

E-MOBILITY SOLUTIONS

HC-STAK 35 High-Voltage Interconnection System

Engineered to enable higher torque, stronger acceleration, & sustained power delivery in high-performance electric & hybrid vehicles

As passenger xEVs continue to evolve toward higher performance, greater vehicle mass, and increased feature content, the demand on high-voltage power distribution is intensifying. Rapid acceleration, higher torque output, and operation under sustained load place extreme stress on the connectors linking the battery, inverter and motor. Conventional connectors can become a bottleneck.



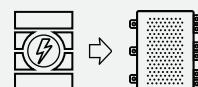
TE's HC-STAK 35 interconnection system is designed to deliver very high-performance energy transfer for xEVs that demand more from their drivetrains. Featuring a scalable fork-terminal architecture with up to 64 independent contact points, HC-STAK 35 allows OEMs to unlock higher vehicle performance while maintaining compact packaging, safety, and long-term reliability.

xEV Applications

(well suited for passenger cars, vans, pick-ups, & light-duty commercial vehicles)



Inlet to Battery



Battery to Inverter



E-motor



Power Distrib.

BENEFITS

- Enables torque-rich performance:** designed to support peak power delivery for fast acceleration, high traction, & sustained hill climbs
- Very high current capacity:** supports up to 400 A continuous with 95 mm² conductors at 85° C
- High-performance energy transfer:** enables rapid acceleration, high torque, & sustained power under load
- Proven, scalable fork contact system:** up to 64 layered contact points provide consistent electrical performance
- Low electrical resistance:** ultrasonic-welded terminals reduce power loss & heat generation
- Well suited for heavier xEV platforms:** built for electric & hybrid vehicles with increased curb weight, AWD systems, or integrated towing capabilities
- Shielded, touch-safe design:** meets IP2XB, IP67, & VO flammability requirements for safety & durability
- Vibration-resistant construction:** designed to withstand mechanical & thermal stress
- Future-ready:** built to meet the evolving power demands of next-gen xEV architectures

TECHNICAL INFORMATION

Positions & shielding	2p; 360° shielding
Voltage rating	Up to 1000 VDC
Current rating*	Up to 400 A @ 85° C (95 mm ²)
Wire sizes	70 or 95 mm ²
Conductor materials	Copper, single-core
Terminal type	3.5 mm double-ended forks
Maximum contact points	Up to 64 per circuit (32 forks)
Termination type	Welded (can be ultrasonic)
Operating temperature	-40° C to +125° C
Additional features	IP2XB finger protection Vibration severity degree 2

FOR MORE INFO

- Visit te.com/hc-stak or contact your sales representative

