CR7310 Series



OUTPUT OPTIONS

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

RELAY (-ELR)

Arrangement: 1 Form C (SPDT)

Contact Material: Silver-cadmium oxide

Terminals: 31/4" 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)

Terminals: 21/4" Male Q C

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 ua @ 240 VAC max.

Terminals: 21/4" Male Q C

The **CR7310** Series, Ground Fault Sensor provides a reliable and cost effective method for sensing ground faults. The current-carrying wires are routed through the opening extending from the top of the case. When ground current reaches the level set by the trip point adjustment, the relay trips, illuminates the tripped LED and provides an output signal. A precision voltage reference circuit ensures a highly repeatable trip point. The Sensor is rated as a Class 1 device.

Applications

Monitor Motor Ground Faults Sense Early Failure of Heater Elements Equipment Protection

Features

Variable Trip Point

Monitors Currents from 10 mA 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

External Current Transformers Available

Specifications

Mounting:

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

Environmental:

Operating Temperature: -30° C to +70° C Storage Temperature: -55° C to +85° C

0-95% RH, Non-condensing

Input Supply Power:
Terminals: 2^{1/4"}Male QC

Sensed Current:

Max. Continuous: 200% Full Scale

Frequency: 50-400 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 |



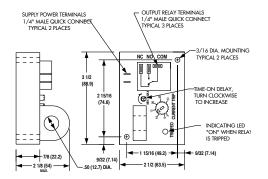
CR Magnetics, Inc. 3500 Scarlet Oak Blvd. St. Louis MO USA 63122 V: 636-343-8518 F: 636-343-5119

Web: http://www.crmagnetics.com

E-mail: sales@crmagnetics.com

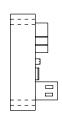
OUTLINE DRAWING

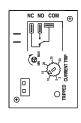
CR7310 Series



Shown with Internal Transformer Option (-1)

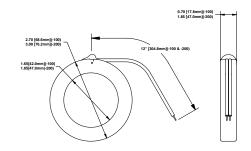
CR7310 -





Shown with Remote Current Transformer Option (-R)

PART NUMBER



Remote Current Transformers **CRGFS** - Series

I - INTERNAL TRANSFORMER

R - REMOTE TRANSFORMER

TRIP RANGE **SUPPLY VOLTAGE TRIP STATUS** .01.1 - .01 to 0.1 AAC 120 - 120 VAC **EH** - Energized on High, trips .11 - 0.1 to 1.0 AAC 240 - 240 VAC

- 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.

All supply voltage tolerances

are 55 to 110 %

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 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 greater.

TRIP POINT DIAL

- CD Calibrated Dial
- FP Fixed Trip Point (Specify value of fixed trippoint with order)



- CD - FP

OUTPUT OPTIONS







Electromechanical Relay

Optoisolated NPN Transistor **Optoisolated** Triac

ERNAL CURRENT SENSING TRANSFORMER CRGFS -

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



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