# CR4395 Series



# **OUTPUT OPTIONS**

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

# **RELAY (-ELR)**

Arrangement: 1 Form C (SPDT)

Contact Material: Silver-cadmium oxide

Terminals: 3 1/4" 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)

Vce (full off): 30 VDC max.

Isink (full on): 120 mADC max.@ rated full-on Vce (full on): 1.5 VDC @ 120 mADC Isink Off state leakage current: 5ua @ 30 VDC

(typical)

# **AC SWITCHING (-TRC)**

Off state voltage: 240 VAC RMS max.

Minimum switch voltage: 24 VAC RMS

On state current: 0.5 AAC RMS max. continuous

Switching mode: Zero crossing

Off state leakage: 60 ua @ 240 VAC max.

The **CR4395** Series, Current Sensing Relay provides an effective and highly stable method for monitoring electrical current. The current-carrying wire is routed through the opening extending from 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 is energized. A precision voltage reference circuit ensures a highly repeatable trip point.

# **Applications**

Monitor Electrical Heater Elements Sense Motor Over/Under Loads Detect Lamp burn-out Indicate Phase Loss

### **Features**

Variable Trip Point and Time Delay Monitors Currents from 1 AC to 100 AC Amps Electrical Isolation Between Circuits Output Relay Rated up to 20 Amps LED Trip Status Indicator Dead Band Prevents Relay Chatter Calibrated Dial Option Available

External Current Transformers Available

# **Specifications**

Mounting:

3/16" dia. clearance holes on 115/16" by 215/16" centers

Environmental:

Operating Temperature:  $-30^{\circ}$  C to  $+60^{\circ}$  C Storage Temperature:  $-55^{\circ}$  C to  $+85^{\circ}$  C

Power-On Delay: 100 MS MAX

Hysteresis: 5% Max.
Input Supply Power:
Terminals: 21/4" Male QC

Sensed Current:

Max. Continuous: 200% Full Scale

Frequency: 60-400 Hz \*

\*All specifications for operation at 60 Hz only

Weight 0.5 LBS.

# **Regulatory Agencies**





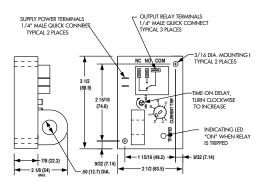
VOLTAGE	LOAD TYPE	N.O. CONTACT	N.C. CONTACT
240 VAC	Resistive	20A	10A
240 VAC	Motor	2HP	1/2 HP
125 VAC	Motor	1HP	1/4 HP
28 VDC	Resistive	20A	10A

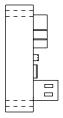


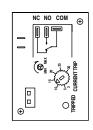
CR Magnetics, Inc. 3500 Scarlet Oak Blvd. St. Louis MO USA 63122 V: 636-343-8518 F: 636-343-5119

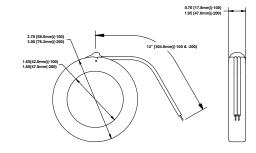
# **OUTLINE DRAWING**

CR4395 Series









Shown with Internal Transformer Option (-1)

**CR4395** - [

**Shown with Remote Current** Transformer Option (-R)

Remote Current Transformers **CRGFS** - Series

# **TRIP STATUS**

**EH** - Energized on High, trips when sense current is above trip point and returns to non-trip status when sense current is below the trip point.

- **EL** Energized on Low, trips when sense current is below trip point and returns to non-trip status when sense current is above the trip point.
- **LH** Latch on High, trips when sense current is above trip point and remains tripped until supply power is removed.
- LL Latch on Low, trips when sense current is below trip point and remains tripped until supply power is removed.

### **SUPPLY VOLTAGE**

AC

120 - 120 VAC 240 - 240 VAC

DC 24D - 24 VDC

All supply voltage tolerances are  $\pm$  10 %

### **TRIP RANGE**

PART NUMBER

110 - 1.0 to 10 AAC

330 - 3.0 to 30 AAC

660 - 6.0 to 60 AAC

101 - 10 to 100 AAC

The trip ranges shown are for one wire pass through the window opening. The trip range may be proportionally lowered with additional wire passes through the window.

# TRIP POINT DIAL

**CD** - Calibrated Dial

FP - Fixed Trip Point

(Specify value of fixed trippoint with order)

> No adjustment dial provided with the fixed set - CD - FP

-3.30 trip range show

# **OUTPUT OPTIONS**

I - INTERNAL TRANSFORMER

R - REMOTE TRANSFORMER

**ELR** 

Electromechanical

Relay

Optoisolated NPN Transistor

### **TRC** Optoisolated Triac, Zero Crossing

### TRIP ON DELAY

A - .5 to 6 Sec.

**B** - 2 to 25 Sec.

C - .1 - 1 Sec.

X - none

Time-on delay is the time from when the relay trips to when the output energizes. The ranges are guaranteed minimum, actual range may be slightly

### **EXTERNAL CURRENT SENSING TRANSFORMER CRGFS** -

100 - 1.65 dia. Window 200 - 1.83 dia. Window



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