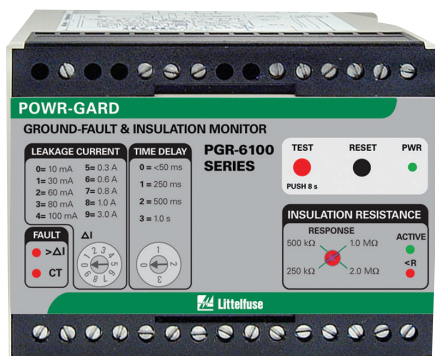
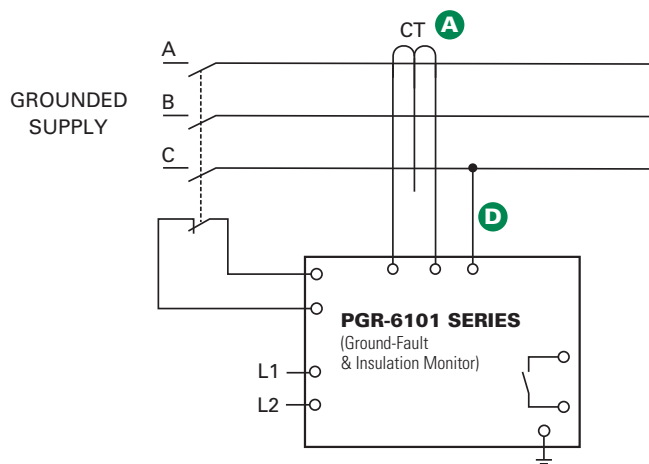


PGR-6100 SERIES (GFR4000)

Ground-Fault & Insulation Monitor



Simplified Circuit Diagram



Ordering Information

| ORDERING NUMBER | CONTROL POWER |
|-----------------------------|------------------------|
| PGR-6100-120 | 120 Vac |
| PGR-6100-240 ⁽¹⁾ | 240 Vac ⁽¹⁾ |

| ACCESSORIES | REQUIREMENT |
|-----------------|------------------|
| PGC-5000 Series | Required |
| PGH Family | Required >1300 V |
| PGA-0500 | Optional |
| PGA-0510 | Optional |

Note (1) - PGR-6100-240 ordering option is not UL Listed.
For optional conformal coating please consult factory.





Description

The PGR-6100 combines the features of a ground-fault protection relay and insulation monitor into one unit. It protects against ground faults by monitoring insulation resistance when the motor is de-energized and by monitoring ground-fault current when the motor is energized. The PGR-6100 features two separate analog outputs for optional current and ohm meters, and two separate alarm relays. It operates on one- or three-phase solidly grounded, resistance grounded and ungrounded systems up to 6 kV.

Features & Benefits

| FEATURES | BENEFITS |
|---|---|
| Adjustable GF pickup (10 mA-3 A) | Trip setting provides a wide range of low-level protection and system coordination |
| Adjustable insulation pickup (250 kΩ-2 MΩ) | Customizable insulation resistance setpoints for maximum protection |
| Adjustable time delay (50 ms- 1.0 s) | Adjustable trip delay for quick protection and system coordination |
| Output contacts | Two Form C output contacts for ground fault and insulation-resistance fault |
| Analog outputs (0-1 mA) | Two analog outputs indicate insulation resistance and ground-fault current |
| CT-Loop monitoring | Alarms when CT is not connected |
| Selectable contact operating mode | Selectable fail-safe or non-fail-safe operating modes allows connection to shunt or undervoltage breaker coil |

Accessories

- A**  **SE-CS30 Series Ground-Fault CTs**
Required zero-sequence current transformer specifically designed for low level detection. Flux conditioner is included to prevent saturation.
- B**  **PGA-0500 Analog % Current Meter**
- C**  **PGA-0510 Analog Ohm Meter**
Optional panel-mounted meters display ground-fault current as a percentage of the set-point and insulation resistance.
- D**  **PGH Family High Tension Couplers**
Required (for systems >1,300 V) PGH Family high-tension coupler must be connected between the phase conductor and the PGR-6100.

Specifications

| IEEE Device Numbers | |
|--|--|
| Ground Fault (50G/N, 51G/N), Ground detector (64), Alarm Relay (74) | |
| Input Voltage | <i>See ordering information</i> |
| Dimensions | H 75 mm (3"); W 100 mm (3.9"); D 115 mm (4.5") |
| Response delay | < 250 ms |
| Contact Operating Mode | Selectable fail-safe or non-fail-safe |
| Harmonic Filtering | Standard feature |
| Test Button | Standard feature |
| Reset Button | Standard feature |
| CT-Loop Monitoring | Standard feature |
| Output Contacts | Two Form C |
| Analog Output | 0-1 mA |
| Approvals | UL Listed (E183688) ⁽¹⁾ |
| Warranty | 5 years |
| Mounting | DIN, Surface |

Disclaimer Notice – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at www.littelfuse.com/product-disclaimer.