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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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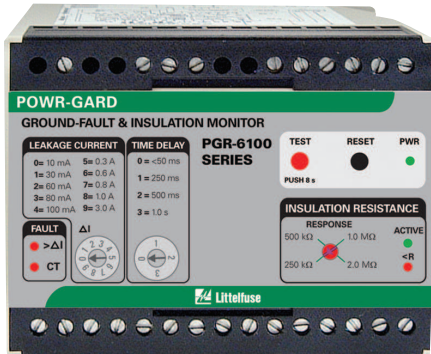
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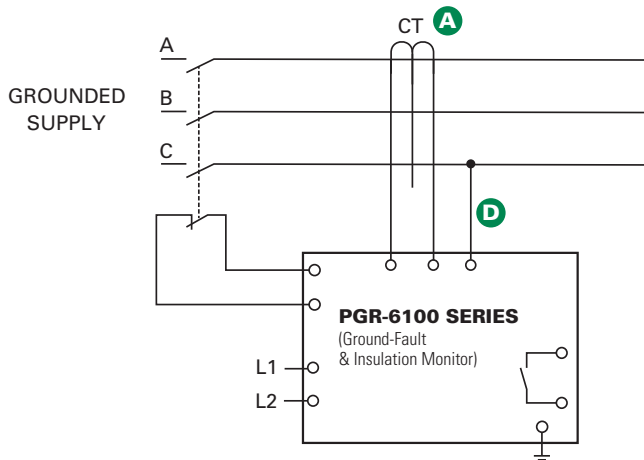


# PGR-6100 SERIES (GFR4000)

## Ground-Fault & Insulation Monitor



### Simplified Circuit Diagram



### Ordering Information

ORDERING NUMBER	CONTROL POWER
PGR-6100-120	120 Vac
PGR-6100-240 <sup>(1)</sup>	240 Vac <sup>(1)</sup>
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.





### 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-6100.

### Specifications

IEEE Device Numbers	
<b>Input Voltage</b>	Ground Fault (50G/N, 51G/N), Ground detector (64), Alarm Relay (74)
<b>Dimensions</b>	See ordering information <b>H</b> 75 mm (3"); <b>W</b> 100 mm (3.9"); <b>D</b> 115 mm (4.5")
<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) <sup>(1)</sup>
<b>Warranty</b>	5 years
<b>Mounting</b>	DIN, Surface