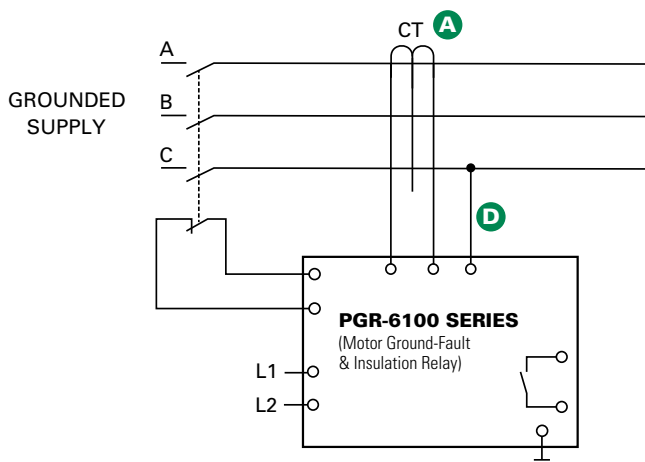


## PGR-6100 SERIES (GFR4000)

### Motor Ground-Fault & Insulation Relay



### Simplified Circuit Diagram



### Ordering Information

ORDERING NUMBER	CONTROL POWER
PGR-6100-120	120 Vac
PGR-6100-240	240 Vac

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

Note: 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
<b>Adjustable GF pickup (10 mA-3 A)</b>	Trip setting provides a wide range of low-level protection and system coordination
<b>Adjustable insulation pickup (250 kΩ-2 MΩ)</b>	Customizable insulation resistance setpoints for maximum protection
<b>Adjustable time delay (50 ms-1.0 s)</b>	Adjustable trip delay for quick protection and system coordination
<b>Output contacts</b>	Two Form C output contacts for ground fault and insulation-resistance fault
<b>Analog outputs (0-1 mA)</b>	Two analog outputs indicate insulation resistance and ground-fault current
<b>CT-Loop monitoring</b>	Alarms when CT is not connected
<b>Selectable contact operating mode</b>	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-3200.

### Specifications

<b>IEEE Device Numbers</b>	Ground Fault (50G/N, 51G/N), Ground detector (64), Alarm Relay (74)
<b>Input Voltage</b>	See ordering information
<b>Dimensions</b>	<b>H</b> 75 mm (3"); <b>W</b> 99.7 mm (3.9"); <b>D</b> 110 mm (4.3")
<b>Response delay</b>	< 250 ms
<b>Contact Operating Mode</b>	Selectable fail-safe or non-fail-safe
<b>Harmonic Filtering</b>	Standard feature
<b>Test Button</b>	Standard feature
<b>Reset Button</b>	Standard feature
<b>CT-Loop Monitoring</b>	Standard feature
<b>Output Contacts</b>	Two Form C
<b>Analog Output</b>	0-1 mA
<b>Approvals</b>	UL Listed (E183688), GFR4000 only; PGR-6100, in Progress
<b>Warranty</b>	5 years
<b>Mounting</b>	DIN, Surface