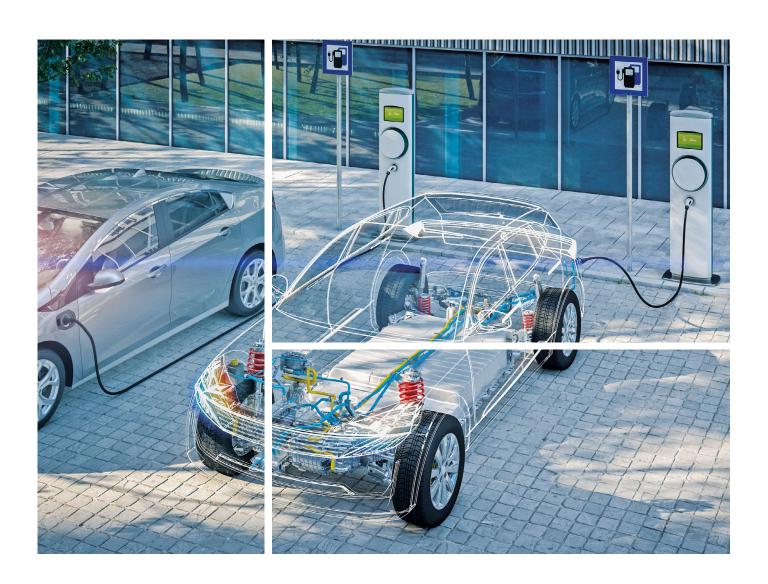


# HC-STAK 25 HV INTERCONNECTION SYSTEM

HIGH-VOLTAGE
AUTOMOTIVE INTERCONNECTION



# High-Voltage Automotive Interconnection

# **HC-STAK 25 HV Interconnection System**

The HC-STAK 25 high-voltage (HV) interconnection system is specifically designed to support the increased connectivity requirements in high-voltage interconnection systems of hybrid and all-electric vehicles. It provides a safer and reliable connection between the HV battery and the inverter or power distribution / e-motor.



HC-STAK 25 interconnection system features a high performance interconnection system that is both scalable and capable of reliable high-power distribution to each aggregate throughout the lifetime of the vehicle. A noteworthy double ended-fork terminal system provides a low contact resistance arrangement while meeting sealing, shielding, and touch-safe requirements in a very compact package. It has the flexibility to interconnect with a wide range of conductor cross-sections, geometry, and materials.

# **Product highlights**

- Suitable for connector voltage levels up to 1,000 VDC
- Very compact dimensions 50 x 57 x 116 mm
- Wire range from 25 mm<sup>2</sup> to 50 mm<sup>2</sup>
- Current capability 257 A at 85°C (50 mm<sup>2</sup>)
- Connector options 90° plug and 180° header
- Multiple contact points up to 40 per circuit
- Double-ended fork contact
- Vibration level USCAR V1

# Typical applications

Hybrid and electric vehicle powertrains:

- HV battery and inverter
- Power distribution / e-motor.

## For more information visit our websites

HC-STAK 25 HV Interconnection System

# te.com/HC-STAK

Hybrid & Electric Mobility Solutions

## te.com/hems

Next-Generation Mobility

High-Voltage Connectivity Solutions

# te.com/next-gen-mobility

Connectivity Solutions - From the Charging Inlet

through the Battery to the E-Motor

te.com/electrifying-a-movement



# **Applications**

- Inverter
- HV Battery
- E-motor

## **Technical Features**

Poles:

2

Terminal Size / System:

2.5 mm / Fork contact

**Conductor Cross-Sections:** 

 $25 \text{ mm}^2 - 50 \text{ mm}^2$ 

Wire Type:

Shielded

Tab Size:

42.4 mm x 2.5 mm x 23 mm

Voltage Rating:

1,000 VDC

Temperature Range:

-40°C up to 125°C

Current Carrying Capability:

257 A at 85°C (50 mm<sup>2</sup>)

IP Rating, Mated:

IP6K7, IP6K9K

IP Rating, Unmated:

IP2XB

**HV Interlock Option:** 

Shunted in Plug

Latch Access Type:

Lever

CPA:

Yes

Fire Classification:

V0 (Inner Housing)

Vibration Level:

USCAR-2 Class V1

Shielding / Options:

Available Codings:

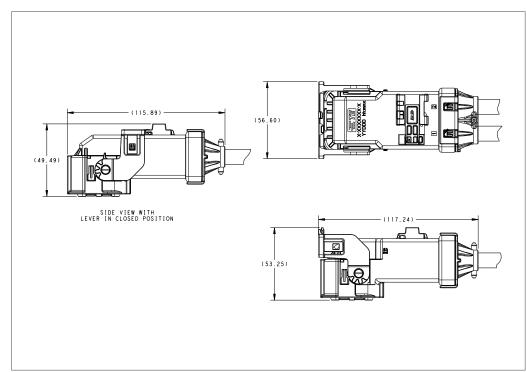
A, B

**Product Specification:** 108-160108

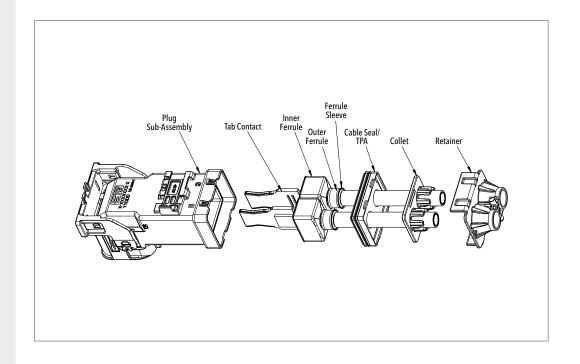
**Application Specification:** 

114-162001

# HC-STAK 25 2 p hi - Plug 90°



Drawing 2349157 \*





# **Applications**

- Inverter
- HV Battery
- E-motor

## **Technical Features**

Poles:

2

Terminal Size / System:

2.5 mm / Fork contact

**Conductor Cross-Sections:** 

 $25~\text{mm}^2\text{--}50~\text{mm}^2$ 

Wire Type:

Shielded

**Voltage Rating:** 1,000 VDC

**Temperature Range:** 

-40°C up to 125°C

**Current Carrying Capability:** 

257 A at 85°C (50 mm<sup>2</sup>)

IP Rating, Mated:

IP6K7, IP6K9K

IP Rating, Unmated:

IP2XB

**HV Interlock Option:** 

Yes

**Latch Access Type:** 

Lever

Fire Classification:

V0

**Vibration Level:** 

USCAR-2 Class V1

Shielding / Options:

**Available Codings:** 

A, B

**Product Specification:** 

108-160108

**Application Specification:** 

408-160030

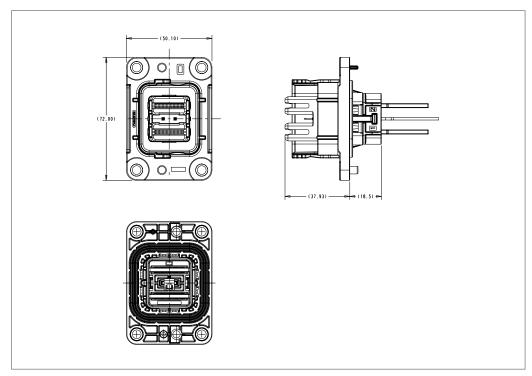
Inner Housing:

2359563-1

Interface Drawing:

2343034

# HC-STAK 25 2p hi - Header



Drawing 2379307 \*

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# HYBRID & ELECTRIC MOBILITY APPLICATION

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