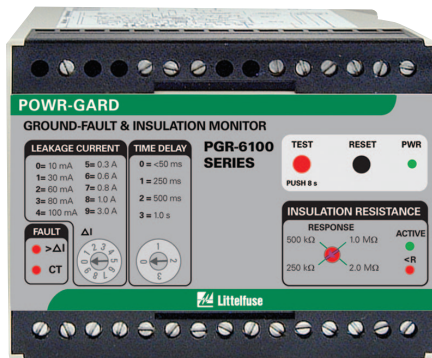
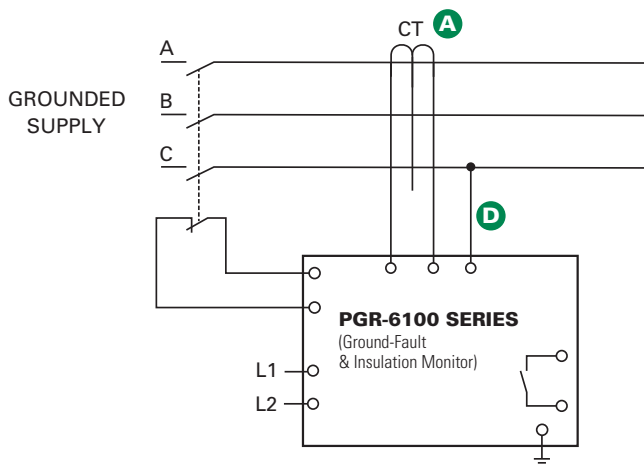


PGR-6100 SERIES (GFR4000)

Ground-Fault & Insulation Monitor



Simplified Circuit Diagram







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**  **PGC-5000 Series Ground-Fault Transformers**
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.

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.

Specifications

| IEEE Device Numbers | |
|-------------------------------|---|
| Input Voltage | Ground Fault (50G/N, 51G/N), Ground detector (64), Alarm Relay (74) |
| Dimensions | See ordering information 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 |