

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 Range

5 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

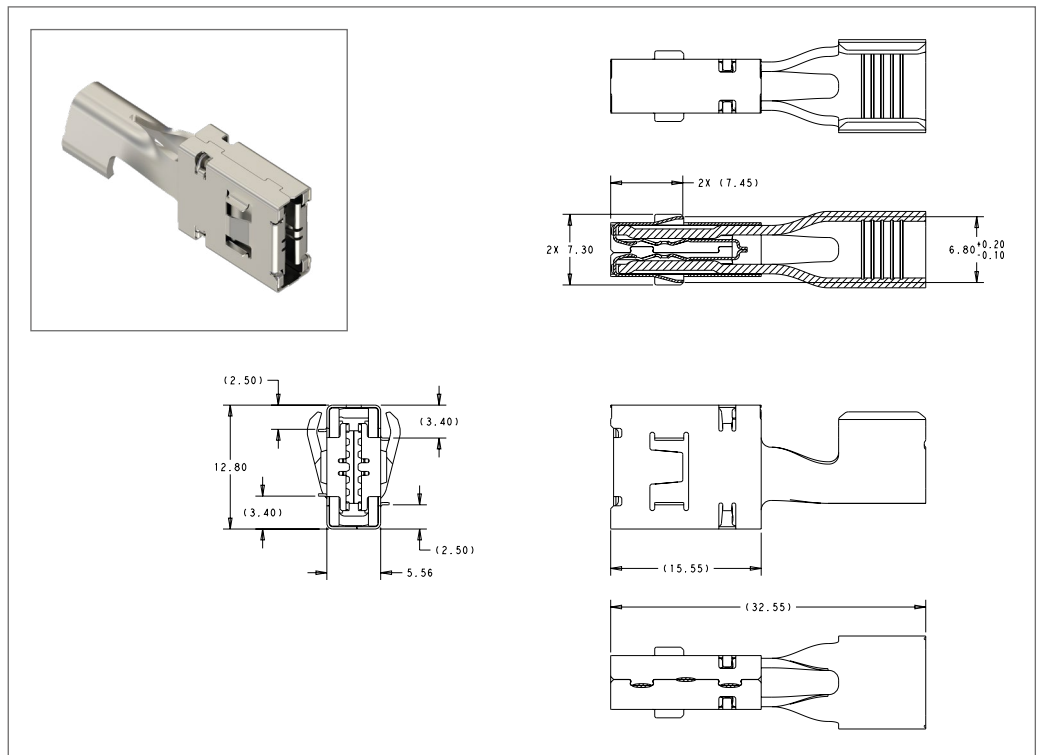
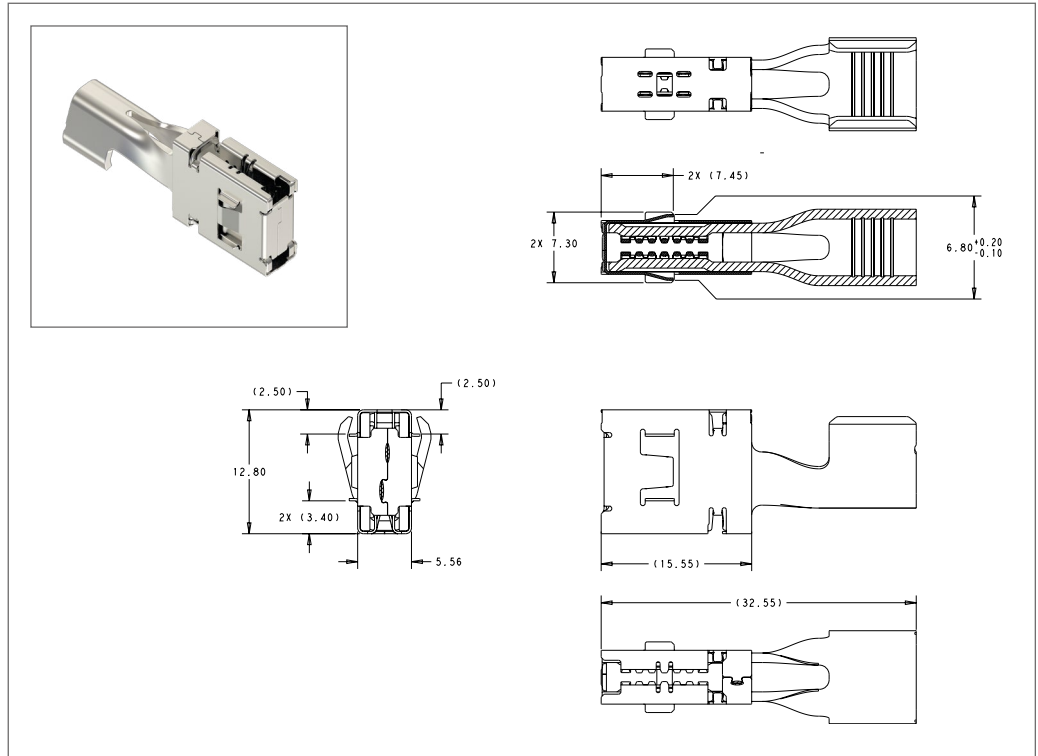
Product Specification

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

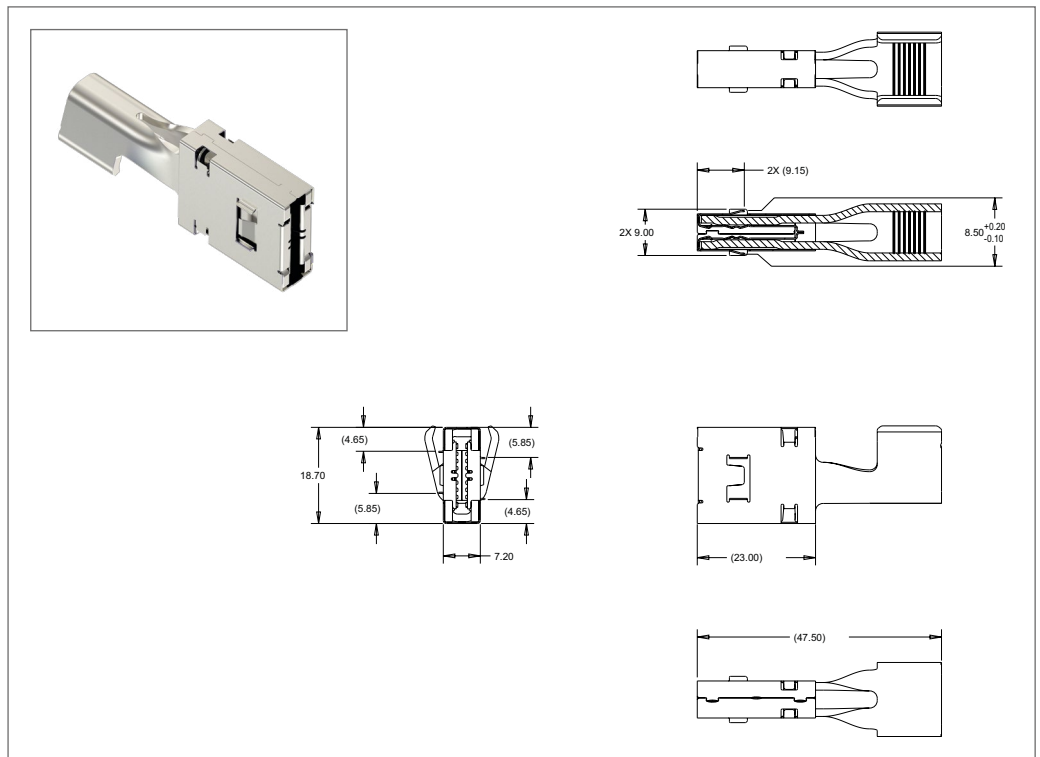
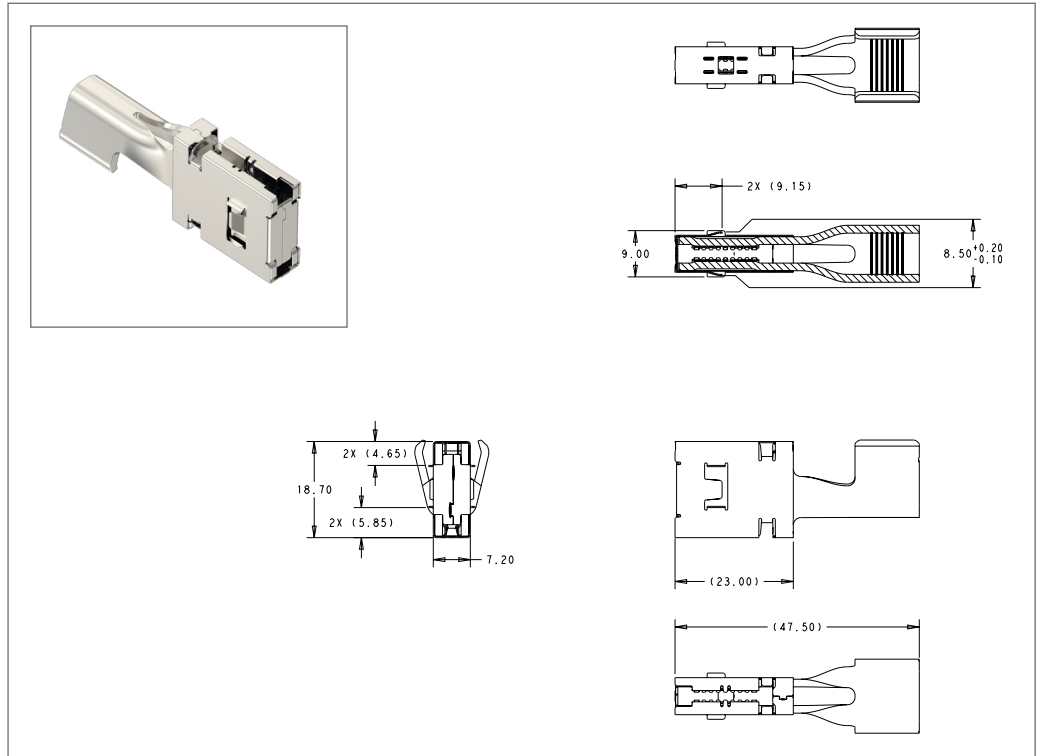
Product Specification

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 Range

25 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

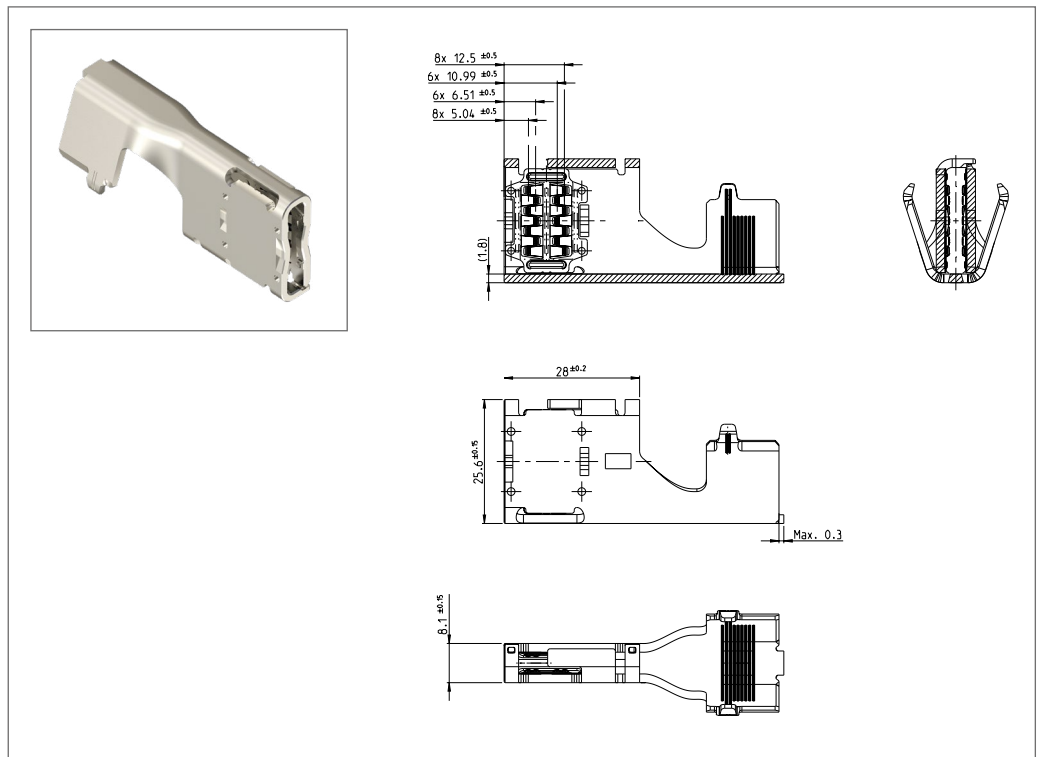
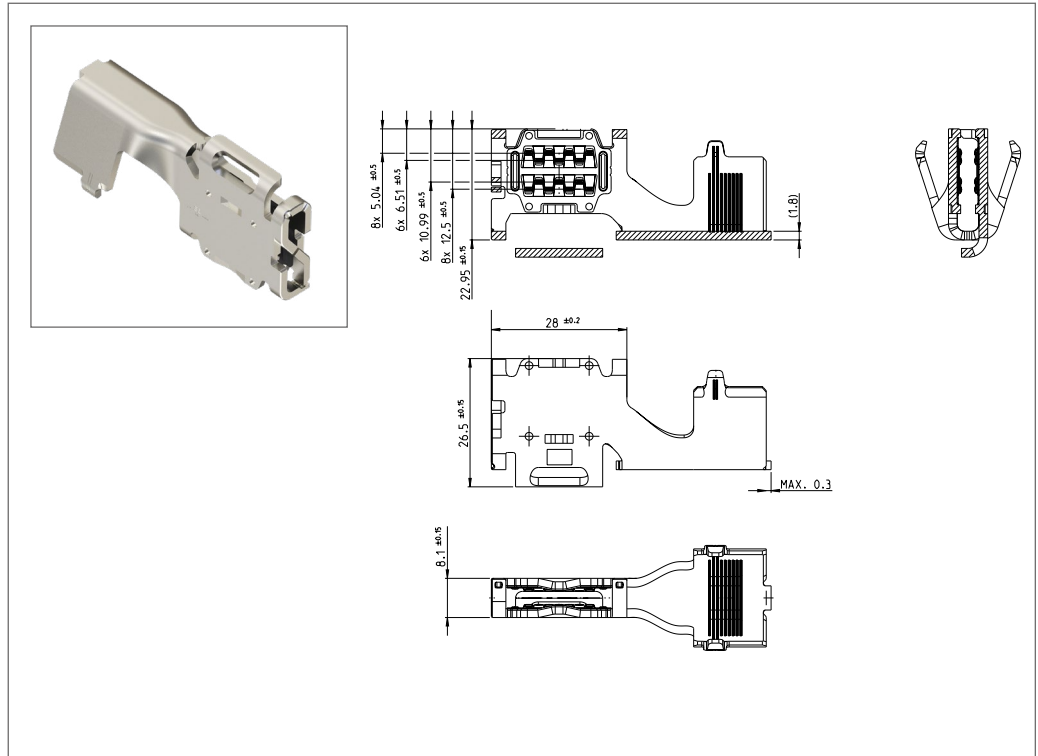
Product Specification

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

www.TE.com

TE CONNECTIVITY ONLINE

[TE.com](http://www.te.com) offers an enhanced digital experience, with more than 250,000 parts profiled. The site has deep, rich product data and easier access to tools and services. Other offerings include improved search and navigation and knowledge and idea sharing.



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>



TE Connectivity Germany GmbH

Ampèrestrasse 12-14
64625 Bensheim | Germany

Product Information Center:
+49 (0)6251 133-1999

© 2020 TE Connectivity. All rights reserved.

PCON, TE, TE Connectivity and TE connectivity (logo) are trademarks owned or licensed by the TE Connectivity Ltd. family of companies.
USCAR is a trademark.

TE Connectivity's only obligations are those stated in TE's General Terms and Conditions of Business (www.te.com/aboutus/tandc.asp). TE expressly disclaims any implied warranty regarding the information contained herein, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose.

3-1773983-6 | Revision 06-2020