



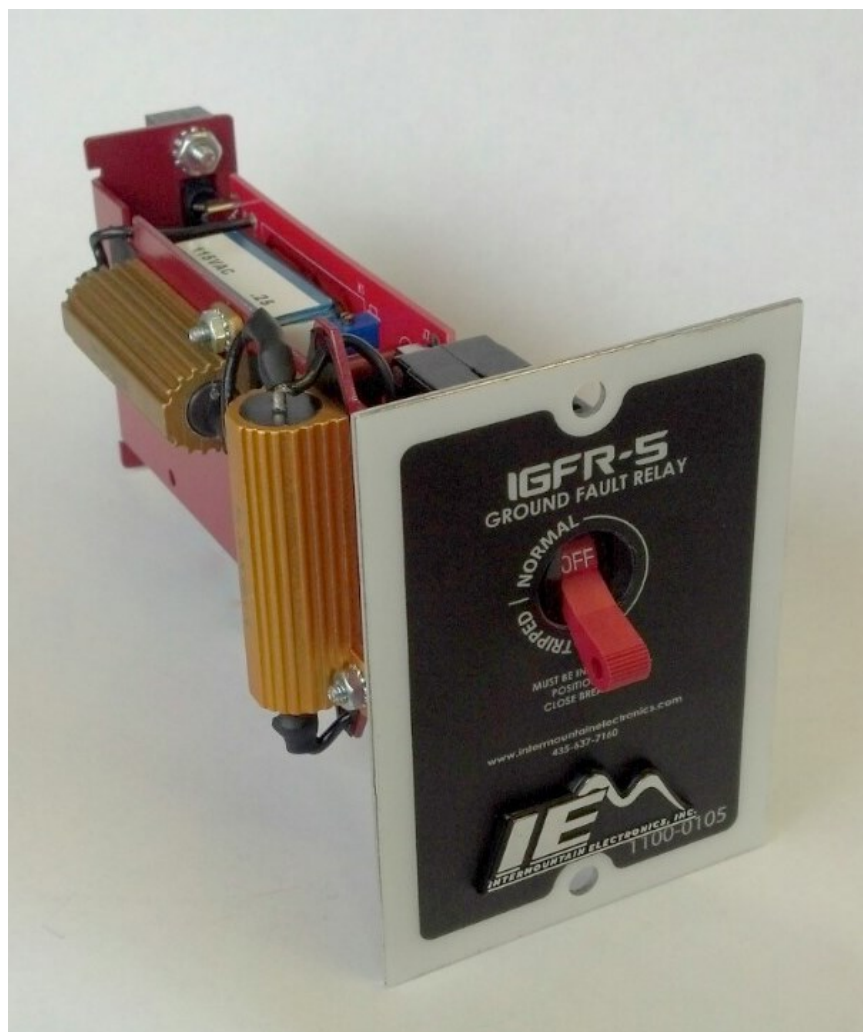
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Phone: (877) 544-2291

# IGFR-5

**Ground Fault Relay with Adjustable Time Delay**

**Part Number: 1100-0105**



## IGFR-5 Ground Fault Relay with Time Delay

The IGFR-5 is a Ground Fault Relay (GFR) that detects ground fault currents by monitoring the voltage across a Neutral Grounding Resistor (NGR) through a potential transformer. The relay trips when a phase-neutral fault occurs, causing fault currents to flow through the NGR.

IGFR-5 is used with a Potential Transformer (PT), which must be designed to convert the phase-neutral voltage of the system to 120 VAC. Thus, the PT design depends on the system voltage, and is not provided with the IGFR-5.

A time delay may be set to 0-5 seconds, using a multi-turn potentiometer.

NO and NC trip outputs are included for use with under-voltage or shunt trip breakers. Once tripped, the IGFR-5 remains latched until the circuit breaker on the front panel is manually reset. The relay cannot be reset unless the fault has been cleared.

### Front Panel



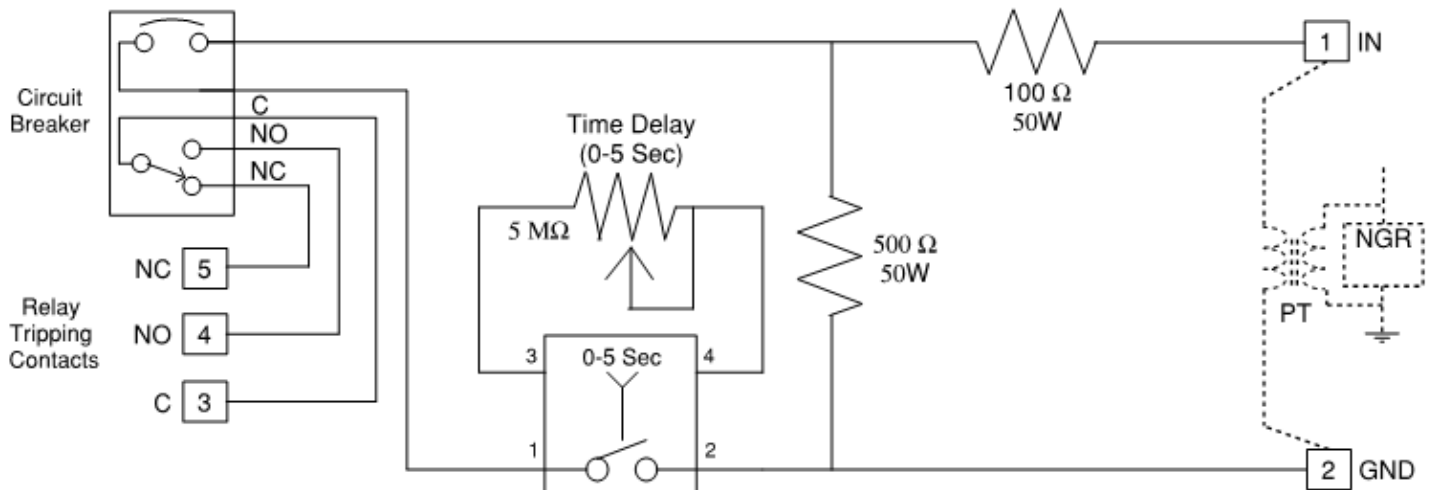
### Features:

- 0-5 second adjustable delay time. Multi-turn potentiometer for accurate delay settings
- Manual reset
- NO/NC outputs for under-voltage/shunt breakers
- Trip indicator
- Compact design
- Designed for system voltages of 1000V (L-L) or more (actual voltage depends on PT). At lower voltages, the IGFR-4 should be used.

### Specifications:

- Trip contacts (NC or NO): 10A / 250 VAC
- Trip Time Delay: 0-5 Seconds (Factory set to 0.25 Sec.)
- For use in NGR-limited systems. A PT with primary rated at the phase-neutral voltage and a 120 VAC secondary is required.
- System voltage specification depends on PT.
- Trip Voltage: Approx. 70 VAC at input.

## Circuit / Connection Diagram:



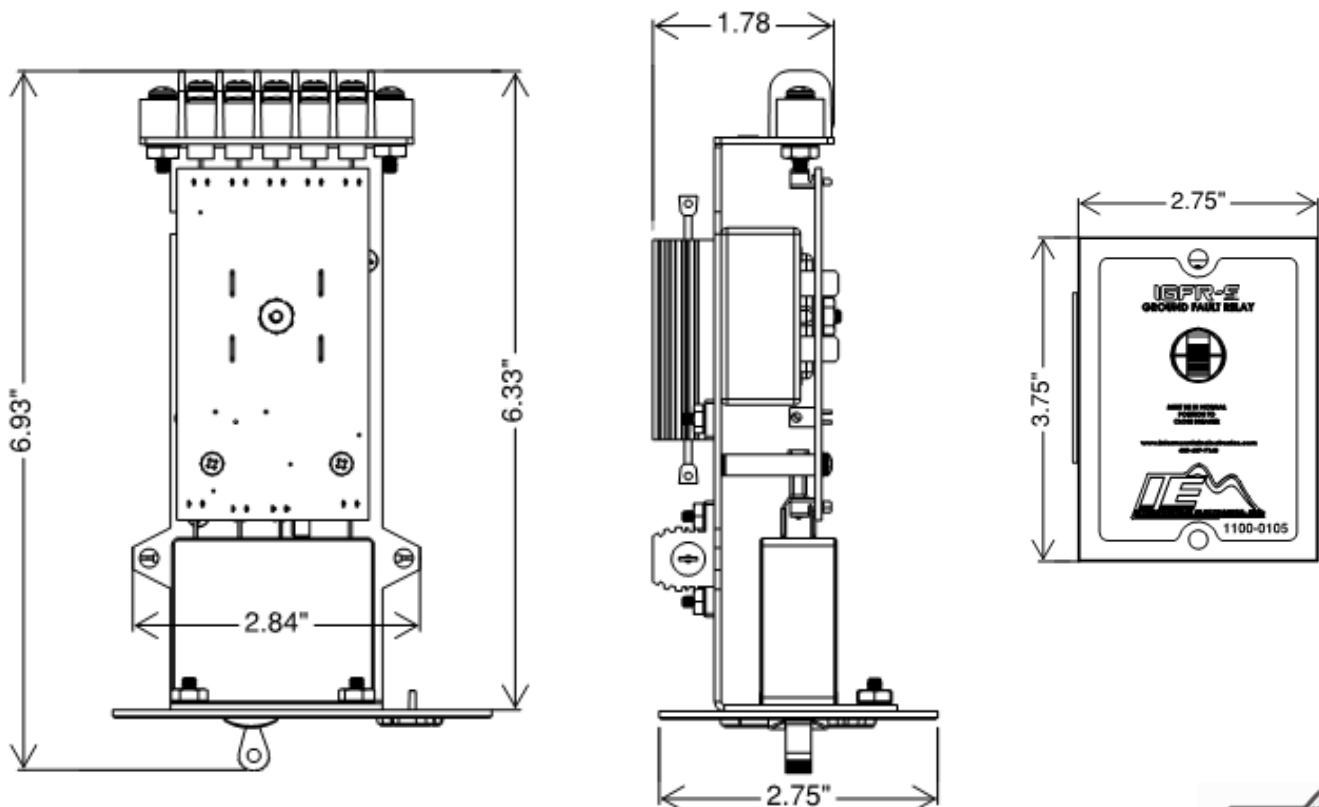
### Notes:

1. PT primary must be rated for phase-neutral voltage.
2. PT secondary must be 120 VAC

## User Adjustments:

**Time Delay:** The potentiometer on the circuit board is used to adjust the delay time from instantaneous to 5 seconds. This is a multi-turn potentiometer, so the delay can be precisely set. The factory setting is 0.25 seconds (instantaneous).

## Mechanical Characteristics



## Recommended Panel Cutout

