











MINIMIZE ELECTRICAL HAZARDS







IMPROVE SAFETY & PRODUCTIVITY









# Safeguarding People & Equipment

Littelfuse has moved beyond fuses into protection relays and other components to offer a unique safety package to its customers. With Littelfuse, safety managers and plant engineers can protect their employees, equipment and productivity from electrical hazards.













#### **Fastest Arc-Flash Detection** on the Market

- Detects a developing arc flash in less than 1ms (PGR-8800, AF0500)
- Sends a trip signal to interrupt power before damage occurs
- Lowers Hazard Risk Category (HRC) of the equipment

#### **Broad Base of Fuses for Diverse Applications**

- Indicating fuses takes the guesswork out of replacement and increases up-time
- Tools to aid fuse cross-reference and selection for improved safety

#### **Medium Voltage Protection** for Motors and Transformers

- Fast delivery available
- R-Rated, E-Rated and potential transformer fuses































# **Enclosed Model**

Ground-Fault and Phase-Voltage Indicator



201-100-SLD Seal-leak Detection Relay

#### First UL Listed Industrial GFCI for Shock Protection

- Provides shock protection at 208 V, 240 V, 480 V and 600 V
- Safest product on the market, meets stringent UL 943C requirements
- Monitors ground-wire continuity and other potentially dangerous conditions

#### Meet NEC® Code Without **Bringing Voltage to the Door**

- Indicates ground faults and the presence of voltage on both grounded and ungrounded systems
- Meets NEC® Article 250.21 and CEC® Part 1. Section 10-106 (2) requirements for ungrounded systems

## **Detects Seal Failures on Submersible Pumps**

- Micro-controller based relay monitors the shaft seal of submersible pump motor
- Adjustable sensitivity setpoint for the probe resistor
- Compact plug-in design; DIN rail or 8-pin socket mount

























# **Space-Saving Protection for Motors and Branch Circuits**

- safer applications
- interrupting rating



PC-102 **Dual-Channel Switch** Seal-Leak Detection Relay

# **Protect Critical Power Electronics**

- Arc-barrier technology specially designed to improve semiconductor lifecycle
- Extremely current limiting to reduce peak let-through current
- Low watt loss values save energy wasted during operation



- Extremely current-limiting design for
- Smallest fuse with 300 kA
- Current up to 60A

## **Dual Protection Detects Seal Failures on Submersible Pumps**

- PC-102-DL: Dual Seal-leak detector PC-102-LT: Dual Seal-leak and overtemperature detector
- Compact design with finger-safe terminals
- Two Form C isolated contacts with LED status indicators





PC-XXX-LLC-CZ / PC-XXX-LLC-GM Liquid Level Controller

# **Controls Levels in Conductive Liquid Pumping Operations**

- Liquid level control with 2-probe inputs and SPDT output allows use in both conductive and non-conductive tanks
- Adjustable debounce time delay prevents nuisance tripping due to waves or splashing in tank
- Invertible relay logic allows use in pump-up and pump-down applications









Neutral-Grounding-Resistor System

Neutral-Grounding-Resistor Monitor



LSRX Load Sensor

#### **Increase Uptime and Reduce Arc-Flash Damage**

- Eliminates arc-flash hazard associated with ground faults (<5 A)
- Continuously monitors neutral-to-ground path for continuity

#### **Self-Powered Load Sensor for** use as AC Current Proof Relay

- No need for separate power control wiring; draws power from wire being monitored
- Quick-connect fast on terminals or depluggable screw terminals
- Monitors up to 200A loads













460-15-100-LLS Liquid Level Detection Relay

# **Detects Seal Failures on Submersible Pumps**

460-15-100-SLD

Seal-Leak Detection Relay

- Micro-controller based relav monitors the shaft seal of submersible pump motor
- the probe resistor
- DIN rail or surface mount



LSR-0 Load Sensor

#### **Detects Presence of Conductive Liquids**

- Adjustable debounce time delay prevents nuisance tripping due to waves or splashing in tank
- Invertible relay logic allows use in pump-up and pump-down applications
- DIN rail or surface mount



- Adjustable sensitivity setpoint for

#### **Self-Powered Load Sensor** for use as Proof Relay

- No need for separate power control wiring; draws power from wire being monitored
- Verifies current is flowing as intended
- Monitors up to 135A loads





# Local Resources for a **GLOBAL** Market





#### **Protection Relays & Controls** Catalog (PF130N)

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 Fuse Holders** Catalog (PF101N)

Littelfuse offers a complete circuit protection portfolio of industrial power fuses, including time-saving indication products for an instant visual blown-fuse identification.

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



#### Visit Technical Resources at Littelfuse.com

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