

IMPROVE SAFETY
WITH INSTANT
ARC-FLASH
DETECTION



PGR-8800 ARC-FLASH RELAY



Expertise Applied | Answers Delivered

**STOP
ARC-FLASH
DAMAGE
BEFORE IT
STOPS YOU**



Detect Arc-Flash Incidents Instantly to Minimize Damage



ELECTRICAL SYSTEMS NEED PROTECTION

Protection relays are designed to safeguard critical circuits and solve the most pressing problems faced by facility and safety managers—minimizing electrical safety hazards, saving cost, and reducing unnecessary downtime.



Increase Safety

- Shock Hazard
- Injury to Personnel
- Arc-Flash Hazards
- Open-CT Hazards
- Failed Resistors



Reduce Downtime

- Replacement Time
- Nuisance Tripping
- Intermittent Faults
- Unreliable Protection
- Calibration Time



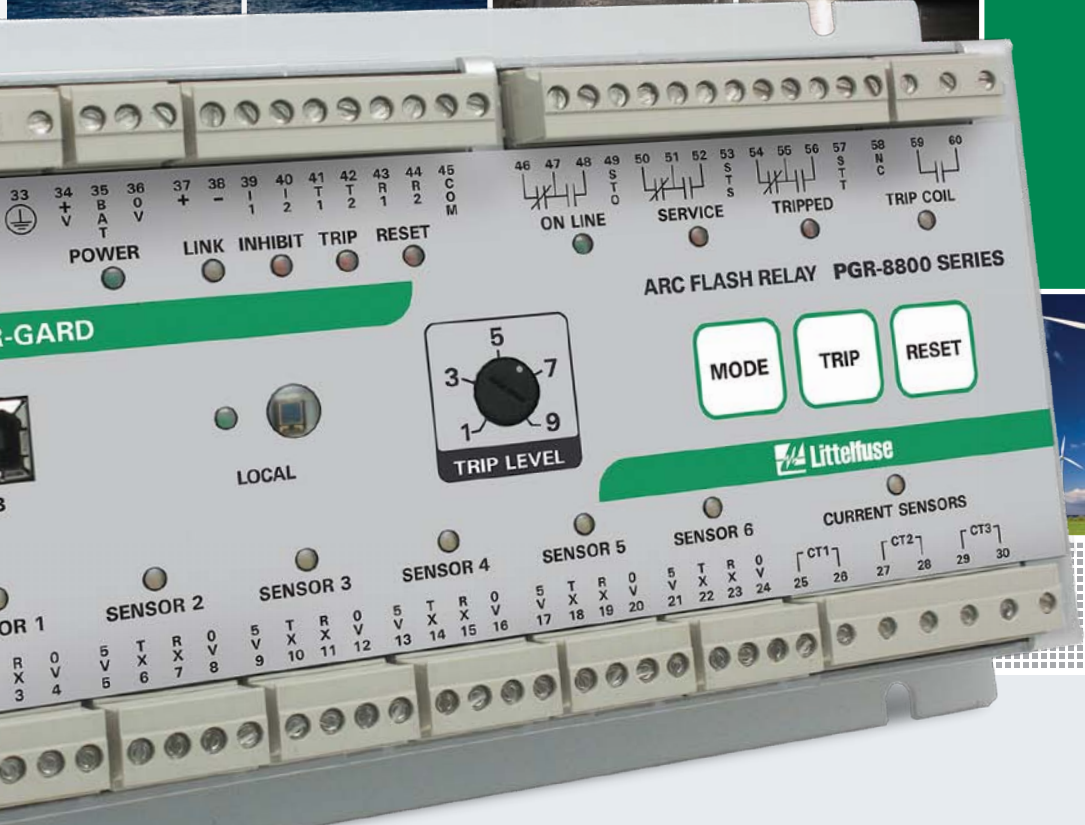
Lower Costs

- Fault Damage
- Equipment Replacement
- Calibration Costs
- Compliance Citations
- Motor Rewinds



Typical Applications

- Offshore Drilling
- Petrochemical
- Oil and Gas
- Wind Power
- Food and Beverage
- Power Generation
- Marine
- General Industrial



Reliable Arc-Flash Detection Without Nuisance Tripping

The Littelfuse PGR-8800 Arc-Flash relay reliably detects developing Arc-Flash incidents by looking for a combination of excess light and current. The PGR-8800 detects both conditions and offers programmable definite-time overcurrent protection and adjustable light trip-level to minimize nuisance tripping.

Light Detection

- Two types of sensors for different applications
- Adjustable light level and wide angle detection add flexibility
- Built-in LED to indicate local sensor health or trip state
- Application tools to help determine sensor placement and maintenance schedules

Overcurrent Detection

- Avoid nuisance tripping with current-supervised Arc-Flash trips
- Two user-defined definite-time overcurrent protection levels and times
- Phase Current Transformers for overcurrent detection



Easy Configuration for New and Existing Installations

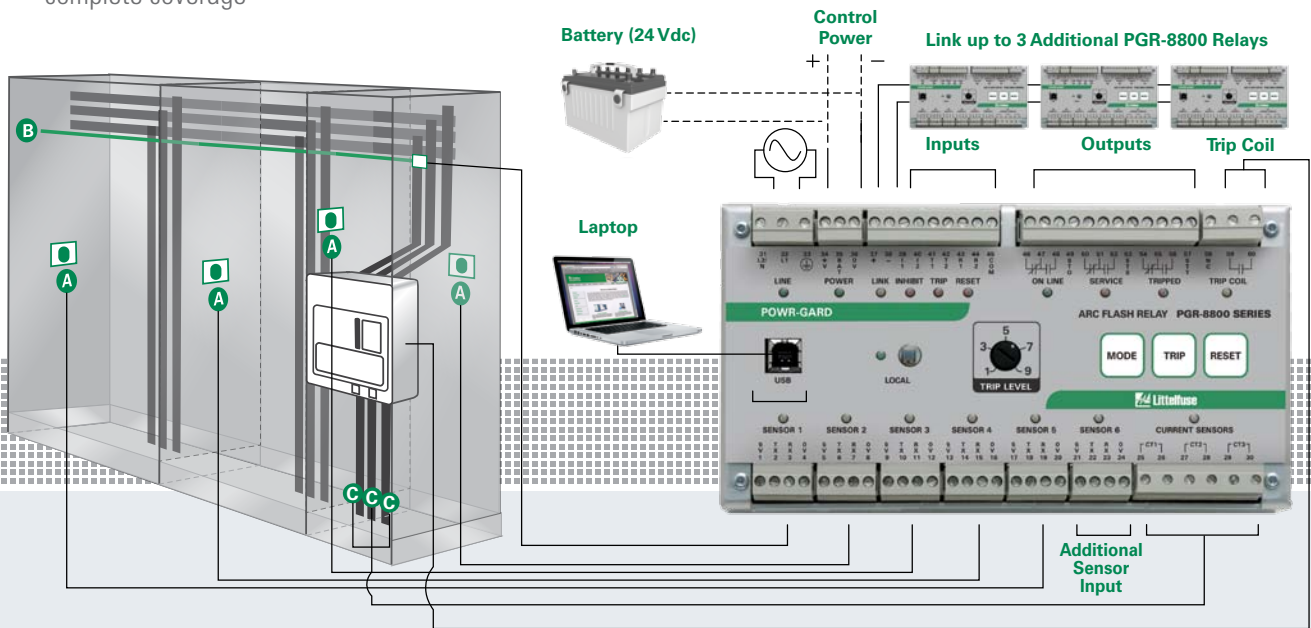
The PGR-8800 Arc-Flash Relay and sensors are easily retrofitted in existing switchgear or pre-installed in new equipment with little or no configuration. Even elaborate systems with multiple power sources take minutes to configure using the relay's built-in USB interface software.

Reduce the Risk of Arc Flash

- Detects Arc Flash in early stages
- Creates a safer system
- No air plenum or new switchgear is needed
- Scalable solution with up to 24 sensors for complete coverage

Economically Retrofit Existing Systems

- Compact, stand-alone unit
- Easily installed without changes to existing layout
- Flexible sensor configuration for any application
- No additional software is required



Sensor Placement

Generally, it is recommended to mount 1 or 2 sensors per cubicle to cover all horizontal and vertical busbars, 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 protection. 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).

Technical Specifications

Part Number	PGR-8800-00
IEEE Device Numbers	Overcurrent (50), Arc Flash (AFD)
Input Voltage	85-230 Vac, 12-60 Vdc, or 100-250 Vdc
Dimensions	H 130 mm (5.2"); W 200 mm (7.9"); D 54 mm (2.2")
Optical Trip Settings	10-40 klux, 300 μ s-2 s
Communications	Link up to 4 PGR-8800-00 units
Approvals	CE, Contact factory for UL
Warranty	5 years
Mounting	DIN, Panel



PGA-LS10 Point Sensor

Line-of-sight light sensor with a built-in LED to indicate sensor health or trip state. Comes standard with a 32-foot cable.



PGA-LS20 Fiber-Optic Sensor

A 360°, 26-foot fiber-optic sensor detects light along the entire length of the cable and has a built-in LED to indicate sensor health or trip state. Recommended installation is along busbars as well as in challenging spaces that have many compartments. Comes standard with two 32-foot cables



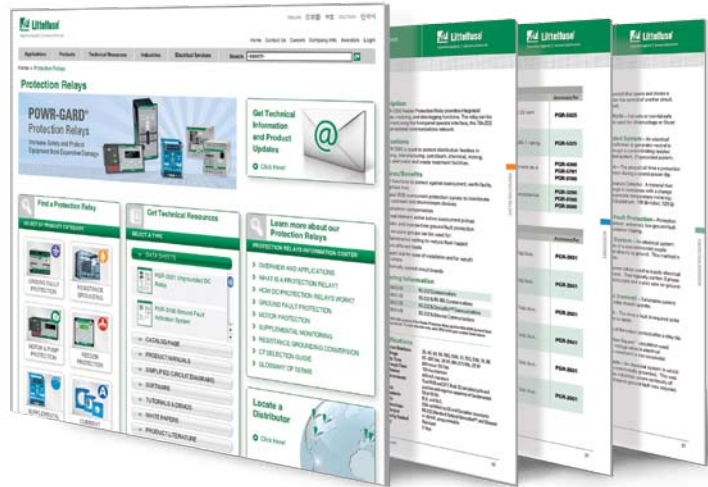
Phase Current Transformers

Phase Current Transformers (CTs) are required to detect phase currents. When retrofitting systems, existing CTs with a 5 A secondary can be used.

The Experts in Electrical Safety

Littelfuse POWR-GARD® products and services enhance the productivity and safety of electrical systems. POWR-GARD offers a full range of protection relays to safeguard equipment, as well as current-limiting fuses to decrease Arc-Flash exposure, fuseholders and fuseblock covers to reduce incidental contact and Electrical Safety Services and worker training to improve safety.

- Protection Relays
- Remote Indication Products
- Fuses and Fuseholders
- Electrical Safety Services
- Worker Training



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For over 35 years, Littelfuse POWR-GARD has helped OEM engineers, consulting engineers and end users select the right products to protect critical electrical equipment—supported by our full line of product catalogs and reference materials.

Protection Relay Catalog The comprehensive line of electronic and microprocessor-based protection relays safeguard equipment and personnel to prevent expensive damage, downtime or injury due to electrical faults.

Fuses and Fuseholders Catalog Littelfuse offers a complete circuit protection portfolio of industrial power fuses, including time-saving indication products for an instant visual blown-fuse identification, even on de-energized systems.

Motor Protection Relay Brochure Littelfuse provides a range of multi-function motor protection products that reliably protect small medium and large motors.

Electrical Safety Services Brochure Littelfuse POWR-GARD offers a complete package of safety services including Arc-Flash Hazard Assessments, Engineering Analysis, Warning Labels and Worker Training to meet OSHA standards.

To view all Littelfuse product catalogs, visit our website at www.littelfuse.com/catalogs

