High-Voltage Automotive Interconnection

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](http://te.com/hems)
Next-Generation Mobility
High-Voltage Connectivity Solutions
[te.com/next-gen-mobility](http://te.com/next-gen-mobility)
Connectivity Solutions - From the Charging Inlet through the Battery to the E-Motor
[te.com/electrifying-a-movement](http://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

Ordering Information PCON 12 Terminals

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product Category</th>
<th>Orientation</th>
<th>Wire Size mm²</th>
<th>Part Number</th>
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</thead>
<tbody>
<tr>
<td>PCON 12 Terminals</td>
<td></td>
<td>90°</td>
<td>5 – 8 mm²</td>
<td>1-2840573-1</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>10 – 16 mm²</td>
<td>1-2840573-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>180°</td>
<td>5 – 8 mm²</td>
<td>1-2840575-1</td>
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<td></td>
<td></td>
<td></td>
<td>10 – 16 mm²</td>
<td>1-2840575-2</td>
</tr>
</tbody>
</table>
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

Ordering Information PCON 18 Terminals

<table>
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<tr>
<th>Product Name</th>
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<th>Part Number</th>
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<td>PCON 18 Terminals</td>
<td>90°</td>
<td>12 – 20 mm²</td>
<td>1-2840578-1</td>
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<td></td>
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<td>25 – 35 mm²</td>
<td>1-2840578-2</td>
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<tr>
<td></td>
<td>180°</td>
<td>12 – 20 mm²</td>
<td>1-2840580-1</td>
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<tr>
<td></td>
<td></td>
<td>25 – 35 mm²</td>
<td>1-2840580-2</td>
</tr>
</tbody>
</table>
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

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**Ordering Information PCON 21 Terminals**

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<tr>
<th>Product Name</th>
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<th>Part Number</th>
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<tr>
<td>PCON 21</td>
<td>Terminals</td>
<td>90°</td>
<td>25 – 50 mm²</td>
<td>2317017-1</td>
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<td>70 – 95 mm²</td>
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<td>180°</td>
<td>25 – 50 mm²</td>
<td>2317680-1</td>
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<tr>
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<td></td>
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<td>70 – 95 mm²</td>
<td>2317680-2</td>
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</tbody>
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Product Information Center:
+49 (0)6251 133-1999

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