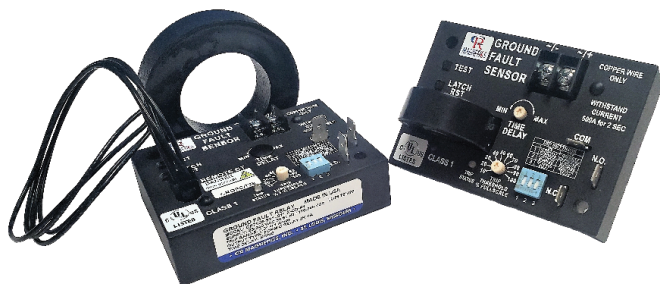


Current Sensing Relays, Switches & Sensors

CR7508 Series



The CR7508 Series Ground Fault Current Sensing Relay, provides a reliable and cost effective method for sensing ground fault current. Ground fault sensors help to protect equipment and processes from potentially harmful currents. The CR7508 monitors the differential current of the load wires routed through the current transformer on the relay.

The CR7508 offers a wide range of either an adjustable or fixed trip threshold. Upon sensing a ground fault current above the trip threshold the red LED illuminates and the Form C relay changes state providing an output signal.

The CR7508 is rated as a UL 1052 Class 1 device. Typically 30mA+ Trip range and provides ground-fault protection at services and feeders. This is not intended for personal protection. Intended to operate with shunt-trip coils as a disconnecting means.

| CR7508 Specifications | | |
|---|---|--------------------------------------|
| Control Power Supply | SV1 | SV2 |
| | Universal AC Power Supply 85-240 Vac 50/60 Hz. 110-240 Vdc | 12.5 - 35 Vdc 18-24 Vsc 50/60 Hz. |
| Copper Wire Only for Supply Connections | | |
| Power Consumption | 3 VA Max | 2 Watts Max |
| Measurable Range | 200% of Rated Full Scale, 50-400 Hz. | |
| Limiting Continuous Current | 10ARMS for Rated Full Scale Otherwise 200% of Rated Full Scale | |
| Current Withstand | 500A, 2 seconds | |
| Output Type | 1 SPDT Form C Relay | |
| Terminals | (3) 0.25" Male Quick Connect | |
| Relay Output Ratings | Rated Voltage | 250 VAC |
| | Rated Current | 12 Amps |
| | Limiting Continuous Current | 12 Amps |
| | Breaking Capacity MAX | 3000 VA |
| | Electrical Endurance | >10 ⁵ Operations |
| | Mechanical Endurance | >30 X 10 ⁶ Operations |
| Trip Threshold | Adjustable or Fixed | |
| Time Delay | Adjustable or No Delay | |
| Hysteresis | 5% of Full Scale Set Point | |
| Case | UL 94 5-VA Flammability Rating | |
| Environmental Ratings | Operating Temperature | -30C to +60C |
| | Storage Temperature | -55C to +85C |
| | Relative Humidity | 0-95% RH, Non-condensing |
| | Altitude | < 2,000 Meters |
| Certifications | UL 1053 Listed, E211244 Vol. 2 | |

Applications

Ground-Fault Protection of Equipment (GFPE)
Marinas and Boatyards
Snow and Ice Melt Systems
Switchgear
Localized Branch Circuit Fault Protection
UL 508A Panels

Features

Wide range of selectable trip thresholds
Adjustable delay time
Optional latching mechanism
Changeable Form C relay state logic
Green and Red Indicators for no fault and fault conditions
Integrated Ground-Fault test circuit for functionality verification
Optional 35 mm DIN rail mount adapter

Specifications

Mounting: 3/16" dia. clearance holes on 1 15/16" by 2 15/16" Centers
Operating Temperature: -30 C to + 60 C
Storage Temperature: -55 C to +85 C
Power On Delay: 1 Sec.
Hysteresis: 5% Max
Input Supply Power: 3 VA 2 Watts Max
Sensed Current: 200% Full Scale Max Continuous
Frequency: 60-400 HZ* *All Specifications at 60 Hz only
Altitude: 2000 Meters Max. Contact Factory for High Altitude Applications

Regulatory Agencies

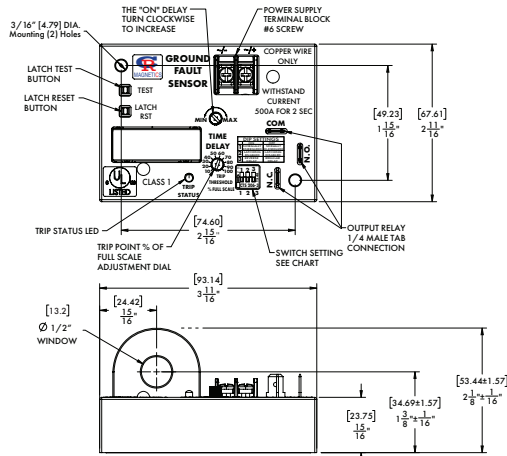


Current Sensing Relays, Switches & Sensors

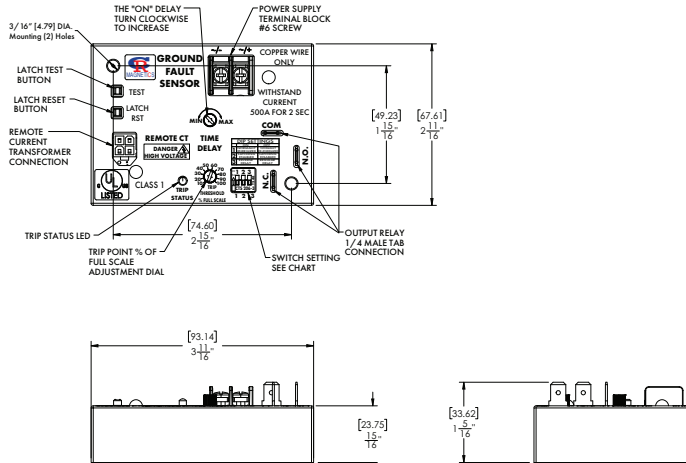
OUTLINE DRAWING

CR7508 Series

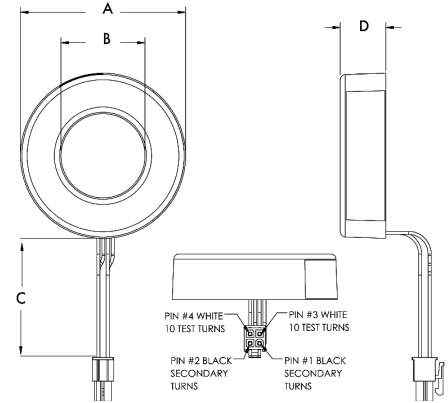
Internal Current Transformer



External Current Transformer



| CRGFS | A | B | C | D |
|-------|-----------------|-----------------|-------------------|-----------------|
| -101 | 2.93 [74.46] | 1.49 [37.93] | 12.00 [304.8] | 0.81 [20.57] |
| -102 | 3.20 [81.24] | 1.74 [44.12] | 12.00 [304.81] | 0.86 [21.82] |



Example Part Numbers:

CR7508-SV1-.03-C-FP-I
CR7508-SV2-.11-X-CD-R2

PART NUMBER

CR7508

SUPPLY VOLTAGE

SV1 - 85 - 240 VAC
50/60 Hz
110-240 VDC
SV2 - 12.5 TO 35 VDC
18-24 VAC
50/60 Hz

TRIP RANGE

.011 - .01 - 0.1 AAC
.11 - 0.1 - 1.0 AAC

*CUSTOM DELAY
AVAILABLE UPON
REQUEST

TRIP DELAY

X - NO DELAY
C - 0.1 TO 1 SEC.

*CUSTOM DELAY
AVAILABLE UPON
REQUEST

I - INTERNAL TRANSFORMER
R1 - CRGFS-101
R2 - CRGFS-102

TRIP POINT DIAL
CD - CALIBRATED DIAL
FP - FIXED POINT