

“AEV250: Enhancing Material Handling with High Voltage DC Contactors”

The Altran Magnetics’ AEV250 is an advanced high voltage DC (HVDC) contactor designed to protect energy storage systems. As the material handling industry transitions from lead-acid to lithium battery packs, the Altran Magnetics product range provides critical functionalities that ensure safety, efficiency, and longevity of these new battery systems. This whitepaper outlines the key benefits, and application scenarios of the AEV250, highlighting its 1000V 500A capability and its role in modernizing material handling operations.

The material handling industry is undergoing a significant transformation with the shift from lead-acid to lithium battery packs. This change is driven by the need for more efficient, reliable, and environmentally friendly energy storage solutions. The Altran Magnetics’ AEV250 is engineered to address the challenges associated with high voltage DC applications in material handling equipment, providing a robust and reliable solution for lithium battery systems.

Protection

The AEV250 offers critical protection for high voltage DC circuits in lithium battery systems, using inert gas technology and arc blowout magnets to maintain low contact resistance and prevent faults, ensuring component longevity.

Efficiency

By minimizing contact resistance and using an internal coil economizer, the AEV250 reduces energy losses and power consumption, enhancing system efficiency and offering environmental and cost benefits.

Reliability

Constructed with high-quality materials and advanced techniques, the AEV250 withstands harsh environments, maintaining operation in demanding conditions. Its robust design is supported by comprehensive testing and full traceability via QR codes.

Application Scenarios

- **Forklifts and Industrial Trucks**
- **Automated Guided Vehicles (AGVs)**
- **Renewable Energy Integration**
- **Off-Grid and Remote Operations**

Conclusion

The AEV250 is a key driver in modernizing the material handling industry with lithium battery packs. Its versatile application across various devices underscores its pivotal role in transitioning to more sustainable and efficient energy solutions. Discover the benefits of the AEV250 for your operations by contacting our technical sales team or visiting our website.