C-2000™ 3-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.

3-Pole, AC Controlled Contactors—FVNR, Open Form

AC-3 Max. Full Load Amps @460 V		Kw (AC3)	Single-Phase HP (AC-3) Motor Voltage— 60 Hz		Auxiliary Contacts A600, Q600		Catalog Number ①	List Price, GO-10A1	Approx. Weight Each			
	200-208	220-240	460-480	550-600	380/415 50 Hz	115	230	NO	NC			
Standard	Screw-Ty	pe Termina	Is									
6.0 6.0 9.0 9.0	1½ 1½ 3 3	1½ 1½ 3 3	3355	3355	2.2 2.2 4 4	1/3 1/3 1/2 1/2	1 1 1½ 1½ 1½	1 0 1 0	0 1 0 1	MC0A310AT* MC0A301AT* MC1A310AT* MC1A301AT*	\$40.00 40.00 44.00 44.00	6 oz. 6 oz. 6 oz. 6 oz.
Faston (2:	x2.8mm) Q	uick Conne	ection Tern	ninals (Sol	d in multipl	es of 10	only.)					
6.0 6.0 9.0 9.0	1½ 1½ 3 3	1½ 1½ 3 3	3 3 5 5	3 3 5 5	2.2 2.2 4 4	1/3 1/3 1/2 1/2	1 1 1½ 1½	1 0 1 0	0 1 0	MC0A310AF* MC0A301AF* MC1A310AF* MC1A301AF*	43.00 43.00 47.00 47.00	6 oz. 6 oz. 6 oz. 6 oz.
Faston (1	x6.3mm) Q	uick Conn	ection Terr	ninals (Sol	d in multipl	es of 10	only.)					
6.0 6.0 9.0 9.0	1½ 1½ 3 3	1½ 1½ 3 3	3355	3 3 5 5	2.2 2.2 4 4	1/3 1/3 1/2 1/2	1 1 1½ 1½	1 0 1 0	0 1 0 1	MC0A310AH * MC0A301AH * MC1A310AH * MC1A301AH *	43.00 43.00 47.00 47.00	6 oz. 6 oz. 6 oz. 6 oz.
Printed C	ircuit Boar	d Terminals	s (Sold in r	nultiples of	10 only.)							
6.0 6.0 9.0 9.0	1½ 1½ 3 3	1½ - 1½ - 3 3	3 3 5 5	3 3 5 5	2.2 2.2 4 4	1/3 1/3 1/2 1/2	1 1 1½ 1½	1 0 1	0 1 0 1	MC0A310AI* MC0A301AI* MC1A310AI* MC1A301AI*	43.00 43.00 47.00 47.00	6 oz. 6 oz. 6 oz. 6 oz.

① 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		С	D	J	М	N	R	U	W	Υ

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

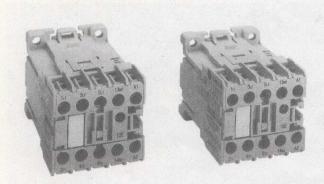
Accessories......pages 3-59 to 3-62
Technical Information...pages 3-66 to 3-70
Dimensions and

Weights..... pages 3-71 to 3-76

EC DEVICES

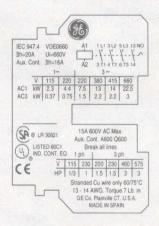
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C-2000™ Mini-Contactors Features and Benefits



- 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 13/4" 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 guick-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

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);

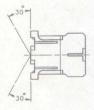
plus other specifications approvals...

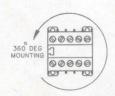
- CEI 17-3, 17-7 (Comitato Electrotechnico Italiano, Italy);
- · Bureau Veritas, France;
- · SEMKO, Sweden.

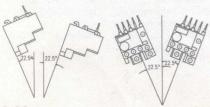
Operating Position











Operating Characteristics/Technical Data: Contactors and Control Relays

General Data

Ambient Conditions

TemperatureStorageOperation

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

Altitude

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

Shock Resistance (All Axis)

 Contacts closed (80% voltage) Admissible acceleration Impulse duration

30g 11 ms

Contacts open (no voltage)
 Admissible acceleration

 Impulse duration

10g 11 ms

Vibration Resistance (All Axis)

Contacts closed (80% voltage)
 Admissible acceleration
 Sweep between

10g 10-200 hz

Contacts open (no voltage)
 Admissible acceleration
 Impulse duration

5g 10-200 hz

Terminal Capacity

 Screw terminal Wire size Wire temperature class

(2) #14-18 AWG max. 60°C/75°C wire

Quick connect (Faston 2.8mm)
 Wire size
 Max. thermal current

(2) 1mm² 8 amps

 Printed circuit terminal Hole size

1.8mm