



CR7310 Ground Fault Sensor



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 1 15/16" by 2 15/16" 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 Q C

Sensed Current:

Max. Continuous: 200% Full Scale
 Frequency: 50-400 Hz *

* All specifications for operation at 60 Hz only



Relay Option Shown (-ELR)

Output Options

The Relay is available with three different output 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: 3 - 1/4" Male Q C
 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

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

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: 2- 1/4" 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: 2- 1/4" Male Q C

THE GROUND FAULT SENSOR IS INTENDED FOR EQUIPMENT PROTECTION AND IS NOT FOR PROTECTION OF PERSONNEL, ANIMALS OR ELECTRICALLY SENSITIVE EQUIPMENT.

