Amphenol[®]

Application Note



IAN-131

1500V 350A MSD

BACKGROUND

Amid the swift advancements in the energy storage sector, the demand for enhanced safety performance for both personnel and equipment has grown significantly. Manual Service Disconnects (MSDs) are crucial in this context, serving as key components in safety design. MSDs allow for the safe and efficient disconnection of energy storage systems during maintenance or emergencies, preventing accidental electrical hazards and ensuring the safety of both technicians and the system. Our new MSD product is designed to meet these heightened safety standards, providing robust, reliable, and user-friendly solutions for energy storage applications.

PROBLEM

In the context of energy storage battery packs, designers and installers face the challenge of connecting and disconnecting high-voltage electrical circuits without the need for tools. Finding a solution that allows for the quick and safe connection and separation of the corresponding plug-in components is essential for efficient and effective system maintenance and installation.

AIO SOLUTION

Amphenol Industrial Operations has developed the 1500V 350A MSD, designed to carry up to 350A at 1500V DC, making it ideal for both industrial and commercial energy storage applications. Our MSD features chip-type contacts to handle both power and signal, a handle lever locking structure, and HVIL and CPA functions. During maintenance in high-voltage environments, the 1500V 350A MSD allows for the rapid disconnection of the high-voltage circuit, ensuring the safety of both personnel and equipment. Once maintenance and testing are complete, the technician can reinsert the MSD to quickly restore power to the equipment, ensuring minimal downtime.