



Expertise Applied | Answers Delivered



ELECTRICAL PRODUCT PORTFOLIO

Fuses & Fuse Holders • Protection Relays
Electronic Controls • Custom-Engineered Products

A Full Range of **POWER FUSES, PROTECTION RELAYS & CONTROLS**

With over 85 years of experience, Littelfuse has developed products to protect electrical equipment used in mining, petrochem, marine, alternative energy, HVAC and industrial applications. We offer industry leading power fuses, protection relays and custom power centers as well as generator protection, controls and alarm panels.

Now a part of Littelfuse, SymCom and SSAC bring a line of electronic products for monitoring, protecting and controlling motors, pumps, timing controls, and custom designs. Our expanded electrical products portfolio allows us to better serve our customers with products that improve safety and reduce downtime.

Littelfuse Electrical Product Portfolio Includes:

POWR-GARD® FUSES

SE **STARTCO®**
ENGINEERING LTD.

SELCO

Industrial
SHOCK BLOCK™
LITTELFUSE® Products

 **SymCom**

MotorSaver
ELECTRONIC MOTOR
CONTROL & PROTECTION

PumpSaver
ELECTRONIC PUMP
CONTROL & PROTECTION

SSAC®

Our Products Improve Safety while Reducing Costs & Hazards in the Workplace



IMPROVE SAFETY

Shock Hazard
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
Footprint Reduction



MINIMIZE DOWNTIME

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

Industries & Applications:

- Mining
- Construction
- HVAC
- Oil & Gas
- Marine
- Water & Wastewater
- Pulp & Paper
- Shore-to-Ship Power
- Data Centers
- Manufacturing Controls
- Solar/Alternative Energy
- OEMs
- Telecom
- Maintenance & Repair
- Power Generation

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/Fuses



Medium Voltage Fuses

E-rated and R-rated medium voltage fuses from Littelfuse 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 your unique applications.

Littelfuse.com/MediumVoltage



Solar Fuses

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

Littelfuse.com/Solar



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



High-Speed Fuses

Littelfuse high-speed fuses protect critical power semiconductors against short circuits in applications including inverters, variable-speed drives, UPS and DC drive systems.

Littelfuse.com/Semiconductor



10 x 38 mm Fuses

An extensive range of 10 x 38 mm fuses provide 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/Fuses



Custom OEM Products

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



Distributor & 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 the safety by reducing the risk of accidental contact.

Littelfuse.com/PowrBlokS

APPLICATION SPECIFIC PROTECTION & CONTROL



Trailing Cable Protection Relays

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

Littelfuse.com/TrailingCableProtection



Engine Diagnostics

The EngineEye diagnostic unit can improve the efficiency and performance of combustion engines by measuring and analyzing the engine combustion process.

Littelfuse.com/EngineDiagnostics



Generator/Engine Protection & Control

Our line of generator protection and control equipment offers synchronizing, frequency control, load sharing, power management, engine control and more for marine, emergency or power generation applications.

Littelfuse.com/GeneratorControls



Process Alarm Solutions

Monitor instantaneous current, temperature or pressure, and include local indication, alarm and event logging.

Littelfuse.com/AlarmMonitoring

PROTECTION RELAYS & CONTROLS



Motor & Feeder Protection Relays

Prevent expensive damage to motors caused by overloads, jams, phase loss or unbalance, heat, heavy start-ups or excessive operational cycles.

Littelfuse.com/MotorProtection



Ground-Fault Protection Relays

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

Littelfuse.com/GroundFaultProtection



Arc-Flash Protection Relays

Our Arc-Flash relays can rapidly detect developing Arc-Flash incidents and send a trip signal to interrupt power before significant damage occurs.

Littelfuse.com/ArcFlashProtection



Industrial Shock-Block™ GFCI

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

Littelfuse.com/IndustrialShockBlock



NGR Package

Neutral-Grounding Resistors (NGRs) are used to ground power systems by inserting a resistor between the system neutral and ground.

Littelfuse.com/ResistanceGrounding



Resistance-Grounding Monitors

High-Resistance Grounding eliminates Arc-Flash Hazards and transient overvoltages associated with ground faults, and can allow for continuous operation during a ground fault.

Littelfuse.com/ResistanceGrounding



Timers & Flashers

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

SSAC.com



Single-Function Relays

Our wide range of compact and cost-efficient single function relays are typically used on low-voltage applications and include Enhanced Overload Relays, Alternating Relays, Voltage and Phase Monitors.

SSAC.com SymCom.com
Littelfuse.com/SingleFunctionRelays



Load Sensors

Detect if the load is running or if there is an overload or underload condition.

SSAC.com



Liquid Level Controls

Combines resistance sensing circuitry with solid-state timing to provide single probe level maintenance.

SymCom.com

CUSTOM-ENGINEERED PRODUCTS



Custom-Engineered Modules

Built to withstand the harshest conditions and reduce the total cost of equipment ownership in below or above ground mining and oil & gas applications.

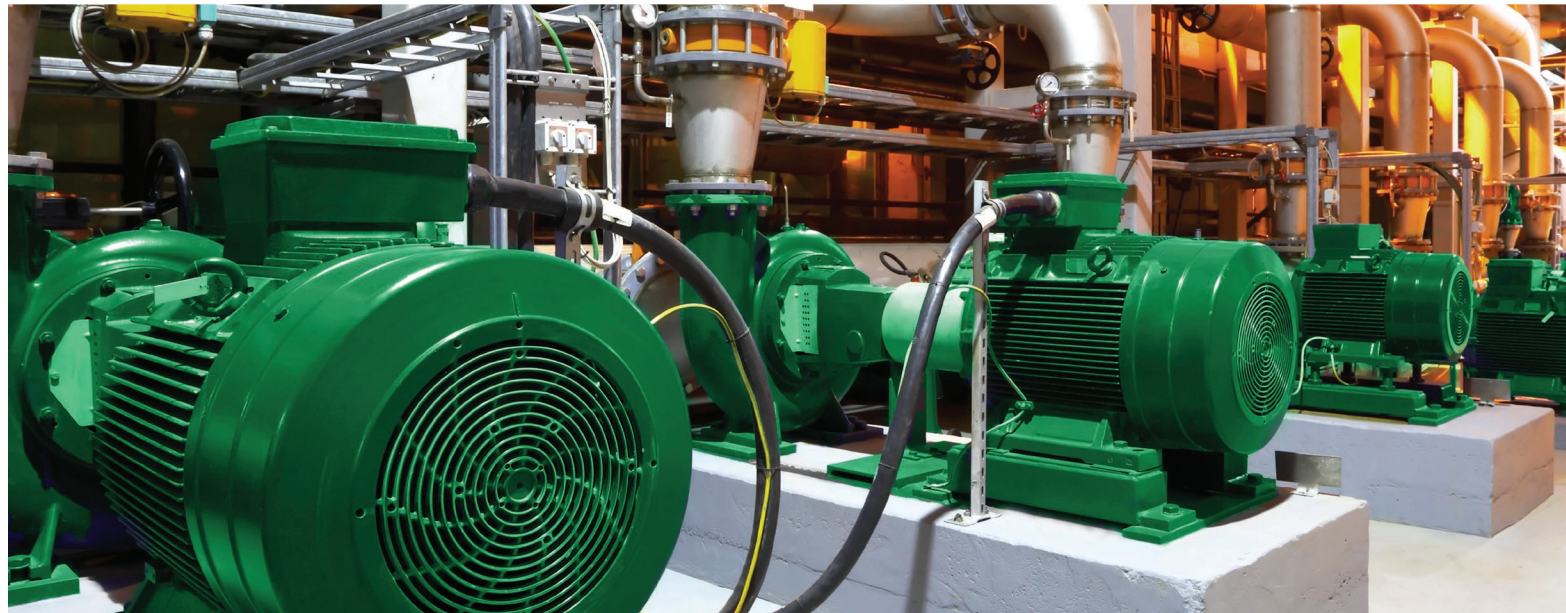
Littelfuse.com/CustomProducts



Electrical Switch Panels

The POWR-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.

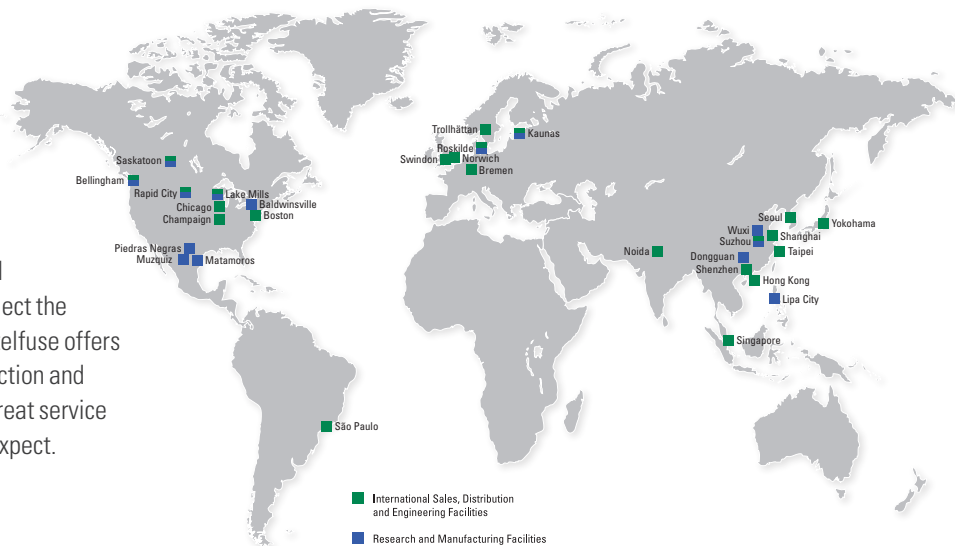
Littelfuse.com/LPS



Local Resources for a **GLOBAL** Market

Littelfuse products help protect electrical equipment used in marine, mining, petrochem and general industrial applications. We offer a broad and reliable selection of fuses, fuse blocks, protection relays and generator controls to improve safety and reduce downtime.

For decades, we have helped OEMs, electrical installers, design engineers and end-users select the right product for their applications. Today, Littelfuse offers a broader range of products addressing protection and control needs while still providing the same great service and support that customers have learned to expect.



Littelfuse electrical product portfolio includes:



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

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WWW.LITTELFUSE.COM/ELECTRICAL

A Full Line of Catalogs:

Protection Relays & Controls Catalog (PF130)

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.

SymCom/SSAC Catalogs

SymCom and SSAC are leaders in electronic control and protection for all types and sizes of motors, pumps, timers and flashers used in many applications.

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



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

Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, but are subject to changes without notice. Visit Littelfuse.com for the most up-to-date technical information.