CHARX ST2C-DC250-10,0MCS00P1 - DC charging cable

1674640

https://www.phoenixcontact.com/gb/products/1674640

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CHARX connect standard, CCS type 2, DC charging cable, 250 A permanent, 1000 V DC, with vehicle charging connector and open cable end, cable: 10 m, black, straight, with four-wire measurement technology, with analog temperature sensors, with replaceable mating face frame, with replaceable DC power contacts, with connected PP contact, PHOENIX CONTACT logo, NOTE: The cable length exceeds the normative specification of 10 m., IEC 62196-3, for charging electric vehicles (EV) with direct current (DC), IP55 degree of protection

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

- Broad portfolio for all DC charging applications in the medium power range
- Particularly robust and durable connector design for high availability
- Prepared for four-wire measurement technology, enabling simple billing compliant with calibration laws
- High-level safety with two-chamber sealing system for the separation of DC+ and DC-
- Fast and cost-effective maintenance with exchangeable mating face including power contacts
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001

Commercial data

Item number	1674640
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	XWBMHF
Product key	XWBMHF
GTIN	4067923225619
Weight per piece (including packing)	23,900 g
Weight per piece (excluding packing)	22,912 g
Customs tariff number	85444920
Country of origin	CN

Technical data

Notes

General	IP55 degree of protection

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 four-wire measurement technology
	with analog temperature sensors
	with replaceable mating face frame
	with replaceable DC power contacts
	with connected PP contact
	no liquid cooling
Charging standard	CCS type 2
Charging mode	Mode 4
Affixed logo	PHOENIX CONTACT logo

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

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	2 sensors for the DC contacts
Switch-off temperature	90 °C

Dimensions

Vehicle charging connector

Width	72 mm
Height	181.1 mm
Depth	285.3 mm

Material specifications

Color (Housing)	black (9005)
Color (Handle area)	black (9005)
Color (Mating face)	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.
Flammability rating according to UL 94	V0 (Mating face)

Cable/line

Cable length	10 m ±50 mm
Wiring standards/regulations	IEC 62893-4-1
Cable type	Class 6
Cable type	straight
Cable structure	2 x 70 mm² + 1 x 25 mm² + 2 x 0.75 mm² + 6 x 0.5 mm²
External cable diameter	33.20 mm ±0.5 mm
Stripping length of the sheath	180 mm ±10 mm
Stripping length	180 mm ±10 mm
Cable resistance	0.000272 Ω/m
Bending radius	332 mm ±1 mm (10 x D)

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)	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)
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	max. 5000 m (above sea level)

Standards and regulations

Connection in accordance with standard

Normative cable length restrictions	NOTE: The cable length exceeds the normative specification of 10 m.
	Interference-free V2G communication in accordance with ISO 15118 is not guaranteed for cable lengths over 10 m (ISO IEC 15118-3, A.11.3, Table A.11).
	Cable management is required in the US if the cable length exceeds 7.5 m (IEC 61851-1).
Standards/specifications	IEC 62196-3
Note	Compliant with AFIR - EU 2025/656

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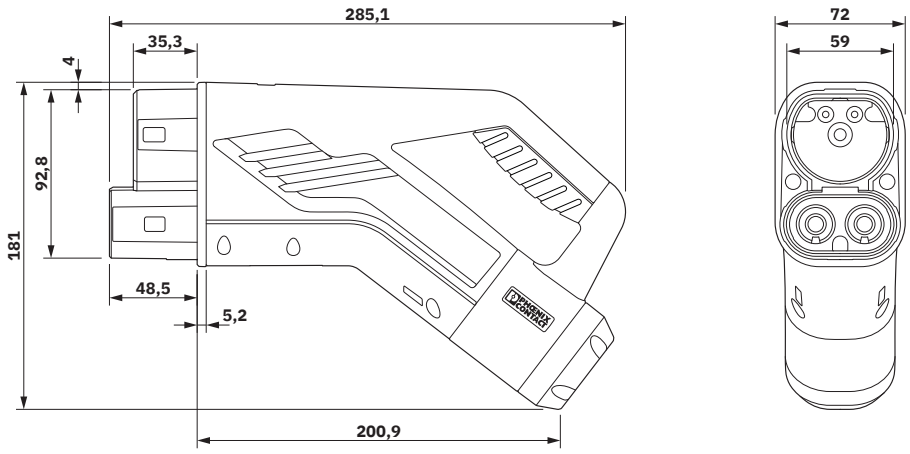
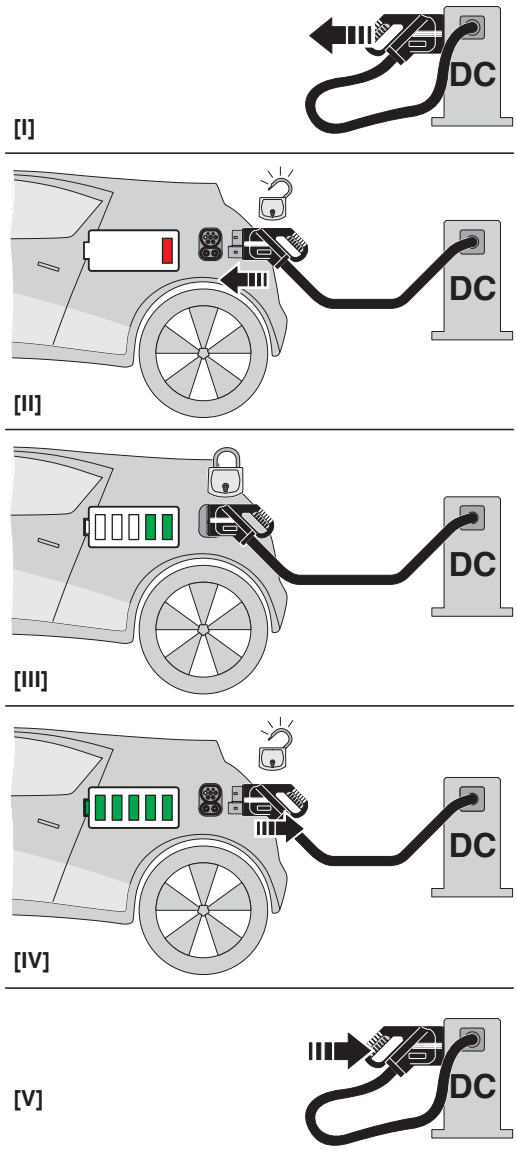
Drawings

Dimensional drawing



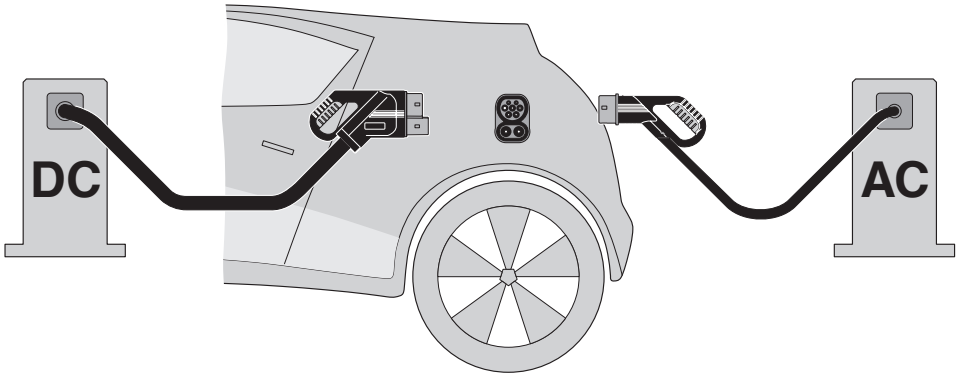
Dimensional drawing

Schematic diagram



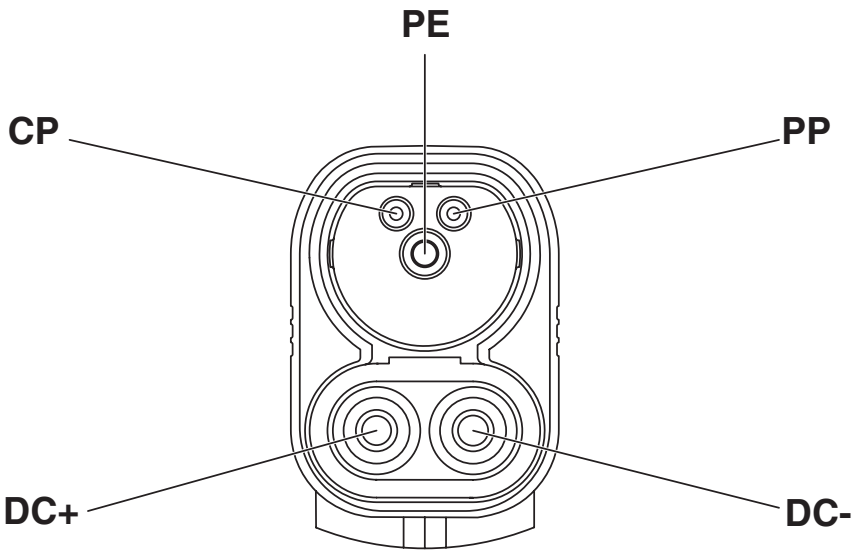
Operating instructions

Schematic diagram



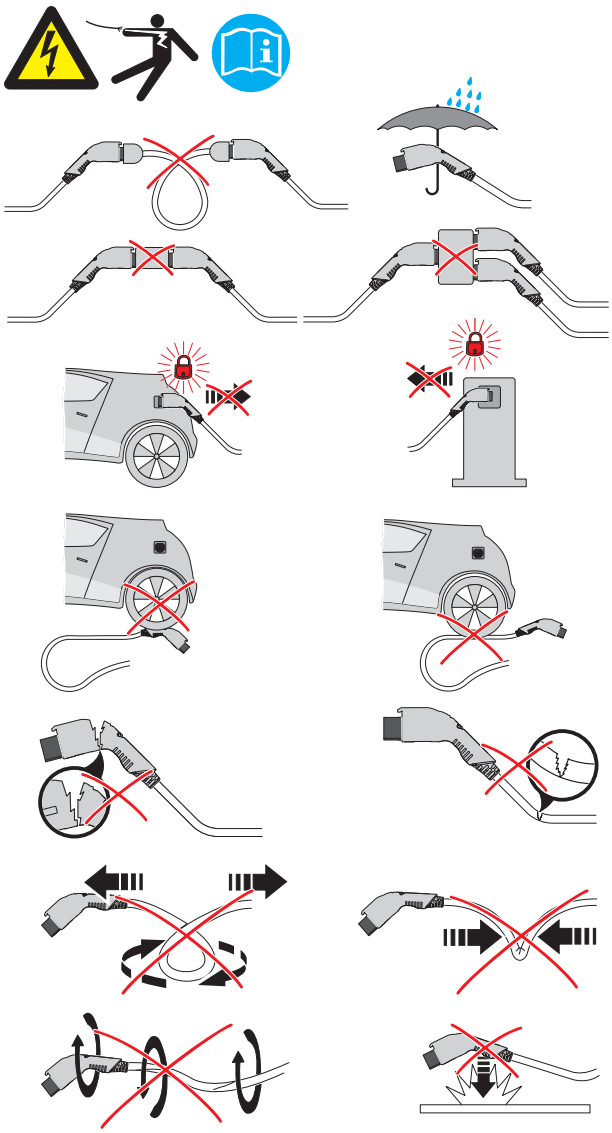
The Combined Charging System (CCS) principle - standard-compliant charging system for electric vehicles, which supports both conventional AC charging and fast DC charging. Both Vehicle Connectors fit into the CCS Vehicle Inlet.

Schematic diagram



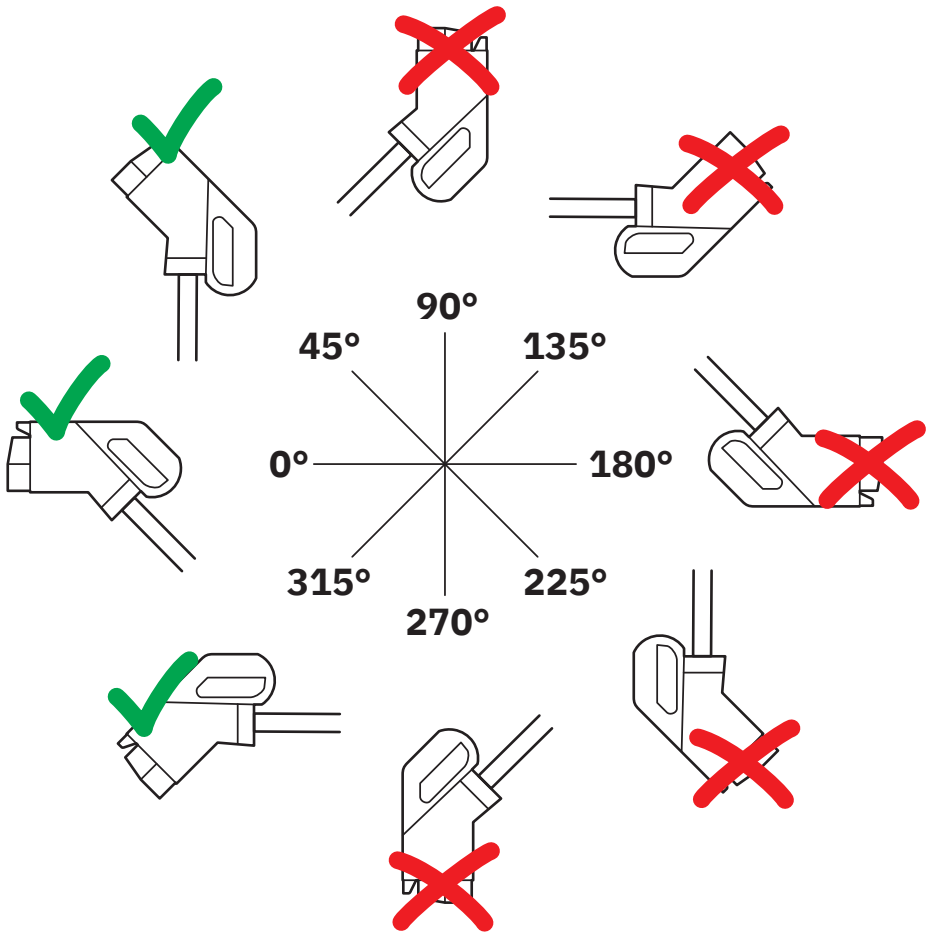
Pin assignment of the Vehicle Connector

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.

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Classifications

ECLASS

ECLASS-13.0	27144705
ECLASS-15.0	27144705

ETIM

ETIM 10.0	EC002897

UNSPSC

UNSPSC 21.0	39121500

Environmental product compliance

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.)	No substance above 0.1 wt%

PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk