



# 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 is that it allows you to mix and match any command relay model with any 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](http://www.workaci.com).**

### PRODUCT SPECIFICATIONS

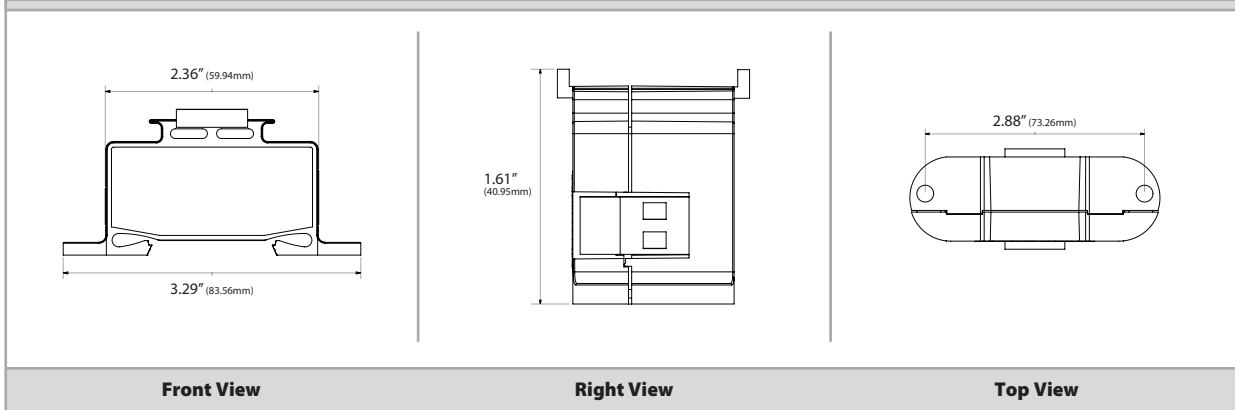
<b>Relay Type:</b>	Electromechanical Relay
<b>Nominal Relay Coil Voltage   Rated Current:</b>	<b>A/CR-DC-5A:</b> 23 to 31.2 VDC, 17 mA @ 24 VDC, 60 Hz <b>A/CR-DC-12A:</b> 20 to 31.2 VDC, 17 mA @ 24 VDC, 60 Hz <b>A/CR-12DC-12A:</b> 10 to 15.6 VDC, 33.33 mA @ 12 VDC, 60 Hz <b>A/CR-24AC-10A:</b> 16 to 26.4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

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





**DIMENSIONAL DRAWING**



STANDARD ORDERING					
Model # Example: <span style="border: 1px solid black; padding: 2px;">A/CR-DC-5A</span> -OR- <span style="border: 1px solid black; padding: 2px;">126773</span>					
Model #	Item #	Nom. Coil Voltage	Contact Rating	Max. Switch Voltage	Max. Switch Current
A/CR-DC-5A	126773	24 VDC	5A @ 250 VAC*   5A @ 125 VAC** 5A @ 30 VDC**   ¼ HP, 120/250/277 VAC	250 VAC, 30 VDC	5A (N/O) / 3A (N/C)
A/CR-DC-12A	128210	24 VDC	12A @ 250 VAC*   12A @ 250 VAC**   12A @ 30 VDC**   1 HP, 120/240/480 VAC (N/O)   ½ HP, 120/240/480 VAC (N/C)	250 VAC, 30 VDC	12 Amps
A/CR-12DC-12A	129176	12 VDC	12A @ 250 VAC*   12A @ 250 VAC**   12A @ 30 VDC** 1 HP, 120/240/480 VAC (N/O)   ½ HP, 120/240/480 VAC (N/C)	250 VAC, 30 VDC	12 Amps
A/CR-24AC-10A	128214	24 VAC	10A @ 250 VAC*   10A @ 250 VAC**   10A @ 30 VDC** 1 HP, 120/240/480 VAC (N/O)   ½ HP, 120/240/480 VAC (N/C)	250 VAC, 30 VDC	10 Amps
A/CR-115AC-8A	128215	115 VAC	8A @ 250 VAC*   8A @ 250 VAC**   8A @ 30 VDC* 1 HP, 120/240/480 VAC (N/O)   ½ HP, 120/240/480 VAC (N/C)	250 VAC, 30 VDC	8 Amps
A/CR-230AC-8A	128216	230 VAC	8A @ 250 VAC*   8A @ 250 VAC**   8A @ 30 VDC** 1 HP, 120/240/480 VAC (N/O)   ½ HP, 120/240/480 VAC (N/C)	250 VAC, 30 VDC	8 Amps

Note\*: General Use | Note\*\*: Resistive

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

