

IEC Power Devices

Mini Control Relays Overview

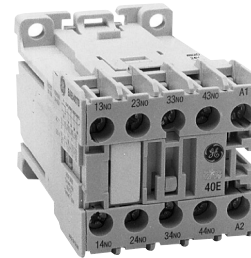
C-2000

Contact Rating A600, Q300

Section 5

Control Relays

- Relays 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 marked in accordance to EN50011.
- Control relays may be mounted on 35mm DIN rail EN50022-35, or may be panel-mounted using two or four #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 relay ideal for most applications. (24 Vdc PLC interface versions are available.)
- A wide range of accessories, including front-mounted auxiliary contact blocks, side-mounted auxiliary contact blocks, a timer, and surge suppressors, are easily installed on relays.



AC Operated Control Relay

PLC Compatible Control Relays

Low Coil Wattage Control Relays

While the standard line of MCRC dc operated relays requires only 3 watts coil holding current, some PLC applications require lower wattage coils to efficiently interface with the PLC. Special relays are available with 24 Vdc coils which only require 1.2 or 2 watts for pull in and holding. These relays are available with screw terminal configuration.

- All terminals are dual marked in accordance to EN50012, and U.S. marking standards.
- Relay may be mounted on 35mm DIN rail EN50022-35, or may be panel-mounted using two #8 screws in diagonal corners.
- Screw-type terminals are protected against accidental contact in accordance with VDE0106T.100 and VBG4.

Reference Publications

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



IEC Power Devices

Mini Control Relays Selection

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Contact Rating A600, Q300

Section 5

AC Operated Control Relays

Contact Configuration	Mounting Type	Product Number ^{1,2}	List Price GO-10A1	Approx. Weight Each
4NO	Standard Screw	MCRA040AT*	\$38.00	6 oz.
4NO	2x2.8mm Faston	MCRA040AF*	\$41.00	6 oz.
4NO	1x6.3mm Faston	MCRA040AH*	\$41.00	6 oz.
4NO	PC Board	MCRA040AI*	\$41.00	6 oz.
3NO-1NC	Standard Screw	MCRA031AT*	\$38.00	6 oz.
3NO-1NC	2x2.8mm Faston	MCRA031AF*	\$41.00	6 oz.
3NO-1NC	1x6.3mm Faston	MCRA031AH*	\$41.00	6 oz.
3NO-1NC	PC Board	MCRA031AI*	\$41.00	6 oz.
2NO-2NC	Standard Screw	MCRA022AT*	\$38.00	6 oz.
2NO-2NC	2x2.8mm Faston	MCRA022AF*	\$41.00	6 oz.
2NO-2NC	1x6.3mm Faston	MCRA022AH*	\$41.00	6 oz.
2NO-2NC	PC Board	MCRA022AI*	\$41.00	6 oz.
1NO-3NC	Standard Screw	MCRA013AT*	\$38.00	6 oz.
1NO-3NC	2x2.8mm Faston	MCRA013AF*	\$41.00	6 oz.
1NO-3NC	1x6.3mm Faston	MCRA013AH*	\$41.00	6 oz.
1NO-3NC	PC Board	MCRA013AI*	\$41.00	6 oz.
4NC	Standard Screw	MCRA004AT*	\$38.00	6 oz.
4NC	2x2.8mm Faston	MCRA004AF*	\$41.00	6 oz.
4NC	1x6.3mm Faston	MCRA004AH*	\$41.00	6 oz.
4NC	PC Board	MCRA004AI*	\$41.00	6 oz.

¹Complete product number reference by replacing the "*" with the letter corresponding to the voltage and frequency of the control circuit.

²Packaged in multiples of 20 units. Each product number represents one unit.

(Replace asterisk (*) in product number with coil product number suffix.)

Mini Contactors Coil Voltage Selection

AC Coil Voltages											
50/60Hz	24	42	48	110-115		220-230	240				
50 Hz				115-127			380-400	415-440	500		
60Hz				120	208		440	480	600		
Product Number Suffix	1	2	9	J	K	M	6	7	U	W	Y

DC Operated Control Relays

Contact Configuration	Mounting Type	Product Number ^{2,3}	List Price GO-10A1	Approx. Weight Each
4NO	Standard Screw	MCRC040AT**	\$48.00	6 oz.
4NO	2x2.8mm Faston	MCRC040AF**	\$51.00	6 oz.
4NO	1x6.3mm Faston	MCRC040AH**	\$51.00	6 oz.
4NO	PC Board	MCRC040AI**	\$51.00	6 oz.
3NO-1NC	Standard Screw	MCRC031AT**	\$48.00	6 oz.
3NO-1NC	2x2.8mm Faston	MCRC031AF**	\$51.00	6 oz.
3NO-1NC	1x6.3mm Faston	MCRC031AH**	\$51.00	6 oz.
3NO-1NC	PC Board	MCRC031AI**	\$51.00	6 oz.
2NO-2NC	Standard Screw	MCRC022AT**	\$48.00	6 oz.
2NO-2NC	2x2.8mm Faston	MCRC022AF**	\$51.00	6 oz.
2NO-2NC	1x6.3mm Faston	MCRC022AH**	\$51.00	6 oz.
2NO-2NC	PC Board	MCRC022AI**	\$51.00	6 oz.

²Packaged in multiples of 20 units. Each product number represents one unit.

³Complete product number reference by replacing the "**" with the letter corresponding to the voltage and frequency of the control circuit.

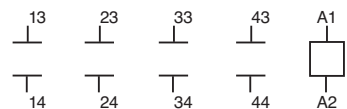
(Replace asterisks (**)) in product number with coil product number suffix.)

Coil Voltage Selection

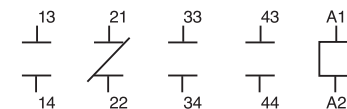
DC Coil Voltages							
Voltage	DC	12	24	48	110	125	250
Product Number Suffix		B	D	G	J	L	S

DC Wide Range Coil Voltages					
Voltage	DC	24	48	72	110
Product Number Suffix		WD	WG	WI	WJ

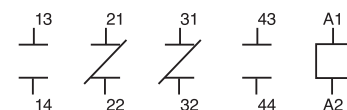
Contact Arrangement/ Terminal Numbers per EN 50011



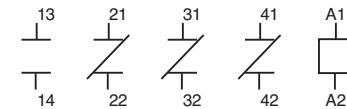
4 NO



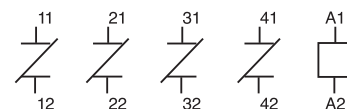
3 NO - 1 NC



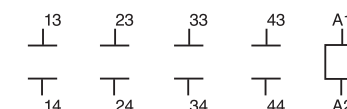
2 NO - 2 NC



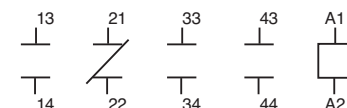
1 NO - 3 NC



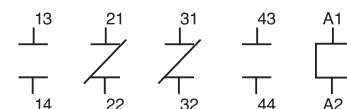
4 NC



4 NO



3 NO - 1 NC



2 NO - 2 NC



IEC Power Devices

Mini Control Relays and Accessories

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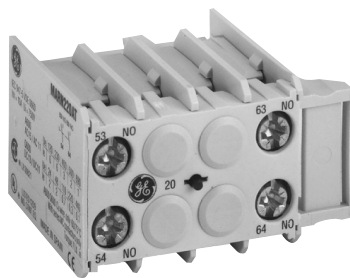
Contact Rating A600, Q300

Section 5

PLC Control Relays—Standard Screw Type Terminals

Contact Configuration	Coil Voltage	Coil Wattage	Product Number	List Price GO-10A1
2NO-2NC	24 VDC	1.2w	MCRI022ATD	\$48.00
3NO-1NC	24 VDC	1.2w	MCRI031ATD	\$48.00
4 NO	24 VDC	1.2w	MCRI040ATD	\$48.00
2NO-2NC	24 VDC	2w	MCRK022ATD	\$48.00
3NO-1NC	24 VDC	2w	MCRK031ATD	\$48.00
4NO	24 VDC	2w	MCRK040ATD	\$48.00

Minimum order is 140 pieces. Packaged in multiples of 10 units. Each product number represents one unit.



2-Pole Front-Mounted Auxiliary Contact
Block MARN2/MACN2



4-Pole Front-Mounted Auxiliary Contact
Block MARN4/MACN4

Front-Mounted Auxiliary Contact Blocks

Contact Configuration	For Use With	Product Number	List Price GO-10A1	Approx. Weight Each
2NO	Relays	MARN220AT	\$12.00	1 oz.
1NO-1NC	Relays	MARN211AT	\$12.00	1 oz.
2NC	Relays	MARN202AT	\$12.00	1 oz.
4NO	Relays	MARN440AT	\$22.00	2 oz.
3NO-1NC	Relays	MARN431AT	\$22.00	2 oz.
2NO-2NC	Relays	MARN422AT	\$22.00	2 oz.
1NO-3NC	Relays	MARN413AT	\$22.00	2 oz.
4NC	Relays	MARN404AT	\$22.00	2 oz.

Packaged in multiples of 10 units. Each product number represents one unit.

Front-mounted contacts may be combined with side auxiliary contacts for a total maximum number of six added auxiliary contacts.

Contact Arrangement/ Terminal Numbers per EN 50005

