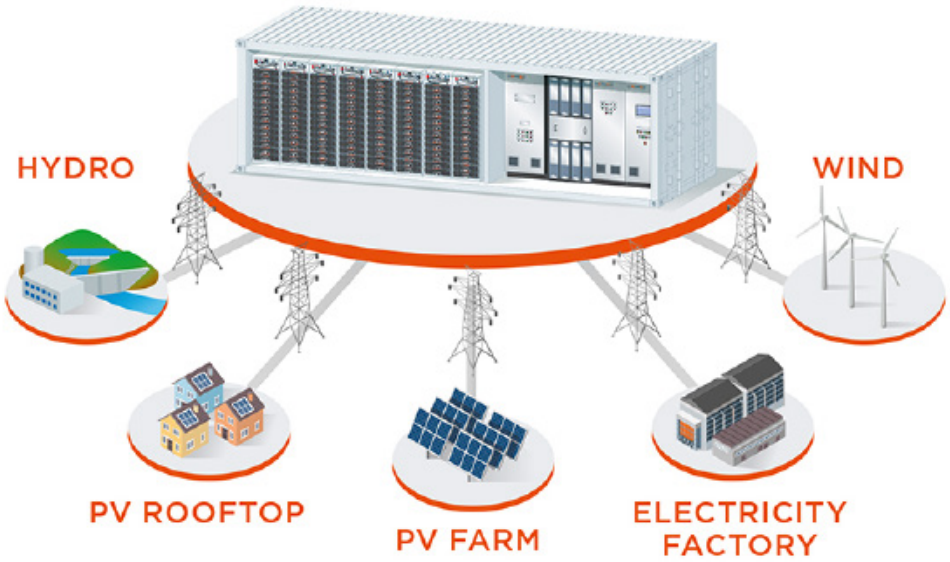
Ferraz Shawmut | Eldre | Idealec | FTCAP

# HIGH SPEED FUSE SOLUTIONS FOR ELECTRICAL ENERGY STORAGE SYSTEMS

## Electrical Energy Storage (EES)




### ELECTRICAL ENERGY STORAGE SYSTEMS

Electrical Energy Storage (EES) is among the fastest-growing solutions in today's electrical energy markets. As these new technologies evolve, the need to keep pace with their technological advancements across residential, commercial, and industrial applications are critical.
Mersen is committed to push boundaries and to introduce game-changing and disruptive technologies to make EES applications safer and more reliable.

Mersen added-values:
In addition to cutting-edge solutions for battery and inverter protection, Mersen provides expertise and support for fuse selection and coordination between the different elements of the entire EES system from inverter to module as well as fully customized design and optimization for engineered products (bus bar, capacitors, and cooling).

# SOLUTIONS FOR ELECTRICAL ENERGY STORAGE SYSTEMS

## 1 CENTRAL INVERTER

Mersen **capacitor lines** offer high energy and low inductance filtering features, helping high performance power conversion systems to operate at their highest level, especially on SiC based.

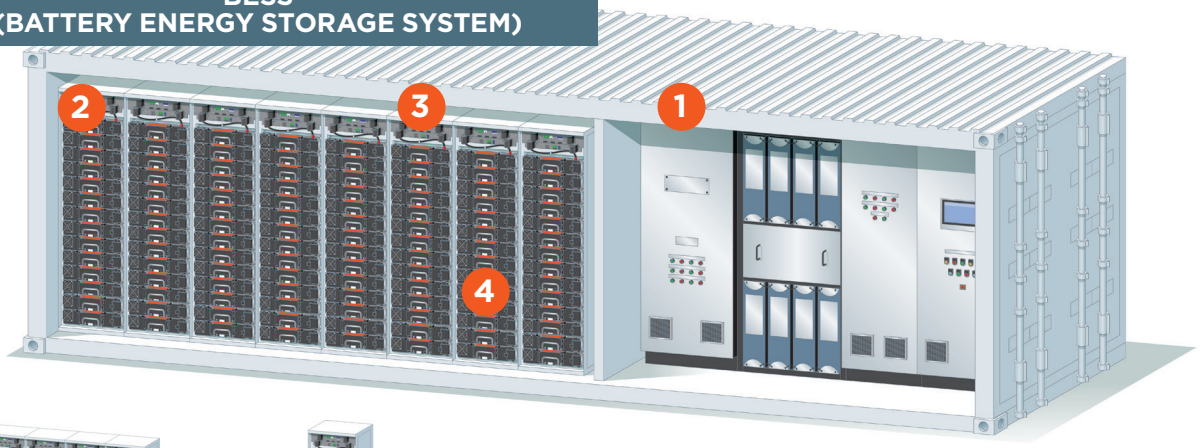
We offer a large range of solutions to reliably, connect, protect, and distribute power in electrical systems thanks to our high T° (up to 180°C) and low inductance **bus bar products**.

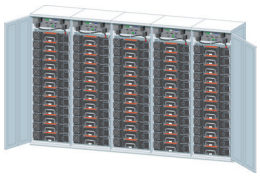
Our **high speed semiconductor protection fuses** offer superior protection to power conversion systems that require a dependable product for short circuits and overloads.

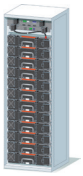
Mersen's complete line of **Surge-Trap® SPD products** provides fail-safe surge protection for energy conversion systems. Patented TPMOV technology allows for installation without separate overcurrent protection.

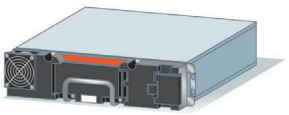
Mersen offers a comprehensive **cooling solution** for power conversion products. Our high performance, air cooling and water-cooling products deliver industry leading results.

## BESS (BATTERY ENERGY STORAGE SYSTEM)







## 2 SECTION

The fastest fuse of its kind, Mersen compact **section fuses** have been designed and exhaustedly tested in very harsh conditions to comply with the highest requirements of EES Systems and according to IEC 60 269-7 fuse standard for battery protection.

## 3 STRING/RACK

Mersen state-of-the-art **string/rack technology** clears fault currents down to 3 times the fuse rated current to perfectly coordinate with contactors, and up to 250 kA to protect from the large short circuits seen in electrical energy storage systems.

## 4 MODULE

Mersen's **module fuses** offer current ratings from 60 to 800A in a very compact format compliant to IEC 60 260-7, ensuring protection for all types of batteries and allowing battery modules footprint optimization.

Using Mersen **Infini-cell** allows our customers to build a compact reliable battery pack in record time through its automation friendly characteristics.

Mersen **liquid cold plates** offer superior performance that keeps battery cells properly cooled, thus increase the battery life time.

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