MR Series
Control Relays

Section: Miscellaneous

GENERAL

The Air Products & Controls **MR Series Multivoltage Control Relays** offer SPDT or DPDT 10-amp contacts which may be operated by one of four input control voltages. A single relay may be energized from a voltage source of 24 VDC, 24 VAC, 115 VAC, or 230 VAC by wiring to appropriate input terminals.

Each relay contains a red light-emitting diode (LED) which indicates the relay coil is energized. Relays may be "snapped apart" from a standard four-module assembly and used independently.

These devices are ideal for applications where local contacts are required for system status, remote contacts for control of electrical loads and general purpose switching. They are suitable for use with HVAC, Temperature Control, Fire Alarm, Security, Energy Management, and Lighting Control Systems.

The Air Products & Controls **MR-199 Heavy Duty Power Relays** are designed for control applications where 30 amp DPDT contacts are required. The 24 VDC and 120 VAC relays are mounted in a rugged steel enclosure.

MR SERIES FEATURES (Excluding MR-199 Series)

- Each relay position may be energized from one of four input control voltages.
- Each relay position contains a red LED which illuminates when the coil is energized. This provides a timesaving convenience when checking an installed system, no metering is required.
- Single, dual, or triple relay modules may be "snapped apart" from a standard four-position master.
- SPDT or DPDT relays available.
- Available in dust-proof metal enclosures (with gray plastic cover on MR-101/C and MR-201/C) with LED viewing port.
- Red enclosure available on some models.
- Track mounting hardware to facilitate installation in standard cabinets.
- UL recognized relays rated at 10,000,000 mechanical operations.

S3403
(MR-101/C or CR, MR-104/C or CR, MR-201/C or CR, MR-204/C or CR)

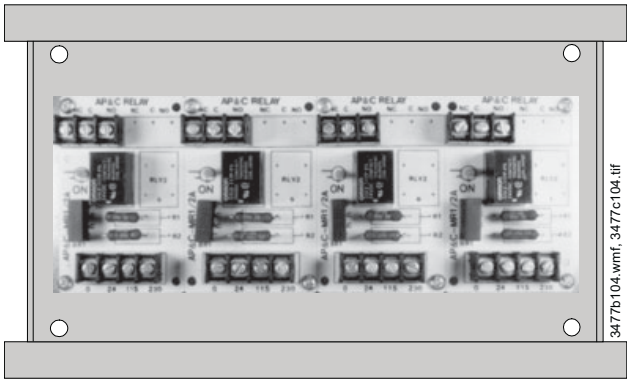
CS118/ CS733
(MR-104 and MR-204 Series *ONLY*)

MEA
73-92-E (MR-101/C or CR, MR-104/C or CR)
73-92-E, Vol. III (MR-201/C or CR, MR-204/C or CR)

California State Fire Marshal
7300-1004:101
(MR-101/C, MR-104/C, MR-201/C, MR-204/C)



The MR-101/C



The MR-104/C

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **NOTIFIER.** Phone: (203) 484-7161 FAX: (203) 484-7118

NOTIFIER 12 Clintonville Road, Northford, Connecticut 06472

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING

PRODUCT SPECIFICATIONS FOR MULTIVOLTAGE CONTROL RELAYS

Power requirements:

MR-101 Position is rated at 0.015 amps (15 milliamps) @ 24 VAC, 24 VDC, 115 VAC, 230 VAC.

MR-201 Position is rated at 0.035 amps (35 milliamps) @ 24 VAC, 24 VDC, 115 VAC, 230 VAC.

Relays: All relays are UL ***recognized*** components. ***NOTE:*** *Only models with enclosures ("C" suffix) are UL* ***listed*** *assemblies (excludes MR-199X-13C and MR-199X-14C).*

Enclosure: 18 gauge CRS, plated with 1/2" conduit knockouts (top and bottom). The ***MR-101/C and MR-201/C*** include a metal backbox with durable plastic cover.

Contact rating: 10.0 A @ 115 VAC resistive.

Ambient temperature: -50°C to +85°C (-50°F to +185°F).

Dimensions:

MR-101/T and MR-201/T are 3.0" (82 mm) H x 2.125" (54 mm) W x 1.5" (38.1 mm) D.

MR-104/T and MR-204/T are 3.0" (82 mm) H x 8.5" (215 mm) W x 1.5" (38.1 mm) D.

MR-101/C and MR-201/C are 6.125" (130.2 mm) H x 3.25'' (82 mm) W x 2.5" (63.5 mm) D.

MR-104/C and MR-204/C are 6.125" (130.2 mm) H x 9.5" (241.3 mm) W x 2.5" (63.5 mm) D.

PRODUCT SPECIFICATIONS FOR HEAVY-DUTY POWER RELAYS

Contact arrangement: DPDT standard.

Contact rating: 30 Amps @ 240 VAC; 20 Amps @ 277 VAC; 2 HP @ 250 VAC.

Coil power: ***MR-199X-13*** is rated at 24 VDC @ 85 mA. ***MR-199X-14*** is rated at 120 VAC @ 85 mA.

Temperature range: -30°C to +50°C (-22°F to +122°F). ***For MR-199X-13:*** -55°C to +80°C (-67°F to +176°F). ***For MR-199X-14:*** -55°C to +45°C (-67°F to +113°F).

Dimensions: ***MR-199X-13*** *and* ***MR-199X-14*** is 3.13" (79.4 mm) high x 2.5" (63.5 mm) wide x 2.31" (58.7 mm) deep. ***MR-199X-13C*** *and* ***MR-199X-14C*** is 5.31" (134.9 mm) high x 3.38" (85.9 mm) wide x 3.13" (96.8 mm) deep.

PRODUCT LINE INFORMATION

Model	*Description*
MR-101/T	Single SPDT Relay with LED and track-mounting hardware (UL recognized).
MR-101/C	Single SPDT Relay with LED, mounted in metal backbox with plastic cover (UL listed).
MR-101/CR	Single SPDT Relay with LED, mounted in metal backbox with ***red*** plastic cover (UL listed).
MR-104/T	Four-Position SPDT Relay with LEDs and track-mounting hardware (UL recognized).
MR-104/C	Four-Position SPDT Relay with LEDs, mounted in metal enclosure (UL listed).
MR-104/CR	Four-Position SPDT Relay with LEDs, mounted in a metal backbox with a ***red*** cover (UL listed).
MR-201/T	Single DPDT Relay with LED and track-mounting hardware (UL recognized).
MR-201/C	Single DPDT Relay with LED, mounted in metal backbox with plastic cover (UL listed).
MR-201/CR	Single DPDT Relay with LED, mounted in metal backbox with ***red*** plastic cover (UL listed).
MR-204/T	Four-Position DPDT Relay with LEDs and track-mounting hardware (UL recognized).
MR-204/C	Four-Position DPDT Relay with LEDs, mounted in a metal enclosure (UL listed).
MR-204/CR	Four-Position DPDT Relay with LEDs, mounted in metal backbox with a ***red*** cover (UL listed).
MR-199X-13	Heavy-duty DPDT Relay only, 24 VDC coil input (UL recognized).
MR-199X-13C	Heavy-duty DPDT Relay, 24 VDC coil input, mounted in enclosure (UL recognized).
MR-199X-14	Heavy-duty DPDT Relay only, 120 VAC coil input (UL recognized).
MR-199X-14C	Heavy-duty DPDT Relay, 120 VAC coil input, mounted in enclosure (UL recognized).

MR SERIES RELAYS

MODEL NUMBER	COIL VOLTAGE				CONTACTS			MOUNTING			LISTINGS		RED COVER (Add "R" suffix.)
	24 VDC	24 VAC	120 VAC	230 VAC	SPDT (10A)	DPDT (10A)	DPDT (30A)	Track	Spacer	Enclosure	UL, CSFM, & MEA	ULC	
MR-101/T	X	X	X	X	1			X					
MR-101/C	X	X	X	X	1					X	X		X
MR-104/T	X	X	X	X	4			X				X	
MR-104/C	X	X	X	X	4					X	X	X	X
MR-201/T	X	X	X	X		1		X					
MR-201/C	X	X	X	X		1				X	X		X
MR-204/T	X	X	X	X		4		X				X	
MR-204/C	X	X	X	X		4				X	X	X	X
MR-199X-13	X						1		X				
MR-199X-13C	X						1			X			
MR-199X-14			X				1						
MR-199X-14C			X				1			X			

347711.tbl