

High-Voltage
Automotive Interconnection

PCON High-Power Terminals



PCON High-Power Terminals

PCON high-power terminals are specifically designed to support the increased connectivity requirements in high-voltage interconnection systems of hybrid and all-electric vehicles.

PCON terminals are highly suited to high-voltage interconnection systems for hybrid and electric vehicles powertrain and auxiliary applications.



The new line of terminals, PCON 12, PCON 18 and PCON 21, have a common body design optimized for maximum vibration resistance while minimizing mating forces. Each is available with 90° and 180° mating directions and accommodates wire sizes ranging from 5 mm² to 95 mm² supporting continuous currents up to 400 Amps.

In addition, the PCON terminals are designed to accept touch-safe protection features integrated into the tab housing according to IEC 60529 IP2XB and UL-finger standards for EV powertrain applications therefore enabling safe and easy assembly and maintenance.

Product highlights

- Suitable for connector voltage levels up to 1,000 VDC
- Wire range from 5 mm² to 95 mm²
- Continuous current capability up to 400 A
- Mating directions 90° and 180°
- Multiple contact points up to 36
- Maximum contact normal force approx. 3.5 N
- Vibration levels USCAR V1 / LV214

Typical applications

High-voltage interconnection systems for:

- Hybrid vehicles
- All-electric and fuel-cell vehicles

For more information visit our websites

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

Technical Features**Mating Direction**

90° / 180°

Wire Range5 to 16 mm²**Current Range at 80° C**(Derating Factor of 20%)
Up to 120 A**Contact Normal Force**

Approx. 3.3 N

Spring Plating

Ag / Ni

Body Plating

Ag / Ni

Crimping / Welding

Crimping

Terminal Style

Receptacle

Tab Size(without Finger Protection / with)
10 x 1.2 mm / 12 x 1.2 mm**Voltage Range**

(Connector System)

up to 1.000 V

Operation Temperature

150° C

Vibration Level

USCAR V1

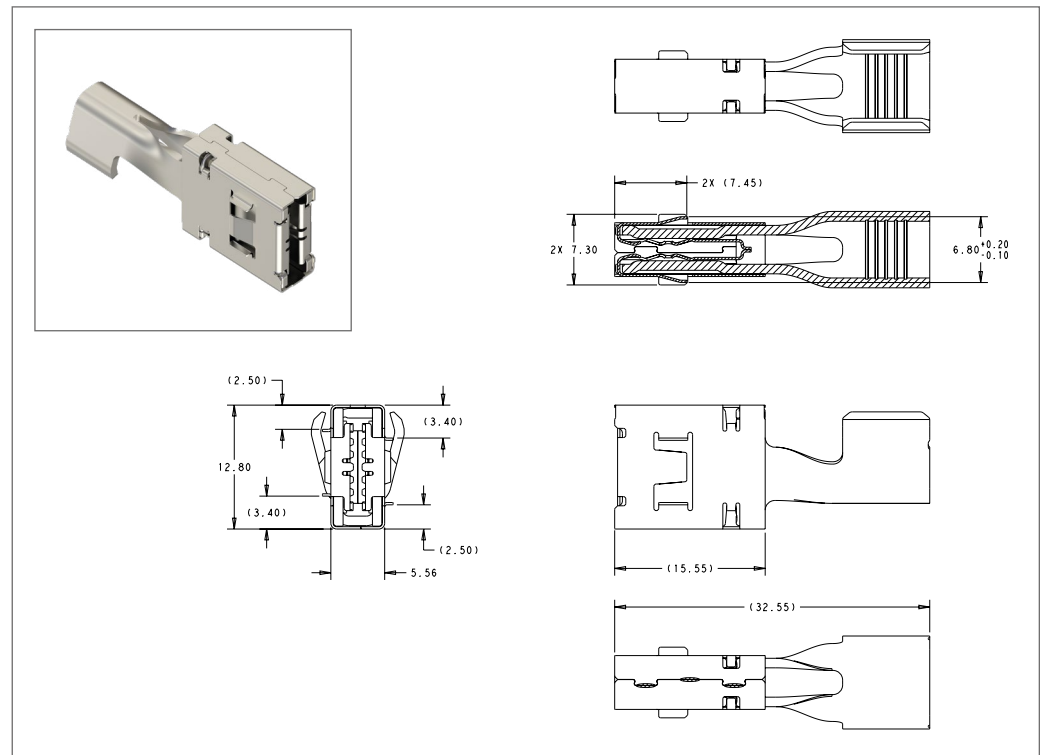
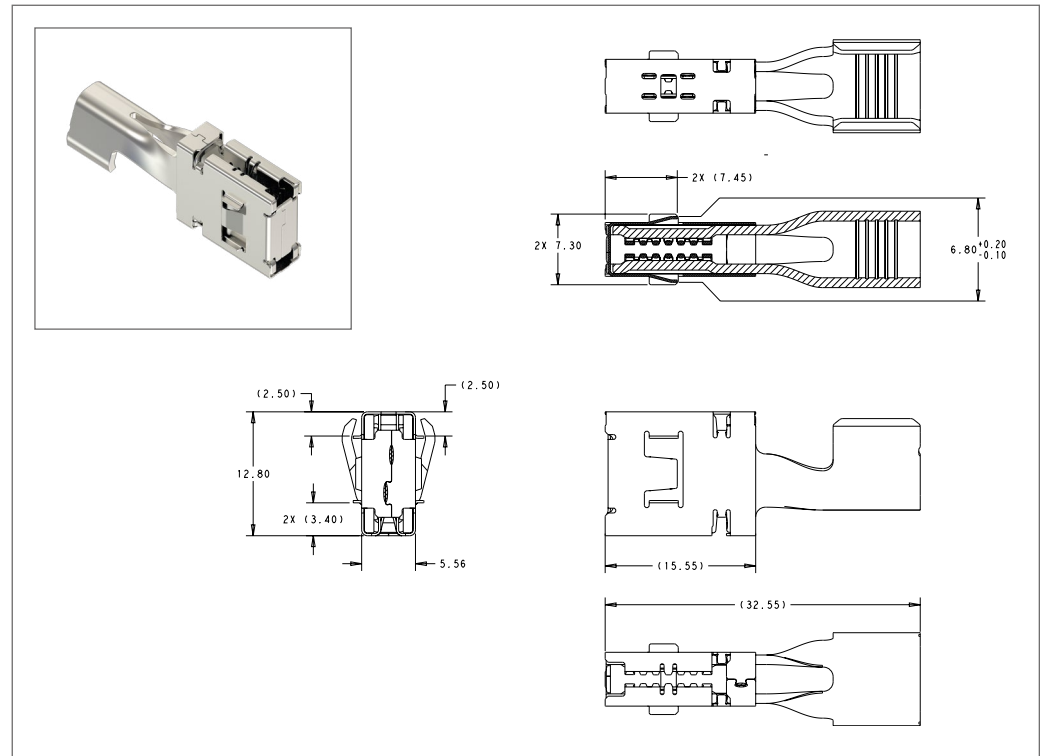
Product Specification

108-32671

Application Specification

114-162014

PCON 12 Terminals

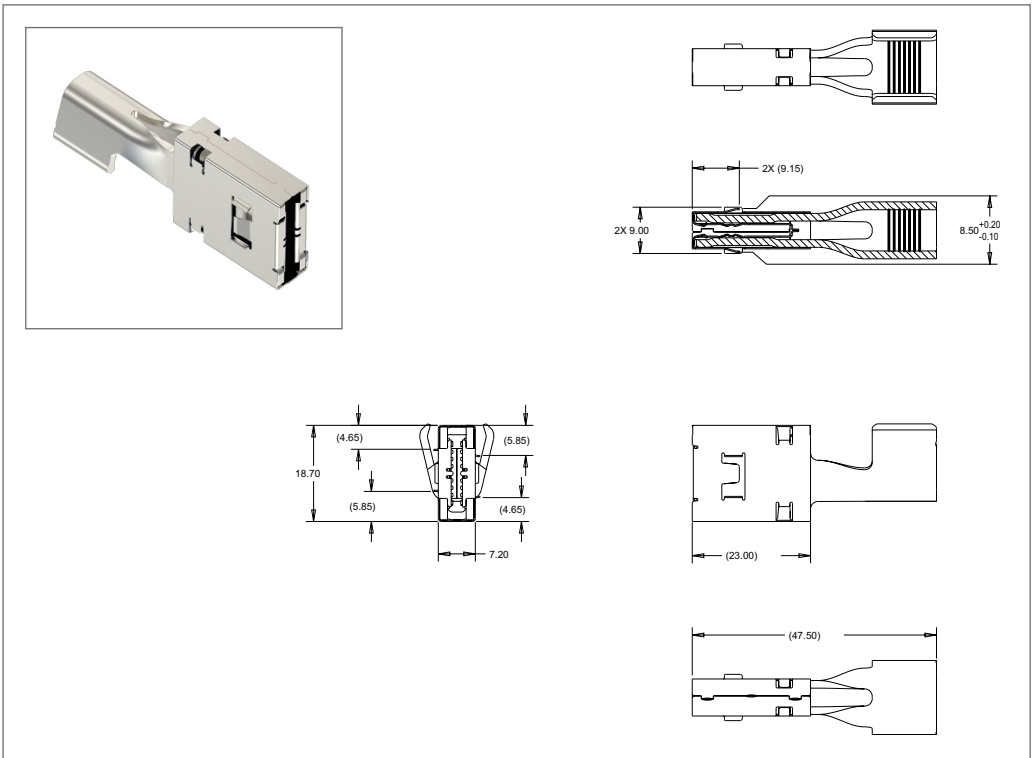
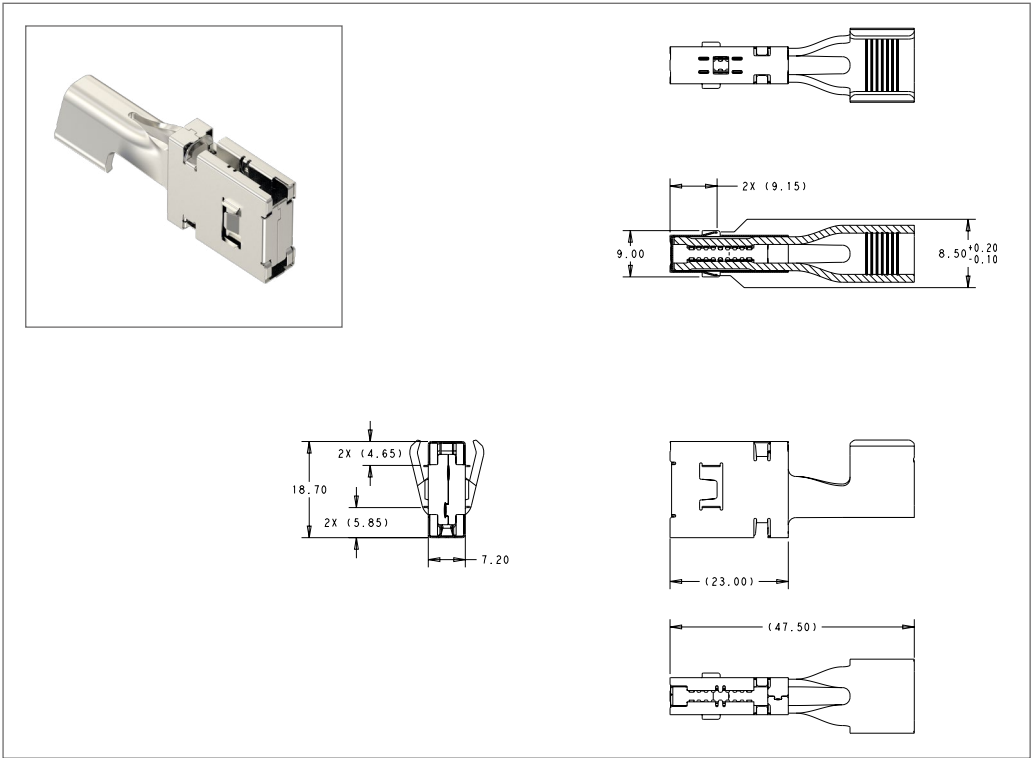
**Ordering Information PCON 12 Terminals**

Product Name	Product Category	Orientation	Wire Size mm ²	Part Number
PCON 12	Terminals	90°	5 – 8 mm ²	1-2840573-1
			10 – 16 mm ²	1-2840573-2
		180°	5 – 8 mm ²	1-2840575-1
			10 – 16 mm ²	1-2840575-2

Technical Features

- Mating Direction**
 90° / 180°
- Wire Range**
 12 to 35 mm²
- Current Range at 80° C**
 (Derating Factor of 20%)
 Up to 180 A
- Contact Normal Force**
 Approx. 3.3 N
- Spring Plating**
 Ag / Ni
- Body Plating**
 Ag / Ni
- Crimping / Welding**
 Crimping
- Terminal Style**
 Receptacle
- Tab Size**
 (without Finger Protection / with)
 15 x 1.8 mm / 18 x 1.8 mm
- Voltage Range**
(Connector System)
 up to 1.000 V
- Operation Temperature**
 150° C
- Vibration Level**
 USCAR V1
- Product Specification**
 108-32683
- Application Specification**
 114-162015

PCON 18 Terminals



Ordering Information PCON 18 Terminals

Product Name	Product Category	Orientation	Wire Size	Part Number
PCON 18	Terminals	90°	12 – 20 mm ²	1-2840578-1
			25 – 35 mm ²	1-2840578-2
		180°	12 – 20 mm ²	1-2840580-1
			25 – 35 mm ²	1-2840580-2

Technical Features**Mating Direction**

90° / 180°

Wire Range25 to 95 mm²**Current Range at 80° C**

(Derating Factor of 20%)

Up to 400 A

Contact Normal Force

Approx. 3.5 N

Spring Plating

Ag / Sn / Ni

Body Plating

Sn / Ni

Crimping / Welding

Crimping

Terminal Style

Receptacle

Tab Size

(without Finger Protection / with)

15.3 x 3 mm / 21 x 3 mm

Voltage Range

(Connector System)

up to 1.000 V

Operation Temperature

180° C

Vibration Level

USCAR V1 / LV214, SG2

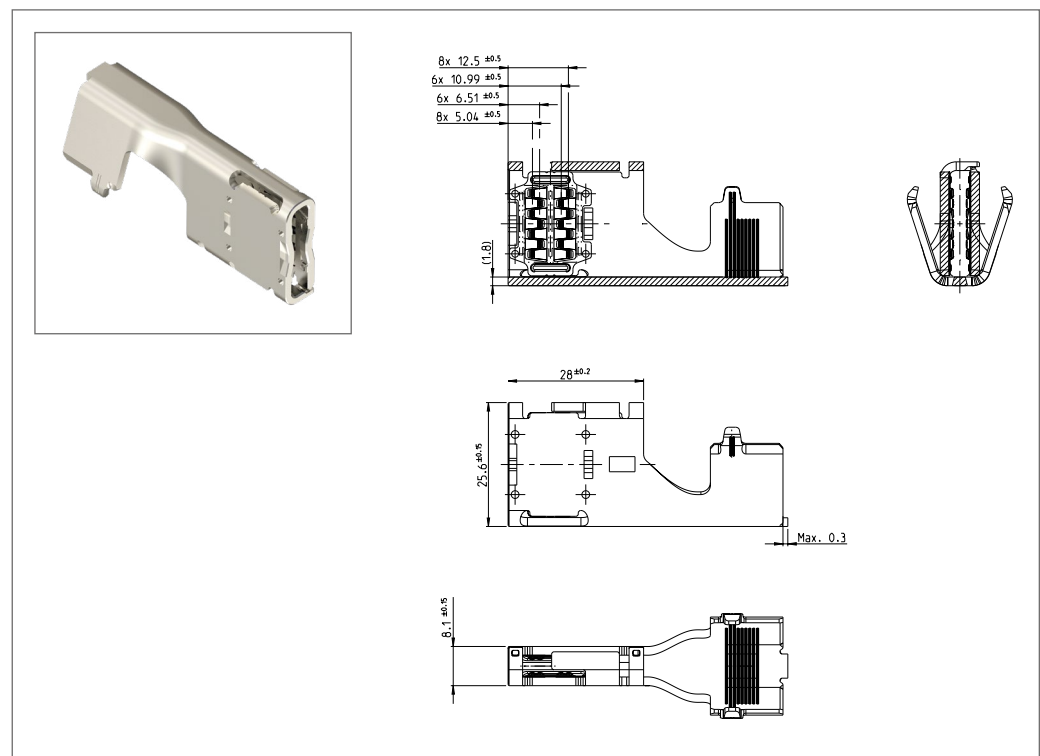
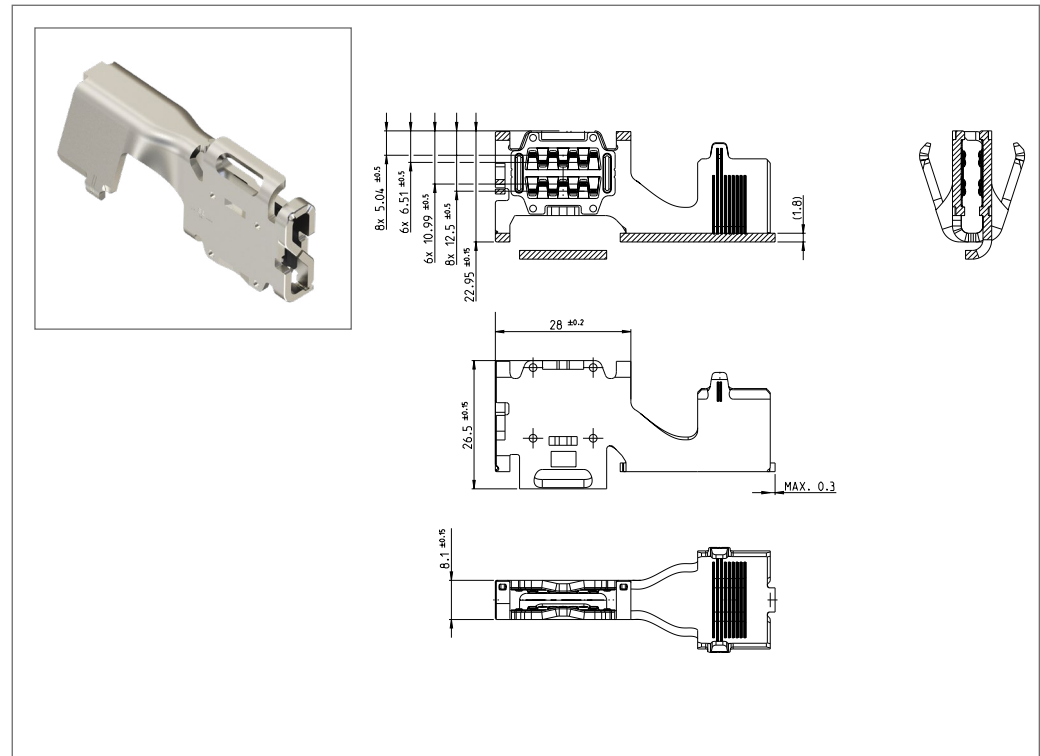
Product Specification

108-94638

Application Specification

114-94511

PCON 21 Terminals

**Ordering Information PCON 21 Terminals**

Product Name	Product Category	Orientation	Wire Size	Part Number
PCON 21	Terminals	90°	25 – 50 mm ²	2317017-1
			70 – 95 mm ²	2317017-2
		180°	25 – 50 mm ²	2317680-1
			70 – 95 mm ²	2317680-2

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HYBRID & ELECTRIC MOBILITY SOLUTIONS

For more information on TE's High Voltage Interconnection Systems, and Hybrid and Electric Mobility Solutions please visit:

<https://www.te.com/usa-en/industries/hybrid-electric-mobility/product-index-hems.html>



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