

1681725
<https://www.phoenixcontact.com/gb/products/1681725>

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CHARX connect standard, GB/T, DC charging cable, 125 A permanent, 1000 V DC, with vehicle charging connector and open cable end, cable: 5 m, straight, with protective cap, with analog temperature sensors, no liquid cooling, PHOENIX CONTACT logo, GB/T 20234.1-2015, GB/T 20234.3-2015, 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 GB/T vehicle charging inlets, for installation at charging stations for e-mobility (EVSE)

Your advantages

- Robust and durable design for particularly high availability under harsh conditions
- Freely controllable LED strip for intuitive status display in your company colors
- Optional Boost Mode allows higher charging powers up to 500 kW for a short period
- Optional S1 switch for implementing customer-specific applications
- With custom housing color, customer logo, and alternative temperature sensor technology on request
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001

Commercial data

Item number	1681725
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	XWBMIC
Product key	XWBMIC
GTIN	4067923236448
Weight per piece (including packing)	15,450 g
Weight per piece (excluding packing)	13,650 g
Customs tariff number	85444290
Country of origin	CN

CHARX SGBC-DC125-5,0MCS00P - DC charging cable



1681725

<https://www.phoenixcontact.com/gb/products/1681725>

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 protective cap with analog temperature sensors no liquid cooling
Charging standard	GB/T
Charging mode	Mode 4
Affixed logo	PHOENIX CONTACT logo

Electrical properties

Charging power and current (DC charging)

Type of charging current	DC
Charging current	125 A DC
Charging power	125 kW
Rated voltage	1000 V

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	125 A

Pin assignment (Signal contacts)

Note on the connection method	Crimp connection, cannot be disconnected
Number	6 (S+, S-, A+, A-, CC1, CC2)
Rated voltage	30 V
Rated current	20 A ((A+, A-))
Coding	1000 Ω (between PE and CC1 / PE and CC2)

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 $\pm$ 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)

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Dimensions

Vehicle charging connector

Width	76 mm
Height	139.5 mm
Depth	292.6 mm

Material specifications

Note	The color appearance and gloss level of the charging cable may vary.
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Cable/line

Cable length	5 m
Wiring standards/regulations	GB/T 33594-2017
Wiring certifications	CQC1105-2015
Cable type	Class 5/6
Cable type	straight
Cable structure	2 x 35 mm ² + 1 x 25 mm ² + 2 x 4 mm ² + (2 x 0.75 mm ²) P + 10 x 0.75 mm ²
Outer sheath, material	TPU

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)
Degree of protection (Protective cover)	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

Standards

Standards/regulations	GB/T 20234.1-2015, GB/T 20234.3-2015
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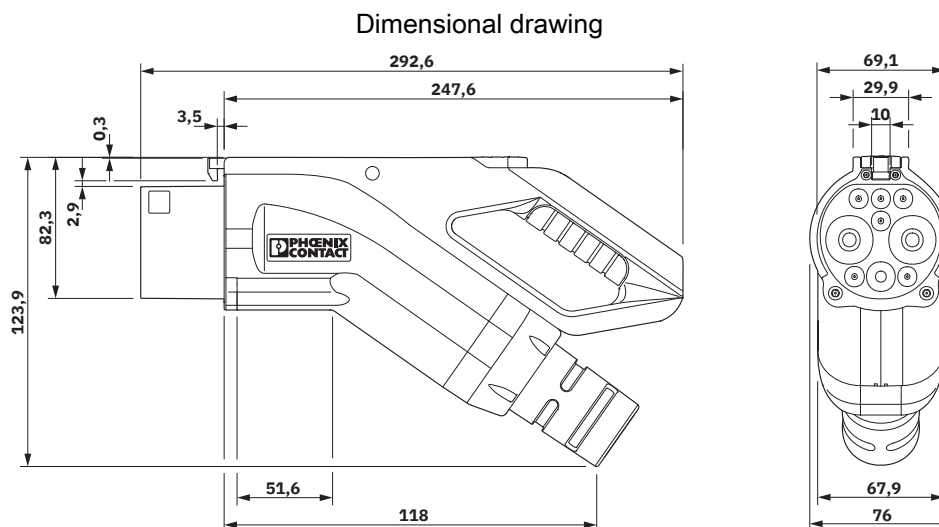
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Drawings



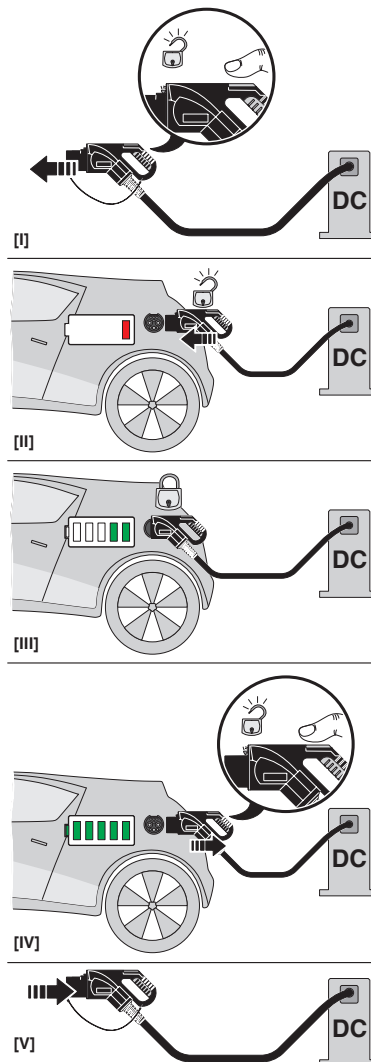
Make sure that the vehicle charging connector is placed in an appropriate charging connector holder, which ensures a minimum protection rating of IP24 in accordance with IEC 61851-1, for the entire time between charging. To create this charging connector holder, use the dimensions of the vehicle charging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

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1681725

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Schematic diagram

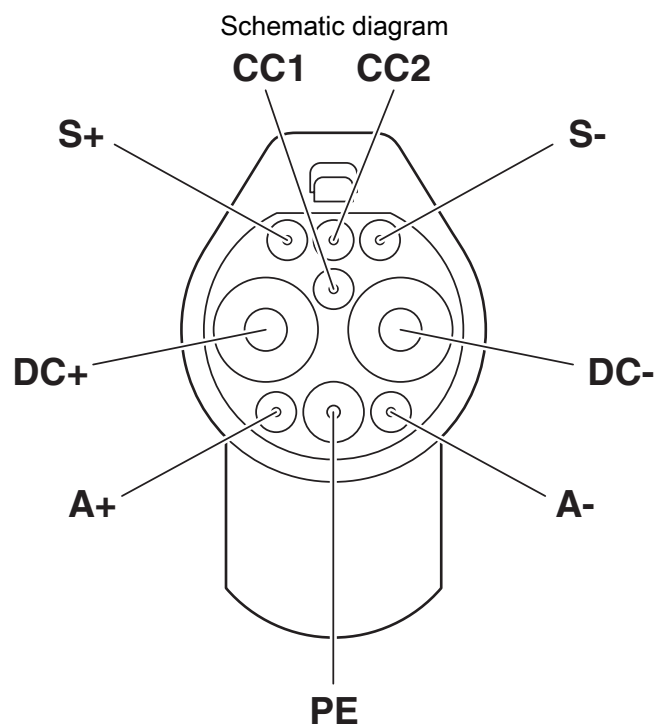


Operating instructions

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Pin assignment of the Vehicle Connector

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Schematic diagram



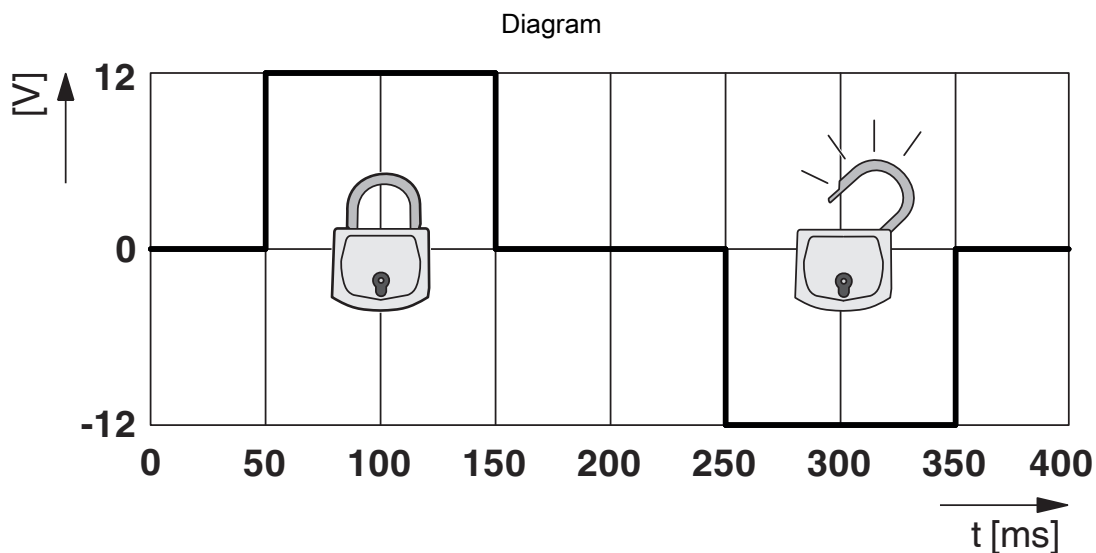
The resting position must be installed in the charging station such that the user cannot hang up the vehicle connector upside down (90° to 270°). However, positions rotated upward (45°) or downward (315°) are options for a resting position.

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Locking: The locking lever is locked via the Lock+ (WHRD) and Lock- (WHYE) connecting cables with an operating voltage of 12 V/2 A locked/unlocked.

The state is changed (lock <-> unlock) by reversing the polarity of the power supply.

The operating voltage is applied to LOCK + (WHRD) to lock.

The operating voltage is applied to LOCK - (WHYE) to unlock.

During this process, the time window for current supply must be between 50 ms ... 100 ms (continuous energization > 100 ms damages the locking actuator).

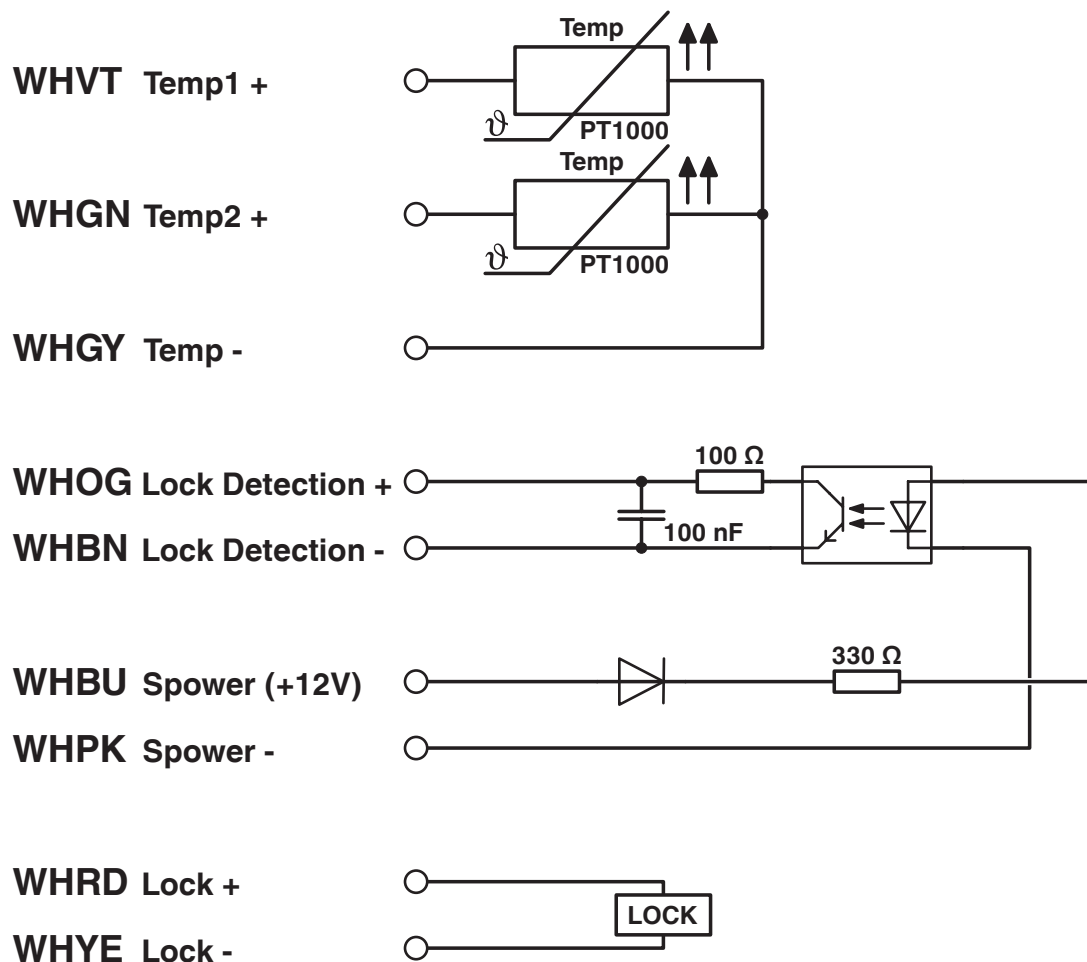
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1681725

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Block diagram



Block diagram GB/T DC

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Classifications

ECLASS

ECLASS-13.0	27144705
ECLASS-15.0	27144705

ETIM

ETIM 10.0	EC002897
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Environmental product compliance

EU RoHS

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

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%
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