

Sensata Technologies Launches STEV Series High-Voltage Contactors for Battery Electric and Plug-in Hybrid Vehicles

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- Sensata's STEV series contactors support the shift to cleaner, more efficient transportation for electric and hybrid vehicles, from passenger cars to heavy-duty trucks.
- Customizable switching technology enables OEMs to standardize high-voltage solutions across multiple vehicle lines, simplifying development and reducing costs.
- Engineered for reliability, safety, and efficiency, STEV contactors deliver low resistance, reduced heat generation, and high short-circuit protection.

SWINDON, United Kingdom--(BUSINESS WIRE)-- **Sensata Technologies** (NYSE: ST) today announced the launch of its STEV high-voltage contactor series, engineered for high efficiency and robust protection to meet the evolving demands of electric vehicles. Sensata's STEV contactors address key challenges in electrified mobility by combining performance, safety and integration capabilities required across modern battery electric vehicles (BEV) and plug-in hybrid electric vehicle (PHEV) platforms. They deliver safer, more efficient operation and reliable performance for electric and hybrid vehicles, supporting OEMs in meeting the highest standards for reliability and safety in electrified mobility.

Contactors are high voltage switches that safely open and close the electrical circuit thousands of times throughout a vehicle's life. In electric vehicles, they serve as a key component, allowing safe power flow between the battery and critical systems like the inverter and charger. Their performance directly impacts vehicle safety, efficiency and reliability, making them critical to the protective architecture of modern EVs.

Scalable across vehicle platforms

The STEV series is designed to scale across a wide range of vehicle platforms, from plug-in hybrid passenger cars to battery electric pickup trucks and Class 8 heavy-duty trucks. This scalability enables OEMs to standardize switching technology across multiple vehicle lines, simplifying integration and reducing development time.

Flexible by design

Sensata's STEV contactors are customizable to meet specific mission requirements, leveraging core switching technology that has been refined over years of development. STEV contactors are engineered to meet stringent automotive safety and quality standards, including compliance with Advanced Product Quality Planning (APQP) processes and other OEM certification requirements, ensuring readiness for integration into global vehicle platforms.

"We don't just manufacture components. We engineer solutions with our customers, adapting our STEV contactors to the unique demands of leading OEM's applications," said **Markus Schwabe, EVP, Automotive and Aftermarket** at Sensata Technologies.

Proven performance

Sensata's contactor technology is used by leading OEMs in millions of vehicles worldwide and continues to expand into new vehicle architectures as requirements evolve. STEV contactors provide reliable high voltage switching with low contact resistance and minimized heat generation. Hermetic sealing and modular designs enable continuous current carry ratings from 150 A to 600 A with high short-circuit withstand capability greater than 20 kA, ensuring safe and efficient operation as well as seamless integration in BEV and PHEV platforms.

Key features and benefits of Sensata's STEV series contactors include:

- Single or dual assembly options: Flexible configurations allow integration into diverse power distribution architectures and help save space.
- Bidirectional current capability: Select models feature non-polarity main contacts, supporting advanced EV power system designs.
- Hermetic ceramic sealing: Arc containment and environmental protection, with IP67 ingress protection available on specific variants.
- High electrical isolation: Coil-to-contact dielectric strength up to 3.0 kV and insulation resistance of 1000 MΩ at 1000 VDC for safety-critical applications.

To support OEM regionalization and supply-chain resilience, Sensata delivers high-voltage solutions through a global network of engineering and manufacturing sites close to customers across North America, Europe and Asia.

This footprint enables in-region production and rapid localization while reducing supply-chain risk.

The STEV series broadens Sensata's electrification portfolio, delivering advanced solutions that enable cleaner, more efficient, and electrified transportation worldwide.

For more information on Sensata's STEV series of contactors, visit www2.sensata.com/STEV.

About Sensata Technologies

Sensata Technologies is a global industrial technology company striving to create a safer, cleaner, more efficient and electrified world. Through its broad portfolio of mission-critical sensors, electrical protection components and sensor-rich solutions, Sensata helps its customers address increasingly complex engineering and operating performance requirements. With more than 18,000 employees and global operations in 13 countries, Sensata serves customers in the automotive, heavy vehicle & off-road, industrial, and aerospace markets. Learn more at sensata.com and follow Sensata on [LinkedIn](#), [Facebook](#), [Instagram](#) and [X](#).

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