

Ferraz Shawmut | Eldre | Idealec | FTCAP

SOLUTIONS FOR BATTERY POWER MANAGEMENT

MERSEN
PRODUCT LINES
FOR BATTERY
ASSEMBLY
SOLUTIONS



LEADER IN INNOVATIVE BONDING TECHNOLOGY TAB 2:1

## **BATTERY ASSEMBLY SOLUTIONS**

## Best of both worlds? Yes, it is possible!

As e-mobility and battery energy storage applications grow in number and power density, designers are always looking to reduce the footprint of the battery assemblies without compromising the efficiency or modularity of their power systems. Customers are looking to components' manufacturers to create standardized battery assemblies that benefit from the latest technologies available to produce a leading \$/KW and kWh/Kg on a modular and flexible platform. In short, designers want the best of both worlds being high efficiency and high flexibility, in sourcing their battery assembly solutions for their applications.

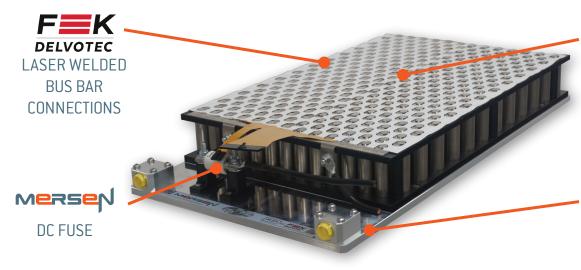
Mersen is an expert in thermal management, overcurrent protection devices, and laminated monitoring bus bars. F & K DELVOTEC has pioneered the unique laser bonding equipment and processes. Mersen and F & K DELVOTEC have joined forces to create the optimum battery assembly solution to support 21700 series battery assembly systems.

## Benefits are numerous...

Unlike traditional battery interconnect solutions, the F & K DELVOTEC laser bonder interface guarantees a high speed, safe, robust, and efficient connection of the battery cells to the laminated bus bar. This method is more than four times faster than conventional wire / ribbon insertion and welding. The laminated bus bar is ultra-thin single-layer with interleaved contacts. The bus bar is also a "smart" bus bar meaning that it not only powers the battery cells but also monitors temperature and voltage of battery cells as needed. Bus bars also eliminate wiring error and provide an extra degree of robustness against shock and vibration in e-mobility installations. To protect the battery assembly from over currents, a special low watt loss / high cycling DC-rated fuse is installed. The battery assembly is then secured onto a super compact (only 7mm thick) liquid cooled cold plate, providing a homogenous cooling to all battery cells.

In short, the Mersen and F & K DELVOTEC technology products and process solutions provide safe, reliable, modular, and secure customizable battery assemblies to our customers.

INFINI ∞ CELL
Always moving ahead.





LAMINATED BUS BAR WITH MONITORING FEATURE



COMPACT AND LOW PROFILE VACUUM BRAZED COLD PLATE

**Applications**EV, EES, and Rail













FL-BATTERY-ASSEMBLY-001 | 02.22 | ©Mersen 2022. All rights reserved.

SOLUTIONS FOR BATTERY POWER MANAGEMENT



