

FUSES & FUSE HOLDERS  
PROTECTION RELAYS  
ELECTRONIC CONTROLS  
SWITCHES  
TEMPERATURE SENSORS

# Industrial Product Portfolio

## Your Partner for Dependable Protection, Safety, & Control

The Industrial division of Littelfuse delivers vital products to address customer needs for protection, safe control, and distribution of electrical power in industrial applications. Our product portfolio includes a comprehensive line of fuses, fuse holders, protective relays and controls, temperature sensors, panels, switches and industrial controls. This portfolio is designed to minimize electrical safety hazards, limit equipment damage, improve productivity, and safeguard personnel from injury due to electrical faults.

Technically speaking, professionals in construction, manufacturing, mining, oil & gas, renewable energy, and many more industries rely on Littelfuse for rugged, lasting protection for their designs and critical applications.

### Our Products Improve Safety While Reducing Costs and Hazards in the Workplace



#### Improve Safety

- Shock Hazards
- Injury to Personnel
- Arc-Flash Hazards
- Open-CT Hazards
- Failed Resistors
- High SCCR Devices
- Touch Safe



#### Reduce Cost

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



#### Minimize Downtime

- Replacement Time
- Nuisance Tripping
- Intermittent Faults
- Unreliable Protection
- Calibration Time
- Fuse Indication
- Fuse Cycling

### ...Across Many Industries

- Construction
- Data Centers
- EV Charging
- Food & Beverage
- HVAC/R
- Manufacturing
- Medical
- Mining
- Oil & Gas
- Power Generation
- Pulp & Paper
- Solar, Wind, & Energy Storage
- Telecom
- Water/Wastewater

### An Extension of Your Team



#### Technical Hotline (1-800-TEC-FUSE or 1-800-832-3873)

Littelfuse engineers are a phone call away to help identify potential issues and provide product recommendations to resolve problems.

#### Application and Field Support

Our experienced product and application engineers work step-by-step with customers from design to installation to determine the best solution.

## Safeguarding People and Equipment Fuses & Fuse Holders



### UL Class Fuses

Littelfuse manufactures a complete selection of UL Class fuses for protecting electrical systems and personnel. Innovative features such as indication, improve productivity, while enhancing the safety of systems.

[Littelfuse.com/IndustrialPowerFuses](http://Littelfuse.com/IndustrialPowerFuses)



### Medium Voltage Fuses

Littelfuse E-rated and R-rated medium voltage fuses protect transformers, potential transformers, feeders, and motor circuits. Designs are available to cover a wide range of current, voltage, interrupting rating, and mounting configurations to fit unique applications.

[Littelfuse.com/MediumVoltage](http://Littelfuse.com/MediumVoltage)



### Supplemental 10 x 38 mm Fuses

An extensive range of 10 x 38 mm fuses provides compact supplemental protection for a wide variety of applications. Availability in time-delay, fast-acting, board-mount, or solar versions, with ratings ranging from 125 to 1000 volts and 1/10 to 30 amperes, allows for a variety of design options.

[Littelfuse.com/10x38Fuses](http://Littelfuse.com/10x38Fuses)



### Fuse Blocks & Holders

Original equipment manufacturers and designers select Littelfuse fuse blocks and holders for their compact designs, indication feature, and the flexibility of DIN-rail mounting.

[Littelfuse.com/FuseBlocks](http://Littelfuse.com/FuseBlocks)



### Custom OEM Product Solutions

Littelfuse understands that existing solutions may not solve all design challenges. Leveraging years of experience, our engineering team can collaborate with customers to develop a unique solution for specific applications such as those found in HVAC systems, lighting fixtures, or high volume OEM opportunities.

[Littelfuse.com/IndustrialOEM](http://Littelfuse.com/IndustrialOEM)



### POWR-SPEED® Fuses

Designed for sensitive power electronic devices, these fuses offer extreme current-limiting protection and balanced performance for longevity. They are available in flush-end, DIN and bolted-blade style mounted terminations.

[Littelfuse.com/Powr-Speed](http://Littelfuse.com/Powr-Speed)



### Battery Energy Storage Fuses

Battery protection requires higher dc voltage, dc current and interrupting rating fuses than other applications. These specialty fuses deliver high-speed protection at the increased voltage coupled with better interrupting ratings, to prevent costly catastrophic failures due to overcurrents.

[Littelfuse.com/BatteryFuses](http://Littelfuse.com/BatteryFuses)



### Solar Fuses

A leader in photovoltaic fuse technology, Littelfuse offers fuses and holders up to 1500 V dc for both high-current and low-current applications.

[Littelfuse.com/SolarFuses](http://Littelfuse.com/SolarFuses)



### Distribution & Splicer Blocks

POWR-BLOKS power distribution blocks offer a safe, convenient way for splicing cables and managing power distribution requirements within panels and systems. Touch-safe blocks and available covers enhance protection by reducing the risk of accidental contact.

[Littelfuse.com/PowrBlocs](http://Littelfuse.com/PowrBlocs)

## Protection Relays & Controls



### Feeder Protection

Protect circuits from overcurrent, ground faults, phase loss, overload, and other detrimental conditions.

[Littelfuse.com/FeederProtection](http://Littelfuse.com/FeederProtection)



### Arc-Flash Protection Relays

Our arc-flash relays can detect a developing arc-flash incident and send a trip signal to interrupt power before significant damage occurs.

[Littelfuse.com/ArcFlash](http://Littelfuse.com/ArcFlash)



### Resistance Grounding/Monitoring

Limit the ground-fault current in order to prevent unwanted fault damage. High-resistance grounding eliminates arc-flash hazards and transient over-voltages associated with ground faults.

[Littelfuse.com/ResistanceGrounding](http://Littelfuse.com/ResistanceGrounding)



### Timers & Flashers

Delay starting and stopping loads, cycling, and sequencing of motors, pumps, compressors, heaters, and lighting.

[Littelfuse.com/TimersFlashers](http://Littelfuse.com/TimersFlashers)



### Trailing-Cable Protection

Continuously monitor the integrity of the ground-return path to protect portable equipment from hazardous voltages caused by ground faults.

[Littelfuse.com/TrailingCableProtection](http://Littelfuse.com/TrailingCableProtection)



### Single-Function Relays

Provide a compact and cost-efficient solution typically used on low-voltage applications and include voltage and phase monitors, liquid-level controls, alternating relays and load sensors.

[Littelfuse.com/SingleFunctionRelays](http://Littelfuse.com/SingleFunctionRelays)



### Ground-Fault Protection 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.

[Littelfuse.com/GroundFaultProtection](http://Littelfuse.com/GroundFaultProtection)



### Industrial Shock Block® GFCI

The first permanently connected special-purpose GFCI that meets UL Standard 943C—designed for worker protection in industrial facilities.

[Littelfuse.com/ShockProtection](http://Littelfuse.com/ShockProtection)



### Motor & Pump Protection

A wide range of current-, voltage-, and temperature-based protection for motors and pumps, including an innovative Bluetooth\* user interface.

[Littelfuse.com/MotorProtection](http://Littelfuse.com/MotorProtection)

[Littelfuse.com/PumpProtection](http://Littelfuse.com/PumpProtection)

\*Bluetooth is a trademark of its respective owner.



### Industrial Solid-State Relays

Get superior uptime, safe and reliable performance for frequent on/off switching.

[Littelfuse.com/SSR](http://Littelfuse.com/SSR)

## Temperature Sensors



### Thermistor Probes and Assemblies

Littelfuse probe assemblies are invaluable for sensing temperature in a variety of industries. Standard and customized probe assemblies offer very precise and extremely reliable thermal monitoring in the most demanding applications.

[Littelfuse.com/TempSensingProducts](http://Littelfuse.com/TempSensingProducts)



### NTC and PTC Thermistors

Littelfuse leaded thermistor options include highly-accurate precision interchangeable thermistors, high temperature axial-leaded glass-encapsulated thermistors and glass-coated radial-leaded chip thermistors.

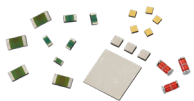
[Littelfuse.com/LeadedThermistors](http://Littelfuse.com/LeadedThermistors)



### RTD Elements and Probe Assemblies

Littelfuse RTDs exhibit a nearly linear temperature-resistance curve as well as high accuracy over a very wide temperature range. Their unique characteristics result in a device especially suitable for use in extreme environmental conditions.

[Littelfuse.com/RTDTempSensingProducts](http://Littelfuse.com/RTDTempSensingProducts)



### Chip and MELF-Style Thermistors

Littelfuse surface mount thermistors are manufactured using the most advanced equipment and technology available. They come in a variety of sizes and configurations suitable for mounting using solder, wire bond, or epoxy.

[Littelfuse.com/SurfaceMountThermistors](http://Littelfuse.com/SurfaceMountThermistors)

## Panels & Switches

### Shunt-Trip Switches & Coordination Panels



The shunt trip disconnect switch and coordination panels provide a simple, time-saving and economical solution for applications that require strict adherence to codes and standards. Common applications include elevators, data processing, and emergency systems.

[Littelfuse.com/LFCP](http://Littelfuse.com/LFCP)

[Littelfuse.com/LPS](http://Littelfuse.com/LPS)

[Littelfuse.com/LCP](http://Littelfuse.com/LCP)



### Fuse Disconnect Switches

The Class J fuse disconnect switch combines a switch and multiple fuses in a single, compact device. It offers a simpler way to manually open and close a circuit while safeguarding against overcurrent and short circuits. When it detects an overload or short circuit, the fuse blows automatically to open or break the circuit and shuts off the equipment. Applications include HVAC, panels, switchboards, compressors and UPS systems.

[Littelfuse.com/ClassJFuseDisconnectSwitch](http://Littelfuse.com/ClassJFuseDisconnectSwitch)

## Industrial Controls



### Capacitors

Run capacitors, also known as start capacitors, are engineered to boost the current or reduce the power factor to an electrical motor. Capacitors are available with single- and dual-rated values, as well as round or oval case options.

[Littelfuse.com/MotorRunCapacitors](http://Littelfuse.com/MotorRunCapacitors)



### Residual Current Monitors

Detect dc and/or ac residual currents in ac or dc installations. These RCMs are ideally suited for use with Electric Vehicle charging cables (Mode 2 Protection) and EV charging stations (Mode 3 Protection).

[WesternAutomation.com](http://WesternAutomation.com)



### Contactors

Used in commercial and residential HVAC applications, Littelfuse contactors are designed with consistent silver thickness for increased product life. Plus, all contactors undergo rigorous testing and validation in house.

[Littelfuse.com/DefinitePurposeContactors](http://Littelfuse.com/DefinitePurposeContactors)



### Auxiliary Switches

Used to switch auxiliary loads below 10 amp, auxiliary switches are designed to fit all models of Littelfuse 3-pole contactors.

[Littelfuse.com/AuxiliarySwitches](http://Littelfuse.com/AuxiliarySwitches)



### Mechanical Relays

Littelfuse offers general-purpose relays that control circuits through a low-power signal. Actuated with an electro-magnetic current, these relays create a closed circuit within the device, making them ideal for HVAC systems, standby power supplies, and telephone exchanges.

[Littelfuse.com/MechanicalRelays](http://Littelfuse.com/MechanicalRelays)



### Transformers

Littelfuse offers transformers engineered to change one ac voltage to another by magnetic induction. These heavy-duty transformers are available with primary and secondary voltages between 20 to 500 VA.

[Littelfuse.com/Transformers](http://Littelfuse.com/Transformers)

## Industrial Success Stories



### Solar: Shining Light on Power Protection

When one of the leaders in the solar industry was designing their next generation panels, they came to Littelfuse because of our history of innovation and experience with over 40 million devices installed in photovoltaic power systems worldwide. The Littelfuse patented fuse technologies were chosen as the preferred solution because they work seamlessly within a wire harness for unsurpassed reliability.



### HVAC/R: Climate of Reliability

A major furnace manufacturer has a reputation for extreme environmental testing of their products before the design makes it to market. They know to trust the reliability of Littelfuse fuse, relay and timer components in their designs to provide the ultimate protection that stands up to rigorous testing. Our OEM customers rely on the Littelfuse reputation for making extreme reliability an everyday practice.



### Construction: Protection Built for Safety

One of the top teaching hospitals in the United States, offering leading-edge care to more than 100,000 patients each year in the emergency room alone, was constructed using Littelfuse LCP series panels to keep their critical systems safely powered. They trusted the Littelfuse coordination panels to provide coordination between their Emergency Systems and Healthcare Essential Electrical Systems required by NEC. The Littelfuse UL Listed solution provided cost savings and increased safety; overall, improving the health of their systems.



### Food & Beverage Processing: Recipe for Safety

A global food manufacturer with a goal to send everyone home safe from work every day uses Shock Block GFCI as a failsafe method to prevent electrical shock and eliminate risk to workers. In their manufacturing process, they use stainless equipment that is subject to frequent wash downs. The combination of electricity, metal, and water is a recipe for dangerous electrical incidents. Safety training and proper use of PPE are stressed, but there's still a risk of human error. This manufacturer uses the engineering control, SB5000, to remove the risk of human error and keep workers safe.



### Oil & Gas: Refined Power Protection

Littelfuse industrial products such as ground-check monitors are used by one of the largest producers of crude oil from oil sands. Our high-resistance grounding packages are found on oil and gas drilling rigs to reduce ground-fault troubleshooting time by 90%. Refineries producing 140,000 barrels a day rely on Littelfuse to protect their variable-frequency drives from ground faults. Fracking firms depend on Littelfuse circuit protection for service mains and injection panels. Upstream, midstream, or downstream. No matter where safety is needed, Littelfuse is there to deliver reliable protection.



### Mining: Power and Protection Run Deep

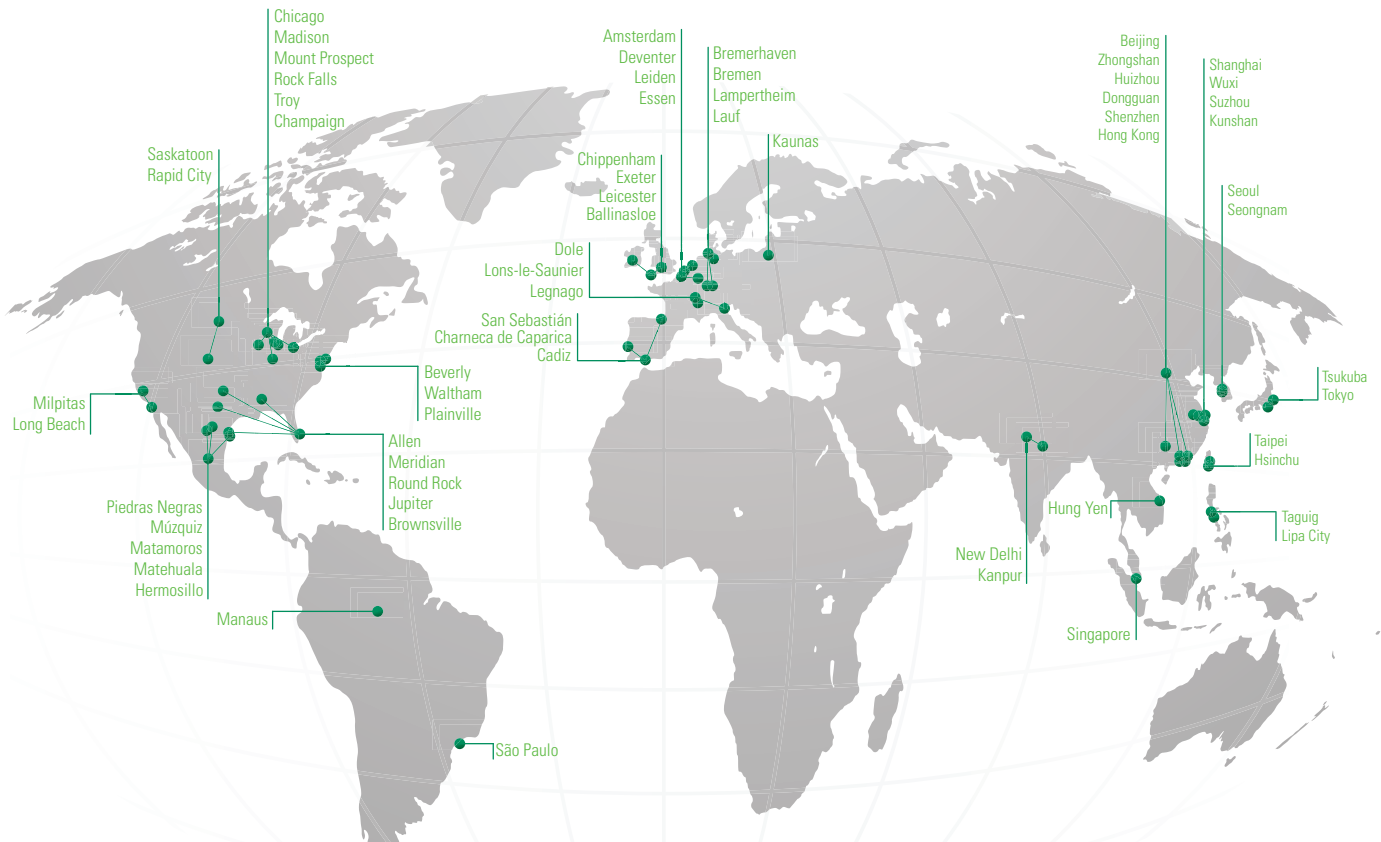
When the world's largest fertilizer company is mining for potash 1000 meters underground, they come to Littelfuse because of our reputation for quality and engineering expertise. There is no room for poor quality in mining. Littelfuse products are an integral part of the electrical systems that power and protect critical applications in the harshest underground and above ground mining environments. The world's top mining companies trust Littelfuse for protection from electrical hazards.



### Battery Energy Storage Systems: Packing in More Power with the Right Protection

A battery energy storage system (BESS) integrator wanted to provide its utility customer the ability to respond faster to increases in power demand while lowering its operating costs. The integrator selected lithium ion batteries to address the utility's requirement for a higher-capacity battery pack but needed a fast-acting fuse with a higher short-circuit current rating to protect it. With 150 kA dc breaking capacity, the Littelfuse PSR series high-speed semiconductor fuse offered the protection the integrator wanted to reduce the dc combiner count and add more battery banks. This design offered the utility a faster and more cost-efficient power demand response.

# 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](https://www.littelfuse.com/TechnicalResources)

### North America

**Littelfuse World Headquarters**  
8755 West Higgins Road, Suite 500  
Chicago, IL 60631, USA

**Littelfuse SymCom**  
1241 Concourse Drive  
Rapid City, SD 57703, USA

**Littelfuse Startco**  
140 – 15 Innovation Boulevard  
(The Galleria Building)  
Saskatoon, SK S7N 2X8, Canada  
Tel: +1-306-373-5505

**Littelfuse Hartland Controls**  
807 Antec Road  
Rock Falls, IL 61071, USA  
Tel: +1-815-626-5170

### Fuse and Relay

**Technical Support:**  
Tel: +1-800-TEC-FUSE  
Tel: +1-800-832-3873  
Fuses: [techline@littelfuse.com](mailto:techline@littelfuse.com)  
Relays: [relays@littelfuse.com](mailto:relays@littelfuse.com)

**Customer Service:**  
Tel: +1-800-227-0029  
E-mail: [PG\\_CSG@littelfuse.com](mailto:PG_CSG@littelfuse.com)

### Asia

**Littelfuse**  
Unit 1604B Desay Building,  
Gaoxin Nanyi Ave.  
Hi-Tech Industrial Park  
Nashan District  
Shenzhen, 518057, China  
+86 755 8207 0760

### Europe

**Littelfuse**  
Julius-Bamberger-Str. 8a  
Bremen, D-28279, Germany  
+49 421 82 87 3 147

**Western Automation**  
now part of **Littelfuse**  
2 Atrius Place, Poolboy,  
Ballinalsee, Co. Galway,  
H53 TD 78, Ireland  
Tel: +353 (0) 90 9643359



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.

**Disclaimer Notice** – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at [www.littelfuse.com/product-disclaimer](https://www.littelfuse.com/product-disclaimer).