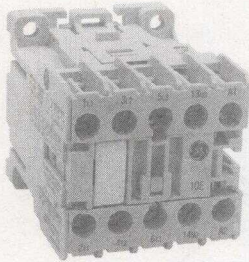




# C-2000™ 4-Pole AC Controlled Mini-Contactors

6 and 9 amp (AC3)



- Contactors are suitable for use on alternating current (ac) control circuits up to 600 volts and dc control circuits up to 240 Volts.
- All terminals are dual marked in accordance to EN50012, and U.S. marking standards.
- Contactor may be mounted on 35mm DIN rail EN50022-35,

or may be panel-mounted using two #8 screws in diagonal corners.

- Screw and quick-connect terminals are protected against accidental contact in accordance with VDE0106T.100 and VBG4.
- Low-coil wattage requirement makes contactors ideal for most applications. 24 Vdc PLC interface versions are available. (See Special PLC-Compatible Products, page 3-65.)
- A wide range of accessories, including front-mounted auxiliary contact blocks, side-mounted auxiliary contact blocks, timer, and surge suppressors, are easily installed on contactors.

## 4-Pole AC Controlled Contactors—FVNR, Open Form

AC-3 Max. Full Load Amps @460 V	Three-Phase Horsepower (AC-3) Motor Voltage—60 Hz				Kw (AC3)	Single-Phase HP (AC-3) Motor Voltage—60 Hz		Main Contact Configuration		Catalog Number <sup>Ⓞ</sup>	List Price, GO-10A1	Approx. Weight Each
	200-208	220-240	460-480	550-600		380/415 50 Hz	115	230	NO			
<b>Standard Screw-Type Terminals</b>												
6.0	1½	1½	3	3	2.2	½	1	4	0	MC0A400AT*	\$40.00	6 oz.
6.0	1½	1½	3	3	2.2	½	1	2	2	MC0AB00AT*	44.00	6 oz.
6.0	1½	1½	3	3	2.2	½	1	0	4	MC0AA00AT*	45.00	6 oz.
9.0	3	3	5	5	4	½	1½	4	0	MC1A400AT*	44.00	6 oz.
9.0	3	3	5	5	4	½	1½	2	2	MC1AB00AT*	48.00	6 oz.
9.0	3	3	5	5	4	½	1½	0	4	MC1AA00AT*	49.00	6 oz.
<b>Faston (2x2.8mm) Quick Connection Terminals (Sold in multiples of 10 only.)</b>												
6.0	1½	1½	3	3	2.2	½	1	4	0	MC0A400AF*	43.00	6 oz.
6.0	1½	1½	3	3	2.2	½	1	2	2	MC0AB00AF*	47.00	6 oz.
6.0	1½	1½	3	3	2.2	½	1	0	4	MC0AA00AF*	48.00	6 oz.
9.0	3	3	5	5	4	½	1½	4	0	MC1A400AF*	47.00	6 oz.
9.0	3	3	5	5	4	½	1½	2	2	MC1AB00AF*	51.00	6 oz.
9.0	3	3	5	5	4	½	1½	0	4	MC1AA00AF*	52.00	6 oz.
<b>Faston (1x6.3mm) Quick Connection Terminals (Sold in multiples of 10 only.)</b>												
6.0	1½	1½	3	3	2.2	½	1	4	0	MC0A400AH*	43.00	6 oz.
6.0	1½	1½	3	3	2.2	½	1	2	2	MC0AB00AH*	47.00	6 oz.
6.0	1½	1½	3	3	2.2	½	1	0	4	MC0AA00AH*	48.00	6 oz.
9.0	3	3	5	5	4	½	1½	4	0	MC1A400AH*	47.00	6 oz.
9.0	3	3	5	5	4	½	1½	2	2	MC1AB00AH*	51.00	6 oz.
9.0	3	3	5	5	4	½	1½	0	4	MC1AA00AH*	52.00	6 oz.
<b>Printed Circuit Board Terminals (Sold in multiples of 10 only.)</b>												
6.0	1½	1½	3	3	2.2	½	1	4	0	MC0A400AI*	43.00	6 oz.
6.0	1½	1½	3	3	2.2	½	1	2	2	MC0AB00AI*	47.00	6 oz.
6.0	1½	1½	3	3	2.2	½	1	0	4	MC0AA00AI*	48.00	6 oz.
9.0	3	3	5	5	4	½	1½	4	0	MC1A400AI*	47.00	6 oz.
9.0	3	3	5	5	4	½	1½	2	2	MC1AB00AI*	51.00	6 oz.
9.0	3	3	5	5	4	½	1½	0	4	MC1AA00AI*	52.00	6 oz.

Ⓞ Complete catalog number reference by replacing the "\*" with the letter corresponding to the voltage and frequency of the control circuit.

## Coil Voltage Selection Table

### AC Coil Voltages

Voltage	60 Hz	24		120	208	240	277		480	600
	50 Hz		24	110		220		380	415	500
Catalog # Suffix		C	D	J	M	N	R	U	W	Y

### References:

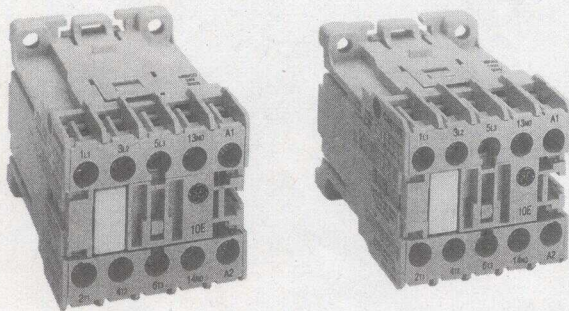
- Instructions
- GEH-5475 MC Mini-Contactor/MT0 Thermal-Overload Relay, U.S. version.
- GEH-5931 MC Mini-Contactor Global Instructions
- GEH-5932 MT0 Thermal-Overload Relay Global Instructions

### Field-Installed

- Accessories..... pages 3-59 to 3-62
- Technical Information.... pages 3-66 to 3-70
- Dimensions and
- Weights..... pages 3-71 to 3-76

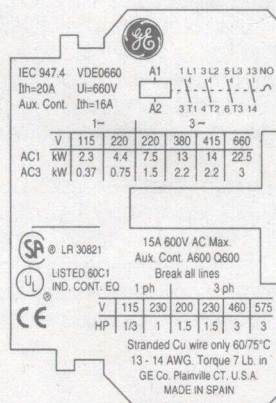
3 IEC DEVICES

# C-2000™ Mini-Contactors Features and Benefits



- Modular Design**—One of the most attractive features of this product family is its modularity. Various configurations can be created by combining the MC contactors and MCR control relays with the wide selection of available accessories.
- Compact Size**—The contactor/relay mounting profile is approximately 1¾" x 17/8".
- Long Life**—The MC/MCR family of contactors and relays offers superior performance. Mechanical life is rated at 10,000,000 operations. Contactor motor ratings (AC-3) are in excess of 1,000,000 electrical operations.
- Reliable Operation**—These products are manufactured with the latest advancements in materials technology and designed to ensure long, dependable operation. (Coils are designed for protection against burnout during demanding brownout conditions.)
- Flexible Mounting**—Mounting is not restricted for contactor and relay applications; contactors may be horizontal-, tabletop-, or ceiling-mounted. Mounting flexibility is provided by a dual mounting system using either 35mm DIN rail or two #8 screws in opposite diagonal corners. The DIN rail release is located at the top, providing easy access when configured as a starter. Accessories are easily assembled to the MC/MCR contactors and relays, saving time while affording maximum versatility.

- Easy Installation**—Captive universal slot screws are standard on all contactors, relays, overloads, and accessories allowing installation with flat, star, and Phillips screwdrivers. All terminals are in the open position for production line and installation efficiency. Accessories are designed for fast installation on either contactors or relays.
- Safety Features**—Finger and back-of-hand protection are provided. All screw and quick-connect type terminals are clearly marked with dual markings where applicable, for easy identification and wiring convenience.
- International Acceptance**—Devices are listed and certified to international standards. Nameplate carries both IEC and North American standards.



Dual markings are provided.

- Special Orders**—For OEMs and higher-volume applications, special terminal configurations are available, including quick-connect terminals (one 6.3mm Faston or two Faston 2.8mm) and pin terminals for printed circuit boards. Four-pole contactors with 4NO, 2NO/2NC or 4NC contacts can be ordered. Lower wattage 1.2w 24 Vdc and 2w 24 Vdc PLC contactor/relay versions also are available. (See Special PLC-Compatible Products, page 3-65.)



# C-2000™ Mini-Contactors Technical Information

## International Certification Marks

In addition to stating the catalog number, the contactor nameplate also lists the international certification marks. All contactors, control relays, overload relays, and accessories are UL listed and CSA Certified.

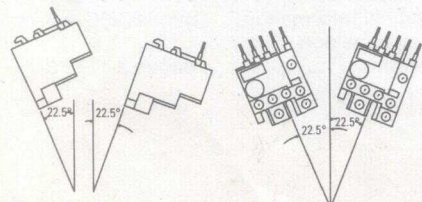
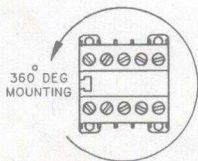
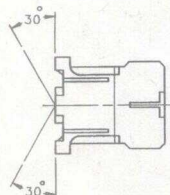
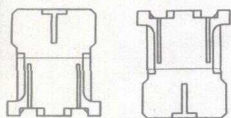
Contactors and relays also conform to International Standards:

- UL listed (Underwriters Laboratories, U.S. -UL 508);
- CSA Certified (Canadian Standards Association, Canada-CSA C22.2 No. 14);
- CE Mark;
- IEC 947-1,4 (International Electrotechnical Commission);
- BS 5424 (British Standards, UK);
- VDE 0660 (Verband Deutscher Elektotechniker, Federal Republic of Germany);
- (S) (SEV, Switzerland-SEV 10254);
- (D) (DEMCO, Denmark);
- (N) (NEMCO, Norway);
- (FI) (SETI, Finland);

plus other specifications approvals...

- CEI 17-3, 17-7 (Comitato Elettrotecnico Italiano, Italy);
- Bureau Veritas, France;
- SEMKO, Sweden.

## Operating Position



## Operating Characteristics/Technical Data: Contactors and Control Relays

### General Data

#### Ambient Conditions

- Temperature
 

Storage	-30 to +80°C (-22 to +176°F)
Operation	-20 to +55°C (-4 to +131°F)
- Altitude
 

Up to 3000 meters	Rated current
3000 - 4000 meters	.9 x's rated current
4000 - 5000 meters	.8 x's rated current

#### Shock Resistance (All Axis)

- Contacts closed (80% voltage)
 

Admissible acceleration	30g
Impulse duration	11 ms
- Contacts open (no voltage)
 

Admissible acceleration	10g
Impulse duration	11 ms

#### Vibration Resistance (All Axis)

- Contacts closed (80% voltage)
 

Admissible acceleration	10g
Sweep between	10-200 hz
- Contacts open (no voltage)
 

Admissible acceleration	5g
Impulse duration	10-200 hz

#### Terminal Capacity

- Screw terminal
 

Wire size	(2) #14-18 AWG max.
Wire temperature class	60°C/75°C wire
- Quick connect (Faston 2.8mm)
 

Wire size	(2) 1mm <sup>2</sup>
Max. thermal current	8 amps
- Printed circuit terminal
 

Hole size	1.8mm
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