Ground-Fault Protection – Ungrounded AC Systems

PGR-3100 SERIES

Ground-Fault Indication System

Description
The PGR-3100 indicates the presence of voltage on each phase of a three-phase system. The LEDs on the panel illuminate when voltage is present. When a ground-fault occurs, the voltage on the faulted phase reduces to ground potential, causing the LEDs for the faulted phase to dim and the LEDs for the unfaulted phases to become brighter. Ungrounded ac systems are required by the National Electrical Code (NEC®) Article 250.21(B) and the Canadian Electrical Code Part 1, Section 10-106 (2) to have ground detectors, such as the PGR-3100, installed on the system. External potential transformers (PTs) can be used to step down system voltage, allowing the PGR-3100 to be applied to any system voltage. PTs are not required for system voltages up to 600 Vac.

Features & Benefits

- **NEC® and CEC Code compliant**: Meets National Electrical Code (NEC®) Article 250.21(B) and Canadian Electrical Code Part 1, Section 10-106 (2) requirements for ungrounded systems
- **Phase LEDs**: Indicates presence of a ground fault and the faulted phase as well as phase-to-ground voltage on an energized bus
- **Redundant LEDs**: Redundant long-life LEDs (two per phase) to ensure reliability
- **Lamp test button**: Verifies LEDs are operating

Accessories

PGR-3100-PNL is the PGR-3100 integrated into compact stainless steel enclosure for ease of installation and retrofits. Options include visual alarm, audible alarm with silence and reset. Dimensions are 8”W x 8”H x 4” D.

Specifications

- **Input Voltage**: Up to 600 Vac 50/60 Hz
- **Indicator Off Voltage**: < 30 Vac line to ground
- **Dimensions**:
  - H 88.9 mm (3.5”)
  - W 108 mm (4.3”)
  - D 54 mm (2.1”)
- **Test Button**: Local
- **Approvals**: CSA certified, UL Listed
- **Conformally Coated**: Standard feature
- **Warranty**: 5 years
- **Mounting**: Panel