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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, 40 A / 1000 V (DC), C-Line, "PHOENIX CONTACT" logo, cable: 4 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 063151 341923
GTIN	4063151341923
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	4 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)	40 kW
Number of power contacts	3 (PE, DC+, DC-)
Rated current of power contacts	40 A (up to 40 °C)
Rated voltage for power contacts	1000 V DC
Number of signal contacts	2 (CP, CS)
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
Material surface of contacts	Ag
Cable	
Cable structure	3 x 10 AWG + 2 x 3 x 18 AWG
Wiring standards/regulations	prEN 50620 / DIN EN 50620
Wiring class	Class 6
External cable diameter	19.8 mm ±0.5 mm
Type of conductor	straight
Cable resistance	$\leq$ 0.00351 $\Omega$ /m (based on a power core, at an ambient temperature of 20°C)
Outer sheath, material	TPE
External sheath, color	black
Minimum bending radius	148.5 mm (7.5 x diameter)
Cable weight	max. 518 kg/km
Temperature sensors	i
Type of sensor	Pt 1000

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

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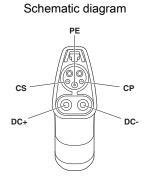


### Technical data

#### Temperature sensors

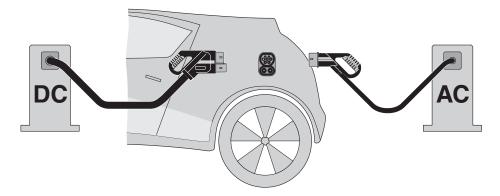
Temperature coefficient (TCR)	3850 ppm/K
Long-term stability (max. R0-Drift)	0.06 % (After 1000 hours at 130°C)
Shutdown temperature	90 °C equivalent to a Pt 1000 value of 1346.5 $\Omega$
Environmental Product Compliance	
China RoHS	Environmentally Friendly Use Period = 10;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings



Pin assignment of the Vehicle Connector

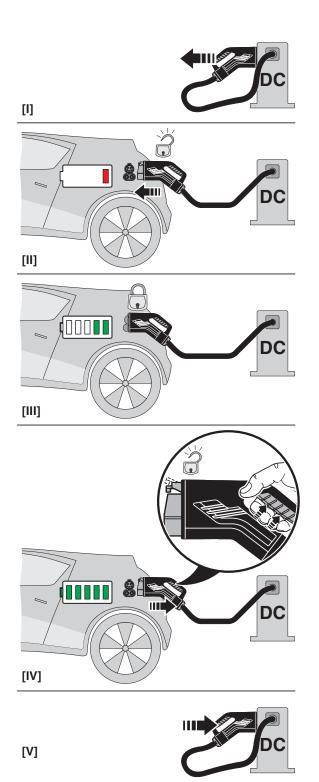
Schematic diagram



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.

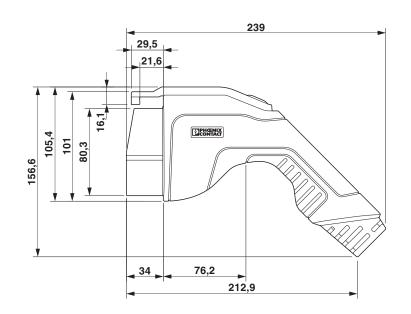


Schematic diagram



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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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#### Approvals

#### Approvals

# Approvals cULus Recognized

Ex Approvals

#### Approval details

cULus Recognized	http://d	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		0160308
Nominal voltage UN		1000 V		
Nominal current IN		40 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

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

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#### Accessories

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-M32-L68N-PNES-BK - 1424483



Cable gland, cable gland material: PA, external cable diameter 18 mm ... 25 mm, shielding: no, connecting thread: M32 x 1.5, color: jet black RAL 9005

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