



Overmolded SurLok™ for Battery Applications

BACKGROUND

Batteries for Electric Vehicle and Energy Storage systems require the electric interconnections to be compact, cost effective, have low temperature rise, and function well in vibrating environments. The interconnect must also have the ability to be changed out quickly for easy maintenance.

PROBLEM

Large lugs were initially being used but were found costly in the long run when compared to an electrical connector. Electricians had to be present for all installation and service. Standard circular connectors would allow manufacturers to get around the hardwire situation of lugs. However, circular connectors can be limited in their ability to carry high power from source to load. Therefore, a quick disconnect connector that could carry a large load and withstand high vibration was desired.

SOLUTION

Amphenol's SurLok™, with patented RADSOK® technology, overmolded with cable provides the perfect solution for this application. The SurLok™ offers a high current rating of 70A to 300A in a small package. For busbars, PC boards and cable assemblies; any power distribution application that uses high current, frequently plugged and unplugged cables or a "plug and play" setup are ideal. Surlok™ is designed to meet or exceed the electrical performance of bolt-on lugs; provides higher ampacity, vibration resistance and high reliability; takes up less space than conventional lugs. Together with Overmolded cable assembly is Amphenol's value added service to provide customers one-stop shopping. "