

Sensata Technologies' Power Disconnect Solution Enables Faster and Safer DC Fast Charging

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- Several leading infrastructure OEMs are using Sensata's new contactor module for a safer, more comprehensive power disconnect solution in DC fast charging applications
- The power disconnect solution contains the contactor and fuse pairing as a packaged module, providing incremental value to Sensata's customers

SWINDON, England--(BUSINESS WIRE)-- Sensata Technologies (NYSE:ST), a leading industrial technology company and provider of sensor-rich solutions that create insight for customers, today announced its new power disconnect solution has been chosen by several leading charging infrastructure OEMs to enable faster and safer DC fast charging. Sensata's unique solution combines contactors and GigaFuses from its leading Gigavac product brand to provide customers with a value-added contactor module, simplifying their installations while delivering safer and more effective system protection compared to traditional contactor and thermal fuse pairings.

This press release features multimedia. View the full release here:

<https://www.businesswire.com/news/home/20210707005135/en/>

Sensata's unique power disconnect solution for DC fast chargers provides customers with a value-added contactor module, simplifying their installations while delivering a safer and more effective solution compared to traditional contactor and thermal fuse pairings. (Photo: Business Wire)

1,000V and from 50kW to up to 350kW to shorten charging times to less than 20 minutes. While higher voltage and current levels reduce charging times, they increase the safety risks and design challenges for the systems. High voltage contactors provide safe circuit continuity while fuses are required in tandem for circuit-protection in the

To compete with traditional internal combustion engines, EVs need faster charging times, so EV Charging Systems are quickly migrating from 400V to

event of a hazardous short circuit event.

The increases in voltage and current levels not only require contactors with higher breaking capabilities, but also make the contactor and fuse pairings more technically challenging. To address these challenges, DC fast charging infrastructure OEMs are seeking safer, higher performing and more comprehensive solutions that improve on the traditional contactor and thermal fuse pairing.

Sensata's **GigaFuse** offers several advantages compared to a conventional DC thermal fuse, including the ability to:

- Open a circuit within 3 mS; faster than a conventional DC thermal fuse
- Open a circuit closer to normal operating conditions without nuisance tripping, resulting in less potential risk of damage
- Pair more easily with the contactor because of its unique electro-mechanical triggering mechanism
- Help prevent overloading, improving the performance of the contactor in the circuit
- Reduce thermal resistance; typically, 0.15 mohm
- Eliminate thermal aging due to low heat generation

Sensata's packaged power disconnect module includes high voltage contactors and GigaFuses that are harnessed to a mounting plate. The solution delivers overcurrent and short circuit protection and provides the following benefits for the whole charging system:

- Increases safety/reduces risk of damage
- Increases thermal performance/system efficiency
- Provides fast and reliable circuit protection

Nick Moelders, Vice President, Electrification at Sensata Technologies explains, "Our recent wins with major Charging Infrastructure OEMs demonstrate the additional value we provide to our customers as we move from being a component supplier to a leading electrification solutions provider. Working engineer-to-engineer with the most innovative companies allows us to learn and adapt to the needs of the rapidly transforming clean energy market."

To learn more about the technologies and products behind Sensata's power disconnect solution for DC fast charging applications, please visit www2.sensata.com/dcfc-solution.

About Sensata Technologies

Sensata Technologies is a leading industrial technology company that develops sensors, sensor-based solutions, including controllers and software, and other mission-critical products to create valuable business insights for customers and end users. For more than 100 years, Sensata has provided a wide range of customized, sensor-rich

solutions that address complex engineering requirements to help customers solve difficult challenges in the automotive, heavy vehicle & off-road, industrial and aerospace industries. With more than 19,000 employees and operations in 13 countries, Sensata's solutions help to make products safer, cleaner and more efficient, more electrified, and more connected. For more information, please visit Sensata's website at www.sensata.com.

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