<b>40T</b>	743.00
	240	<b>03T</b>	367.00	<b>03T</b>	440.00	<b>03T</b>	585.00	<b>03T</b>	675.00	<b>03T</b>	743.00
	277	<b>61T</b>	367.00	<b>61T</b>	440.00	<b>61T</b>	585.00	<b>61T</b>	675.00	<b>61T</b>	743.00
	480	<b>04T</b>	367.00	<b>04T</b>	440.00	<b>04T</b>	585.00	<b>04T</b>	675.00	<b>04T</b>	743.00

### 3 Select Push Buttons or Selector Switch

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

<sup>D</sup> Add holding interlock with this option.

### 4 Select Push Buttons or Selector Switch

Light Options	NEMA Type 1 Only Standard-Duty		Any Enclosure Heavy-Duty	
	Cat. No. Digit	List Price, GO-10MB	Cat. No. Digit	List Price, GO-10MB
None	<b>A</b>	\$0.00	<b>A</b>	\$0.00
Red Across Coil	<b>B</b>	122.00	<b>J</b>	202.00
Green Across Coil	—	—	<b>K</b>	202.00

### 5 Select Control Power Option

	Cat. No. Digit	List Price, GO-10MB
None	<b>Z</b>	—
Holding Interlock	<b>A</b>	\$82.00
Holding Interlock Plus 1 NO	<b>B</b>	164.00
Holding Interlock Plus 1 NC	<b>C</b>	164.00
Holding Interlock Plus 1 NO, 1 NC	<b>D</b>	246.00
Holding Interlock Plus 2 NO	<b>E</b>	246.00
Holding Interlock Plus 2 NC	<b>F</b>	246.00
Holding Interlock Plus 2 NO, 1 NC	<b>G</b>	328.00

GE FASTRAC™ Program items are printed in **bold** type.

# CR360L Electrically Held Contactors

Dual Dimensions Inches (For estimating only)  
Millimeters

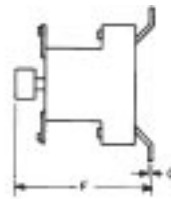
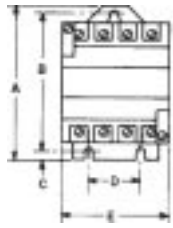


Fig. 1, Open CR360L 30- to 300-Ampere 2- and 3-Pole Forms

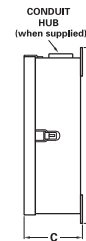
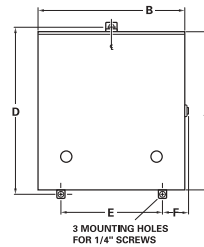


Fig. 3, Enclosed CR360L Type 12, 3R, 4/4X 3-Point Mounting

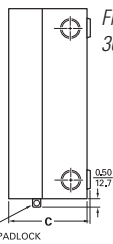
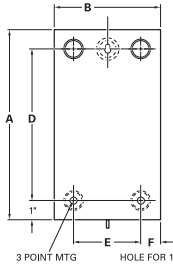


Fig. 2, Enclosed CR360L Type 1, 30-100A w/Standard Pilot Devices

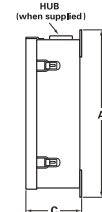
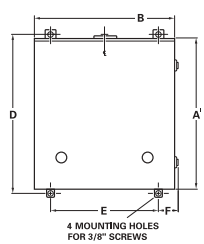


Fig. 4, Enclosed CR360L Type 1, 12, 3R, 4/4X 4-Point Mounting

Type	Device	Approximate Dimensions														Approx. Shipping Wt., Lbs.
		A		B		C		D		E		F		G		
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
Open CR360L	CR360L3 (30A)	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 3/4
	CR360L4 (60A)	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
Two-and Three-Pole Forms	CR360L5 (100A)	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 1/2
	CR360L6 (200A)	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
	CR360L7 (300A)	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

Type	Device	Fig. #	Hub Size	Approximate Dimensions																Approx. Shipping Wt., Lbs.
				A		B		C		D		E		F		G				
				in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm			
Enclosed CR360L Type 1	CR360L3 (30 A) w/o CPT	2	—	10.00	254.0	—	—	6.00	152.4	4.63	117.6	8.00	203.2	4.00	101.6	1.00	25.4	6		
	CR360L3 (30 A) w/CPT	2	—	10.00	254.0	—	—	10.00	254.0	4.63	117.6	8.00	203.2	8.00	203.2	1.00	25.4	10		
	CR360L3 (30 A) w/Heavy-Duty Pilot Devices	4	—	17.40	442.0	14.75	374.7	13.00	330.2	5.14	130.6	16.40	416.6	8.00	203.2	3.25	82.6	18		
	CR360L4 (60 A) w/o CPT, 2- to 3-Pole	2	—	13.25	—	—	—	7.38	187.5	6.13	155.7	11.00	279.4	5.00	127.0	1.19	30.2	13		
	CR360L4 (60 A) w/CPT	2	—	13.25	336.6	—	—	12.00	304.8	6.13	155.7	11.00	279.4	9.00	228.6	1.50	38.1	18		
	CR360L4 (60 A) w/Heavy-Duty Pilot Devices	4	—	19.40	492.8	16.68	423.7	15.00	381.0	6.62	168.1	18.40	467.4	10.00	254.0	3.25	82.6	27		
	CR360L5 (100 A) w/o CPT, 2- to 3-Pole	2	—	20.25	514.4	—	—	8.75	222.3	7.31	185.7	17.00	431.8	5.75	146.1	1.50	38.1	35		
	CR360L5 (100 A) ALL OTHER	4	—	24.20	614.7	21.62	549.1	18.00	457.2	8.40	213.4	23.20	589.3	13.00	330.2	3.25	82.6	50		
	CR360L6 (200 A) w/o CPT, 2- to 3-Pole	4	—	45.50	1155.7	42.75	1085.9	17.00	431.8	10.75	273.1	44.50	1130.3	12.00	304.8	2.50	63.5	38		
	CR360L6 (200 A) ALL OTHER	4	—	45.50	1155.7	42.75	1085.9	23.00	584.2	10.75	273.1	44.50	1130.3	18.00	457.2	2.50	63.5	55		
CR360L7 (300 A) w/o CPT, 2- to 3-Pole	4	—	45.50	1155.7	42.75	1085.9	17.00	431.8	10.75	273.1	44.50	1130.3	12.00	304.8	2.50	63.5	130			
CR360L7 (300 A) ALL OTHER	4	—	45.50	1155.7	42.75	1085.9	23.00	584.2	10.75	273.1	44.50	1130.3	18.00	457.2	2.50	63.5	140			
Enclosed CR360L Type 12	CR360L3 (30 A) w/o CPT	3	—	15.62	396.7	14.25	362.0	6.28	159.5	5.50	139.7	15.00	381.0	3.00	76.2	2.26	57.4	16		
	CR360L3 (30A) ALL OTHER	3	—	15.62	396.7	14.25	362.0	14.25	362.0	5.50	139.7	15.00	381.0	11.00	279.4	2.26	57.4	20		
	CR360L4 (60A) 2-to3-Pole, w/o CPT	3	—	17.62	447.5	16.25	412.8	7.63	193.8	6.25	158.8	17.00	431.8	4.38	111.3	2.26	57.4	29		
	CR360L4 (60A) ALL OTHER	3	—	17.62	447.5	16.25	412.8	12.25	311.2	6.25	158.8	17.00	431.8	9.00	228.6	2.26	57.4	38		
	CR360L5 (100A) w/o CPT, 2-to3-Pole	4	—	30.00	762.0	27.25	692.2	10.50	266.7	7.25	184.2	29.00	736.6	5.75	146.1	3.25	82.6	40		
	CR360L5 (100A) ALL OTHER	4	—	24.00	609.6	21.38	543.1	18.00	457.2	7.88	200.2	23.00	584.2	13.00	330.2	3.25	82.6	55		
	CR360L6 (200A) 2-to3-Pole, w/o CPT	4	—	45.50	1155.7	42.75	1085.9	17.00	431.8	10.25	260.4	44.50	1130.3	12.00	304.8	3.25	82.6	44		
	CR360L6 (200A) ALL OTHER	4	—	45.50	1155.7	42.75	1085.9	23.00	584.2	10.25	260.4	44.50	1130.3	18.00	457.2	3.25	82.6	60		
	CR360L7 (300A) 2-to3-Pole, w/o CPT	4	—	45.50	1155.7	42.75	1085.9	17.00	431.8	10.25	260.4	44.50	1130.3	12.00	304.8	3.25	82.6	140		
	CR360L7 (300A) ALL OTHER	4	—	45.50	1155.7	42.75	1085.9	23.00	584.2	10.25	260.4	44.50	1130.3	18.00	457.2	3.25	82.6	150		
Enclosed CR360L Type 3R	CR360L3 (30A) w/o CPT	3	1"	15.62	396.7	14.50	368.3	6.88	174.8	5.50	139.7	15.00	381.0	3.00	76.2	2.31	58.7	16		
	CR360L3 (30A) ALL OTHER	3	1"	15.62	396.7	14.50	368.3	10.38	263.7	5.50	139.7	15.00	381.0	7.00	177.8	2.31	58.7	20		
	CR360L4 (60A) w/o CPT	3	1.5"	17.62	447.5	16.50	419.1	7.84	199.1	6.50	165.1	17.00	431.8	4.38	111.3	2.32	58.9	29		
	CR360L4 (60A) ALL OTHER	3	1.5"	17.62	447.5	16.50	419.1	12.50	317.5	6.50	165.1	17.00	431.8	8.00	203.2	2.88	73.2	38		
	CR360L5 (100A) ALL	4	2"	24.50	622.3	22.00	558.8	17.20	436.9	7.25	184.2	23.50	596.9	11.00	279.4	3.62	91.9	55		
	CR360L6 (200A) ALL	4	3"	44.50	1130.3	41.50	1054.1	22.00	558.8	10.25	260.4	43.50	1104.9	16.00	406.4	3.62	91.9	60		
Enclosed CR360L Type 4/4X	CR360L7 (300A) ALL	4	3"	44.50	1130.3	42.00	1066.8	22.00	558.8	10.25	260.4	43.50	1104.9	16.00	406.4	3.62	91.9	150		
	CR360L3 (30A) w/o CPT	3	1"	15.62	396.7	14.50	368.3	6.38	162.1	5.50	139.7	15.00	381.0	3.00	76.2	1.69	42.9	16		
	CR360L3 (30A) ALL OTHER	3	1"	15.52	394.2	14.50	368.3	10.38	263.7	5.50	139.7	15.00	381.0	7.00	177.8	1.69	42.9	20		
	CR360L4 (60A) w/o CPT	3	1.5"	17.62	447.5	16.50	419.1	7.75	196.9	6.50	165.1	17.00	431.8	4.38	111.3	1.69	42.9	29		
	CR360L4 (60A) ALL OTHER	3	1.5"	17.62	447.5	16.50	419.1	12.50	317.5	6.25	158.8	17.00	431.8	8.00	203.2	2.25	57.2	38		
	CR360L5 (100A) ALL	4	2"	24.50	622.3	22.00	558.8	17.00	431.8	7.25	184.2	23.50	596.9	11.00	279.4	3.00	76.2	55		
	CR360L6 (200A) ALL	4	3.5"	44.50	1130.3	41.50	1054.1	22.00	558.8	10.25	260.4	43.50	1104.9	16.00	406.4	3.00	76.2	60		
CR360L7 (300A) ALL	4	3.5"	44.50	1130.3	41.50	1054.1	22.00	558.8	10.25	260.4	43.50	1104.9	16.00	406.4	3.00	76.2	150			

# DESCRIPTION



Open 30-Amp Mechanically Held Lighting Contactor

## CR360MA Mechanically Held Contactors

### Application

These CR360MA magnetic mechanically 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 and 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:	
	125V Maximum	250V Maximum
30	2	3
60	2	4
100-300	2	2

### Ordering Directions

Order by complete catalog number, select rating and enclosure from Table 1, select control circuit option from Table 2 and make coil/transformer voltage selection from Table 3 for basic device. For additional modifications to enclosed forms make selection from table 4, 5, and 6. Add appropriate list price adders to the basic device. Completed catalog number must contain either 14 or 17 digits.

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.

CR360MA	①	②	③	④	⑤	⑥
	Enclosure	# NO Poles	Control Circuit Type	Coil Voltage	Pilot Device	Pilot Light

### List Price, GO-10MB

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

Example: Mechanically held, 60-Amp, 3-Pole contactor in a NEMA Type 1 enclosure without CPT, 120 Volt control with 2 control circuit fuses, on/off selector switch, red on pilot light and no additional aux. contacts.

CR360MA	413	2A	02	C	B	A			
							60 Amp 3-Pole in NEMA Type 1 Enclosure	+	\$ 648.00
							No CPT with 2 Control Circuit Fuses	+	\$ 165.00
							Coil Voltage 120V		\$ 0.00
							On-Off Selector Switch	+	\$ 165.00
							Red On Pilot Light	+	\$ 202.00
							No Auxiliary Contact	+	\$ 0.00
								=	\$ 1180.00

### References

#### Instructions

Continuous Ampere Rating	Publication Number
30	GEH-5112
60	GEH-5112
100	GEH-5113
200	GEH-5114
300	GEH-5114

Dimensions — See page 24.

# CR360MA Mechanically Held Contactors

## 1 Select Size, Number of Poles and Enclosure

Continuous Ampere Rating	No. of Poles	Open		NEMA 1		NEMA 12		NEMA 3R		NEMA 1, Flush Mount	
		Cat. No. Digits CR360MA	List Price, GO-10MB	Cat. No. Digits CR360MA	List Price, GO-10MB	Cat. No. Digits CR360MA	List Price, GO-10MB	Cat. No. Digits CR360MA	List Price, GO-10MB	Cat. No. Digits CR360MA	List Price, GO-10MB
30	2	302	\$252.00	312	\$264.00	322	\$342.00	362	\$342.00	382	\$447.00
	3	303	270.00	313	282.00	323	360.00	363	360.00	383	465.00
	4	304	288.00	314	300.00	324	378.00	364	378.00	384	483.00
	5	305	306.00	315	366.00	325	396.00	365	396.00	385	501.00
60	2	402	576.00	412	624.00	422	741.00	462	741.00	482	846.00
	3	403	600.00	413	648.00	423	765.00	463	765.00	483	870.00
	4	404	720.00	414	768.00	424	885.00	464	885.00	484	990.00
100	2	502	768.00	512	876.00	522	963.00	562	963.00	582	1113.00
	3	503	816.00	513	924.00	523	1011.00	563	1011.00	583	1161.00
	4	504	996.00	514	1104.00	524	1191.00	564	1191.00	584	1341.00
200	2	602	1896.00	612	2244.00	622	2541.00	662	2541.00	—	—
	3	603	2052.00	613	2532.00	623	2697.00	663	2697.00	—	—
	4	604	2616.00	614	3096.00	624	3261.00	664	3261.00	—	—
300	2	702	3180.00	712	3924.00	722	4830.00	762	4830.00	—	—
	3	703	3288.00	713	4308.00	723	4938.00	763	4938.00	—	—
	4	704	6060.00	714	6984.00	724	7710.00	764	7710.00	—	—

For neutral terminal on 3-pole, change "3" (last digit table 1) to 7; for neutral terminal on 4-pole, change "4" (last digit table 1) to 8. Add \$50.00 List to 30-, 60-, 100-Amp devices and \$100.00 List to 200-, 300-Amp devices.

## 2 Select Control Circuit Type

Control Circuit Fusing & CPT Options	Standard			2-Wire Control			3-Wire Control		
	Cat. No. Digits	List Price, GO-10MB		Cat. No. Digits	List Price, GO-10MB		Cat. No. Digits	List Price, GO-10MB	
		30-100A Forms	200-300A Forms		30-100A Forms	200-300A Forms		30-100A Forms	200-300A Forms
No CPT No Fusing	AA	—	—	A2	\$382.00	N/A	A3	\$764.00	\$645.00
2 Control Circuit Fuses	2A	\$165.00	\$165.00	22	547.00	N/A	23	889.00	810.00
CPT Forms with 2 Primary and 1 Secondary Fuse	4A	577.00	577.00	42	959.00	577.00	43	1341.00	1222.00

## 4 Select Push Button/ Selector Switch in Cover (Available only when there is an enclosure)

	Cat. No. Digit	List Price, GO-10MB
None <sup>Ⓛ</sup>	A	—
On-Off Push Button	B	\$248.00
On-Off Selector Switch	C	165.00
On-Off-Auto Selector Switch <sup>Ⓛ</sup>	D	165.00
Hand-Off-Auto Selector Switch <sup>Ⓛ</sup>	E	165.00

<sup>Ⓛ</sup> Must select 2- or 3-wire control in step 2 if a CPT is chosen in step 3.

## 5 Select Pilot Lights in Cover (Available only when there is an enclosure)

	Cat. 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
Red "ON when energized" and Green "OFF" PTT Indicating Lights	H	440.00
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 control is not selected. All "OFF" indicating lights use 1 NC auxiliary contact.

## 6 Select Additional Auxiliary Contacts

	Cat. No. Digit	List Price, GO-10MB
None	A	—
1 NC Extra	B	\$66.00
1 NO Extra	C	66.00
1 NO and 1 NC Extra	D	132.00
2 NO Extra	E	132.00
2 NC Extra	F	132.00
2 NO and 1 NC Extra	G	198.00

See Table 7 for contact available with each form.

## 3 Select Coil Voltage

Without CPT

Contact Voltage	Cat. No. Digit
115-120 V 60 Hz Coil	02
230-240 V 60 Hz Coil <sup>Ⓛ</sup>	03
460-480 V 60 Hz Coil <sup>Ⓛ</sup>	04
265-277 V 60 Hz Coil <sup>Ⓛ</sup>	13
200-208 V 60 Hz Coil <sup>Ⓛ</sup>	23
24 V 60 Hz Coil <sup>Ⓛ</sup>	24

<sup>Ⓛ</sup> Control circuit fuses required for 200A and 300A forms if pilot devices are selected in Steps 4 or 5.

<sup>Ⓛ</sup> Available in 30A or 60A forms only.

With CPT<sup>Ⓛ</sup>

Primary Voltage-Secondary Control Voltage	Cat. No. Digit
120 V 60 Hz—24 V 60 Hz <sup>Ⓛ</sup>	80
208 V 60 Hz—24 V 60 Hz <sup>Ⓛ</sup>	82
240 V 60 Hz—24 V 60 Hz <sup>Ⓛ</sup>	84
277 V 60 Hz—24 V 60 Hz <sup>Ⓛ</sup>	86
480 V 60 Hz—24 V 60 Hz <sup>Ⓛ</sup>	88
208 V 60 Hz—120 V 60 Hz	92
240 V 60 Hz—120 V 60 Hz	94
277 V 60 Hz—120 V 60 Hz	96
480 V 60 Hz—120 V 60 Hz	98

<sup>Ⓛ</sup> 80, 84, 86 requires 2-wire control circuit.

<sup>Ⓛ</sup> Available in 30A or 60A forms only.

With 24 Vdc Control Relay

Coil—Control Voltage	Cat. No. Digit
120 V 60 Hz—24 Vdc	40
208 V 60 Hz—24 Vdc	42
240 V 60 Hz—24 Vdc	44
277 V 60 Hz—24 Vdc	46
480 V 60 Hz—24 Vdc	48

40-48 requires 2- or 3-wire control circuit.

## 7

Size	Available Auxiliary Contacts				
	No Indicating Lights	"ON" Indicating Light		"ON" and "OFF" Indicating Lights	
		With 2-Wire Control	Without 2-Wire Control	With 2-Wire Control	Without 2-Wire Control
30	A, B, C, D, E	A, B, C, D, E	A, B, C	A, C	A
60	A, D, G	A, D, G	A, B, D	A, C, E	A, C
100	A, B, C, D, E, F, G	A, B, C, D, E, F, G	A, B, C, D	A, B, C, E	A, C
200	A, B, C, D, E, F, G	A, B, C, D, E, F, G	A, B, C, D	A, B, C, E	A, C
300	A, B, C, D, E, F, G	A, B, C, D, E, F, G	A, B, C, D	A, B, C, E	A, C

**CR360MA Mechanically Held Contactors**

Dual Dimensions     Inches     (For estimating only)  
    Millimeters    

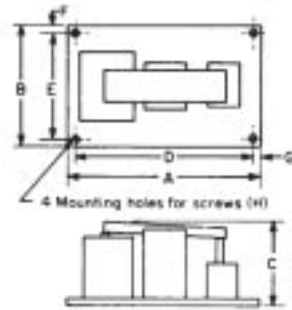


Fig. 1, Open CR360MA 30- to 300-Ampere Forms

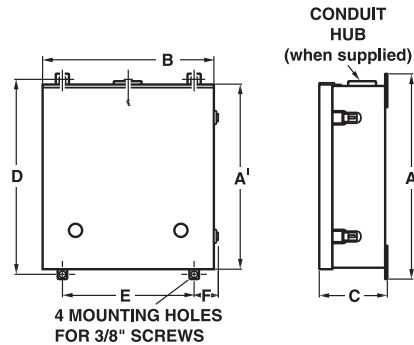


Fig. 2, CR360MA Type 1, 3R  
 4-Point Mounting

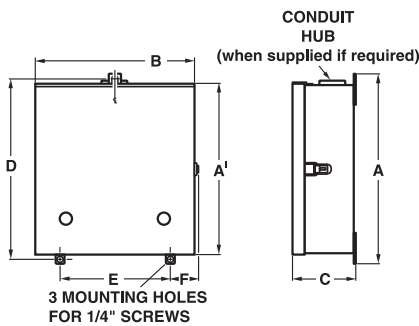


Fig. 3, CR360MA Type 12, 3R  
 3-Point Mounting

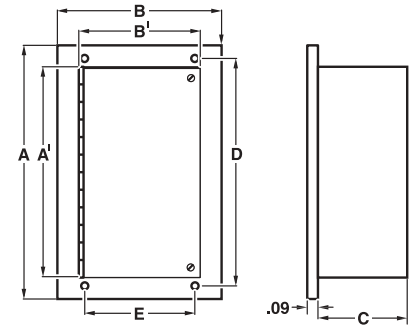


Fig. 4, CR360MA Type 1  
 Flush Mount

Type	Device	Approximate Dimensions														Mtg. Screw Size (H)	Approx. Shipping Wt. Lbs.
		A		B		C		D		E		F		G			
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
Open CR360MA 30- to 300-Ampere Forms (Fig 1)	CR360MA3 (30 A)	11.00	279.4	7.00	177.8	5.00	127.0	10.00	254.0	6.00	152.4	0.50	12.7	0.50	12.7	1/4	20
	CR360MA4 (60A)	12.50	317.5	7.00	177.8	7.00	177.8	11.50	292.1	6.00	152.4	0.50	12.7	0.50	12.7	1/4	28
	CR360MA5 (100A)	20.00	508.0	12.00	304.8	8.00	203.2	18.50	469.9	10.50	266.7	0.75	19.0	0.75	19.0	1/4	95
	CR360MA6 (200A)	26.00	660.4	16.00	406.4	11.00	279.4	24.50	622.3	14.50	368.3	0.75	19.0	0.75	19.0	3/8	130
	CR360MA7 (300A)	26.00	660.4	16.00	406.4	11.00	279.4	24.50	622.3	14.50	368.3	0.75	19.0	0.75	19.0	3/8	130

Type	Device	Fig. #	Hub Size	Approximate Dimensions														Approx. Shipping Wt. Lbs.		
				A		A'		B		B'		C		D		E			F	
				in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		in.	mm
Enclosed CR360MA Type 1	CR360MA3 (30 A) w/o CPT	2	—	16.38	416.1	13.75	349.3	16.00	406.4	—	—	7.00	177.8	15.38	390.7	11.00	279.4	3.25	82.6	25
	CR360MA3 (30 A) ALL OTHER	2	—	21.25	539.8	18.62	472.9	16.00	406.4	—	—	7.00	177.8	20.19	512.8	11.00	279.4	3.25	82.6	30
	CR360MA4 (60A) ALL	2	—	17.18	436.2	14.75	374.7	16.50	419.1	—	—	8.50	215.9	16.18	410.8	11.50	292.1	3.25	82.6	35
	CR360MA5 (100A) ALL	2	—	21.40	543.6	18.75	476.3	27.00	685.8	—	—	9.25	235.0	20.40	518.2	22.00	558.8	3.25	82.6	100
	CR360MA6,7 (200A, 300A) ALL	2	—	31.40	797.6	28.68	728.5	35.00	889.0	—	—	13.25	336.6	30.40	772.2	30.00	762.0	3.25	82.6	200
Enclosed CR360MA Type 12	CR360MA3 (30A) w/o CPT	3	—	17.62	447.5	16.25	412.8	12.25	311.2	—	—	6.25	158.8	17.00	431.8	9.00	228.6	2.25	57.2	30
	CR360MA3 (30A) ALL OTHER	3	—	21.44	544.6	18.75	476.3	16.00	406.4	—	—	7.19	182.6	20.50	520.7	11.00	279.4	3.25	82.6	35
	CR360MA4 (60A) ALL	3	—	16.44	417.6	13.75	349.3	19.00	482.6	—	—	8.19	208.0	15.50	393.7	14.00	355.6	3.25	82.6	40
	CR360MA5 (100A) ALL	3	—	27.44	697.0	24.75	628.7	25.00	635.00	—	—	9.19	233.4	26.50	673.1	20.00	508.0	3.25	82.6	110
	CR360MA6,7 (200A, 300A) ALL	3	—	31.44	798.6	28.75	730.3	35.00	889.0	—	—	12.69	322.3	30.50	774.7	30.00	762.0	3.25	82.6	200
Enclosed CR360MA Type 3R	CR360MA3 (30A) ALL	2	1.5"	17.62	447.5	16.50	419.1	16.50	419.1	—	—	6.50	165.1	17.00	431.8	12.00	304.8	2.32	58.9	35
	CR360MA4 (60A) ALL	3	2"	25.50	647.7	23.00	584.2	21.00	533.4	—	—	8.00	203.2	24.50	622.3	15.00	381.0	3.63	92.2	40
	CR360MA5 (100A) ALL	3	2"	32.50	825.5	30.00	762.0	22.00	558.8	—	—	10.25	260.4	31.50	800.1	16.00	406.4	3.62	91.9	110
	CR360MA6,7 (200A, 300A) ALL	3	3"	38.50	977.9	36.00	914.4	36.00	914.4	—	—	12.25	311.2	37.50	952.5	30.00	762.0	3.62	91.9	200
Enclosed CR360MA Type 1 Flush	CR360MA3 (30A)	4	—	19.19	487.4	15.38	390.7	19.19	487.4	15.38	390.7	6.00	152.4	17.69	449.3	17.69	449.3	0.75	19.1	25
	CR360MA4 (60A)	4	—	19.19	487.4	15.38	390.7	19.19	487.4	15.38	390.7	8.31	211.1	17.69	449.3	17.69	449.3	0.75	19.1	35
	CR360MA5 (100A)	4	—	25.81	655.6	22.00	558.8	31.19	792.2	27.38	695.5	9.41	239.0	24.31	617.5	29.69	754.1	0.75	19.1	100



CR160MC Lighting Contactor for Bus Mounting



CR160MC Lighting Contactor with Sub-Panel

## CR160MC Mechanically Held Lighting Contactors

### 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 Rating

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 <sup>①</sup>	
			115V-60 Hz	230V-60 Hz
30-225A	10	1	500 ft	1500 ft
	12	1.6	315 ft	950 ft
	14	2.5	200 ft	600 ft

<sup>①</sup> The 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-0 Hertz	Inrush (Amperes)	NEC Fuse Size (Amperes)
	CR160MC	CR160MC
115	26	8
230	13	4
277 <sup>①</sup>	10	3
460 <sup>①</sup>	7	2

<sup>①</sup> Breaking 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, use 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.

### References

Instructions GEH-3202



## CR160MC Mechanically Held Lighting Contactors

### 2 Select CPT and Control Circuit Fusing

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

① Available only when there is an enclosure or baseplate.

② Bus-mount or sub-panel forms only.

### 3 Select Push Button/ Selector Switch in Cover (Available only when there is an enclosure)

	Cat. No. Digit	List Price, GO-10MB
None <sup>①</sup>	A	—
On-Off Push Button	B	\$248.00
On-Off Selector Switch	C	165.00
On-Off-Auto Selector Switch <sup>①</sup>	D	165.00
Hand-Off-Auto Selector Switch <sup>①</sup>	E	165.00

Cannot use with option EA in step 2 above.

Can be used with options BA, CA & EA only in step 2 above.

Can be used with options BA, CA & EA only in step 2 above.

Cannot use with option EA in step 2 above.

Cannot be used with option EA in step 2 above.

### 4 Select Pilot Lights in Cover (Available only when there is an enclosure)

	Cat. 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.

### 5 Select Additional Auxiliary Contacts

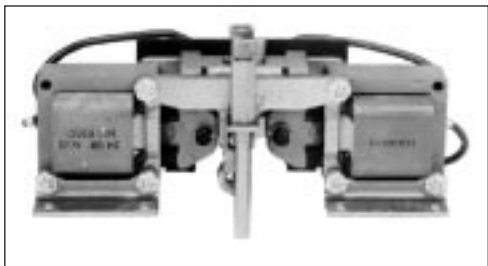
	Cat. No. Digit	List Price, GO-10MB
None	A	—
1 NC Extra	B	\$154.00
1 NO Extra	C	154.00
1 NO and 1 NC Extra	D	308.00

Note that auxiliary contacts are limited by pilot device requirements.

### Pricing Information—Coil Kit for CR160MC Lighting Contactors

This coil changeout kit for CR160MC forms is furnished complete with necessary components for installation. Order as CR160MCX1\*\*.

List Price \$598.00, GO-10MB. Note: Use Coil Suffix Selection Table 1a on page 26.

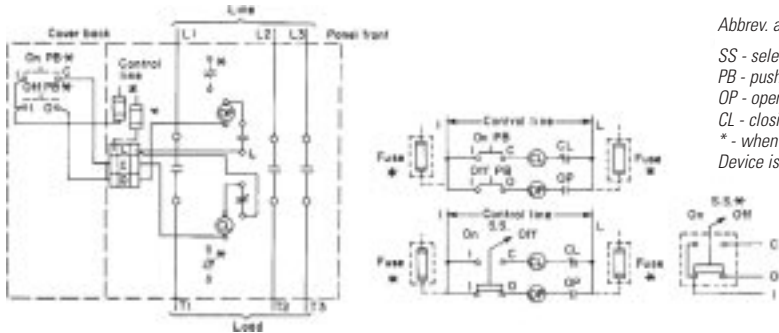


GE FASTRAC™ Program items are printed in **bold** type.

## CR160MC Mechanically Held Lighting Contactors

Dual Dimensions     Inches     (For estimating only)  
    Millimeters    

### Schematic Diagrams



Typical Schematic Diagram for CR160MC

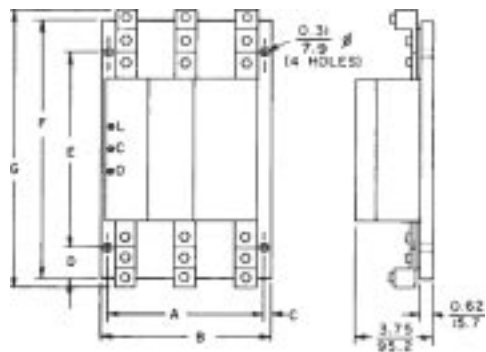


Fig. 1, Contactor with sub-panel

Continuous Ampere Rating	Approximate Dimensions												Approx. Shipping Wt., Lbs.		
	A		B		C		D		E		F			G	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		in.	mm
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

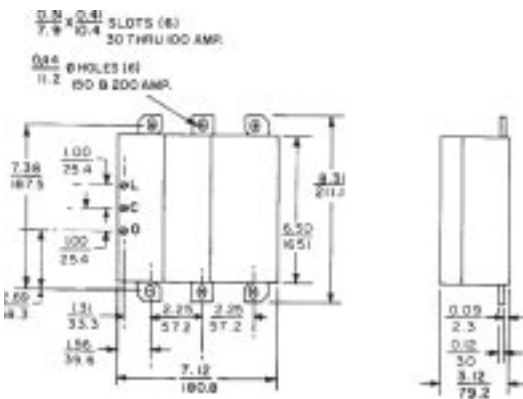


Fig. 2, 30-, 60-, 75-, and 100-Ampere Contactor only for Bus Mounting Approx. Shipping wt., 9 lbs.

## CR160MC Mechanically Held Lighting Contactors

Dual Dimensions Inches (For estimating only)  
Millimeters

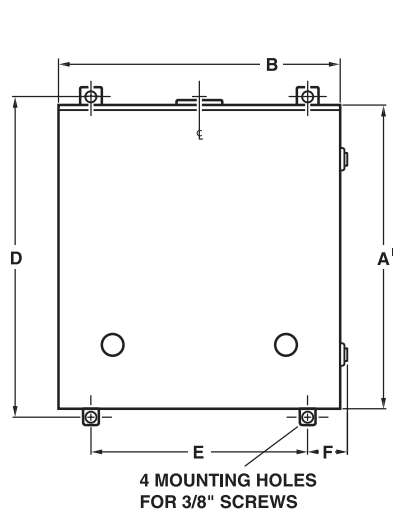


Fig. 1, CR360MC Type 1, 12, 3R, 4/4X 4-point Mounting

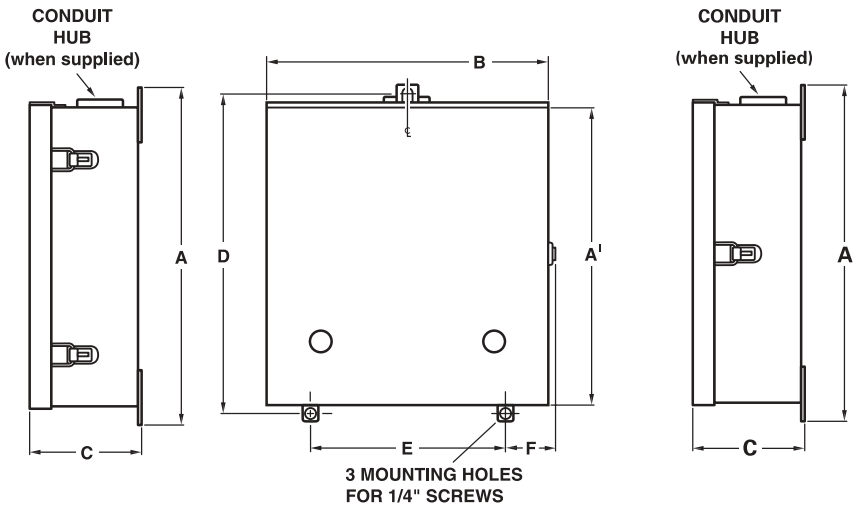


Fig. 2, CR160MC Type 12, 4/4X 3-point Mounting

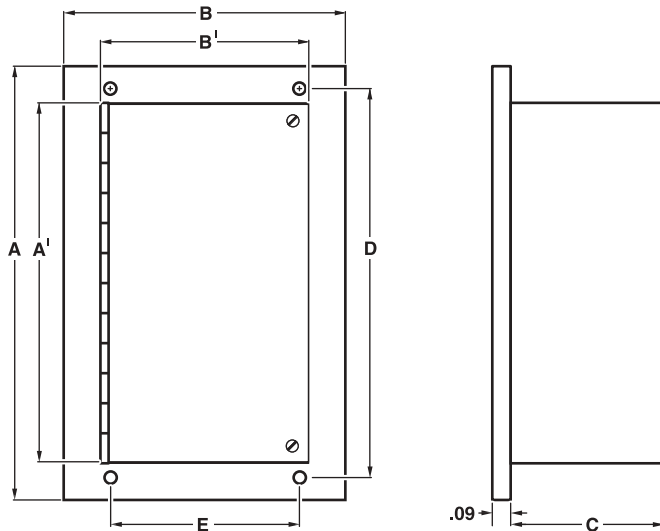


Fig. 3, CR160MC Flush Mount

Type	Device	Fig. #	Hub Size	Approximate Dimensions														Approx. Shipping Wt., Lbs.		
				A		A'		B		B'		C		D		E			F	
				in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		in.	mm
NEMA Type 1	CR160MC (30-75 Amps) w/wo CPT	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
	NEMA CR160MC (100 Amps) w/wo CPT	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
	CR160MC (150 Amps) w/wo CPT	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
	CR160MC (200-225 Amps) w/wo CPT	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
NEMA Type 12	NEMA CR160MC (30-75 Amps) w/wo CPT	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
	CR160MC (100-225 Amps) w/wo CPT	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
NEMA Type 3R	CR160MC (30-100 Amps) w/wo CPT	1	2.5"	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
NEMA Type 4/4X	CR160MC (30-75 Amps) w/wo CPT	2	1.5"	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
	CR160MC (100-225Amps) w/wo CPT	1	2.5"	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
NEMA Type 1 Flush	CR160MC (30-100Amps)	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
	CR160MC (150-225Amps)	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



CR360ML RC Switch

## CR360ML RC Switches

### GE RC Switches Adapt to Your Application and Your Imagination!

#### Description

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.

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.

## CR360ML RC Switches

### 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 catalog number digits to the corresponding boxes in the catalog number line and the price to the appropriate boxes in the price column. (Photocopying the blank catalog number line and price column will allow for repeated use.) When you have finished, you will have built a complete catalog number for your RC switch and established the prices that add up to the total List Price, GO-10MB.

①	②	③	④	⑤	⑥	⑦
CR360ML						

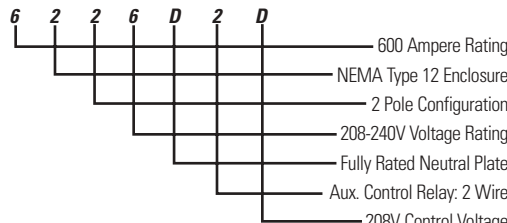
Note: Boxes 1 through 4 must be filled in. If no options are selected for 5, 6 or 7, the trailing characters can be omitted, and the catalog number would be complete after the last nonblank character.

#### List Price, GO-10MB

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

Example:

CR360ML



#### List Price, GO-10MB

\$ 0.00
\$ 0.00
\$ 12,350.00
\$ 0.00
\$ 225.00
\$ 625.00
\$ 100.00
Total = \$ 13,300.00

### ① Select Current Rating

Select the current rating for the RC switch from the table below. Transfer the corresponding catalog number digit to the box marked 1 on the catalog number line.

Current Rating	Cat. No. 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 catalog number digit to the box marked 2 on the catalog number line.

Enclosure	Cat. No. 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 catalog number digit to the box marked 3 on the catalog number line.

Number of Poles	Cat. No. Digit
2 Poles	2
3 Poles	3

### Pricing Schedule for Options ① ② ③

The above three options are arranged in the pricing table below. Transfer the corresponding price to the box marked 3 in the price column.

Poles	Amps	Cat. No. Digits Open Enclosure	List Price, GO-10MB	Cat. No. Digits NEMA Type 1	List Price, GO-10MB	Cat. No. Digits NEMA Type 12	List Price, GO-10MB	Cat. No. Digits NEMA Type 3R	List Price, GO-10MB
2	400 A	402	\$6850.00	412	\$8750.00	422	\$10350.00	462	\$10350.00
2	600 A	602	8800.00	612	10750.00	622	12350.00	662	12350.00
2	800 A	802	10750.00	812	12750.00	822	14250.00	862	14250.00
2	1000 A	102	19950.00	112	27750.00	122	29950.00	162	29950.00
3	400 A	403	8025.00	413	9925.00	423	11525.00	463	11525.00
3	600 A	603	10125.00	613	12075.00	623	13725.00	663	13725.00
3	800 A	803	12225.00	813	14275.00	823	15875.00	863	15875.00
3	1000 A	103	22975.00	113	31025.00	123	33425.00	163	33425.00

### ④ Select Contactor Coil Voltage Rating

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

Voltage Rating	Cat. No. Digit
110 to 120 Volts AC	3
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 catalog number digit to the box marked 5 on the catalog number line on next page and the price to the box marked 5 in the price column.

Auxiliary/Neutral Options	Cat. No. Digit	List Price, 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

**CR360ML RC Switches**

**⑥ Select Auxiliary Relays**

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

Auxiliary Relays	Cat. No. Digit	List Price, GO-10MB
No Option	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

**⑦ Select Control Voltage**

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

Control Voltage	Cat. No. Digit	List Price, 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

**Technical Data**

**Electrical Characteristics**

Wire Size for Service and Control<sup>①</sup> Connections

Switch Ratings (amps)	Al or Cu Terminal Lug Wire Range AWG-kcmil	No. of Cables Per Terminal Lug Connector
400	1/0-250	2
600	2-600	3
800	2-600	3
1000	2-600	4

<sup>①</sup> Control circuit connections designated 1, 2, and 3 will accommodate a wire range of #14 AWG TO #10 AWG copper wire.

**Withstand Current Ratings<sup>①②</sup>**

Switch Ratings (Amps)	Available Symmetrical Amperes rms at 480 Vac			
	When Used with Current-Limiting Fuses <sup>③</sup>		When Used with Circuit Breakers	
	WCR	Max. Fuse Size (amps)	WCR with Specific Circuit Breaker	WCR with Any Circuit Breaker
400	200,000	600	42,000	2
600	200,000	1200	65,000	3
800	200,000	1200	65,000	3
1000	200,000	2000	85,000	4

<sup>①</sup> Application requirements may permit higher withstand ratings for certain size switches. Consult GE Sales Office for certified ratings.

<sup>②</sup> Tested in accordance with the withstand and closing requirements of UL 1008.

<sup>③</sup> Current-limiting fuses may be of the Class J, K1, and L types. Class Type for amp sizes 100-225.

**Inrush Current Values and Minimum Recommended Control Circuit Fuse Size<sup>①②</sup>**

Switch Rating (Amps)	Poles	120 Vac, 60 Hz		240 Vac, 60 Hz		Max. Total Wattage of Signal Lamps
		Inrush Amps	Min. <sup>③</sup> Fuse	Inrush Amps	Min. <sup>③</sup> Fuse	
400	2, 3	29	10	15	5	50
600	2, 3	22	10	11	5	50
800	2, 3	22	10	11	5	50
1000	2, 3	18	10	9	5	50

<sup>①</sup> Overcurrent protective device ratings for control circuits should be selected and installed in accordance with the NEC.

<sup>②</sup> This table shows the minimum permissible control circuit fuse size, based on the operating coil's inrush current.

<sup>③</sup> GE furnished control fuses are rated at 15 amps.

**Max. Distance Between Control Station and One RC Switch with Source Line Voltage at 90% of Normal<sup>①</sup>**

Switch Rating (Amps)	Distance in Feet					
	120 Vac, 60 Hz			240 Vac, 60 Hz		
	#14 AWG	#12 AWG	#10 AWG	#14 AWG	#12 AWG	#10 AWG
400	180	290	460	730	1150	1830
600	140	225	360	570	900	1430
800	140	225	360	570	900	1430
1000	160	255	400	640	1000	1600

<sup>①</sup> 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.

Dual Dimensions      Inches      (For estimating only)  
Millimeters

Switch Rating (Amps)	Dimensions, in. (mm)					
	Open			Enclosed		
	Width	Height	Depth	Width	Height	Depth
400	12 (305)	18.5 (470)	6.875 (175)	18 (457)	48 (1219)	13 (330)
600	17 (432)	22 (559)	8.375 (213)	24 (610)	63 (1600)	17.5 (445)
800	17 (432)	22 (559)	8.375 (213)	24 (610)	63 (1600)	17.5 (445)
1000	20.5 (521)	20 (508)	9.375 (238)	36 (914)	79 (2007)	19.5 (495)

Dimensions are approximate. Detailed, certified dimensions available upon request.

# CR460 Series Lighting Contactors – Project Submittal Form

Item No. \_\_\_\_\_

Proposition No. \_\_\_\_\_

## CR460 Series lighting contactors feature:

- A modular design that permits fast, on-site configuration
- 2-12 power poles that latch easily onto the base as either NO or NC and that can be added at any time
- 30 amp rating
- Snap-in auxiliary contacts
- Common components for both electrically and mechanically held versions
- Continuously rated, interchangeable coils
- Finger-safe terminals

## Main Power Pole Ratings

### Maximum AC Voltage and Amp Ratings

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

### Maximum Horsepower Rating (Normal Starting Duty)

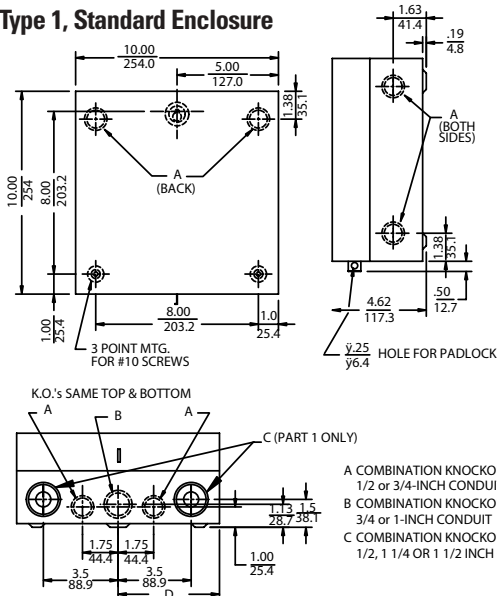
	1 Pole Single Phase		3 Poles, Three Phase			
Volts	110-120V	220-240V	200-208V	220-240V	440-480V	550-600V
HP	1	2	3	5	10	15

Power pole configuration		Electrically Held Contactor				Mechanically Held Contactor				
NO	NC	Standard Type 1 Enclosure	Oversized Type 1 Enclosure	Standard Type 1 Enclosure	Oversized Type 1 Enclosure	Standard Type 1 Enclosure	Oversized Type 1 Enclosure	Standard Type 1 Enclosure	Oversized Type 1 Enclosure	
2	0	<input type="checkbox"/> CR463L20A*A10A0	<input type="checkbox"/> CR463L20A*A10AA	<input type="checkbox"/> CR463M20##A10A0	<input type="checkbox"/> CR463M20##A10AA					
3	0	<input type="checkbox"/> CR463L30A*A10A0	<input type="checkbox"/> CR463L30A*A10AA	<input type="checkbox"/> CR463M30##A10A0	<input type="checkbox"/> CR463M30##A10AA					
4	0	<input type="checkbox"/> CR463L40A*A10A0	<input type="checkbox"/> CR463L40A*A10AA	<input type="checkbox"/> CR463M40##A10A0	<input type="checkbox"/> CR463M40##A10AA					
6	0	<input type="checkbox"/> CR463L60A*A10A0	<input type="checkbox"/> CR463L60A*A10AA	<input type="checkbox"/> CR463M60##A10A0	<input type="checkbox"/> CR463M60##A10AA					
8	0	<input type="checkbox"/> CR463L80A*A10A0	<input type="checkbox"/> CR463L80A*A10AA	<input type="checkbox"/> CR463M80##A10A0	<input type="checkbox"/> CR463M80##A10AA					
10	0	<input type="checkbox"/> CR463LB0A*A10A0	<input type="checkbox"/> CR463LB0A*A10AA	<input type="checkbox"/> CR463MB0##A10A0	<input type="checkbox"/> CR463MB0##A10AA					
12	0	<input type="checkbox"/> CR463LD0A*A10A0	<input type="checkbox"/> CR463LD0A*A10AA	<input type="checkbox"/> CR463MD0##A10A0	<input type="checkbox"/> CR463MD0##A10AA					
		<b>* 60Hz Coil Voltage (✓) for Electrically Held</b>				<b>## Control Module (✓) for Mechanically Held</b>				
		24V	115-120V	200-208V	230-240V	277V	460-488V	575-600V		
		<input type="checkbox"/> C	<input type="checkbox"/> J	<input type="checkbox"/> L	<input type="checkbox"/> S	<input type="checkbox"/> T	<input type="checkbox"/> U	<input type="checkbox"/> Y		
				2-wire Control Coil Voltage		3-wire Control Coil Voltage				
		Control Volts		115-120V	277V	115-120V	277V			
		24-28V		<input type="checkbox"/> BJ	<input type="checkbox"/> BN	<input type="checkbox"/> MJ	<input type="checkbox"/> MN			
		110-120V		<input type="checkbox"/> CJ	<input type="checkbox"/> CN	<input type="checkbox"/> NJ	<input type="checkbox"/> NN			
		200-277V		—	<input type="checkbox"/> PN	—	<input type="checkbox"/> PN			

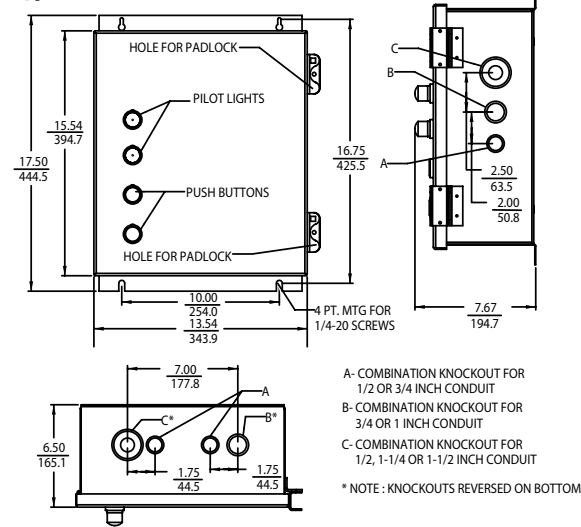
Extended description (if any): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

For other enclosure types or open forms, or for further technical information, refer to publication DEP-123, contact your local GE sales office, or go to [www.GEindustrial.com](http://www.GEindustrial.com).

## Type 1, Standard Enclosure

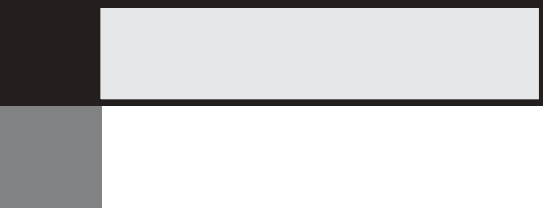


## Type 1, Oversized Enclosure



- 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





***GE Industrial Systems***

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[www.GEindustrial.com](http://www.GEindustrial.com)*

*DEP-123A 0502*

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