

1383858

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CHARX connect universal, DC CCS Typ 2, Vehicle charging inlet, up to 500 A in Boost mode, 200 A permanent, 1000 V DC, Single wires, length: 2 m, locking actuator: 12 V, 4-pos., Front and rear mounting, M6, housing: black, for charging with direct current (DC), IEC 62196-2, IEC 62196-3, A protective cap is supplied as standard for the DC contacts.

#### Product description

Vehicle charging inlet for charging with direct current (DC), compatible with type 2 CCS vehicle charging connectors (EVSE), for installation in electric vehicles (EV).

#### Your advantages

- · Complete product range
- · Uniform, space-saving dimensions for the installation space and the screw connection points of all Phoenix Contact vehicle charging inlets
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- · Integrated interlock during charging
- · Manual emergency release of the locking actuator
- Protected and sealed against dirt and water with a high degree of protection

#### Commercial data

Item number	1383858
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	EM01
Product key	XWCAID
GTIN	4063151758455
Weight per piece (including packing)	5,300 g
Weight per piece (excluding packing)	5,300 g
Customs tariff number	85444290
Country of origin	PL



A protective cap is supplied as standard for the DC contacts.

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#### Technical data

General

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roduct type	Vehicle charging inlet
Product family	CHARX connect universal
Technology	Combined Charging System
Application	for charging with direct current (DC)
	for installation in electric vehicles (EV)
Charging standard	DC CCS Typ 2
Charging mode	Mode 4
Customer variations	On request

#### Electrical properties

Note on the connection method	Crimp connection, cannot be disconnected
Temperature measurement	DC contacts: 2x PT1000 (DIN EN 60751)

#### Charging power and current (DC charging)

Type of charging current	DC
Charging current	200 A DC
Charging power	200 kW
Rated voltage	1000 V

#### Charging power and current (DC charging in Boost Mode)

Type of charging current	DC Boost Mode
Charging current	up to 500 A DC
Charging power	up to 500 kW
Rated voltage	1000 V
Note	The specifications refer to charging in Boost Mode and are dependent on ambient conditions. For further details, see the packing slip in the download area.

#### Pin assignment (Leistungskontakte)

Number	3 (PE, DC+, DC-)
Rated voltage	1000 V DC
Rated current	200 A DC

#### Pin assignment (Signalkontakte)

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



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Coding	4.7 kΩ (between PE and PP)
Insulation resistance	> 200 MΩ
Locking actuator	
Locking actuator	12 V, 4-pos.
	Left position
Possible power supply range at the motor	9 V 16 V
Maximum voltage for locking detection	12 V
Typical motor current for locking	0.25 A
Reverse current of the motor	max. 1.5 A
Max. dwell time with reverse current	1 s
Recommended adaptation time	600 ms
Pause time after entry or exit path	3 s
Service life insertion cycles	> 10000 load cycles
Lock recognition	available
Mechanical emergency release	available
Ambient temperature (operation)	-40 °C 40 °C
Temperature sensors (Pt 1000)	
Sensor type	Pt 1000
Standards/regulations	DIN EN 60751
Standards/regulations Attachment point mensions	2 sensors for the DC contacts
Attachment point mensions Vehicle charging inlet	2 sensors for the DC contacts
Attachment point  mensions  Vehicle charging inlet  Width	2 sensors for the DC contacts  108 mm
Attachment point  mensions  Vehicle charging inlet  Width  Height	2 sensors for the DC contacts  108 mm  140.25 mm
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth	2 sensors for the DC contacts  108 mm
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions	2 sensors for the DC contacts  108 mm  140.25 mm  133.5 mm
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width  Height  Height	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm  117.65 mm 90 mm
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width  Height  Depth	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm  117.65 mm 90 mm
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Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width  Height  Depth  aterial specifications	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm  117.65 mm 90 mm 117.65 mm
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width  Height  Depth  aterial specifications  Color (Housing)	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm  117.65 mm 90 mm 117.65 mm black (9005)
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width  Height  Depth  aterial specifications  Color (Housing)  Color (Mating face)	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm  117.65 mm 90 mm 117.65 mm  black (9005) black (9005)
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width  Height  Depth  aterial specifications  Color (Housing)  Color (Mating face)  Material (Housing)	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm  117.65 mm 90 mm 117.65 mm  black (9005) black (9005) Plastic
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width  Height  Depth  aterial specifications  Color (Housing)  Color (Mating face)  Material (Housing)  Material (Contact surface)	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm  117.65 mm 90 mm 117.65 mm  black (9005) black (9005) Plastic
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width  Height  Depth  aterial specifications  Color (Housing)  Color (Mating face)  Material (Housing)  Material (Contact surface)  able/line  Cable length	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm  117.65 mm 90 mm 117.65 mm  black (9005) black (9005) Plastic Silver
Attachment point  mensions  Vehicle charging inlet  Width  Height  Depth  Bore dimensions  Width  Height  Depth  aterial specifications  Color (Housing)  Color (Mating face)  Material (Housing)  Material (Contact surface)	2 sensors for the DC contacts  108 mm 140.25 mm 133.5 mm  117.65 mm 90 mm 117.65 mm black (9005) black (9005) Plastic Silver



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Insertion force

Cable structure	2 x 70 mm²
Single wire, material	Silicone
Single wire, color	OG
External cable diameter	17.90 mm ±0.3 mm
Cable resistance	≤ 0.259 Ω/km
Single-core wire for PE	
Cable length	2 m
Cable structure	1 x 25 mm²
Single wire, material	Silicone
Single wire, color	GN/YE
External cable diameter	8.60 mm ±0.1 mm
Cable resistance	≤ 0.743 Ω/km
Single-core wires for locking actuator	
Cable length	1.5 m
Cable structure	4 x 0.5 mm²
Single wire, material	PVC
Single wire, color	BU/RD, BU/GN, BU/YE, BU/BN
External cable diameter	1.60 mm ±0.20 mm
Cable resistance	≤ 37.1 Ω/m
Single-core wires for Pt 1000 temperature sensors	
Cable length	1 m
Cable structure	3 x 0.5 mm²
Single wire, material	PVC
Single wire, color	BN
	GN
	YE
External cable diameter	1.60 mm ±0.20 mm
Cable resistance	≤ 37.1 Ω/m
Single-core wires for communication	
Cable length	1 m
Cable structure	2 x 0.5 mm²
Single wire, material	PVC
Single wire, color	ВК
	WH
External cable diameter	1.60 mm ±0.20 mm
Cable resistance	≤ 37.1 Ω/m
echanical properties	
Mechanical data	
Insertion/withdrawal cycles	> 10000

< 100 N



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Withdrawal force	< 100 N	
nvironmental and real-life conditions		
Ambient conditions		
Degree of protection (Vehicle charging inlet)	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)	
	IP67 (Inner area of vehicle charging inlet)	
Ambient temperature (operation)	-40 °C 40 °C (60°C, maximum (current reduction required, observe the DC contact temperature limit value of 90°C))	
Ambient temperature (storage/transport)	-40 °C 85 °C	
Altitude	4000 m (above sea level)	
Standards and regulations Standards		
Standards/regulations	IEC 62196-2	
	IEC 62196-3	
lounting		
Mounting type	Front and rear mounting (0 to 90 degree frontal inclination possible)	
Mounting hole diameter	6.70 mm (ø)	
Fixing screws	M6	
Screws included in the scope of delivery	none	

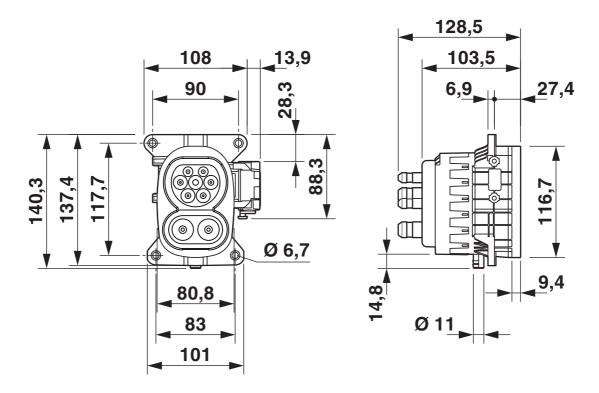


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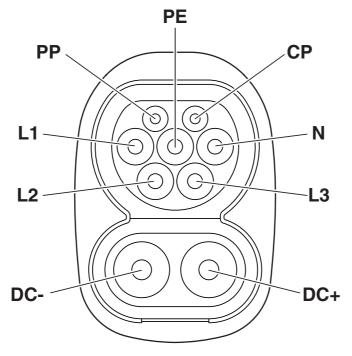
## **Drawings**

#### Dimensional drawing



Dimensional drawing

Connection diagram

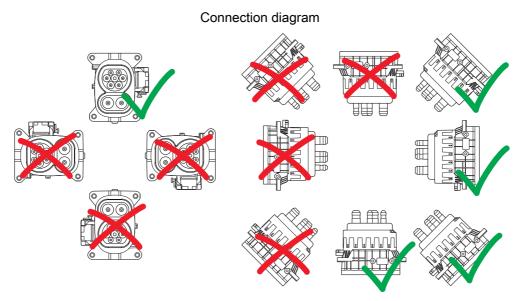


Pin assignment of vehicle charging inlets



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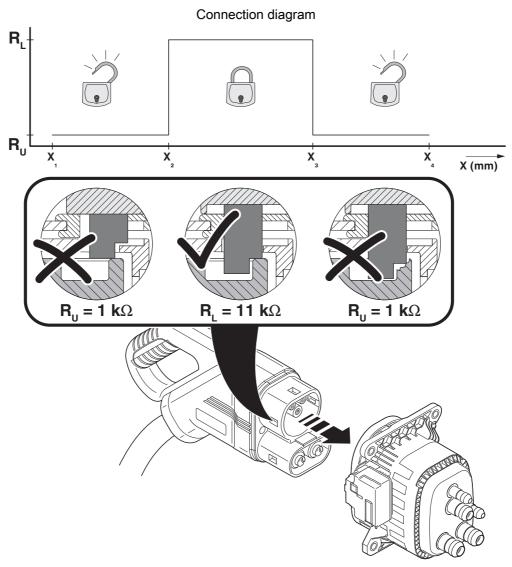


Installation positions

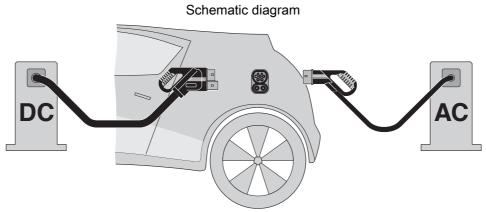


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**Detection for Vehicle Connector** 



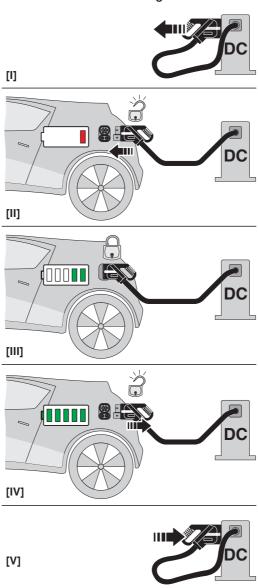
The Combined Charging System (CCS) principle - standard-compliant charging system for electric vehicles, which supports both conventional AC charging and fast DC charging. Both Vehicle Connectors fit into the CCS Vehicle Inlet.



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Operating instructions



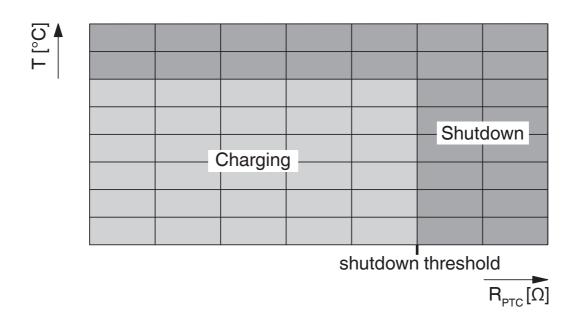
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# + BU/RD 0,5 mm<sup>2</sup> R1 BU/GN 0,5 mm<sup>2</sup> R2 1k 10k BU/YE 0,5 mm<sup>2</sup> -BU/BN 0,5 mm<sup>2</sup>

Block diagram of the locking actuator

#### Schematic diagram

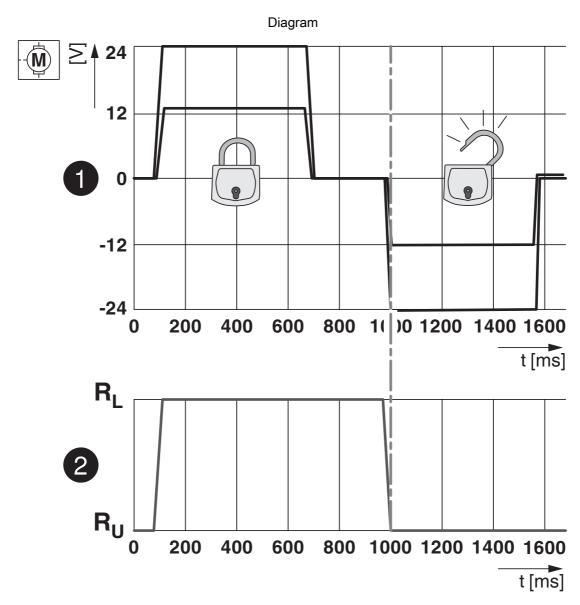


Temperature sensor technology resistance range at AC contacts



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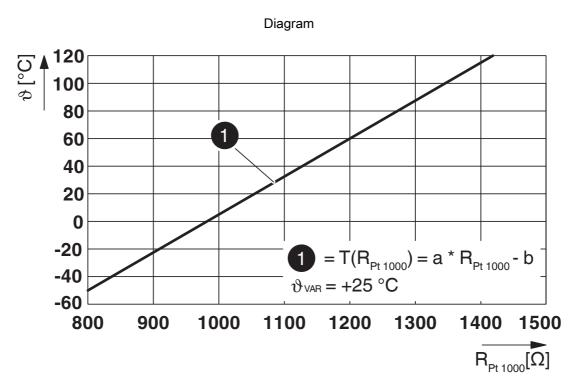


Locking states of the locking actuator



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Pt 1000 characteristic curve at an ambient temperature of 25°C for temperature measurement at the DC contacts



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### Classifications

#### **ECLASS**

	ECLASS-13.0	27144706				
	ECLASS-15.0	27144706				
Εī	ETIM					
	ETIM 9.0	EC002898				
U	NSPSC					
	UNSPSC 21.0	39121800				



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### Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(c)-l
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.)	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)(CAS: 15571-58-1)
	Lead(CAS: 7439-92-1)
	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol(CAS: 119-47-1)
SCIP	9a8c2f31-a1a6-415c-9fff-03e744a20794

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