# EV-T2M4CC-DC250A-3,5M70ESBK11 - DC charging cable

1130319

https://www.phoenixcontact.com/us/products/1130319

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



CHARX connect standard, CCS type 2, DC charging cable, up to 500 A in Boost mode, 250 A permanent, 1000 V DC, with vehicle charging connector and open cable end, cable: 3.5 m, black, straight, with connected PP contact, with replaceable mating face frame, with analog temperature sensors, no liquid cooling, PHOENIX CONTACT logo, IEC 62196-3, for charging electric vehicles (EV) with direct current (DC)

## 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
- 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

## Commercial data

| | |
|---|---|
| Item number | 1130319 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | EM01 |
| Product key | XWBMFF |
| GTIN | 4063151058531 |
| Weight per piece (including packing) | 9,080 g |
| Weight per piece (excluding packing) | 7,876 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

## Technical data

### Product properties

| | |
|---|---|
| Product type | DC charging cable |
| Product family | CHARX connect standard |
| Type | DC charging cable |
| | with vehicle charging connector and open cable end |
| Design | with connected PP contact |
| | with replaceable mating face frame |
| | with analog temperature sensors |
| | no liquid cooling |
| Charging standard | CCS type 2 |
| Charging mode | Mode 4 |
| Affixed logo | PHOENIX CONTACT logo |
| Label | 14.1 mm x 44.8 mm (customer logo on request) |

### Electrical properties

| | |
|---|---|
| Temperature monitoring | 2x Pt 1000 |

Charging power and current (DC charging)

| | |
|---|---|
| Type of charging current | DC |
| Charging current | 250 A DC |
| Charging power | 250 kW |
| Rated voltage | 1000 V |

Charging power and current (DC charging in Boost Mode)

| | |
|---|---|
| Type of charging current | DC Boost Mode |
| Charging current | up to 500 A DC |
| Charging power | up to 500 kW |
| Rated voltage | 1000 V |
| Note | The specifications refer to charging in Boost Mode and are dependent on ambient conditions. For further details, see the packing slip in the download area. |

Pin assignment (Power contacts)

| | |
|---|---|
| Note on the connection method | Crimp connection, cannot be disconnected |
| Number | 3 (PE, DC+, DC-) |
| Rated voltage | 1000 V DC |
| Rated current | 250 A (up to 40 °C) |

Pin assignment (Signal contacts)

| | |
|---|---|
| Note on the connection method | Crimp connection, cannot be disconnected |
| Type of signal transmission | Pulse width modulation with modulated Powerline communication in accordance with ISO/IEC 15118 / DIN SPEC 70121 |
| Number | 2 (CP, PP) |

| | |
|---|---|
| Rated voltage | 30 V AC |
| Rated current | 2 A |
| Coding | 1500 Ω (between PE and PP) |
| | PP signal contact connected to cable |

Temperature sensors (Pt 1000)

| | |
|---|---|
| Sensor type | Pt 1000 |
| Standards/regulations | DIN EN 60751 |
| Attachment point | Sensor for the DC contacts |
| Switch-off temperature | 90 °C ±1 K (equivalent to a Pt 1000 value of 1346.5 Ω) |
| Long-term stability | 0.06 % (after 1000 hours at 130 °C) |
| Recommended measured current | 1 mA (1 V at 0°C) |
| Coefficient | 3850 ppm/K |
| Ambient temperature | -50 °C ... 130 °C (Operation) |

## Dimensions

Vehicle charging connector

| | |
|---|---|
| Width | 75 mm |
| Height | 139 mm |
| Depth | 267 mm |

## Material specifications

| | |
|---|---|
| Color (Housing) | black (9005) |
| Color (Handle area) | gray (7042) |
| Color (Mating face) | black (9005) |
| Color (Protective cap) | black (9005) |
| Color (Cable) | black (9005) |
| Material (Vehicle charging connector) | Plastic |
| Material (Cable outer sheath) | TPE-U |
| Material (Contact surface) | Silver |
| Note | The color appearance and gloss level of the charging cable may vary. |

## Cable/line

| | |
|---|---|
| Cable length | 3.5 m ±45 mm |
| Wiring standards/regulations | DIN EN 50620 |
| Wiring certifications | VDE-Reg. |
| Cable weight | max. 2300.00 kg/km |
| Cable type | Class 6 |
| Cable type | straight |
| Cable structure | 2 x 70 mm² + 1 x 35 mm² + 3 x 2 x 0.75 mm² |
| External cable diameter | 32.00 mm ±0.4 mm |
| Outer sheath, material | TPE-U |
| Stripping length of the sheath | 140 mm ±10 mm |

| | |
|---|---|
| Stripping length | 140 mm ±10 mm |
| Cable resistance | ≤ 0.000272 Ω/m (based on a power core, at an ambient temperature of 20°C) |
| Bending radius | min. 320 mm (10x Ø) |

## Mechanical properties

Mechanical data

| | |
|---|---|
| Insertion/withdrawal cycles | > 10000 |
| Insertion force | < 100 N |
| Withdrawal force | < 100 N |

## Environmental and real-life conditions

Ambient conditions

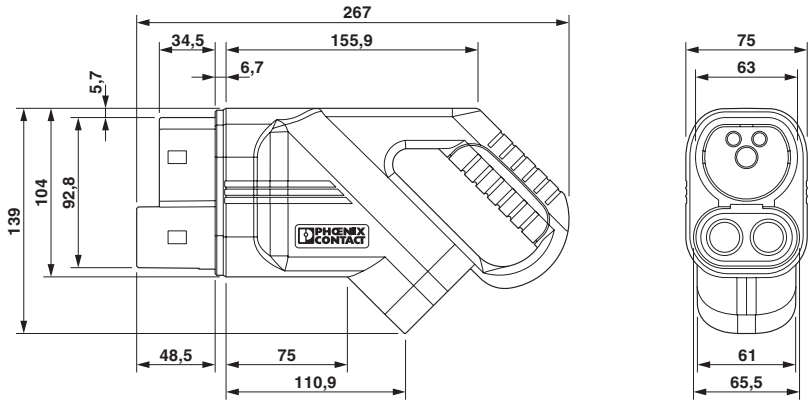
| | |
|---|---|
| Degree of protection (Vehicle charging connector) | IP44 (plugged in; when plugged in and ready to operate, the degree of protection is only ensued if both plug-in components are original products from Phoenix Contact or suitable standard-compliant products) |
| Ambient temperature (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/specifications | IEC 62196-3 |
| Note | Compliant with AFIR - EU 2025/656 |
| Note | Test voltage for insulation resistance measurement in accordance with IEC 62196-1:2022 between CP and PE/PP<br>< 24 V |

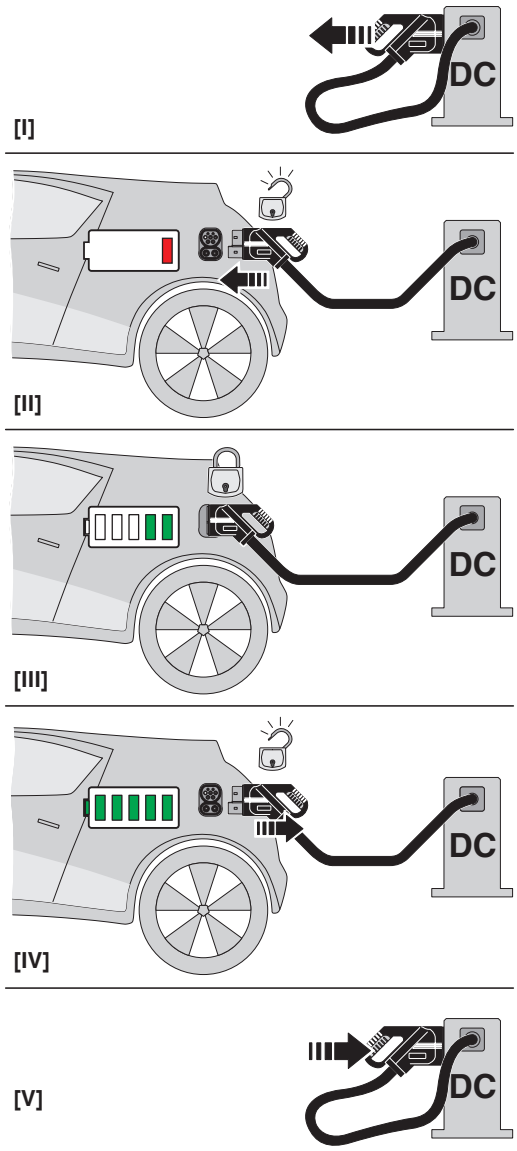
## Drawings

Dimensional drawing



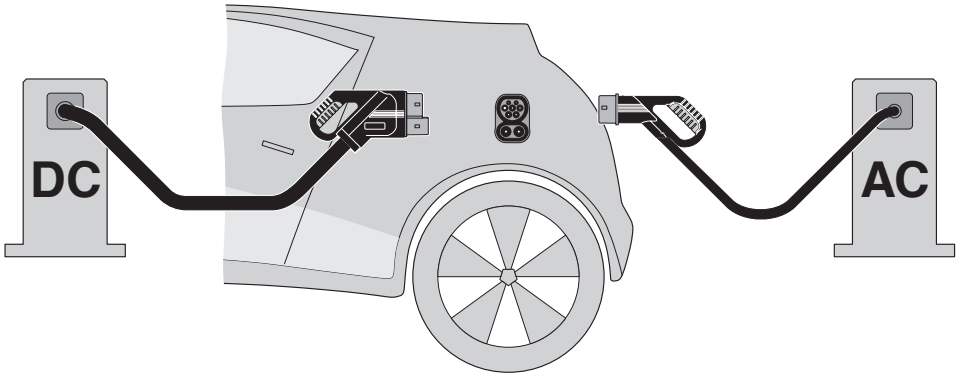

Make sure that the vehicle charging connector is placed in an appropriate charging connector holder, which ensures a minimum protection rating of IP24 in accordance with IEC 61851-1, for the entire time between charging. To create this charging connector holder, use the dimensions of the vehicle charging connector. Detailed dimensions can also be found in the Download area.

Schematic diagram



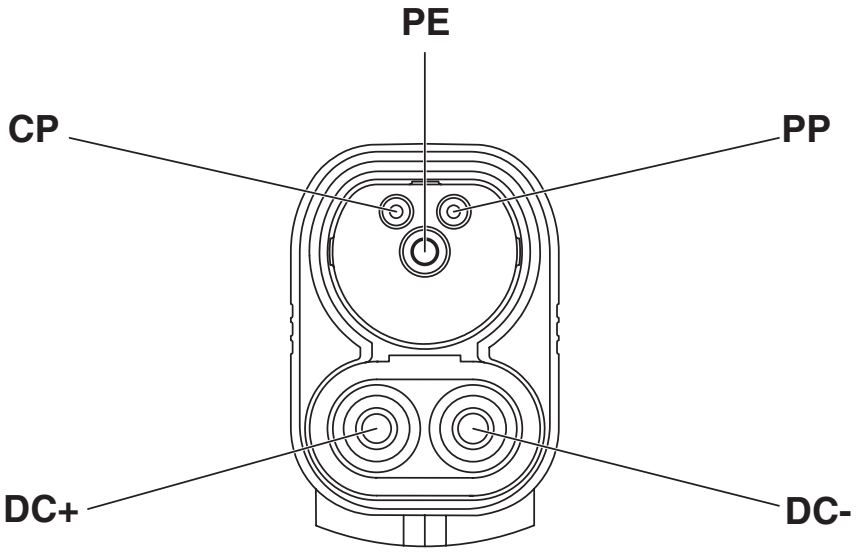

Operating instructions

Schematic diagram



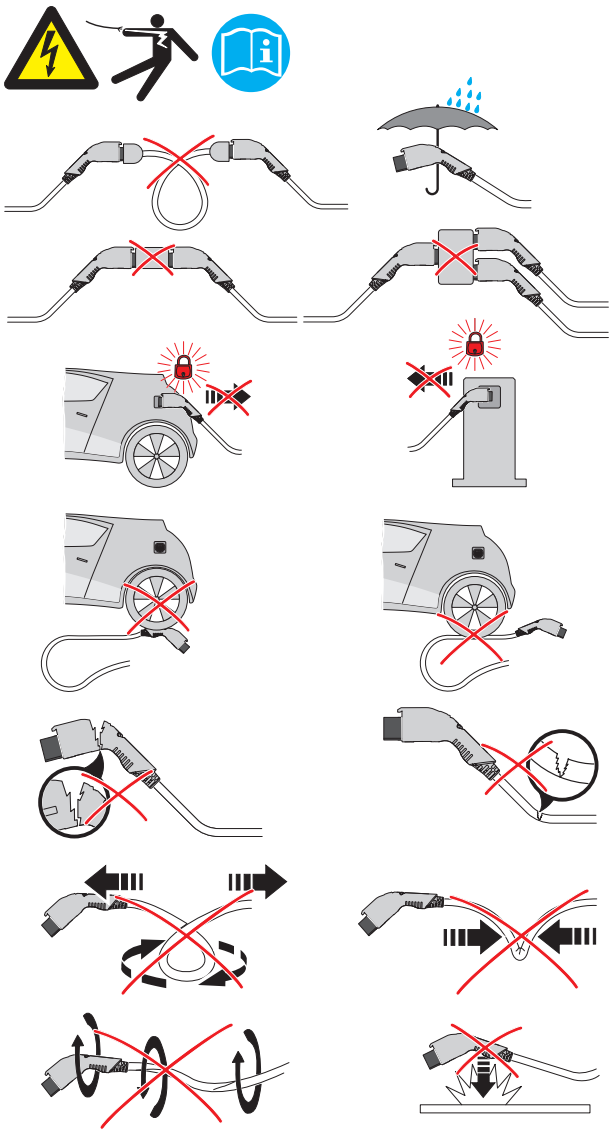

The Combined Charging System (CCS) principle - standard-compliant charging system for electric vehicles, which supports both conventional AC charging and fast DC charging. Both Vehicle Connectors fit into the CCS Vehicle Inlet.

Schematic diagram



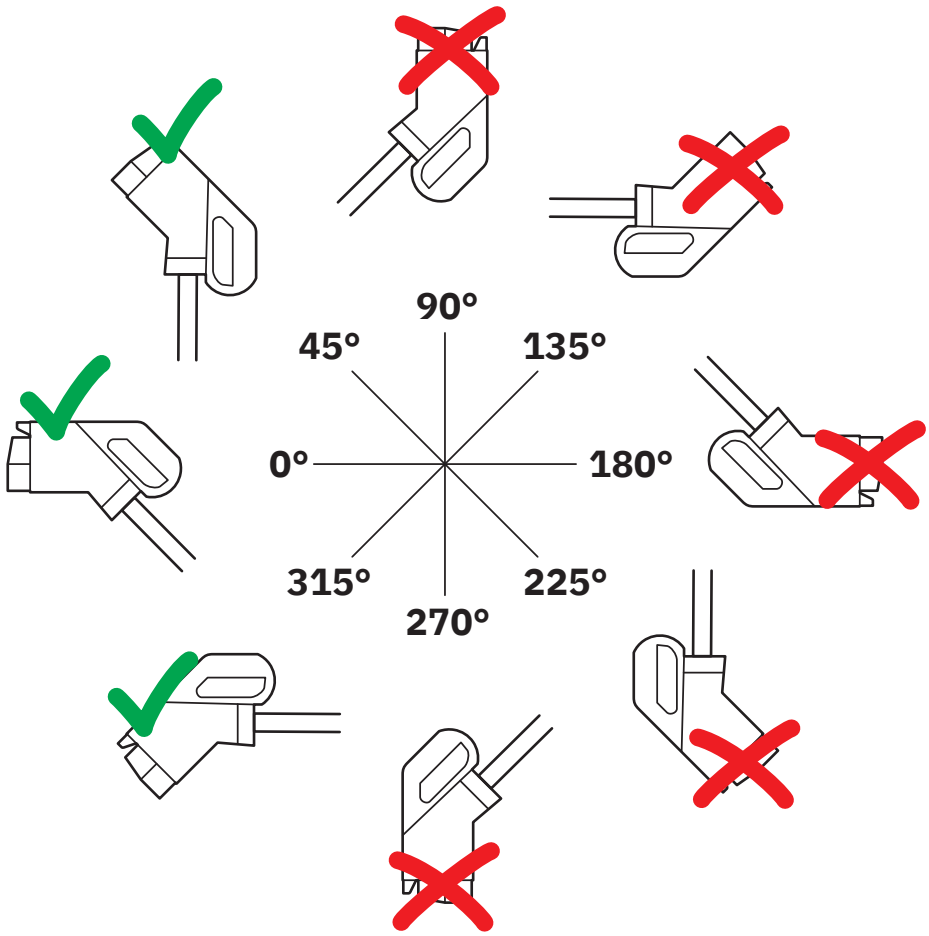

Pin assignment of the Vehicle Connector

Schematic diagram



Warnings regarding use

Schematic diagram




The resting position must be installed in the charging station such that the user cannot hang up the vehicle connector upside down (90° to 270°). However, positions rotated upward (45°) or downward (315°) are options for a resting position.

## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1130319

**IECEE CB Scheme**
Approval ID: DE1-65588/M3/A1

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| keine | | | | |
| | 1000 V | 250 A | - | - |

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-13.0 | 27144705 |
| ECLASS-15.0 | 27144705 |

### ETIM

| | |
|---|---|
| ETIM 10.0 | EC002897 |

### UNSPSC

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

## Environmental product compliance

EU RoHS

| | |
|---|---|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 6(c), 7(c)-I |

China RoHS

| | |
|---|---|
| Environment friendly use period (EFUP) | EFUP-10 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|---|---|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
| | Bis(2-(2-methoxyethoxy)ethyl)ether(CAS: 143-24-8) |
| SCIP | aecaae76-a0f8-47dd-9f49-adc436f2f5d4 |


Phoenix Contact 2026 © - all rights reserved
https://www.phoenixcontact.com



Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com