Monitoring Laminated Busbar Solutions

Expertly engineered for reliable performance

Contact: John G Peck Ltd - jgpl.com
LAMINATED BUS BAR WITH MONITORING INTEGRATED

To cope with the growing demand of constant voltage and temperature monitoring in power electronics applications such as lithium-ion and ultracapacitors packs, Mersen has engineered an innovative concept that combines in a single customized device a laminated busbar, a flexible circuit, thermal sensors and other custom electronic components. It allows, with only one part, to make both the power connections and the signal collection from each cell independently, so the status of each cell is delivered to the Battery Management System via a custom connector.

This is a smart answer to the market need since it solves major problems of current technologies ordinarily used to make the power connections such as series of small copper bars, cables or PCBs. Indeed, Mersen Monitoring Bus Bar gives the user improved product quality providing easy handling, quick assembly time, voltage drop reduction, wiring errors suppression and, with the case of a PCB, improved current carrying capacity and enough flexibility to withstand the micro-movements of the cells during the charge/discharge process.

Moreover, common monitoring technologies generally use small wire harness attached manually to collect data on each cell, and then to carry the data to an outside processor. On the contrary, Mersen Monitoring Bus Bar includes a flex circuit directly integrated into the bus bar network, thereby eliminating the set-up time needed for attaching the wires harness.

The Mersen Monitoring Bus Bar can also integrate a water-cooling pipe when thermal considerations exceed conventional means of heat dissipation. This prevents the system from overheating, and allows it to remain at the highest level of performance and safety.

CUSTOMER’S BENEFITS

• Signal and power connections in one device
• Improved inventory management
• Faster assembly time
• Withstanding of cells micro-movements during charge/discharge process
• No wiring errors
• Best signal quality by a highly engineered and precision controlled welding technique to reduce the voltage drop
• Increased current carrying capacity
• Possibility to integrate a water-cooling pipe

MONITORING LAMINATED BUSBARS SOLUTIONS

CONTACT: John G Peck Ltd - jgpl.com
A WORLD LEADER in safety & reliability for electrical power

Mersen designs innovative solutions to address its clients’ specific needs to enable them to optimize their manufacturing process in sectors such as Energy, Transportation, Electronics, Chemical, Pharmaceutical and Process Industries.

A GLOBAL PLAYER

Global expert in materials and equipment for extreme environments and in the safety and reliability of electrical equipment.

MERSEN Rochester
1500 Jefferson Road
Rochester, NY 14623
USA
T: 585 427 7280
F: 585 272 0018

MERSEN France
2-4 rue du Déry
49480 St Sylvain d’Anjou
France
T: +33 (2) 41 96 15 40
F: +33 (2) 41 96 88 40

MERSEN Shanghai
No. 55-A6. Shu Shan Road
Songjiang 201611
Shanghai
T: +8621 67602388

Contact: John G Peck Ltd - jgpl.com

ep.mersen.com