



**THE DATASHEET OF**  
**CR5395-EL-ACV-110-X-CD-ELR-R1**



# Direct Current Sensing Relay

## CR5395 Series



### OUTPUT OPTIONS

The Relay is available with three different output configurations, electromechanical relay, optoisolated NPN transistor or ZeroCrossing optoisolated triac. Specify desired selection in part number.

### RELAY (-ELR)

Arrangement: 1 Form C (SPDT)  
 Contact Material: Silver-cadmium oxide  
 Terminals: 3<sup>1/4</sup>" Male QC  
 Mechanical Life: 10 million operations,  
 typ. @ rated load  
 Electrical Life: 100,000 operations,  
 typ. @ rated load  
 Initial Contact Resistance:  
 50 milliohms max. @ 500 mA, 12 VDC  
 Contact Rating: UL508/873 & CSA

### DC SWITCHING (-NPN)

V<sub>ce</sub> (full off): 30 VDC max.  
 I<sub>sink</sub> (full on): 120 mADC max. @ rated full-on  
 V<sub>ce</sub> (full on): 1.5 VDC @ 120 mADC I<sub>sink</sub>  
 Off state leakage current: 5 $\mu$ a @ 30 VDC  
 (typical)  
 Terminals: 2<sup>1/4</sup>" Male QC

### AC SWITCHING (-TRC)

Off state voltage: 240 VAC RMS max.  
 Minimum switch voltage: 24 VAC RMS  
 On state current: 500 mA RMS max. continuous  
 Switching mode: Zero Crossing  
 Off state leakage: 60  $\mu$ a @ 240 VAC max.  
 Terminals: 2 @ 1/4" Male QC

The **CR5395** Series, Direct Current Sensing Relay provides a precision and cost effective method for monitoring Direct Current. Magnetic Modulator Technology is utilized for the current sensing to provide a stable and highly repeatable current trip. The current-carrying wire is routed through the opening extending through the top of the case. When current reaches the level set by the trip point adjustment, the relay trips and starts the adjustable timer. After the timer cycles the electromechanical relay energizes.

### Applications

DC motor drives  
 Battery Chargers  
 Power Supply Management  
 Uninterruptible Power Systems  
 Motor Application

### Features

Variable Trip Point and Time Delay  
 Bi-polar  
 Monitors Currents from 1.0 ADC to 100 ADC  
 Electrical Isolation Between Circuits  
 Output Relay Rated up to 20 Amps  
 LED Trip Status Indicator  
 Dead Band Prevents Relay Chatter  
 Calibrated Dial  
 External Current Transformers Available

### Specifications

Mounting:  
 3/16" dia. clearance holes on 1<sup>15/16</sup>" by 2<sup>15/16</sup>" centers  
 Environmental:  
 Operating Temperature: -30° C to +70° C  
 Storage Temperature: -55° C to +85°  
 0-95% RH, Non-condensing  
 Input Supply Power:  
 Typical 80mA                      Max 100mA  
 Sensed Current: Max. Continuous: 200% Full Scale  
 Altitude: 2000 meters max.  
 (Contact factory for High Altitude applications)  
 Weight 0.5 LBS.

### Regulatory Agencies



| VOLTAGE | LOAD TYPE | N.O. CONTACT | N.C. CONTACT |
|---------|-----------|--------------|--------------|
| 240 VAC | Resistive | 20A          | 10A          |
| 240 VAC | Motor     | 2HP          | 1/2 HP       |
| 125 VAC | Motor     | 1HP          | 1/4 HP       |
| 28 VDC  | Resistive | 20A          | 10A          |



3500 Scarlet Oak Blvd. St. Louis MO USA 63122 V: 636-343-8518 F: 636-343-5119

Web: <http://www.crmagnetics.com>

64



E-mail: [sales@crmagnetics.com](mailto:sales@crmagnetics.com)





## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View CR5395-EL-ACV-110-X-CD-ELR-R1 on WIN SOURCE](#)
-  [CR Magnetics Inc. Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management