# Vehicle charging inlet - CHARX GBH4I-DC125-2,0M - 1271834

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The figure shows a version of the product

CHARX connect, Vehicle charging inlet, For charging with direct current (DC), For installation in electric vehicles (EV), DC GB/T, GB/T 20234.3-2015, length: 2 m, Front and rear mounting, M6, Generation 4

## Product Description

Vehicle inlet for direct current (DC) charging, compatible with GB/T vehicle charging connectors (EVSE), for installation in electric vehicles for electromobility (EV).

## Your advantages

- Silver-plated surface of the power and signal contacts
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Material data available in the IMDS (International Material Data System of the automotive industry)
- Tested in accordance with selected tests of automotive standards LV124, LV214, LV215-2
- Integrated temperature sensors for monitoring the temperature at the power contacts

RoHS

## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 |
| GTIN | 4 063151 463151 |
| GTIN | 4063151463151 |

## Technical data

### Product definition

| | |
|---|---|
| Application | For charging with direct current (DC) |
| | For installation in electric vehicles (EV) |
| Design | Generation 4 |
| Standards/regulations | GB/T 20234.3-2015 |

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## Technical data

### Product definition

| | |
|---|---|
| Charging standard | DC GB/T |
| Charging mode | Mode 4 |
| Note on the connection method | Crimp connection, cannot be disconnected |

### Dimensions

| | |
|---|---|
| Height | 93 mm |
| Width | 93 mm |
| Depth | 136.3 mm |
| Bore dimensions | 72 mm x 72 mm, 72 mm x 72 mm |
| Conductor length | 2 m (DC cables) |
| | 2 m (PE cable) |
| | 2 m (Power supply) |
| | 1 m (Locking actuator cables) |
| | 1 m (Temperature sensors cables) |
| | 1 m (Communications cables) |

### Ambient conditions

| | |
|---|---|
| Ambient temperature (operation) | -40 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Max. altitude | 4000 m (above sea level) |
| Degree of protection | IP55 (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) |
| | IP67 (Inner area of vehicle charging inlet) |

### Electrical properties

| | |
|---|---|
| Charging power (nominal operation) | 125 kW |
| Type of charging current | DC |
| Number of power contacts | 3 (DC+, DC-, PE) |
| Rated current of power contacts | 125 A DC |
| Rated voltage for power contacts | 1000 V DC |
| Number of signal contacts | 6 (S+, S-, A+, A-, CC1, CC2) |
| Note on the connection method | Crimp connection, cannot be disconnected |
| Resistor coding | 1 kΩ (between PE and CC1) |
| Temperature measurement | DC contacts: 2x PT1000 (DIN EN 60751) |

### Mechanical properties

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

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## Technical data

### Mounting

| | |
|---|---|
| Possible mounting positions | Front and rear mounting |
| Restrictions to mounting position | Only 0 to 90 degree frontal inclination possible, see figure |
| Mounting hole diameter | 6.70 mm (ø) |
| Required mounting screws | M6 |
| Screws included in the scope of delivery | none |

### Design

| | |
|---|---|
| Design line | Generation 4 |
| Mating face color | black |
| Customer variations | On request |

### Material

| | |
|---|---|
| Material | Plastic |
| Flammability rating | V0 |
| Material surface of contacts | Ag |

### DC cable

| | |
|---|---|
| Cable structure | 2 x 35 mm² |
| External cable diameter | 14.1 mm ±0.3 mm |
| Cable resistance | ≤ 0.527 Ω/km |
| Outer sheath, material | Silicone |
| External sheath, color | orange |
| Minimum bending radius | 3 x D |
| Cable weight | approx. 482 kg/km |

### PE cable

| | |
|---|---|
| Cable structure | 1 x 25 mm² |
| External cable diameter | 8.6 mm ±0.1 mm |
| Cable resistance | ≤ 0.743 Ω/km |
| Outer sheath, material | Silicone |
| External sheath, color | Green-yellow |
| Minimum bending radius | 3 x D |
| Cable weight | approx. 251 kg/km |

### Cable communication

| | |
|---|---|
| Cable structure | 0.5 mm² + 0.5 mm² |
| External cable diameter | 1.6 mm -0.2 mm |
| Cable resistance | ≤ 37.1 Ω/km |
| Outer sheath, material | PVC |
| Single wire, color | black PP/CS |

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## Technical data

### Cable communication

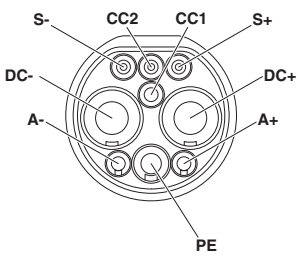
| | |
|---|---|
| | white CP |
| Minimum bending radius | 15 mm |
| Cable weight | 7 kg/km |

### Temperature sensor technology, DC contacts

| | |
|---|---|
| Type of sensor | Pt 1000 |
| Standards/regulations | DIN EN 60751 |
| Recommended measured current | ≤ 1 mA ($U_{max}$= 16 V DC) |
| Temperature range | -40 °C ... 130 °C |
| Resistance range | 650 Ω ... 1450 Ω |

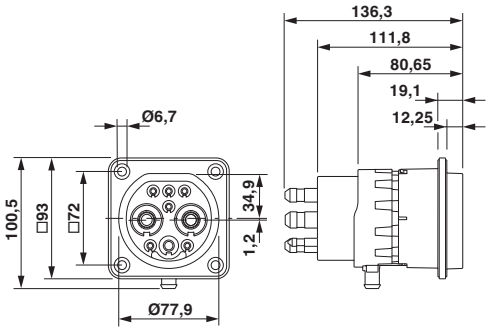
## Drawings

Connection diagram




Pin assignment of Vehicle Inlet

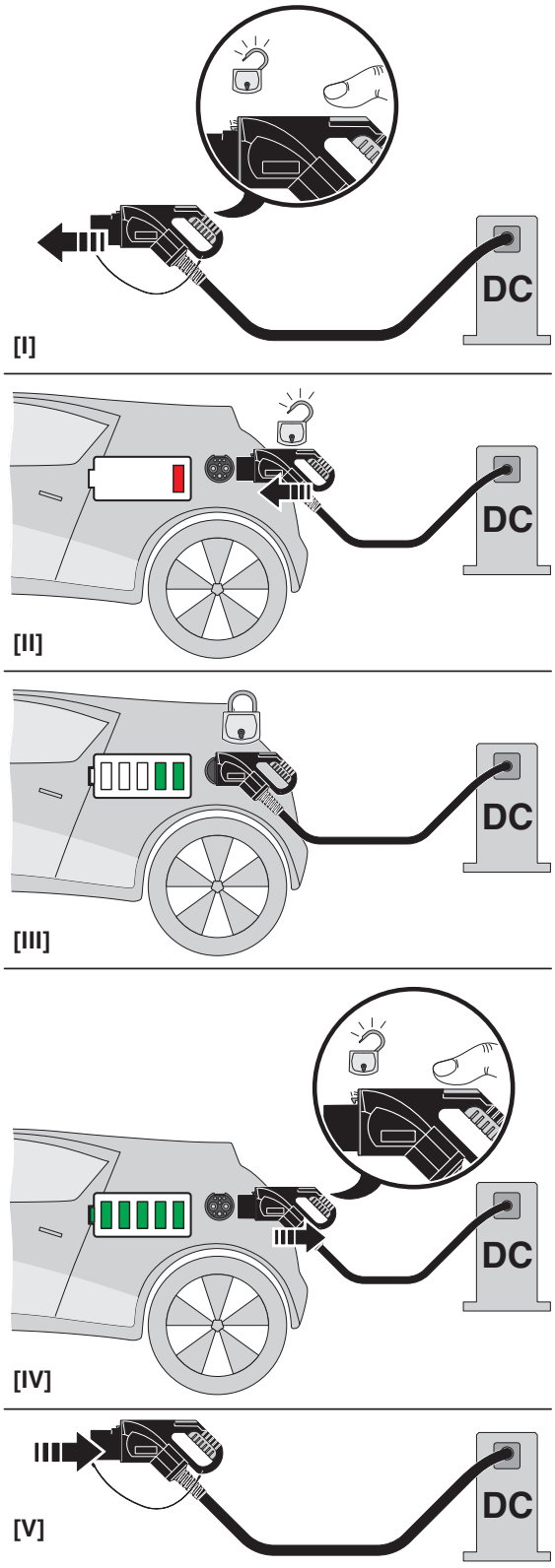
Dimensional drawing




Dimensional drawing

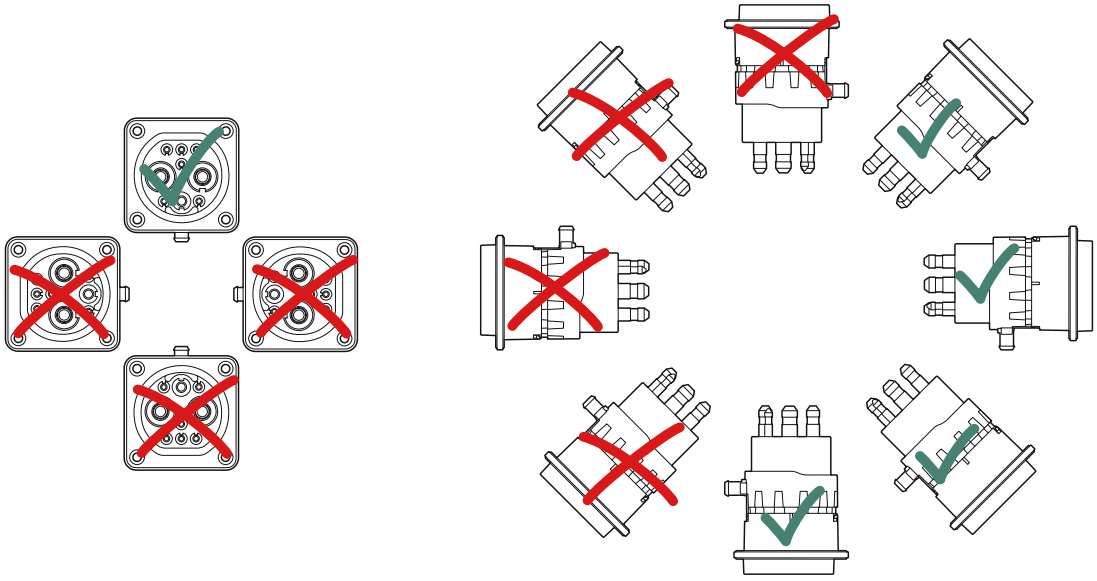
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Schematic diagram



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Connection diagram



Installation positions

## Classifications

### eCl@ss

| | |
|---|---|
| eCl@ss 10.0.1 | 27144706 |
| eCl@ss 11.0 | 27144706 |

### ETIM

| | |
|---|---|
| ETIM 7.0 | EC002898 |

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