**PGR-8800 SERIES (D1000)**

**Arc-Flash Relay**

The PGR-8800 is a microprocessor-based relay that limits arc-fault damage by detecting the light from an arc flash and rapidly tripping. Phase-current-transformer inputs are provided for current-constrained arc-flash protection and, when so equipped, a programmable definite-time overcurrent function can be enabled. An optical sensor on the PGR-8800 and adjustable trip level reduce the chance of nuisance tripping by setting a threshold for ambient light. Sensors, inputs, and connections are monitored to ensure fail-safe operation. A secondary solid-state trip circuit provides a redundant trip path. A USB port is used for configuration and access to event logs and graphs.

**Optical Sensors**

The PGR-8800 accepts both PGA-LS10 and PGA-LS20/PGA-LS30 optical sensors, designed to collect light over a wide angle and with high sensitivity. For fast fault location, front-panel and sensor LED’s indicate sensor health and which sensor detected an arc fault.

**Sensor Placement**

The PGR-8800 Arc-Flash Relay and sensors are easily installed in retrofit projects and new switchgear with little or no re-configuration. Even elaborate systems with multiple power sources take minutes to configure using the relay’s built-in USB interface software.

Generally, it is recommended to mount 1 or 2 sensors per cubicle to cover all horizontal and vertical bus bars, breaker compartments, drawers, and anywhere that there is potential for an arc-fault. Threading a fiber-optic sensor through the cabinets and in areas where point-sensor coverage is uncertain results in complete coverage and an added level of redundancy. Even if policy is to only work on de-energized systems, all maintenance areas should be monitored to prevent potential damage and additional cost. At least one sensor should have visibility of an arc fault if a person blocks the other sensor(s).

**Ordering Information**

<table>
<thead>
<tr>
<th>ORDERING NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGR-8800-00 (UL, CE, CSA, RCM)</td>
<td>Arc-Flash Relay</td>
</tr>
<tr>
<td>PGR-8800-00-CC (UL, CE, CSA, RCM)</td>
<td>Arc-Flash Relay, Conformally Coated</td>
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</tbody>
</table>

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<thead>
<tr>
<th>ACCESSORIES</th>
<th>REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGA-LS10</td>
<td>Required*</td>
</tr>
<tr>
<td>PGA-LS20, PGA-LS30</td>
<td>Required*</td>
</tr>
<tr>
<td>PGA-1100</td>
<td>Optional</td>
</tr>
<tr>
<td>Current Transformer</td>
<td>Recommended</td>
</tr>
</tbody>
</table>

*At least one sensor is required. However, the exact number of sensors for proper coverage depends on the application.*
Continuous monitoring of optical sensors and inputs ensures protection

Two each: remote trip, inhibit, and reset inputs

Remotely view measured values, event records & reset trips

80mm (3.15"

Form C and status outputs

On-board event recorder helps with system diagnostics

Can be used in single-sensor systems, as a seventh sensor, and for calibration

18 LEDs provide at-a-glance status for module and I/O state

Phase-CT inputs provide overcurrent protection and prevent nuisance trips

Limits arc-flash damage and risk of injury

Ability to trip upstream device if the local breaker fails to clear the fault

Eliminate nuisance arc-flash trips and use for

20mm (0.79"

or a tie-breaker. Dimensions: See PGR-8800 Manual

PGA-1100 Diode Logic Unit

This module allows multiple PGR-8800 relays to trip the same breaker, for example an upstream or a tie-breaker. Dimensions: H 80mm (3.15"), W 20mm (0.79") D 70mm (2.76"

Current Transformers

Eliminate nuisance arc-flash trips and use for overcurrent protection.

NOTE (1) - Contact Littelfuse for trip coil voltages higher than 300 Vdc/Vac.

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