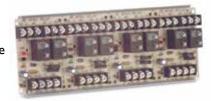


MR-100, 200 SERIES MULTI-VOLTAGE CONTROL RELAYS

PRODUCT DESCRIPTION

The MR Series Multivoltage Control Relays offer SPDT or DPDT 10 Amp resistive contacts which may be operated by one of four input control voltages. A single relay may be energized from a voltage source of 24VDC, 24VAC, I20VAC or 230VAC by wiring to appropriate input terminals.





Each relay position contains a red LED which indicates the relay coil is energized. Relays may be "snapped apart" from a standard 4 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.

FEATURES

- Relays may be energized from a voltage source of 18 to 35VDC or VAC, 120VAC or 230VAC
- Each relay position contains a red LED, which illuminates when the coil is energized. This provides a time saving device when checking an installed system – no metering is required
- Single, dual or triple relay modules may be "snapped apart" from standard 4-position master
- DC control inputs are polarized
- For continuous duty use at 24VAC, 24VDC, I20VAC, or 230VAC
- ❖ Available in dust resistant enclosures with LED viewing port(s)
- /C versions mounted in enclosures
- /C/R versions with red covers for NYC and other uses
- /T versions come complete with track mounting hardware which facilitates installation in standard cabinets
- UL recognized relays rated at 10,000,000 mechanical operations

MR-101

UL listed as Control Unit Accessory





MEA ACCEPTED



WIRING (TYPICAL FOR ONE MODULE POSITION)

SPDT CONTACT
RESISTIVE: 7A @ 30VDC,
10A @ 125VAC, 7A @ 250VAC
INDUCTIVE: .25HP 125/250VAC (N.C.),
.33 HP 125/250VAC (N.C.),
.33 HP 125/250VAC (N.C.),
.34 HP 125/250VAC (N.C.)

NOTE: DC COIL
INPUT IS
POLARIZED

ON

NOTE: DC COIL
INPUT IS
POLARIZED

ON

NOTE: DC COIL
INPUT IS
POLARIZED

ON

AC. AC.

18/24 115 230

VOLTAGES

24VDC @ 15mA

AC. AC.

120VAC @ 21mA

N H

230VAC @ 19mA

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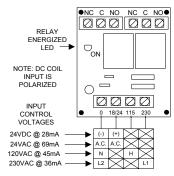
L1

Air Products and Controls is a Brand of Apollo America 25 Corporate Drive Auburn Hills, MI 48326 (248) 332-3900 Phone (888) 332-2241 Toll free (248) 332-8807 Fax www.ap-c.com



MR-201 DPDT CONTACTS

DPDT CONTACTS
RESISTIVE: 7A @ 30VDC,
10A @ 125VAC, 7A @ 250VAC
INDUCTIVE: .25HP 125/250VAC (N.C.
.33 HP 125/250VAC (N.O.)



Distributed By:

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PRODUCT SPECIFICATIONS

MODEL MODULE CONFIGURATION MOUNTED MOUNTED HXW XD MATERIAL Sados 73-92-E 7300-1004			CONTACT	TRACK	ENCLOSURE		UL*	, MEA	CSFM				
Number Positions Per Position HXWXD HXWXD MATERIAL S3403 73-92-E 7300-1004	MODEL	MODULE				COVER	l .	l .					
MR-101/T 1 SPDT 2.125' (54mm) 2.125' (54mm) 2.125' (54mm) 3.125' (79mm) 3.125' (130mm) 3.125' (1	1						
MR-101/C 1 SPDT 2.125' (54mm) 1.50' (38mm) SPDT 2.125' (130mm) 3.125' (130mm) 3.125' (130mm) SPDT SPDT S.50' (241mm) S.50' (241mm)	INOMBER.	roomono	TERTOGRAM		IIX W X B		33.00						
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MR-101/C 1 SPDT													
MR-101/C 1 SPDT				1.00 (0011111)		Grev							
SPDT SPDT SPDT SPDT SPDT SPDT S.125' (130mm) ABS-94VO Plastic SPDT S.50' (63mm) S.125' (130mm) ABS-94VO Plastic SPDT S.50' (215mm) S.125' (130mm) S.125' (130	MR-101/C	1	SPDT				11000	Vol. 14					
MR-101/C/R 1 SPDT 3.25" (82mm) 2.50" (63mm) Red ABS-94VO Plastic UOXX7 Vol. 22 106							1						
MR-104/C 1 SPDT 3.25" (82mm) 1.50" (38mm) 9.50" (215mm) 2.50" (63mm) 9.50" (241mm) 2.50" (63mm) 1.50" (38mm) 1.50" (38mm) 1.50" (38mm) 1.50" (38mm) 1.50" (38mm) 1.50" (38mm)					, , ,		l .		:101				
MR-104/T 4 SPDT 8.50" (215mm) 1.50" (38mm) S.125" (130mm) 9.50" (241mm) 2.50" (63mm) 1.50" (38mm) 1.50" (3	MR-101/C/R	1	SPDT		2.50" (63mm)	1	UUXX/	Vol. 22					
MR-104/T 4 SPDT 8.50" (215mm) 1.50" (38mm)													
1.50" (38mm) 1.50" (38mm) 1.50" (38mm) 1.50" (38mm) 1.50" (38mm) 1.50" (241mm) 2.50" (63mm) 1.50" (241mm) 2.50" (63mm) 1.50" (38mm) 1.				3.25" (82mm)									
MR-104/C 4 SPDT 5.125" (130mm) 9.50" (241mm) 2.50" (63mm) 18ga UOXX UOXX2 Vol. 14 :101 UOXX7	MR-104/T	4	SPDT	8.50" (215mm)			UOXX2		:106				
MR-104/C/R 4 SPDT 5.125" (130mm) 9.50" (241mm) 2.50" (63mm) 18ga CRS UOXX UO				1.50" (38mm)									
SPDT	-					Plated							
MR-104/C/R 4 SPDT SPDT	MR-104/C	4	SPDT		5 125" (130mm)	18ga	UOXX						
MR-104/C/R 4 SPDT 2.50" (63mm) Red 18ga CRS CRS					, ,	CRS	l .	Vol 14	·101				
MR-201/C 1 DPDT 2.125" (54mm) 1.50" (38mm) 2.125" (54mm) 1.50" (38mm) 2.125" (54mm) 1.50" (38mm) 2.125" (130mm) 3.125" (79mm) 2.50" (63mm) 2.50"					· '	Red	l .						
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MR-201/C 1 DPDT 2.125" (54mm) 1.50" (38mm)						CRS							
MR-201/C 1 DPDT									.400				
MR-201/C 1	MR-201/T	1	DPDT				UOXX2		:106				
MR-201/C 1				1.50" (38mm)		_							
S.125" (130mm) S.125" (79mm) S.125" (79mm) S.125" (79mm) S.125" (79mm) S.125" (79mm) S.125" (79mm) S.125" (83mm) S.125" (130mm)		_	DDDT			,		Val. 16					
MR-201/C/R 1 DPDT 2.50" (63mm) Red ABS-94VO Plastic UOXX7 Vol. 22 .106	MR-201/C	'	וטפט		5.125" (130mm)		UOXX	VOI. 10					
MR-204/C A					3.125" (79mm)		UOXX2		:101				
MR-204/T 4 DPDT 3.25" (82mm)	MD 204/C/D	1	DDDT		2.50" (63mm)		UOXX7	Vol. 22					
MR-204/T 4 DPDT	MR-201/C/R	'	DPD1					VOI. 22					
MR-204/C 4 DPDT 8.5" (215mm) 1.50" (38mm) MR-204/C 4 DPDT 5.125" (130mm) 9.50" (241mm) 2.50" (63mm) MR-204/C/R 4 DPDT 5.125" (130mm) 9.50" (241mm) 2.50" (63mm) MR-204/C/R 4 DPDT 5.125" (130mm) 9.50" (241mm) 2.50" (63mm) MR-204/C/R 4 DPDT 2.50" (63mm) MR-204/C/R 4 DPDT 2.50" (63mm) MR-204/C/R 4 DPDT 2.50" (63mm) MR-205.24(18-35)VDC, 24(18-35)VAC, 120VAC, 230VAC (Pull in voltage: 75% of nominal max. @ 25°C; Drop out voltage: 25% of nominal min. @ 25°C) POLARIZED: DC input only ENERGIZED LED INDICATOR: One per module position CURRENT REQUIREMENT: Per module position: MR-100 Series = 48mA max/ MR-200 Series = 69mA max CONTACT RATINGS: 7A @ 28VDC / 10A (NO:1/6HP, NC:1/8HP) @ 120VAC / 7A @ 230VAC CONTACT CONSTRUCTION: Dry Form "C" ENVIRONMENTAL: 32°F to 120°F (0°C to 49°C) @ 85% RH (@ 32°F), Non-condensing, Non-freezing MRING: Solid or stranded; #14 to #22 AWG terminals T VERSIONS: 3.5" wide, low profile plastic snap track provided with mounting screws				3 25" (92mm)		Plastic							
MR-204/C	MR-204/T	4	DPDT				UOXX2		·106				
MR-204/C 4 DPDT 5.125" (130mm) 9.50" (241mm) 2.50" (63mm) Red 18ga CRS UOXX Vol. 16 :101 VOXX Vol. 16	WIIX-204/1			` ' '									
MR-204/C/R 4 DPDT				(55)		Plated							
Signature Sign	MR-204/C	4	DPDT		5 405" (400)		HOW						
MR-204/C/R 4 DPDT 2.50" (63mm) Red 18ga CRS COIL VOLTAGE: MR-100: 24(18-35)VDC, 24(18-35)VAC, 120VAC, 230VAC MR-200: 24(18-35)VDC, 24VAC, 120VAC, 230VAC (Pull in voltage: 75% of nominal max. @ 25°C; Drop out voltage: 25% of nominal min. @ 25°C) POLARIZED: DC input only ENERGIZED LED INDICATOR: One per module position CURRENT REQUIREMENT: Per module position: MR-100 Series = 48mA max/ MR-200 Series = 69mA max CONTACT RATINGS: 7A @ 28VDC / 10A (NO:1/6HP, NC:1/8HP) @ 120VAC / 7A @ 230VAC CONTACT CONSTRUCTION: Dry Form "C" ENVIRONMENTAL: 32°F to 120°F (0°C to 49°C) @ 85% RH (@ 32°F), Non-condensing, Non-freezing WIRING: Solid or stranded; #14 to #22 AWG terminals T VERSIONS: 3.5" wide, low profile plastic snap track provided with mounting screws							l .	\/-I 40	.404				
MR-204/C/R 4 DPDT 2.30 (631111) 18ga CRS COIL VOLTAGE: MR-100: 24(18-35)VDC, 24(18-35)VAC, 120VAC, 230VAC MR-200: 24(18-35)VDC, 24VAC, 120VAC, 230VAC (Pull in voltage: 75% of nominal max. @ 25°C; Drop out voltage: 25% of nominal min. @ 25°C) POLARIZED: DC input only ENERGIZED LED INDICATOR: One per module position CURRENT REQUIREMENT: Per module position: MR-100 Series = 48mA max/ MR-200 Series = 69mA max CONTACT RATINGS: 7A @ 28VDC / 10A (NO:1/6HP, NC:1/8HP) @ 120VAC / 7A @ 230VAC CONTACT CONSTRUCTION: Dry Form "C" ENVIRONMENTAL: 32°F to 120°F (0°C to 49°C) @ 85% RH (@ 32°F), Non-condensing, Non-freezing WIRING: Solid or stranded; #14 to #22 AWG terminals T VERSIONS: 3.5" wide, low profile plastic snap track provided with mounting screws					· '		l .	VOI. 16	. 101				
MR-100: 24(18-35)VDC, 24(18-35)VAC, 120VAC, 230VAC MR-200: 24(18-35)VDC, 24VAC, 120VAC, 230VAC (Pull in voltage: 75% of nominal max. @ 25°C; Drop out voltage: 25% of nominal min. @ 25°C) POLARIZED: DC input only ENERGIZED LED INDICATOR: One per module position CURRENT REQUIREMENT: Per module position: MR-100 Series = 48mA max/ MR-200 Series = 69mA max CONTACT RATINGS: 7A @ 28VDC / 10A (NO:1/6HP, NC:1/8HP) @ 120VAC / 7A @ 230VAC CONTACT CONSTRUCTION: Dry Form "C" ENVIRONMENTAL: 32°F to 120°F (0°C to 49°C) @ 85% RH (@ 32°F), Non-condensing, Non-freezing WIRING: Solid or stranded; #14 to #22 AWG terminals T VERSIONS: 3.5" wide, low profile plastic snap track provided with mounting screws	MR-204/C/R	4	DPDT		2.50 (6311111)		UUXXI						
MR-100: 24(18-35)VDC, 24(18-35)VAC, 120VAC, 230VAC MR-200: 24(18-35)VDC, 24VAC, 120VAC, 230VAC (Pull in voltage: 75% of nominal max. @ 25°C; Drop out voltage: 25% of nominal min. @ 25°C) POLARIZED: DC input only ENERGIZED LED INDICATOR: One per module position CURRENT REQUIREMENT: Per module position: MR-100 Series = 48mA max/ MR-200 Series = 69mA max CONTACT RATINGS: 7A @ 28VDC / 10A (NO:1/6HP, NC:1/8HP) @ 120VAC / 7A @ 230VAC CONTACT CONSTRUCTION: Dry Form "C" ENVIRONMENTAL: 32°F to 120°F (0°C to 49°C) @ 85% RH (@ 32°F), Non-condensing, Non-freezing WIRING: Solid or stranded; #14 to #22 AWG terminals T VERSIONS: 3.5" wide, low profile plastic snap track provided with mounting screws													
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POLARIZED: DC input only ENERGIZED LED INDICATOR: One per module position CURRENT REQUIREMENT: Per module position: MR-100 Series = 48mA max/ MR-200 Series = 69mA max CONTACT RATINGS: 7A @ 28VDC / 10A (NO:1/6HP, NC:1/8HP) @ 120VAC / 7A @ 230VAC CONTACT CONSTRUCTION: Dry Form "C" ENVIRONMENTAL: 32°F to 120°F (0°C to 49°C) @ 85% RH (@ 32°F), Non-condensing, Non-freezing WIRING: Solid or stranded; #14 to #22 AWG terminals T VERSIONS: 3.5" wide, low profile plastic snap track provided with mounting screws			,	,									
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CONTACT CONSTRUCTION: Dry Form "C" ENVIRONMENTAL: 32°F to 120°F (0°C to 49°C) @ 85% RH (@ 32°F), Non-condensing, Non-freezing WIRING: Solid or stranded; #14 to #22 AWG terminals T VERSIONS: 3.5" wide, low profile plastic snap track provided with mounting screws	CURRENT REQUIREMENT:												
ENVIRONMENTAL: 32°F to 120°F (0°C to 49°C) @ 85% RH (@ 32°F), Non-condensing, Non-freezing WIRING: Solid or stranded; #14 to #22 AWG terminals T VERSIONS: 3.5" wide, low profile plastic snap track provided with mounting screws	CONTACT RATINGS:			7A @ 28VDC / 10A (NO:1/6HP, NC:1/8HP) @ 120VAC / 7A @ 230VAC									
WIRING: Solid or stranded; #14 to #22 AWG terminals T VERSIONS: 3.5" wide, low profile plastic snap track provided with mounting screws	CONTACT CONSTRUCTION:		ON: Dry Form "C"	Dry Form "C"									
T VERSIONS: 3.5" wide, low profile plastic snap track provided with mounting screws	ENVIRONMENTAL:			32°F to 120°F (0°C to 49°C) @ 85% RH (@ 32°F), Non-condensing, Non-freezing									
, , , , , , , , , , , , , , , , , , , ,	WIRING:		Solid or stran	Solid or stranded; #14 to #22 AWG terminals									
C VERSIONS: Backbox: 18ga CRS, plated with 1/2" conduit knockouts top and bottom													
	/C VERSION:	S:	Backbox: 18g	Backbox: 18ga CRS, plated with 1/2" conduit knockouts top and bottom									

^{*}UOXX=Control Unit Accessories, System; 2=Component; 7=Certified for Canada

NOTICE: The information contained in this document is intended only as a summary and is subject to change without notice. The products described have specific instructional/installation documentation, which covers various technical, approval, code, limitation and liability information. Copies of this documentation along with any general product warning and limitation documents, which also contain important information, are provided with the product and are also available from Air Products and Controls Inc. The information contained in all of these documents should be considered before specifying or using the products. Any example applications shown are subject to the most current enforced local/national codes, standards, approvals, certifications, and/or the authority having jurisdiction. All of these resources, as well as the specific manufacturer of any shown or mentioned related equipment, should be consulted prior to any implementation. For further information or assistance concerning the products, contact Air Products and Controls Inc. Air Products and Controls Inc. reserves the right to change any and all documentation without notice.