

1003678

https://www.phoenixcontact.com/us/products/1003678

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 comfort, GB/T, AC charging cable, 32 A permanent, 440 V AC, with vehicle charging connector and open cable end, cable: 7.5 m, black, straight, with protective cap, housing: black, gray, PHOENIX CONTACT logo, NOTE: Cable management may be required., GB/T 20234.2-2015, GB/T 18487.1-2015, for charging electric vehicles (EV) with alternating current (AC) via GB/T vehicle charging inlets

## Product description

AC charging cable with vehicle charging connector and free cable end for charging electric vehicles (EV) with alternating current (AC) via GB/T vehicle charging inlets, for installation at charging stations for e-mobility (EVSE)

### Your advantages

- · Complete product range
- · Convenient handling due to the ergonomic, triple award-winning design
- Available with your logo on request for consistent branding of your charging station
- · Longitudinal water tightness reliably prevents water ingress
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Tested in accordance with automotive standards LV124, LV214, and LV215-2
- Tested in accordance with EV Ready 37 requirements

## Commercial data

| Item number                          | 1003678       |
|--------------------------------------|---------------|
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Product key                          | XWBDCB        |
| GTIN                                 | 4055626472317 |
| Weight per piece (including packing) | 2,266 g       |
| Weight per piece (excluding packing) | 2,266 g       |
| Country of origin                    | PL            |



1003678

https://www.phoenixcontact.com/us/products/1003678

## Technical data

### Product properties

| Product type        | AC charging cable  |
|---------------------|--|
| Product family      | CHARX connect comfort  |
| Application         | for charging electric vehicles (EV) with alternating current (AC) via GB/T vehicle charging inlets |
|                     | for installation at charging stations for electromobility (EVSE)                                   |
| Design              | with protective cap  |
| Charging standard   | GB/T   |
| Charging mode       | Mode 3, Case C   |
| Affixed logo        | PHOENIX CONTACT logo   |
| Customer variations | On request   |
| Label               | 14.1 mm x 44.8 mm (customer logo on request)   |

## Electrical properties

### Charging power and current (AC charging (1-phase))

| Type of charging current | AC single-phase   |
|--------------------------|-------------------|
| Charging current         | 32 A AC (1-phase) |
| Charging power           | 8 kW (1-phase)    |
| Rated voltage            | 250 V             |

### Pin assignment (Leistungskontakte)

| Note on the connection method | Crimp connection, cannot be disconnected |
|-------------------------------|--|
| Number                        | 3 (L, N, PE)                             |
| Rated voltage                 | 440 V                                    |
| Rated current                 | 32 A                                     |

### Pin assignment (Signalkontakte)

| Note on the connection method | Crimp connection, cannot be disconnected |
|-------------------------------|--|
| Type of signal transmission   | Pulse width modulation                   |
| Number                        | 2 (CP, CC)                               |
| Rated voltage                 | 30 V AC                                  |
| Rated current                 | 2 A                                      |
| Coding                        | 680 $\Omega$ (between PE and CC)         |

### **Dimensions**

#### Vehicle charging connector

| Width  | 60 mm    |
|--------|----------|
| Height | 112.4 mm |
| Depth  | 219.1 mm |

#### Material specifications

| Color (Housing) | black (9005) |
|-----------------|--------------|



1003678

https://www.phoenixcontact.com/us/products/1003678

| Color (Handle area)                   | black (9005)   |
|---------------------------------------|--|
| Color (Actuating element)             | black (9005)   |
| 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                   | 7.5 m   |
|--------------------------------|---|
| Wiring standards/regulations   | prEN 50620/DIN EN 50620   |
| Wiring certifications          | VDE   |
| Cable weight                   | max. 305.00 kg/km   |
| Cable type                     | Class 5   |
| Cable type                     | straight  |
| Cable structure                | 3 x 6.0 mm² + 1 x 0.5 mm²   |
| External cable diameter        | 12.80 mm ±0.4 mm  |
| Outer sheath, material         | TPE-U   |
| Stripping length of the sheath | 70 mm ±5 mm   |
| Stripping length               | 70 mm ±5 mm   |
| Cable resistance               | ≤ 0.0033 Ω/m (based on a power core, at an ambient temperature of 20°C) |
| Bending radius                 | min. 96 mm (7.5x diameter)  |
| Cable length                   | 7.5 m   |
| Stripping length               | 70 mm ±5 mm   |
| External cable diameter        | 12.80 mm ±0.4 mm  |
| Cable type                     | Class 5   |
| Wiring certifications          | VDE   |
| Wiring standards/regulations   | prEN 50620/DIN EN 50620   |
| Cable resistance               | ≤ 0.0033 Ω/m (based on a power core, at an ambient temperature of 20°C) |

## 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 inlet) | IP55 (plugged in; when plugged in and ready to operate, the |
|---|---|



1003678

https://www.phoenixcontact.com/us/products/1003678

|   | degree of protection is only ensued if both plug-in components are original products from Phoenix Contact or suitable standard-compliant products)   |
|---|--|
| Degree of protection (Infrastructure charging plug) | 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) |
| Degree of protection (Protective cap)               | IP54   |
| Ambient temperature (operation)                     | -30 °C 50 °C   |
| Ambient temperature (storage/transport)             | -40 °C 80 °C   |
| Altitude  | 5000 m (above sea level)   |

## Standards and regulations

#### Connection in accordance with standard

| Normative cable length restrictions | NOTE: Cable management may be required.   |
|-------------------------------------|---|
|                                     | Cable management is required in the US if the cable length exceeds 7.5 m (IEC 61851-1). |
|                                     |   |
| Standards                           |   |
| Standards Standards/regulations     | GB/T 20234.2-2015   |

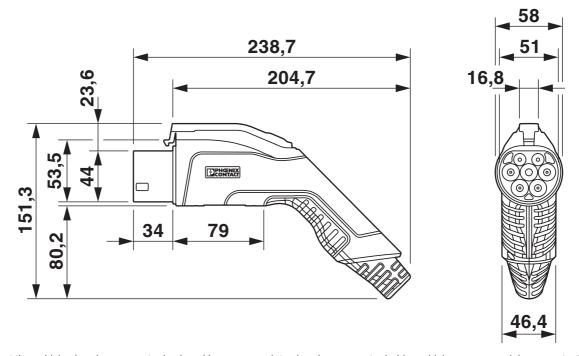


1003678

https://www.phoenixcontact.com/us/products/1003678

## Drawings

### Dimensional drawing



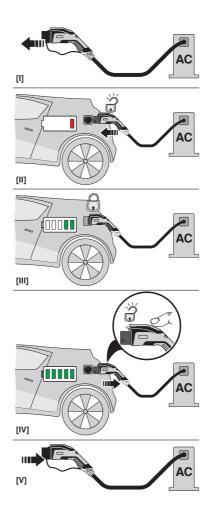
Make sure that the vehicle charging connector is placed in an appropriate charging connector holder, which ensures a minimum protection rating of IP24 in accordance with IEC 61851-1, for the entire time between charging. To create this charging connector holder, use the dimensions of the vehicle charging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



1003678

https://www.phoenixcontact.com/us/products/1003678

## Schematic diagram

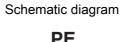


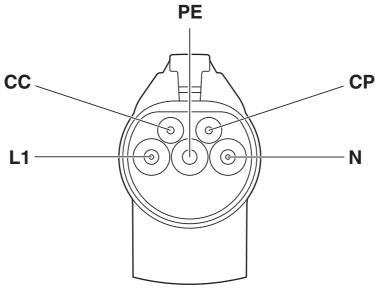
Operating instructions



1003678

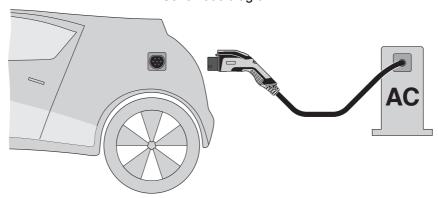
https://www.phoenixcontact.com/us/products/1003678





Pin assignment of the Vehicle Connector





Terminology definition



1003678

https://www.phoenixcontact.com/us/products/1003678

## Classifications

### **ECLASS**

|        | ECLASS-13.0 | 27144705 |  |  |
|--------|-------------|----------|--|--|
|        | ECLASS-15.0 | 27144705 |  |  |
| ETIM   |             |          |  |  |
|        | ETIM 9.0    | EC002897 |  |  |
| UNSPSC |             |          |  |  |
|        | UNSPSC 21.0 | 39121500 |  |  |



1003678

https://www.phoenixcontact.com/us/products/1003678

## Environmental product compliance

#### EU RoHS

| Fulfills EU RoHS substance requirements | Yes   |
|---|---|
| Exemption                               | 6(c)  |
| China RoHS                              |   |
| Environment friendly use period (EFUP)  | EFUP-50   |
|   | 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)  |
| SCIP                                    | b22e2b90-a061-408d-9518-95ebd1eceedd  |

Phoenix Contact 2025 © - 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