

Power Electronics

Safety & Reliability of
Electrical Power



Safety & Reliability for Electrical Power

Mersen brings the relentless pursuit of power electronics protection to your door. You can build on our extensive product expertise and unsurpassed service.

A global manufacturing company with a century of experience, Mersen has remained strong and viable by consistently focusing on our day-to-day mission — ensuring the integrity of the equipment our devices protect and the safety of people working around them. You can count on Mersen as a single-source supplier of electrical and thermal protection products. By combining our extensive product line with the knowledge of our application experts, we have the unique ability to evaluate your needs and deliver the right solution.

You can build on our experience.

With more than 100 years experience, Mersen has built a reputation for its “relentless pursuit of electrical protection.” Our zealous commitment to critical research in electrical safety has enabled us to turn industry knowledge into products and services customers can rely on. We consistently go the extra mile by helping our customers increase their effectiveness, simplify applications and enhance productivity. For unbeatable technical support teams, design assistance in the earliest stages of an application through to final development, and a customer and sales service team that is easy to do business with, turn to Mersen.

Our product expertise for power electronics applications:

- Semiconductor fuses & fuse holders
- High speed fuses & fuse holders
- Control fuses & fuse holders
- Air and liquid cooled heatsinks
- Disconnect switches
- Surge protective devices
- Power distribution blocks
- High power switches
- Medium voltage fuses

Serving companies that manufacture:

- Drives
- Induction heating
- Inverters
- Motor controllers
- Rectifiers
- UPS
- Welding equipment

"Electricity runs the world. Mersen keeps it safe & reliable."

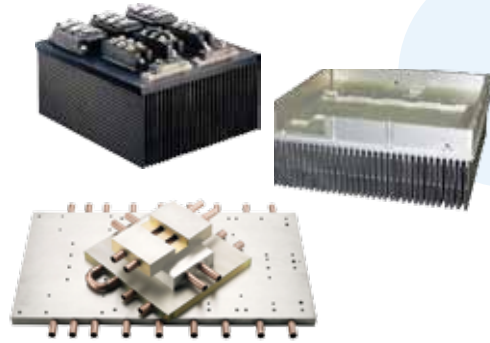


Power Electronics Protection Solutions

Air & Liquid Cooled Heatsinks and Thermal Management Products

Mersen (formerly R-Theta Thermal Solutions) offers innovative Fabfin® heatsinks, the original, no glue, very rugged, high performance, fabricated heatsink. It is available in four standard fin spacings in any height up to 118 mm. We also offer a broad range of extruded sections to cool semiconductors.

- Air Cooled Heatsinks: FabFin®, Hollowfin, mixed metals and integrated modules
- Liquid Cooled Heatsinks: Aquasink® Aquasurf®, and Aquamax®
- Extrusions

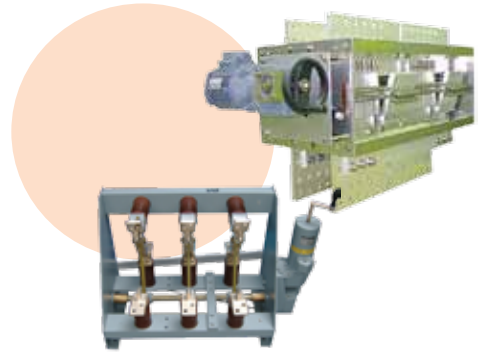


High Power Switches

Mersen's High Power Switches are rigorously engineered and encompass a wide range of DC and AC switches designed to handle high current/low voltage and high voltage/low current applications.

Our offerings include:

- DC disconnect switches, DC transfer switches, cell switches, rectifier output switches, DC power contactors
- AC disconnect switches, medium voltage AC switches, AC power contactors, AC transfer switches, AC earthing switches



Power Distribution Blocks

Mersen not only helps you protect circuits, we help you manage them. Our power distribution blocks — safe, durable and easy to install — are the simple way to split primary power circuits or provide fixed-junction tap-off points. Be sure to check out our FSPDB, the industry's first finger-safe power distribution block.

- Finger Safe Power Distribution Blocks (FSPDB)
- Miniature open style (90-240A)
- Intermediate open style (155-460A)
- Large open style (170-2660A)



Medium Voltage Fuses

For medium voltage equipment, we offer medium voltage current-limiting fuses in a full range of ratings and configurations. Our general purpose fuses which include our E-rated fuses provide overload and short circuit protection for transformers, distribution systems and drives. Our R-rated fuses are back-up type, current-limiting fuses that provide short circuit protection for medium voltage motors and motor controllers. We also offer capacitor fuses to protect medium voltage capacitors.



Power Electronics Protection Solutions



Surge Protective Devices

Mersen's Surge-Trap® Surge Protective Devices deliver fail-safe overvoltage protection with TPMOV® Technology inside and do not require additional fuses, fuse holders, or wiring in meeting the UL 1449 3rd Edition safety standard thus providing substantial cost savings and reduced installation time. Our offering includes modular (ST), pluggable (STP), and Type 1 (STT2 & STX-series) designs. The Surge-Trap SPD offers the fail-safe protection you need in one compact, self-sufficient design.



Control Fuses & Holders

We offer a comprehensive line of control fuses, whether you need the current-limiting, time-delay Type 2 No Damage circuit protection of the Amp-Trap 2000® Class CC ATDR fuse or the fast-acting, small dimension of the Amp-Trap® ATMR Class CC fuse. We have what you need. We also offer Amp-Trap midget fuses in a variety of performance levels and ratings, as well as an extensive range of electronic/glass fuses. We offer fuses and fuse holders that are ideal for small motors, contactors, lighting, heating and general loads, branch circuit protection, control transformers, solenoids, inductive loads, and transformer and control circuits.

- UL Class CC, midget and electronic/glass fuses
- UltraSafe™ modular CC, midget, 303 series and GPM panel mount fuse holders



Disconnect Switches

Mersen offers an extensive line of compact UL 98 fusible and non-fusible disconnect switches ranging from 30 to 1200A, as well as compact UL508 disconnect switches ranging from 16 to 125A. You'll find DIN-rail and direct mountable disconnect switches that conform to today's finger-safe IEC standards; plus a large assortment of handle, shaft, and accessories to meet the needs of your application. Our disconnect switches are ideal for service entrance rated or main panel applications as well as motor controller, motor disconnect, motor isolator, general purpose, on/off switching, "make and break" power circuit applications, NFPA 79 solutions, load break switching, and circuit isolation.

- FSLBS, FSSC, FBXJ, EJFS, SX AC, SXDC
- Enclosed disconnect switches
- Engineered switches
- AC disconnect switches



Power Electronics Protection

- Semiconductor fuses
- High speed fuses
- Control fuses
- Fuse holders
- Air and liquid cooled heatsinks
- Disconnect switches
- Surge protective devices
- Power distribution blocks
- High power switches
- Medium voltage fuses

Power Electronics Protection Solutions



Semiconductor Fuses - Round & Square Body

Mersen offers OEM designers a comprehensive line of ferrule-type fuses, bolt-in type fuses, and square body fuses for the protection of semiconductors. This includes Form 101 semiconductor protection fuses in ratings from 130 to 1500 VAC. Plus Square Body North American and European-Dimension semiconductor fuses in 690/700 and 1250/1300V ratings (four sizes each). We also offer compatible fuse blocks and accessories such as blown-fuse indicators and add-on switches.

- Amp-Trap® Form 101 A15QS, A30QS, A50QS, A50P, A60Q, A60X, A70QS, A70P, A100P, A120X, A150X
- Protistor A070gRB, French Cylindrical A70QS
- DIN 6,9gRB-URB; 6,6gRB-URB
- PSC North American Series A070URD and A130URD
- PSC European Series 6.6URD and 12.5 URD
- French Cylindrical and British Standard



High Speed Fuses & Holders

Protect your electrical power wiring and power semiconductors with a single fuse - the HSJ or the HSRK. The Amp-Trap® High Speed J (HSJ) combines the low I^2t of a semiconductor fuse and branch circuit performance of a Class J UL listed fuse. The HSJ can provide branch circuit protection per NEC requirements, as well as very low I^2t for protection of power semiconductors such as diodes, SCRs, GTOs and SSRs.

The high speed Amp-Trap® HSRK combines semiconductor fuse performance with NEC branch circuit compliance. It provides overcurrent protection to solid state drive applications but in the larger RK body sizes that have been typically installed in older systems. It also provides industrial power applications with the most current limiting fuse available, which in turn provides the best arc flash mitigation available to power systems using the large RK size fuses.

Use the UltraSafe™ Modular Fuse Holder for Class J Fuses. The US3J and US6J are finger-safe to an IP20 grade of protection under IEC standards. The US3J accommodates 30A Class J or 22x58 mm French ferrule fuses. The US6J is for 60A Class J fuses. UltraSafe holders are available in compact 1, 2, or 3 pole units, with or without blown fuse indicators in each pole.

- High Speed Class J Fuse (HSJ)
- High Speed Class RK1 Fuse (HSRK)
- UltraSafe™ Modular Class J Fuse Holder (US3J & US6J)



The Benefits of Mersen

- Product breadth
- Technical knowledge
- Design assistance from day-one
- Global manufacturing
- Innovative, problem solving products like Fabin® heatsinks, TPMOV® Technology, and the industry's first finger-safe UltraSafe™ fuse holders
- Easy to do business with!



MERSEN
Expertise, our source of energy

A WORLD LEADER
 in safety & reliability
 for electrical power

A GLOBAL PLAYER

Since its foundation in 1892, MERSEN has built an international reputation by creating subsidiaries on all continents. Today with industrial and commercial plants scattered in more than 30 countries, agencies

and representatives in more than 70 countries and 250 commercial contacts throughout the world, MERSEN offers its customers everywhere reliable, high technology products and services backed by its expert technicians.

Mersen U.S.A.
 374 Merrimac Street
 Newburyport, MA 01950
 U.S.A.
 T : 978 462 6662
 F : 978 462 0181

Mersen FRANCE
 15 Rue Jacques de Vaucanson
 F-69720 Saint Bonnet de Mure
 France
 T : +33 (0)4 72 22 66 11
 F : +33 (0)4 72 22 67 13

Mersen TORONTO
 88 Horner Avenue
 Toronto, Ontario
 Canada M8Z 5Y3
 T : 416 252 9371
 F : 416 252 6572

Mersen SHANGHAI
 No.55-A6. Shu Shan Road
 Songjiang 201611
 Shanghai
 Tel: +8621 67602388

us-ferrazshawmut.mersen.com