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Phone: (877) 544-2291

# IGFR-2

Ground Fault Relay with Adjustable Trip Current

Part Number: 1100-0102



## IGFR-2 Ground Fault Relay

The IGFR-2 Ground Fault Relay (GFR) detects zero-sequence ground fault currents through a Current Transformer (CT). The relay trips when these currents exceed a set limit, which is factory calibrated to 5A. This limit is adjustable, and may be set to any level between 4-15A( $\pm 1A$ ).

The IGFR-2 can be set for NO or NC operation, for use with undervoltage or shunt trip breakers. (NC is the factory setting.)

Once tripped, the IGFR-2 remains latched until it is manually reset with the RESET button on the front panel.

A green PWR LED is lit when the IGFR-2 is on. The red TRIP LED lights when a trip occurs, and remains lit until the GFR is reset.

Two CT sizes are available for use with the IGFR-2: 1100-0006 has an Inside Diameter (ID) of 2.5", while 1100-0007 has a 4.25" ID. When used with these CTs, the IGFR-2/CT is suitable for use in resistance grounded 3-phase power circuits that are NGR-limited to no more than 25A. Other properly designed CTs may be used with the IGFR-2 to allow operation in other types of circuits.

A 120VAC (nominal) supply voltage is required.

### Front Panel



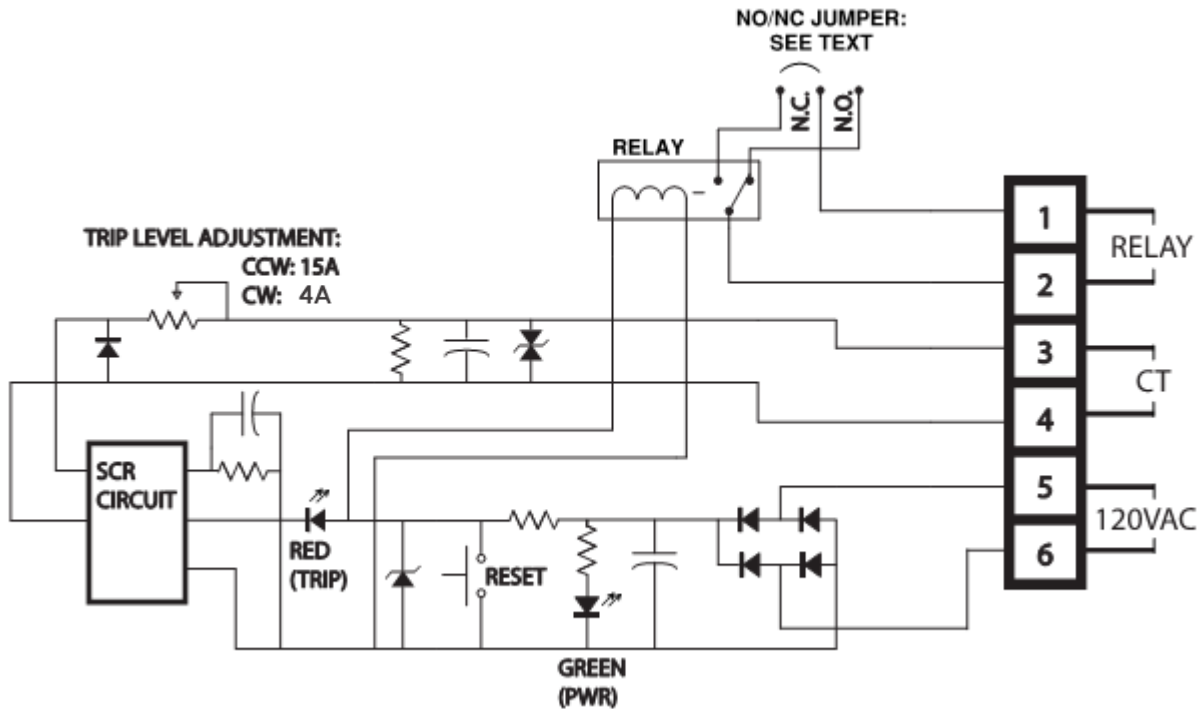
### Features:

- Power (Green) and Trip (Red) LED Indicators
- Manual reset
- Adjustable trip current setting (factory calibrated to 5A)
- NO or NC operation factory set for NC)

### Specifications:

- Trip contacts (NC or NO):  
5A / 240VAC  
5A / 28VDC
- Adjustable Trip Current Level: 4-15A( $\pm 1A$ ) (Factory set to 5A)
- Power Supply: 120VAC/4VA
- Use with current transformer: 1100-0006 or 1100-0007
- For use in systems with ground currents limited to 25A maximum
- Applicable to other types of systems with properly designed CTs
- Modern PCB-based design for durable, reliable operation

## Circuit / Connection Diagram:



## User Adjustments:

### Trip Current Level:

The level adjustment potentiometer on the circuit board is used to adjust the trip current from 4A to 15A. The IGFR-2 comes from the factory preset to 5A (+/- 10%).

The factory setting (5A) is a typical setting for resistance-grounded systems that are NGR limited to 15 or 25A.

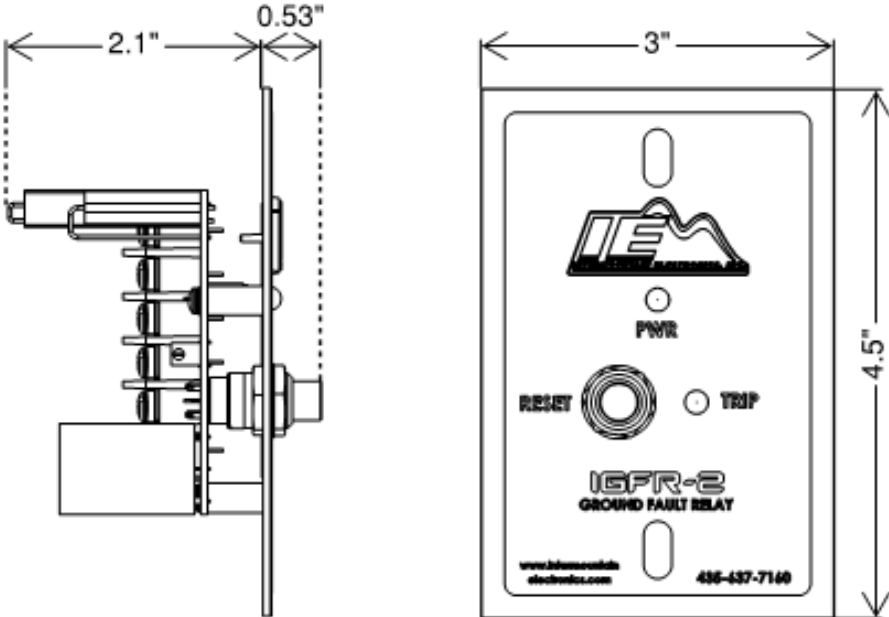
### Normally Open / Normally Closed:

The IGFR-2 can be set for NO or NC operation using the jumper on the circuit board. The IGFR-2 comes from the factory preset for NC operation. To convert for NO operation, remove the jumper from the center and NC pins, and replace it on the center and NO pins.

In NC mode, the relay contacts will be closed when there is no trip condition (typically used with undervoltage breaker coils). In NO mode, the relay contacts are open when there is no trip condition (typically used with shunt/opening breaker coils).



**Mechanical Characteristics**



**Recommended Panel Cutout**

