

Automation Components, Inc.



COMMAND RELAY CR Series

The Command Relay Series brings control (start/stop) functionality to your load trending and fan/pump/motor status monitoring and control applications. Each unit has a Form 1C - SPDT relay which provides both a Normally-Open "N/O" and a Normally-Closed "N/C" contact in a single device. The patented 35mm Din-Rail mounting flange will allow you to use the A/CR Series with any ACI current sensor or switch that incorporates the 35 mm din rail mounting flange. The stacking feature allows you to reduce the required panel space, since up to two devices may be stacked together during installation and saves cost since two devices can be installed as a single component. An added benefit of the A/CR Series command relays separate from the current sensor or switch model reducing the number of SKU's needed. All of

the command relays can also be used in panel mount applications in place of a typical general purpose relay, since they have been tested to meet the UL 508 Industrial Equipment requirements. Please contact ACI for more information regarding the Command Relays or to discuss your application in further detail.

Applications: Start/Stop/Status, Motors, Pumps, Fans, Compressors, Din Rail Mountable Control Relay, Industrial Equipment

The Command Relays are covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.

PRODUCT SPECIFICATIONS

Relay Type:	Electromechanical Relay		
Nominal Relay Coil Voltage Rated Current:	A/CR-DC-5A: 23 to 31.2 VDC, 17 mA @ 24 VDC, 60 Hz		
	A/CR-DC-12A: 20 to 31.2 VDC, 17 mA @ 24 VDC, 60 Hz		
	A/CR-12DC-12A: 10 to 15.6 VDC, 33.33 mA @ 12 VDC, 60 Hz		
	A/CR-24AC-10A: 16 to 26.4 VAC, 28.30 mA @ 24 VAC, 60 Hz or 31.30 mA @ 24 VAC, 50 Hz		
	A/CR-115AC-8A: 80 to 132 VAC, 5.35 mA @ 115 VAC, 60 Hz or 5.85 mA @ 115 VAC, 50 Hz		
	A/CR-230AC-8A: 165 to 264 VAC, 2.76 mA @ 230 VAC, 60 Hz or 3.00 mA @ 230 VAC, 50 Hz		
Contact Form:	Form 1C (SPDT Contact)		
Relay Contact Rating:	See Ordering Grid on Back of Data Sheet		
Maximum Contact Switching Voltage:	ee Ordering Grid on Back of Data Sheet		
Maximum Contact Switching Current:	See Ordering Grid on Back of Data Sheet		
Status LED Indication 1:	Red LED "On": Relay Energized "COM to N/O" Red LED "Off": Relay De-Energized "Com to N/C"		
Electrical Life (Relay):	> 30,000 Cycles, typical		
Mechanical Life (Relay):	> 10,000,000 Cycles, typical		
Din Rail Size:	35 mm (U.S. Patent No. 7,416,421)		
Operating Temperature Range:	5 to 104°F (-15 to 40°C)		
Operating Humidity Range:	0 to 95%, non-condensing		
Storage Temperature Humidity Range:	32 to 104°F (0 to 40°C) 20% to 85% RH, non-condensing		
Enclosure Material Flammability Rating:	PC/ABS (Polycarbonate/ABS Blend) UL94-V0		
Wiring Connections:	Screw Terminal Blocks		
Conductor Size:	Relay Coil: 18 to 24 AWG (2.5 mm ² to 0.20 mm ²) Copper Wires only		
	Relay Contacts: 12 to 16 AWG (4.0 mm ² to 020 mm ²) Copper Wires only		
Terminal Block Torque Rating:	4.43 to 5.31 in-lbs. (0.5 to 0.6 Nm)		
Agency Approvals:	UL/CUL US Listed (UL 508) Ind. Control Equipment (File # E179139), CE, RoHS2, WEEE		
Product Weight:	A/CR-DC-5A: 0.135 lbs. (0.061 kg) A/CR-12DC-12A & A/CR-24AC-10A: 0.150 lbs. (0.068 kg)		
	A/CR-DC-12A, A/CR-115AC-8A & A/CR-230AC-8A: 0.145 lbs. (0.066 kg)		
Product Dimensions (L x W x H):	3.283" (83.39 mm) x 1.305" (33.15 mm) x 1.565" (39.75 mm)		

Note1: The LED should not be used to determine if current is present

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STANDARD ORDERING Model # Example: A/CR-DC-SA -OR- 126773					
Model #	ltem #	Nom. Coil Voltage	Contact Rating	Max. Switch Voltage	Max. Switch Current
A/CR-DC-5A	126773	24 VDC	5A @ 250 VAC* 5A @ 125 VAC**	250 VAC, 30 VDC	5A (N/O) / 3A (N/C
			5A @ 30 VDC** ¼ HP, 120/250/277 VAC		
A/CR-DC-12A	128210	24 VDC	12A @ 250 VAC* 12A @ 250 VAC** 12A @ 30 VDC** 1 HP,	250 VAC, 30 VDC	12 Amps
			120/240/480 VAC (N/O) 1/2 HP, 120/240/480 VAC (N/C)		
A/CR-12DC-12A	129176	12 VDC	12A@250 VAC* 12A@250 VAC** 12A@30 VDC**	250 VAC, 30 VDC	12 Amps
			1 HP, 120/240/480 VAC (N/O) ½ HP, 120/240/480 VAC (N/C)		
A/CR-24AC-10A	128214	24 VAC	10A@250 VAC* 10A@250 VAC** 10A@30 VDC**	250 VAC, 30 VDC	10 Amps
			1 HP, 120/240/480 VAC (N/O) ½ HP, 120/240/480 VAC (N/C)		
A/CR-115AC-8A	128215	115 VAC	8A@250VAC* 8A@250VAC** 8A@30VDC*	250 VAC, 30 VDC	8 Amps
			1 HP, 120/240/480 VAC (N/O) ½ HP, 120/240/480 VAC (N/C)		
A/CR-230AC-8A	128216	230 VAC	8A@250VAC* 8A@250VAC** 8A@30VDC**	250 VAC, 30 VDC	8 Amps
			1 HP, 120/240/480 VAC (N/O) ½ HP, 120/240/480 VAC (N/C)		

Note*: General Use | Note**: Resistive

Command Relays are not intended to be used in either Life / Safety Applications or Hazardous / Classified Locations

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