PGR-6100 SERIES (GFR4000)

Ground-Fault & Insulation Monitor

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

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>BENEFITS</th>
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<tr>
<td>Adjustable GF pickup (10 mA - 3 A)</td>
<td>Trip setting provides a wide range of low-level protection and system coordination</td>
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<tr>
<td>Adjustable insulation pickup (250 kΩ - 2 MΩ)</td>
<td>Customizable insulation resistance setpoints for maximum protection</td>
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<tr>
<td>Adjustable time delay (50 ms - 1.0 s)</td>
<td>Adjustable trip delay for quick protection and system coordination</td>
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<tr>
<td>Output contacts</td>
<td>Two Form C output contacts for ground fault and insulation-resistance fault</td>
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<tr>
<td>Analog outputs (0 - 1 mA)</td>
<td>Two analog outputs indicate insulation resistance and ground-fault current</td>
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<tr>
<td>CT-Loop monitoring</td>
<td>Alarms when CT is not connected</td>
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<tr>
<td>Selectable contact operating mode</td>
<td>Selectable fail-safe or non-fail-safe operating modes allows connection to shunt or undervoltage breaker coil</td>
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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
  PGA-0510 Analog Ohm Meter
  Optional panel-mounted meters display ground-fault current as a percentage of the set-point and insulation resistance.

- **C** 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)
  See ordering information

- **Input Voltage**
  H 75 mm (3’’), W 100 mm (3.9’’), D 115 mm (4.5’’)
  < 250 ms

- **Dimensions**
  Selectable fail-safe or non-fail-safe

- **Response delay**
  Standard feature

- **Contact Operating Mode**
  Standard feature

- **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)

- **Warranty**
  5 years

- **Mounting**
  DIN, Surface

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

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