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CHARX connect, DC charging cable with vehicle charging connector and open cable end, Housing color black, with connected CS contact, For charging electric vehicles (EV) with direct current (DC), for installation at charging stations for electromobility (EVSE), CCS type 1, Combined Charging System, SAE J1772, IEC 62196-3, 80 A / 1000 V (DC), C-Line, "PHOENIX CONTACT" logo, cable: 5 m, black, straight

Product Description

DC charging cable with Vehicle Connector and open cable end for fast charging of electric vehicles (EV) with direct current (DC) via CCS type 1 Vehicle Inlets, for installation at charging stations for E-Mobility (EVSE)

Your advantages

- ☑ Consistent design of all Phoenix Contact Vehicle Connectors and Infrastructure Plugs
- Silver-plated surface of the power and signal contacts
- ☑ Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Convenient handling, thanks to the ergonomic handle
- Integrated temperature sensors for monitoring the temperature at the power contacts

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 990712
GTIN	4055626990712
Custom tariff number	85444290
Country of origin	Germany

Technical data

Product definition

Туре	DC charging cable
	with vehicle charging connector and open cable end
	Housing color black

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Technical data

Product definition

	with connected CS contact
Application	For charging electric vehicles (EV) with direct current (DC)
	for installation at charging stations for electromobility (EVSE)
Affixed logo	"PHOENIX CONTACT" logo
Design	C-Line
Standards/regulations	SAE J1772
	IEC 62196-3
Charging standard	CCS type 1
	Combined Charging System
Charging mode	Mode 4
	DC level 2

Dimensions

Height	156.6 mm (Vehicle charging connector)
Width	68.5 mm (Vehicle charging connector)
Depth	239 mm (Vehicle charging connector)
Conductor length	5 m
Stripping length	140 mm ±10 mm

Ambient conditions

Ambient temperature (operation)	-30 °C 50 °C
Ambient temperature (storage/transport)	-40 °C 80 °C
Max. altitude	5000 m (above sea level)
Degree of protection	IP54 (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)
	3R (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)

Electrical properties

Charging power (nominal operation)	80 kW
Number of power contacts	3 (PE, DC+, DC-)
Rated current of power contacts	80 A (up to 40 °C)
Rated voltage for power contacts	1000 V DC
Number of signal contacts	2 (CP, PP)
Rated current for signal contacts	2 A
Rated voltage for signal contacts	30 V AC
Type of signal transmission	Pulse width modulation with modulated Powerline communication according to ISO/IEC 15118 / DIN SPEC 70121
Resistor coding	480 Ω (Lever actuated)

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Technical data

Electrical properties

	150 Ω (Lever not actuated)	
Temperature monitoring	2x Pt 1000	
Mechanical properties		
Insertion/withdrawal cycles	> 10000	
Insertion force	< 75 N	
Withdrawal force	< 75 N	
Design		
Design line	Standard	
Housing color	black	
Mating face color	black	
Color handle area	black	
Label	8.9 mm x 28.9 mm (customer logo on request)	
Material		
Housing material	Plastic	
Material handle area	Plastic	
Material mating face	Plastic	
Cable		
Cable structure	3 x 6 AWG + 2 x 3 x 18 AWG	
Wiring standards/regulations	UL 62	
Wiring class	Class 6	
External cable diameter	27 mm ±0.4 mm	
Type of conductor	straight	
Cable resistance	\leq 0.0014 Ω /m (based on a power core, at an ambient temperature of 20°C)	
Outer sheath, material	TPE	
External sheath, color	black	
Minimum bending radius	405 mm (15 x diameter)	
Cable weight	max. 915 kg/km	
Temperature sensors		
Type of sensor	Pt 1000	
Standards/regulations	DIN EN 60751	

Type of sensor	Pt 1000
Standards/regulations	DIN EN 60751
Recommended measured current	1 mA (1 V at 0°C)
Tolerance at the sensor with the recommended measured current	±1K
Temperature range	-50 °C 130 °C
Temperature coefficient (TCR)	3850 ppm/K
Long-term stability (max. R0-Drift)	0.06 % (After 1000 hours at 130°C)

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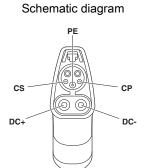


Technical data

Temperature sensors

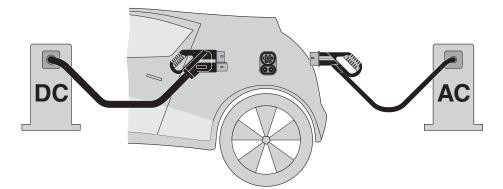
Shutdown temperature	90 °C equivalent to a Pt 1000 value of 1346.5 Ω
Environmental Product Compliance	
China RoHS	Environmentally Friendly Use Period = 10;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings



Pin assignment of the Vehicle Connector

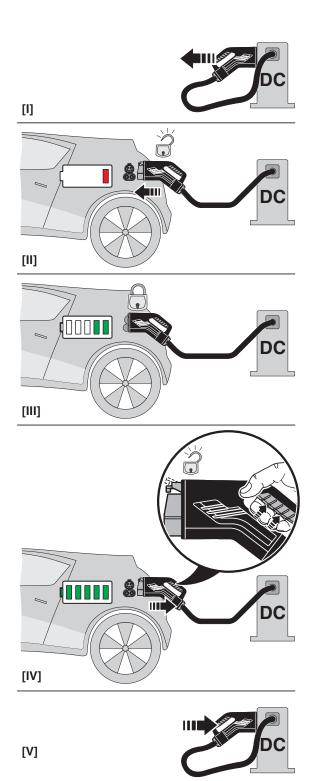
Schematic diagram



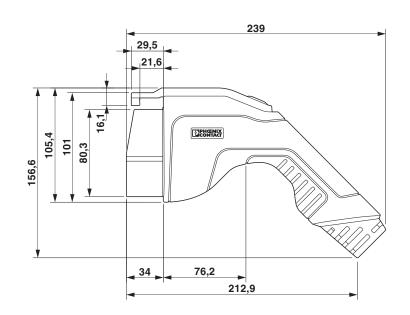
The Combined Charging System (CCS) principle - standard-compliant charging system for electric vehicles, which supports both conventional AC charging and fast DC charging. Both Vehicle Connectors fit into the CCS Vehicle Inlet.



Schematic diagram







Dimensional drawing

Classifications

eCl@ss

eCl@ss 10.0.1	27144705
eCl@ss 11.0	27144705
eCl@ss 9.0	27144705

ETIM

ETIM 7.0	EC002897

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Dimensional drawing



Classifications

UNSPSC

UNSPSC 18.0	39121522
UNSPSC 19.0	39121522
UNSPSC 20.0	39121522
UNSPSC 21.0	39121522

Approvals

Approvals

Approvals

cULus Recognized

Ex Approvals

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Approval details

cULus Recognized	http://database.ul.o	com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E473195-20160308
Nominal voltage UN		1000 V	
Nominal current IN		80 A	
mm²/AWG/kcmil		1	

Accessories

Accessories

Charging connector holder

Charging connector holder - EV-T1CCS-PARK - 1624143



CHARX connect, Charging connector holder, for vehicle charging connectors on charging stations (EVSE), CCS type 1, SAE J1772, Front mounting

DC power module

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Accessories

DC power module - CHARX PS/3AC/920DC/87.5KW - 1162690



CHARX power, Fast charging module for setting up DC charging stations, Rack mounting, input: 3-phase, output: 200 V DC...920 V DC / 125 A. The corresponding system control cabinet CHARX PS-CAB/4x87.5KW (Order No. 1165442) is necessary for operating the DC power module

DC power module - CHARX PS-M2/3AC/1000DC/30KW - 1232243



CHARX power, Fast charging module for setting up DC charging stations, 19" rack mounting, CAN bus, input: 3-phase, output: 150 V DC...1000 V DC / 0 A...100 A

DC power module - CHARX PS-M2/825DC/1000DC/30KW - 1296467



CHARX power, Fast charging module for setting up DC charging stations, 19" rack mounting, CAN bus, output: 150 V DC...1000 V DC / 0 A...100 A

Full screw connection

Cable gland - G-INS-M40-L68N-PNES-BK - 1424484



Cable gland, cable gland material: PA, external cable diameter 22 mm ... 32 mm, shielding: no, connecting thread: M40 x 1.5, color: jet black RAL 9005

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