

E-MOBILITY SOLUTIONS

HC-STAK 25 XE High-Voltage Interconnection System

Enhanced power delivery & flexible packaging
for next-generation electric & hybrid vehicles

Electric vehicle platforms are growing more demanding, requiring higher current throughput, broader conductor compatibility, and improved flexibility in packaging without sacrificing safety or manufacturability. As design teams push for higher torque and additional weight capacity, they need a high-voltage connector that meets performance requirements while streamlining integration and



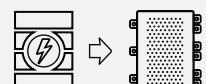
serviceability. TE Connectivity's HC-STAK 25 XE interconnection system builds on a proven architecture with extended performance and ergonomic enhancements. With its layered fork terminal system providing up to 40 independent contact points, HC-STAK 25 XE meets the needs of forward-thinking OEMs that seek a safe, robust, and high-performance drivetrain connector.

xEV Applications

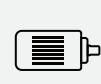
(well suited for passenger cars, vans, pick-ups, & light-duty commercial vehicles)



Inlet to Battery



Battery to Inverter



E-motor



Power Distrib.

BENEFITS

- Ergonomic, service-friendly design:** cam-driven lever and front-facing CPA improve handling & accessibility
- Higher current capacity:** supports up to 296 A continuous with 70 mm² conductors at 85° C
- Optimized for mid-power applications:** bridges the gap between standard & high-performance systems
- Flexible cable routing:** optional bi-directional cable routing allows 180° plug rotation to simplify installation
- Modular contact system:** up to 40 fork-style contacts per circuit ensure consistent power delivery & scalability
- Low connector system resistance:** optimized contact architecture & ultrasonic welding support efficient energy transfer
- Shielded, sealed, & safe:** touch-proof with IP2XB, IP67 and VO flame resistance for high-voltage environments
- Vibration-resistant construction:** designed to withstand mechanical & thermal stress
- Compact footprint:** delivers high current in a space-saving package ideal for modern xEVs

TECHNICAL INFORMATION

Positions & shielding	2p; 360° shielding
Voltage rating	Up to 1000 VDC
Current rating*	Up to 296 A @ 85° C (70 mm ²)
Wire sizes	50 or 70 mm ²
Conductor materials	Copper, single-core
Terminal type	2.5 mm double-ended forks
Maximum contact points	Up to 40 per circuit (20 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

