

EV-T2HPCC-DC500A-3,5M50ECBK11 - DC charging cable



1197249

<https://www.phoenixcontact.com/us/products/1197249>

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CHARX connect professional, HPC DC charging cable, with cooled vehicle charging connector and cooled cable, for charging electric vehicles (EV) with direct current (DC), with replaceable mating face frame, with replaceable DC power contacts, without panel feed-through, with digital temperature sensors, CCS type 2, IEC 62196-3-1, 500 A / 1000 V (DC), PHOENIX CONTACT logo, cable: 3.5 m, black, straight

Product description

DC charging cable with vehicle charging connector and free cable end for fast charging of electric vehicles (EV) with direct current (DC) via CCS type 2 vehicle charging inlets, for installation at charging stations for e-mobility (EVSE)

Your advantages

- Complete product range
- The right charging cable for every application, from the carport to the charging park
- Ultra-fast HPC charging, with temporary power up to 500 kW
- Convenient handling due to the ergonomic design
- Available with your logo on request – for consistent branding of your charging station
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Additional safety thanks to integrated leakage sensors and a wear indicator in the cable sheath
- Convenient communication interfaces via CAN bus and digital output
- Maintenance-friendly replacement of the mating face frame without draining the coolant

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1197249 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | EM01 |
| Product key | XWBALD |
| GTIN | 4063151256661 |
| Weight per piece (including packing) | 11,020 g |
| Weight per piece (excluding packing) | 8,000 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |

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Technical data

Product properties

| | |
|-------------------|--|
| Product type | DC charging cable |
| Product family | CHARX connect professional |
| Application | for charging electric vehicles (EV) with direct current (DC) for installation at charging stations for electromobility (EVSE) |
| Type | HPC DC charging cable with cooled vehicle charging connector and cooled cable |
| Design | with replaceable mating face frame with replaceable DC power contacts without panel feed-through with digital temperature sensors |
| Technology | Combined Charging System High Power Charging |
| Affixed logo | PHOENIX CONTACT logo |
| Label | 8.9 mm x 28.9 mm (customer logo on request) |
| Charging standard | CCS type 2 |
| Charging mode | Mode 4 |

Cooling system

| | |
|------------------------------|---|
| Cooling | in the vehicle charging connector and in the cable |
| Coolant | 50% water, 50% glycol (Glysofor N) |
| Cooling capacity | 600 W (Cable length: 3 m) 800 W (Cable length: 4 m) 900 W (Cable length: 5 m) 1050 W (Cable length: 6 m) |
| Cooling hose diameter | 1x 11.50 mm Supply hose 2x 8.80 mm Return hoses |
| Flow rate | 2 l/min |
| Operating pressure | 1.00 bar ... 2.00 bar |
| Relief pressure | 2.00 bar |
| Maximum permissible pressure | 4.00 bar |
| Flow-in temperature | 15 °C |

Electrical properties

| | |
|-----------------------------|---|
| Type of signal transmission | Pulse width modulation with modulated Powerline communication in accordance with ISO/IEC 15118 / DIN SPEC 70121 |
| Coding | 1500 Ω (between PE and PP) |
| Type of charging current | DC |
| Charging power | 500 kW |
| Charging current | 500 A |
| Type of charging current | DC Boost Mode |

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| | |
|------------------|--|
| Charging power | up to 700 kW (Boost Mode, depending on the ambient conditions. For further information on implementation, please contact your local Phoenix Contact office and see the packing slip in the download area for this item.) |
| Charging current | up to 700 A (Boost Mode, depending on the ambient conditions. For further information on implementation, please contact your local Phoenix Contact office and see the packing slip in the download area for this item.) |

Power contact

| | |
|---------------|---------------------|
| Number | 3 (PE, DC+, DC-) |
| Rated voltage | 1000 V DC |
| Rated current | 500 A (up to 40 °C) |

Signal contact

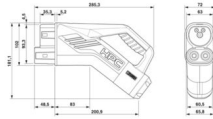
| | |
|---------------|------------|
| Number | 2 (CP, PP) |
| Rated voltage | 30 V AC |
| Rated current | 2 A |

Temperature sensors (NTC)

| | |
|------------------------|--|
| Sensor type | NTC |
| Attachment point | 2 sensors for the replaceable front DC contacts 2 sensors for the internal DC power wires 1 sensor on the PCB in the housing |
| Switch-off temperature | 90 °C |

Dimensions

Vehicle charging connector

| | |
|---------------------|--|
| Dimensional drawing |  <p>Make sure that the vehicle charging connector is placed in an appropriate charging connector holder, which ensures a minimum protection rating of IP24 in accordance with IEC 61851-1, for the entire time between charging. To create this charging connector holder, use the dimensions of the vehicle charging connector. Detailed dimensions can also be found in the Download area.</p> |
| Width | 72 mm |
| Height | 181.1 mm |
| Depth | 285.3 mm |

Material specifications

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|---------------------|--------------|
| Color (Housing) | black (9005) |
| Color (Handle area) | black (9005) |
| Color (Mating face) | black (9005) |
| Color (Cable) | black (9005) |

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| | |
|--|-----------------------------------|
| Material (Vehicle charging connector) | Plastic |
| Material (Cable outer sheath) | EVM-1 in accordance with EN 50620 |
| Material (Contact surface) | Silver |
| Flammability rating according to UL 94 | V0 (Mating face) |

Cable/line

| | |
|--------------------------------|--|
| Cable length | 3.5 m ±45 mm |
| Wiring standards/regulations | Based on UL 62 (File E515623, Vol 1) |
| | Based on IEC 62893 |
| Cable weight | max. 1938.00 kg/km |
| Cable type | straight |
| Cable structure | 5 x 25 mm ² + 7 x 0.75 mm ² |
| External cable diameter | 35.70 mm ±0.4 mm |
| Outer sheath, material | TPE-U in accordance with IEC 62893-1 |
| Stripping length of the sheath | 250 mm ±5 mm |
| Stripping length | 250 mm ±5 mm |
| Cable resistance | ≤ 0.00078 Ω/m (based on a power core, at an ambient temperature of 20°C) |
| Bending radius | min. 357 mm (10x Ø) |

Mechanical properties

Mechanical data

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|-----------------------------|--------------------------------|
| Insertion/withdrawal cycles | > 10000 (based on IEC 62196-1) |
| Insertion force | < 100 N |
| Withdrawal force | < 100 N |

Environmental and real-life conditions

Ambient conditions

| | |
|---|--|
| Degree of protection (Vehicle charging connector) | IP54 (plugged in; when plugged in and ready to operate, the degree of protection is only ensued if both plug-in components are original products from Phoenix Contact or suitable standard-compliant products) |
| Ambient temperature (operation) | -30 °C ... 40 °C |
| | max. 55 °C (Current reduction required, observe the DC contact temperature limit value of 90°C) |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C |
| Altitude | 5000 m (above sea level) |

Standards and regulations

Standards

| | |
|-----------------------|---------------|
| Standards/regulations | IEC 62196-3-1 |
|-----------------------|---------------|

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Classifications

ECLASS

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|-------------|----------|
| ECLASS-11.0 | 27144705 |
| ECLASS-12.0 | 27144705 |
| ECLASS-13.0 | 27144705 |

ETIM

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| ETIM 9.0 | EC002897 |
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UNSPSC

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|-------------|----------|
| UNSPSC 21.0 | 39121500 |
|-------------|----------|

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Environmental product compliance

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|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 10; For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads" |

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