Vehicle charging inlet - CHARX T2HBI12-3AC32DC250-2,0M2

1162095

https://www.phoenixcontact.com/gb/products/1162095

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CHARX connect, Vehicle charging inlet, for charging with alternating current (AC) and with direct current (DC), CCS type 2, IEC 62196-2, IEC 62196-3, 250 A / 1000 V (DC), 32 A / 480 V (AC), length: 2 m (AC cables), locking actuator: 12 V, 4-pos., Front and rear mounting, M6, X-Line, housing: black, A protective cap is supplied as standard for the DC and AC 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 for electromobility (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
- Safe against overheating with temperature measurement at every DC power contact
- 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	1162095
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	XWCAID
Product Key	XWCAID
GTIN	4063151172107
Weight per Piece (including packing)	7,497 g
Weight per Piece (excluding packing)	7,400 g
Customs tariff number	85444290
Country of origin	DE

Technical Data

Notes

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

Product properties

Product type	Vehicle charging inlet
Application	for charging with alternating current (AC) and with direct current (DC)
	for installation in electric vehicles (EV)
	Combined Charging System
Locking type	Locking in the inserted state with a locking mechanism
Charging standard	CCS type 2
Charging mode	Mode 2, 3, 4

Electrical properties

Type of signal transmission	Pulse width modulation with modulated Powerline communication in accordance with ISO/IEC 15118 / DIN SPEC 70121
Note on the connection method	Crimp connection, cannot be disconnected
Insulation resistance	> 200 MΩ
Coding	4.7 kΩ (between PE and PP)
Temperature measurement	DC contacts: 2x PT1000 (DIN EN 60751)
Temperature monitoring	AC contacts: PTC chain (DIN□EN□60738-1)
Type of charging current	AC 3-phase
Charging power	26.6 kW
Charging current	32 A
Type of charging current	DC
Charging power	250 kW
Charging current	250 A
Type of charging current	DC Boost Mode
Charging power	up to 500 kW (Boost Mode, depending on the ambient conditions. For detailed information, see the packing slip in the download area for this item.)
Charging current	up to 500 A (Boost Mode, depending on the ambient conditions. For detailed information, see the packing slip in the download area for this item.)

Power contact

Number	7 (L1, L2, L3, N, PE, DC+, DC-)
Rated voltage	480 V AC
	1000 V DC
Rated current	32 A AC
	250 A DC

Signal contact

Number	2 (CP, PP)
Rated voltage	30 V AC
Rated current	2 A

(PTC chain)

Sensor type	PTC chain
Standards/regulations	DIN□EN 60738-1
Messbereich_Widerstand	790 Ω ... 1420 Ω
Resistance	max. 1280 Ω ±5 K
Recommended measured current	≤ 1 mA (U_{max}= 16 V DC)
TEST Umgebungstemperatur Neu	-40 °C ... 130 °C
Cable structure	5 x 0,5 mm²
External cable diameter	1.6 mm -0.2 mm
Bending radius	min. 15 mm
Cable weight	7 kg/km
Cable resistance	≤ 37.1 Ω/km
Single wire, color	brown, gray
	brown, yellow, green

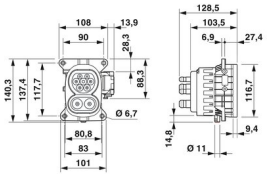
(Pt 1000)

Sensor type	Pt 1000
Standards/regulations	DIN EN 60751

Locking actuator

Operating voltage	12 V
Note number of positions	4-pos.
Position of the locking actuator	right-side

Dimensions

Dimensional drawing	
Width	108 mm
Height	140.25 mm
Depth	128.4 mm
Bore dimensions	117.65 mm x 90 mm, 117.65 mm x 83 mm

Material specifications

Material	Plastic
	Silver

Connector

Insertion/withdrawal cycles	> 10000

Cable / line

Cable length	2 m (AC cables)
	2 m (DC cables)
	2 m (PE cable)
	1 m (Locking actuator cables)
	1 m (Temperature sensors cables)
	1 m (Communications cables)

AC cable

Cable weight	approx. 450 kg/km
Conductor structure	4 x 6 mm²
External cable diameter	14.7 mm ±0.2 mm
Outer sheath, material	Silicone
External sheath, color	orange
Conductor resistance	≤ 3.2 Ω/km
Cable weight	approx. 1150 kg/km
Conductor structure	2 x 95 mm²
External cable diameter	20.6 mm ±0.3 mm
Outer sheath, material	Silicone
External sheath, color	orange
Conductor resistance	≤ 0.196 Ω/km
Cable weight	approx. 251 kg/km
Conductor structure	1 x 25 mm²
External cable diameter	8.6 mm ±0.1 mm
Outer sheath, material	Silicone
External sheath, color	green-yellow
Conductor resistance	≤ 0.743 Ω/km
Cable weight	7 kg/km
Conductor structure	4 x 0.5 mm²
External cable diameter	1.6 mm -0.2 mm
Outer sheath, material	PVC
Conductor resistance	≤ 37.1 Ω/km

Communication cable

Cable weight	7 kg/km
Conductor structure	0.5 mm² + 0.5 mm²
External cable diameter	1.6 mm -0.2 mm
Outer sheath, material	PVC
Conductor resistance	≤ 37.1 Ω/km
Single wire, cross section	6 mm²

Mechanical properties

Mechanical data

Insertion force	< 100 N

Withdrawal force	< 100 N

Environmental and real-life conditions

Ambient conditions

Degree of protection	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)
Altitude	4000 m (above sea level)

Standards and regulations

Standards

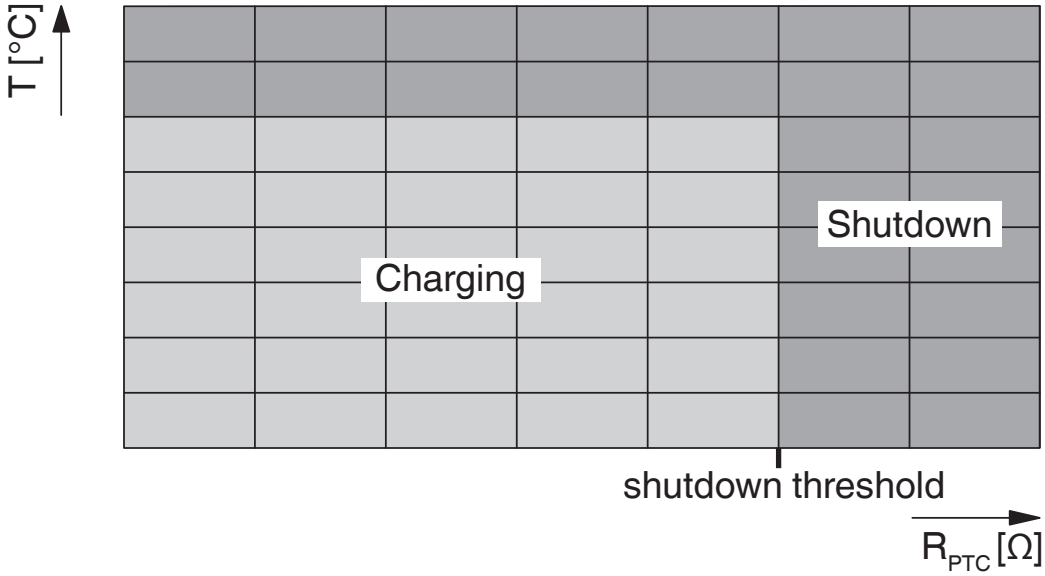
Standards/regulations	IEC 62196-2
	IEC 62196-3

Mounting

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

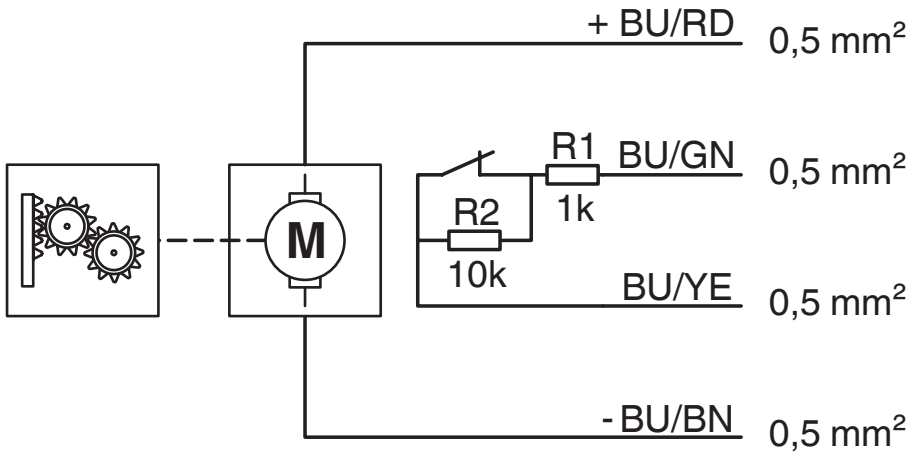
Drawings

Schematic diagram



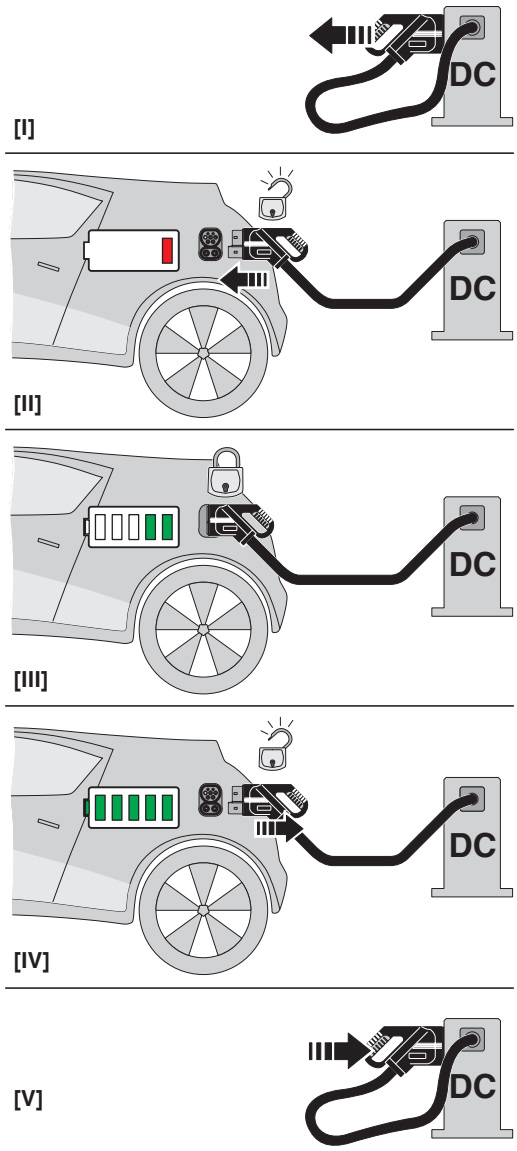
Temperature sensor technology resistance range at AC contacts

Schematic diagram



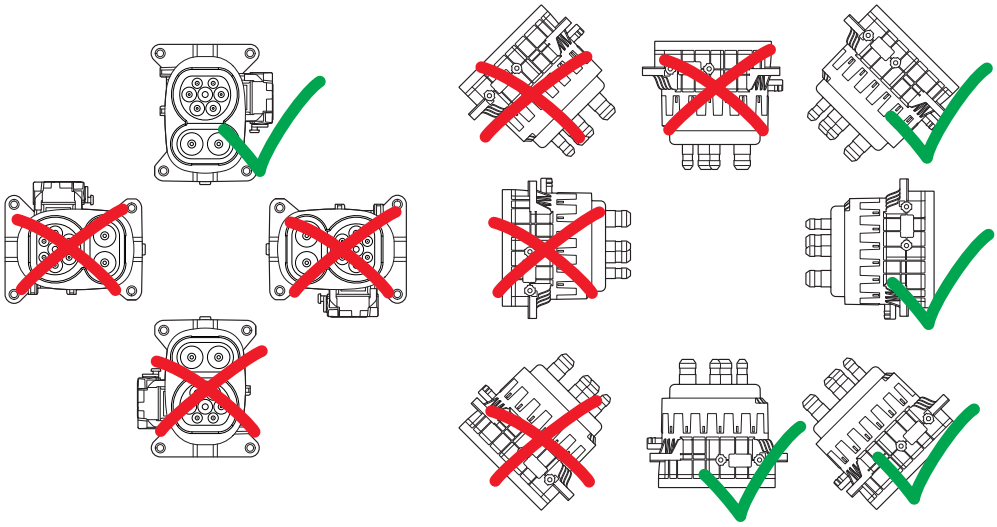
Block diagram of the locking actuator

Schematic diagram



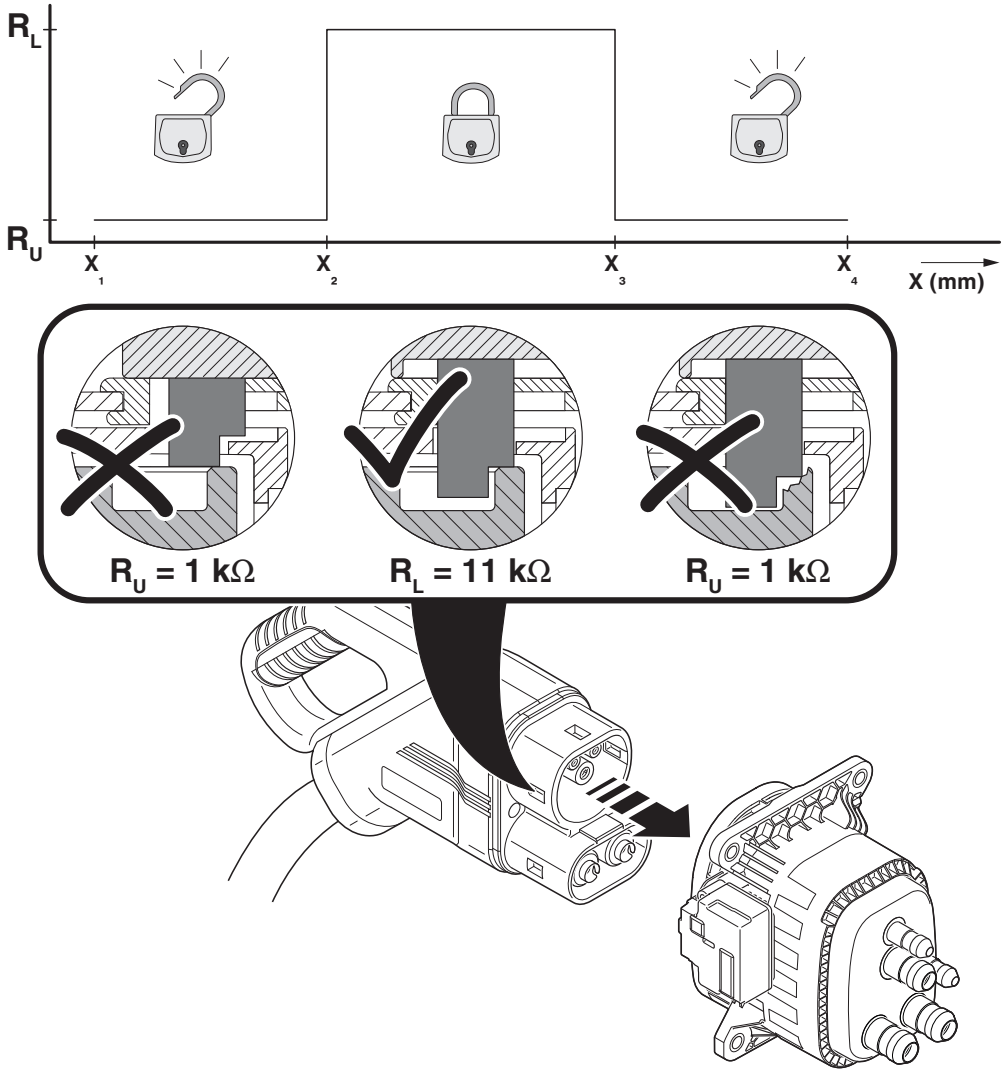
Operating instructions

Connection diagram



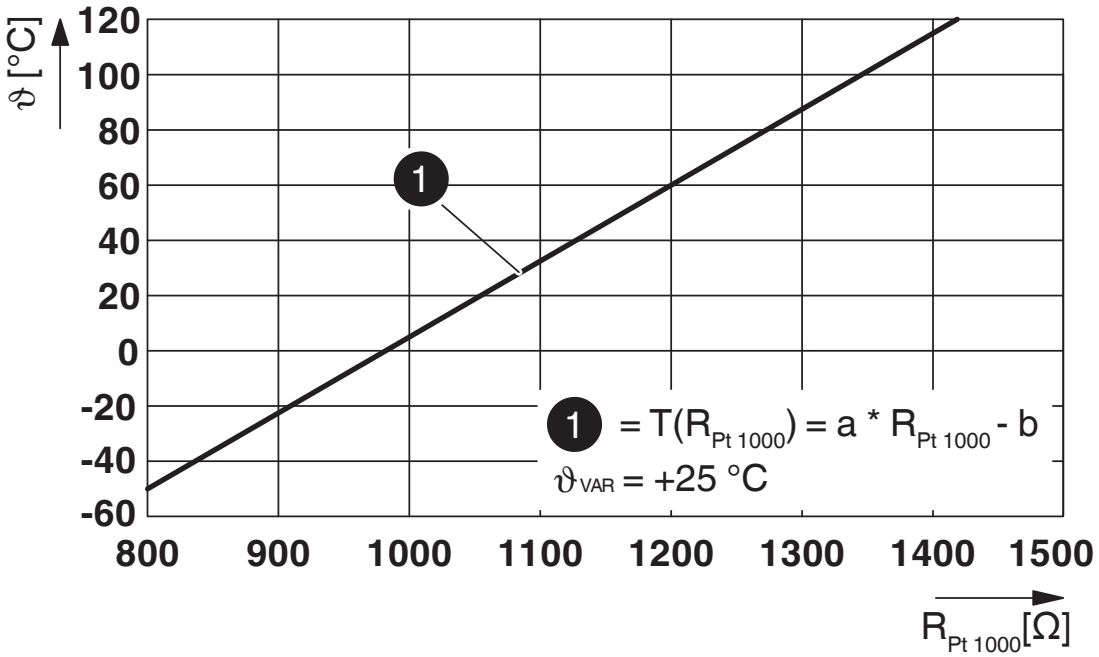
Installation positions

Connection diagram



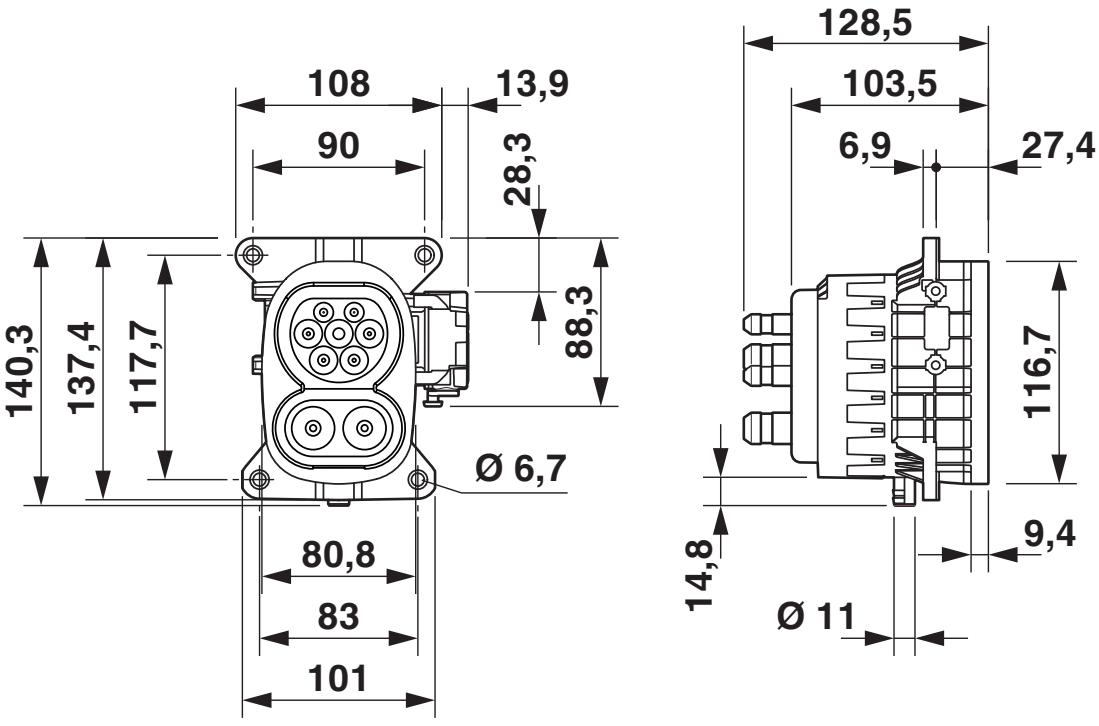
Detection for Vehicle Connector

Diagram



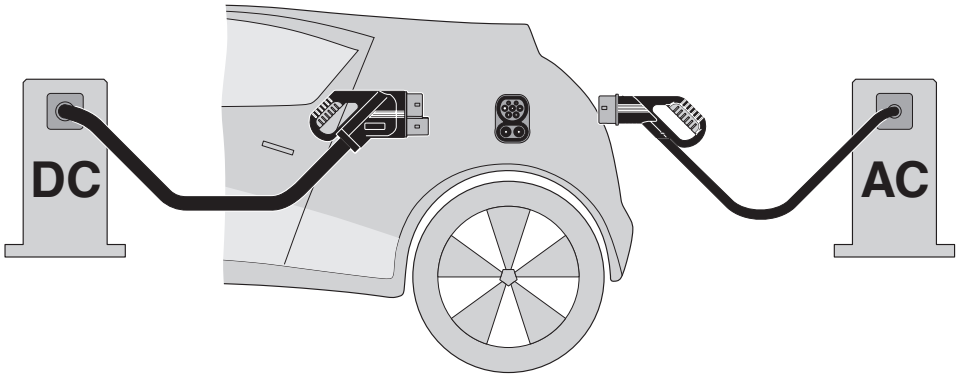
Pt 1000 characteristic curve at an ambient temperature of 25°C for temperature measurement at the DC contacts

Dimensional drawing



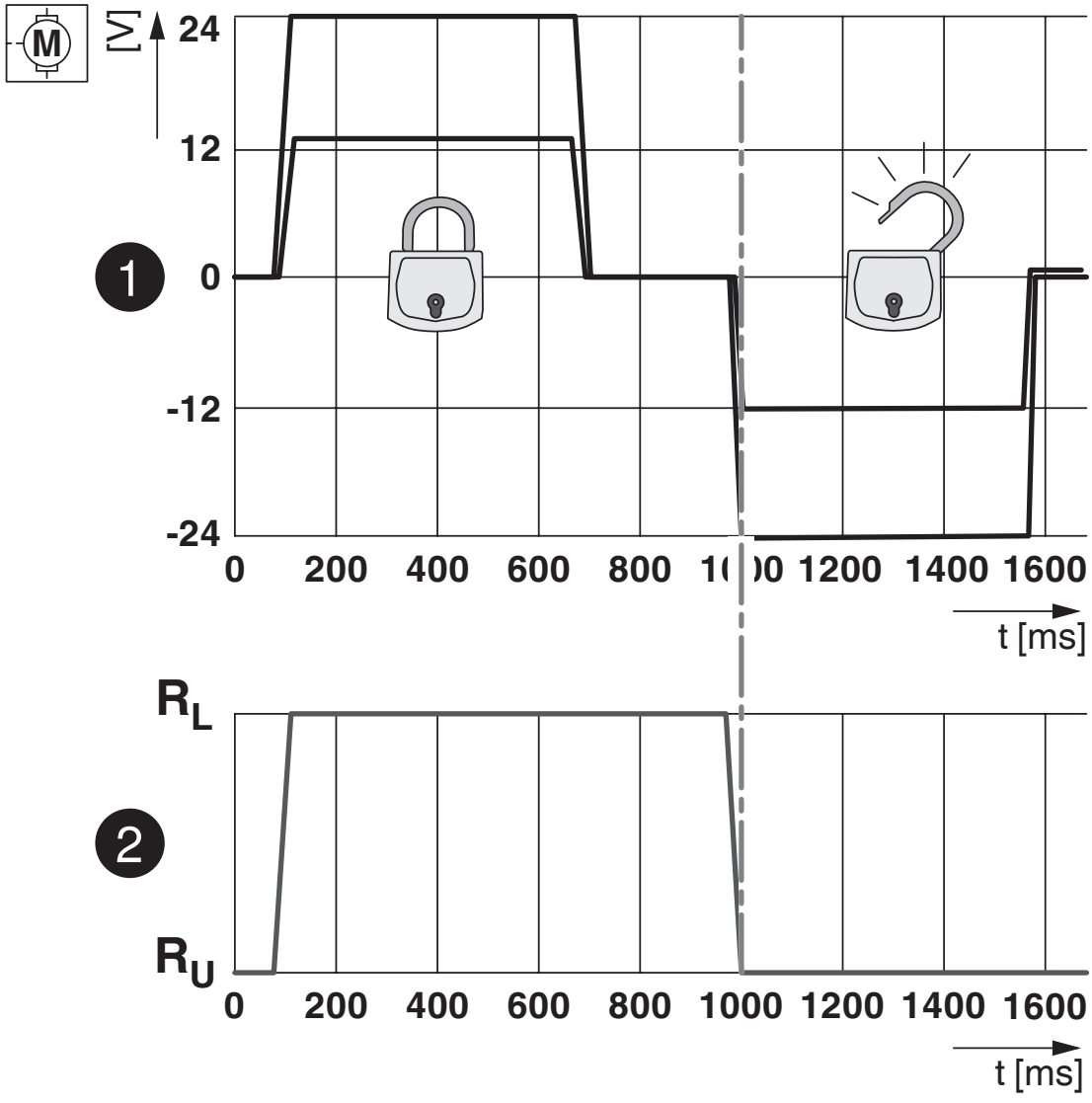
Dimensional drawing

Schematic diagram



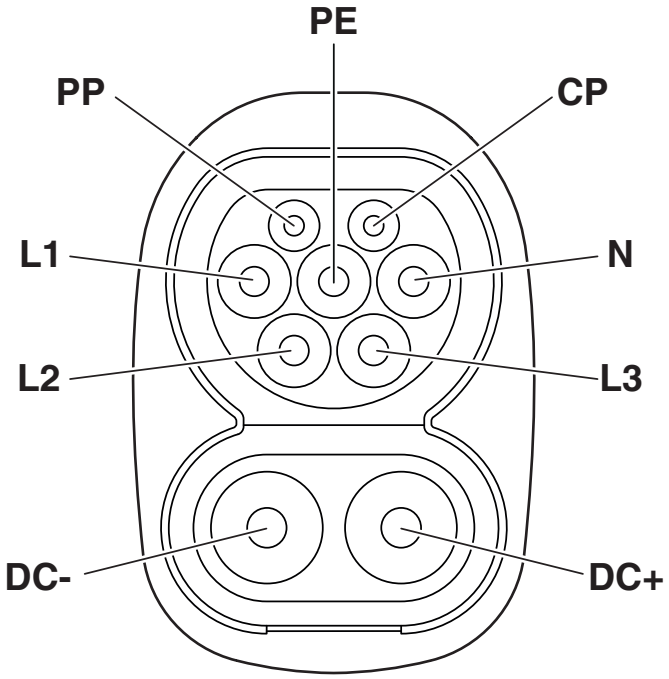
The Combined Charging System (CCS) principle - standard-compliant charging system for electric vehicles, which supports both conventional AC charging and fast DC charging. Both Vehicle Connectors fit into the CCS Vehicle Inlet.

Diagram



Locking states of the locking actuator

Connection diagram



Pin assignment of vehicle charging inlets

Classifications

ECLASS

ECLASS-9.0	27144706
ECLASS-10.0.1	27144706
ECLASS-11.0	27144706

ETIM

ETIM 8.0	EC002898

UNSPSC

UNSPSC 21.0	39121800

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
	DOTE 15571-58-1
	Dechlorane Plus

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