



Hybrid Electric Vehicle

BACKGROUND

Hybrid Electric Vehicle manufacturers typically have space limitations in their battery packs and require a flexible interconnect between modules. The usual electrical requirements of 80 AMPS continuous duty at 336VDC with 30 second spike of 150 AMPS are applicable.

PROBLEM

Space Limitations and how to supply power to a tray of automotive components that are being manufactured as a sub-assembly and will slide into the vehicle, similar to inserting a drawer into runners.

AIO SOLUTION

Due to space limitations, Amphenol chose to utilize braided flexible insulated bus bars to connect the batteries together. The bus bars are made of copper mesh and can be insulated with heat shrink .

To bring power to the automotive component sub-assembly, Amphenol designed a blind mate set of 8 - 10mm RAD-SOK's® combined with bus bars to provide enough flexibility to allow the drawer to be guided into place. Additionally Amphenol incorporated our circular AC connector for power supply. Cable harnesses are utilized to connect control units to the other power modules throughout the vehicle.