PGR-6101 SERIES (GFR4001)

Ground-Fault & Insulation Monitor

Description

The PGR-6101 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-6101 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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</thead>
<tbody>
<tr>
<td>Adjustable GF pickup</td>
<td>Trip setting provides a wide range of low-level protection and system coordination</td>
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<tr>
<td>(30-200 mA)</td>
<td></td>
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<tr>
<td>Adjustable insulation pickup (60-600 kΩ)</td>
<td>Customizable insulation resistance setpoints for maximum protection</td>
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<tr>
<td>Adjustable time delay</td>
<td>Adjustable trip delay for quick protection and system coordination</td>
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<td>(50-250 ms)</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</td>
<td>Two analog outputs indicate insulation resistance and ground-fault current</td>
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<tr>
<td>(0-1 mA)</td>
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<tr>
<td>CT-Loop monitoring</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

- **PGC-5000 Series Ground-Fault Transformers** Required zero-sequence current transformer specifically designed for low level detection. Flux conditioner is included to prevent saturation.
- **PGA-0500 Analog % Current Meter**
- **PGA-0510 Analog Ohm Meter**
- **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-6101.

Specifications

- **IEEE Device Numbers**: Ground Fault (50G/N, 51G/N), Ground detector (64), Alarm Relay (74)
- **Input Voltage**: See ordering information
- **Dimensions**: H 75 mm (3”), W 100 mm (3.9”), D 115 mm (4.5”)
- **Response delay**: < 50 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)
- **Warranty**: 5 years
- **Mounting**: DIN, Surface

Ordering Information

<table>
<thead>
<tr>
<th>ORDERING NUMBER</th>
<th>CONTROL POWER</th>
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<tr>
<td>PGR-6101-120</td>
<td>120 Vac</td>
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For optional conformal coating please consult factory.

Accessories Requirement

- **PGC-5000 Series** Required
- **PGH Family** Required >1300 V
- **PGA-0500** Optional
- **PGA-0510** Optional

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