

Littelfuse®

Expertise Applied | Answers Delivered

PANEL SHOP & CONTROL SYSTEMS INTEGRATOR

INTEGRATE PROTECTION FROM ELECTRICAL HAZARDS

Littelfuse offers a wide variety of unique solutions specifically designed to meet the requirements of panel shops and systems integrators. Our products have features such as space-saving case sizes, plug and play setup, indication features on fuses and fuse holders, and remote Bluetooth* communications. Contact us for application expertise and technical support to help simplify incorporating electrical safety in to your design.



*Bluetooth is a trademark of its respective owner.

PRODUCT PORTFOLIO & FEATURES

UL Class Fuses

Littelfuse UL Class fuses offer quality overcurrent protection for all kinds of equipment. Littelfuse fuses are chosen over breakers due to their higher amperage in a smaller package, quicker response time, easy coordination, and no calibration required.

- Available in both indicating and non-indicating versions
- Best-in-class current-limiting performance available in Class RK5
- High interrupting rating (up to 300 kA)
- POWR-PRO® performance, dual-element design



Class CC and Midget Fuses

10 x 38 mm midget and Class CC fuses help provide supplemental overcurrent protection and have the capability to limit currents with fast acting reliability.

- Save 45–75 % space
- Fast-acting
- High-interrupting capacity
- Excellent current-limitation



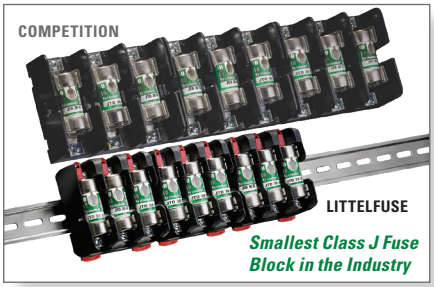
High-Speed Fuses

The POWR-SPEED® line of high-speed (semiconductor) fuses is designed for modern day sensitive power electronics devices that require superior protection against overcurrent.

- Extreme current-limiting protection
- Balanced performance for longevity
- Available in direct bus bar mount flush-end and blade designs to meet the needs of a global market.







Fuse Blocks and Holders

Enable easy fuse installation and replacement with fuse blocks, fuse holders, and fuse accessories.

- Compact, space-saving design
- Optional DIN-clip covers
- Indication available
- Snap to release–no tools required

Power Distribution Blocks

Specially designed covers provide protection against accidental shorting between poles caused by loose wires, tools, or other conductive material. They also protect personnel from accidentally contacting energized connectors.

- Space-saving designs
- IP20 protection rating



Surge Protective Devices

Surge protective devices (SPDs) provide equipment protection from transient overvoltage events lasting micro-seconds. By limiting the overvoltage to the equipment during these events, costly damage and downtime can be mitigated.

- Available in a wide range of operating voltages
- Provides thermal protection to eliminate catastrophic failure
- Visual indicator quickly identifies service requirements to avoid loss of protection
- Compact footprint increases design flexibility



Bluetooth Overload Relay

Monitor and control multiple MP8000 relays through the Littelfuse app on your smartphone. No need to open the control panel, which enhances worker safety.

- Stand next to the motor or pump—not the relay—to monitor start up on new installations
- Keep the panel door closed. Control and view relay settings from up to 30 feet away**
- Stores up to 1000 date/time stamped events with trip cause and more
- One model works on all motors 90–690 V ac single or 3-phase (and medium voltages with use of PTs)



Time Delay Relays

The Littelfuse SSAC line of timers include delay-on-make, delay-on-break, dual function, multifunction, and lockout functions.

- Prevents rapid recycling of compressor
- Provides brownout protection and prevents low-voltage start ups
- Encapsulated to guard against shock, vibration, and humidity
- Replaces thousands of competitive models



Load and Current Sensors

Littelfuse load and current sensors monitor up to 200 A loads.

- Available with fast-on terminals for quick installation
- Over or under current sensing with adjustable trip delays



**Bluetooth connectivity range may be reduced depending on the smartphone/tablet used, enclosure type or environmental factors.

Alternating Relays

Used to alternate between two loads and are commonly used in duplex pumping applications to balance the runtime of both pumps. The built-in debounce feature prevents the relay from changing state if the switch or float contact bounces momentarily.

- Debounce time delay prevents nuisance actuating caused by waves in the tank
- Duplexing models to handle lag versus lead pump applications
- LED indicators for quick visual load operation reference in duplexing applications

Arc-Flash Relays

Installed in new electrical gear, or easily retrofitted into existing switchgear with little or no configuration. Rapidly detect an impending arc flash and send a signal to interrupt power to protect your personnel and equipment.

- Lower the incident energy (IE) and PPE rating of your equipment
- Fast detection in less than 1 ms (select models)
- Flexible sensor configuration for any application

Industrial Shock Block® GFCI

The Shock Block is vital anywhere people, equipment, and water are present. The first permanently connected special-purpose GFCI that meets UL Standard 943C–designed for worker protection in industrial facilities. It is the only GCFI device on the market that also monitors the continuity of the ground circuit.

- UL943C inverse time trip curve detects and interrupts fault current to protect people and reduce the probability of nuisance tripping
- GFCI Class A, C, D, and EGFPD options

Ac Ground-Fault Relays

Sensitive ground-fault relays featuring advanced filtering will quickly and reliably detect the breakdown of insulation resistance caused by moisture, vibration, chemicals or dust.

- Microprocessor-based solutions with advanced digital harmonic filtering to prevent nuisance trips
- Non-volatile trip memory retains trip state when de-energized to simplify troubleshooting
- DIN-rail mount and small footprint

Ac-Dc Ground-Fault Relays

Complete and sensitive protection of VFDs to catch high-resistance ground faults before they escalate; detects faults from dc to 6000 Hz.

- Many VFDs do not have sensitive built-in ground-fault protection and are not compatible with High-Resistance Grounding (HRG)
- Metering capabilities
- Password-protected alarm and trip settings and optional network communications

Intrinsically-Safe Relays

Single or multi-channel, intrinsically-safe switch for interfacing between hazardous and non-hazardous areas. Designed to handle multiple uses including pump-up/pump-down controller or switch.

- Finger-safe terminals meet IEC 61000 safety requirements
- Isolated output relay allows connection to programmable logic controller (PLC) or control voltage

Voltage and Phase Monitors

Prevent motors from running with no load applied and provide protection due to blown fuses, broken wires, or worn contacts. The monitors help to prevent damaged machinery and injury of personnel.

- Protects against phase loss and reverse phase
- Low- and high-voltage trip

Neutral Grounding Resistor/HRG Monitoring

Provides continuous monitoring of the neutral-to-ground path to verify that the neutral grounding resistor (NGR) is intact and that it has not been bypassed or shorted.

- Open NGR renders current sensing ground-fault protection inoperative and could result in a false belief that the system is functioning properly
- A shorted NGR results in higher-than-expected ground-fault current

Pump Controller

This 5-channel pump controller handles multiple pump applications and can act as a 5-channel switch. Supports industry standards for pump-up and pump-down configurations and can indicate low, high, and out of sequence alarms. Can also be used as alternating and non-alternating pump control for jockey or emergency pumps.

- Duplex, triplex, or quadplex pump control
- Variable time delay/lag pump delay from 2–255 seconds
- Intrinsically-safe version available

Motor Protection

From basic to advanced, from standard to smart, we have the level of protection that's right for you. Use this checklist to easily select the degree of motor protection that you need for your application.

☐ SMART

This smart, universal relay can communicate directly with your smartphone or tablet via Bluetooth. No need to open the control panel. Monitor and control unlimited relays through the Littelfuse MP8000 app on your smartphone or tablet from a safe distance.



MP8000 Bluetooth Overload Relay

☐ ADVANCED

Offering an advanced level of protection, multi-functional relays with on-board display, customizable trip curves, and optional communications provide protection for low- and medium-voltage motors.



MotorSaver® 777-P2 Current/Voltage Monitor



MPU-32 Motor Protection

☐ STANDARD

In addition to voltage and phase protection, a standard level of protection allows you to monitor the load side and log events of low voltage motors. Plus, you can view conditions on an optional hand-held display in real time for easy troubleshooting.



455 Voltage Monitor Relay



Informer-MS

☐ BASIC

With a basic level of protection, you can monitor the voltage going into a low voltage motor and detect faulty conditions that cause premature motor failure and unplanned downtime.



460 Monitor

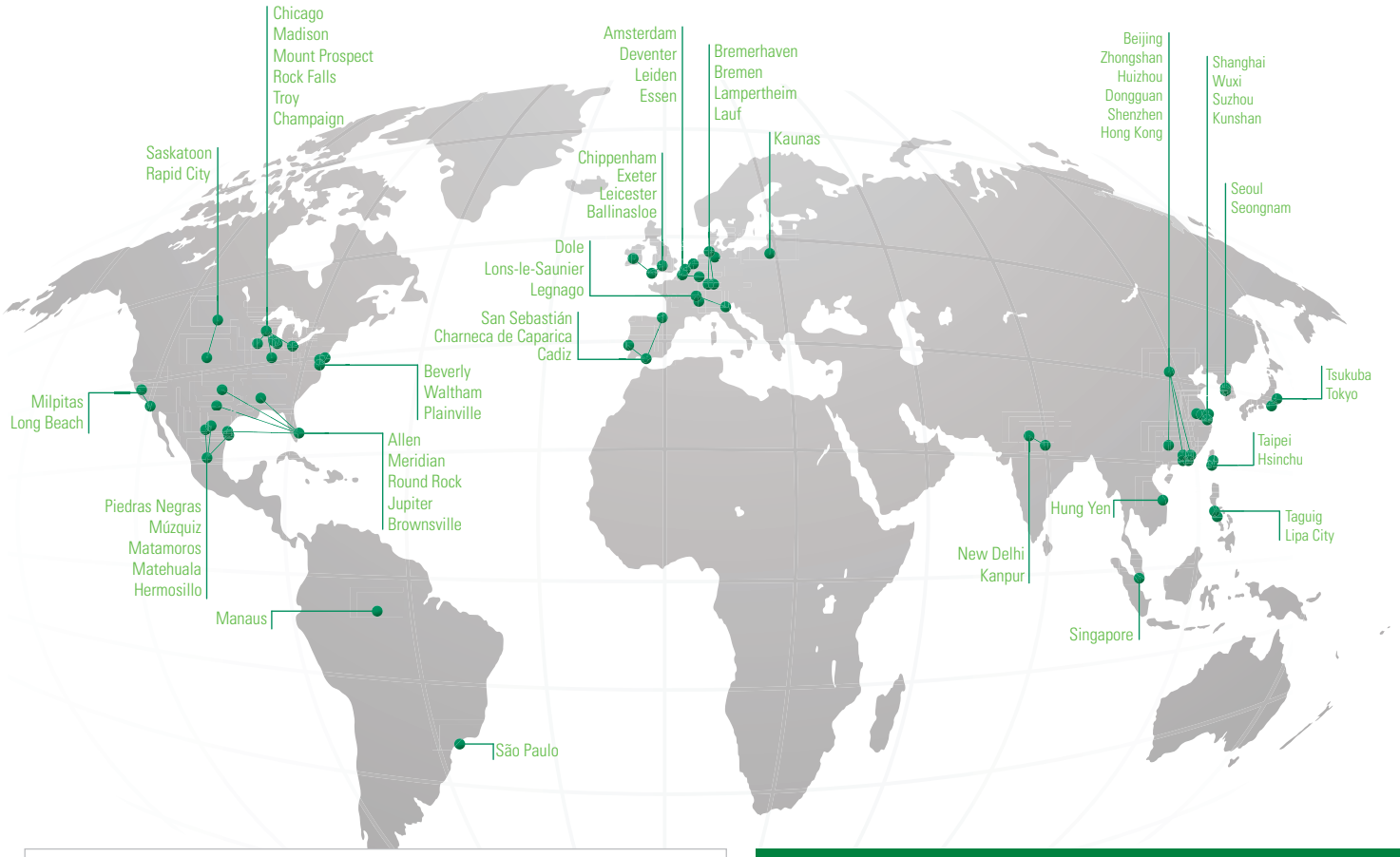


201A-AU Monitor



PGR-6100 Ground-Fault & Insulation Relay

LOCAL RESOURCES FOR A **GLOBAL** MARKET



Littelfuse.com/Industrial

For a comprehensive library of resources including datasheets, product manuals, white papers, application guides, demos, online design tools, catalogs, and more, visit **Littelfuse.com/TechnicalResources**

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Littelfuse products are certified to many standards around the world. To check certifications on specific components, please refer to the specific product datasheet on Littelfuse.com.

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