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CHARX connect, Socket Outlet, rear protective cover screw connection, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.7 m, Locking actuator: 12 V, 4-position, Front and rear mounting, Generation 1, "PHOENIX CONTACT" logo

### **Product Description**

Infrastructure Socket Outlet for charging electric vehicles (EV) with alternating current (AC), compatible with type 2 Infrastructure Plugs, for installation at charging stations for E-Mobility (EVSE)

#### Your advantages

- ☑ Uniform, space-saving installation space of all Phoenix Contact Infrastructure Socket Outlets
- Silver-plated surface of the power and signal contacts
- Certified in accordance with IATF 16949:2016 and ISO 9001:2015
- Manual emergency release of the locking actuator
- Integrated interlock during charging



## **Key Commercial Data**

| Packing unit                         | 1 pc            |
|--------------------------------------|-----------------|
| GTIN                                 | 4 046356 961523 |
| GTIN                                 | 4046356961523   |
| Weight per Piece (excluding packing) | 660.000 g       |
| Custom tariff number                 | 85444290        |
| Country of origin                    | Germany         |

## Technical data

### Product definition

| Туре        | rear protective cover screw connection                            |
|-------------|---|
| Application | For charging electric vehicles (EV) with alternating current (AC) |



# Technical data

### Product definition

|                               | Compatible with infrastructure charging plugs |
|-------------------------------|---|
| Affixed logo                  | "PHOENIX CONTACT" logo                        |
| Design                        | Generation 1                                  |
| Standards/regulations         | IEC 62196-2                                   |
| Charging standard             | Type 2  |
| Charging mode                 | Mode 3, Case B                                |
| Note on the connection method | Crimp connection, cannot be disconnected      |

## **Dimensions**

| Height            | 96 mm                           |
|-------------------|---------------------------------|
| Width             | 75 mm                           |
| Depth             | 76.2 mm                         |
| Bore dimensions   | 60 mm x 60 mm                   |
| Conductor length  | 0.7 m (AC cables)               |
|                   | 0.5 m (Locking actuator cables) |
| Cable structure   | 5x 6.0 mm² + 2x 0.5 mm²         |
| Type of conductor | Single wires                    |

## 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                    | IP44 (plugged in)                             |
|   | IP54 (with protective cover, see accessories) |

## Electrical properties

| Maximum charging power            | 22 kW                                    |
|-----------------------------------|--|
| Type of charging current          | AC 3-phase                               |
| Number of phases                  | 3  |
| Number of power contacts          | 5 (L1, L2, L3, N, PE)                    |
| Rated current of power contacts   | 32 A                                     |
| Rated voltage for power contacts  | 480 V AC                                 |
| 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                   |
| Note on the connection method     | Crimp connection, cannot be disconnected |

## Mechanical properties



# Technical data

## Mechanical properties

| Insertion/withdrawal cycles | > 10000 |
|-----------------------------|---------|
| Insertion force             | < 100 N |
| Withdrawal force            | < 100 N |

## Mounting

| Possible mounting positions               | Front and rear mounting   |
|---|---|
| Restrictions to mounting position         | Only 0 to 90 degree frontal inclination possible, see figure  |
| Mounting position of the locking actuator | Not pre-assembled, top center mounting possible   |
| Screw connection of a protective cover    | Only possible on the front  |
| Max. wall thickness                       | max. 50 mm (Rear panel mounting, normative maximum specification for infrastructure plug)                               |
|   | max. 28 mm (Rear mounting, normative maximum specification for infrastructure plug when using protective cover 1405217) |
|   | max. 10 mm (Front mounting, when using the locking mechanism)   |
| Mounting hole diameter                    | 7.00 mm (ø)   |

## Design

| Design line         | Generation 1 |
|---------------------|--------------|
| Housing color       | black        |
| Customer variations | On request   |

### Material

| Material                     | Plastic |
|------------------------------|---------|
| Material surface of contacts | Ag      |

## Locking

|  | Locking type | Locking in the inserted state with a locking mechanism |
|--|--------------|--|
|--|--------------|--|

## Locking actuator

| Number of positions of theconnectors     | 4  |
|--|--|
| Operating voltage                        | 12 V (Typical power supply at the motor) |
| Possible power supply range at the motor | 9 V 16 V                                 |
| Maximum voltage for locking detection    | 30 V                                     |
| Typical motor current for locking        | 0.2 A                                    |
| Reverse current of the motor             | max. 1 A                                 |
| Max. dwell time with reverse current     | 1000 ms                                  |
| Recommended adaptation time              | 600 ms                                   |
| Pause time after entry or exit path      | 3 s                                      |
| Service life insertion cycles            | > 10000 load cycles                      |
| Ambient temperature (operation)          | -30 °C 50 °C                             |
| Cable length                             | 0.5 m                                    |



## Technical data

## Locking actuator

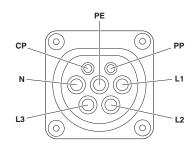
| Cable structure              | 4 x 0.5 mm² |
|------------------------------|-------------|
| Lock recognition             | available   |
| Mechanical emergency release | available   |

## **Environmental Product Compliance**

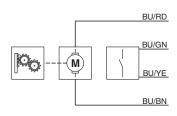
| REACh SVHC | Lead 7439-92-1  |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 10;   |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

# Drawings

### Connection diagram



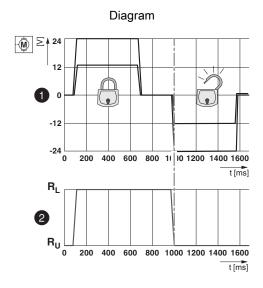
### Block diagram



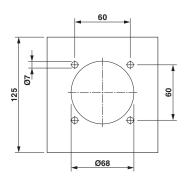
Block diagram of the locking actuator

Pin assignment of Infrastructure Socket Outlet





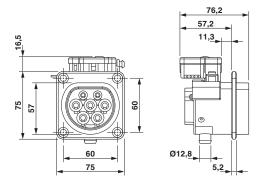
Dimensional drawing



Hole image

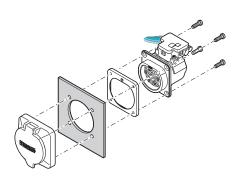
Locking states of the locking actuator

### Dimensional drawing



Dimensional drawing

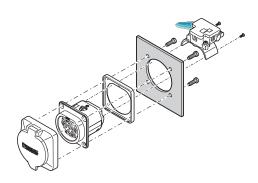
### Schematic diagram



Rear mounting with rear protective cover screw connection
The screw connection for a protective cover from the accessories range
(EV-T2SC) only supports rear mounting. The panel thickness must not
exceed 5 mm. The sealing frame that is slid on from the rear must contact
the housing panel flush with the flat side and must completely surround the
infrastructure socket outlet.



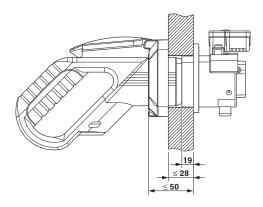
#### Schematic diagram



Front mounting with rear protective cover screw connection Front mounting is only possible when the locking actuator is removed. We recommend using an infrastructure socket outlet without pre-assembled locking actuator (EV-T2M3SE-...E0..., e.g., 1621729).

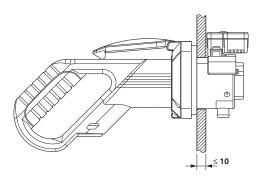
The screw connection for a protective cover from the accessories range (EV-T2SC) only supports rear mounting. The panel thickness must not exceed 10 mm. The sealing frame that is slid on from the front must contact the housing panel flush with the flat side and must completely surround the infrastructure socket outlet.

#### Schematic diagram



Panel thickness for rear mounting (max. 50 mm, with Phoenix Contact protective cover, max. 22 mm)

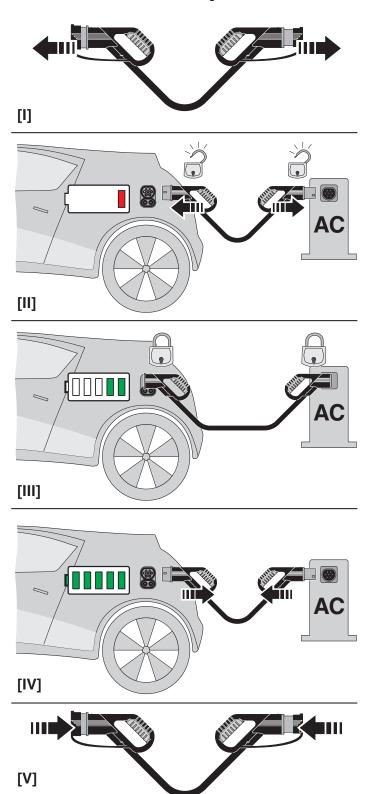
#### Schematic diagram



Panel thickness for front mounting (in mm)



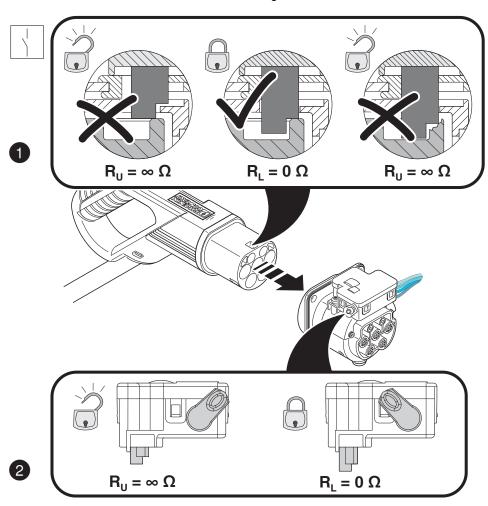




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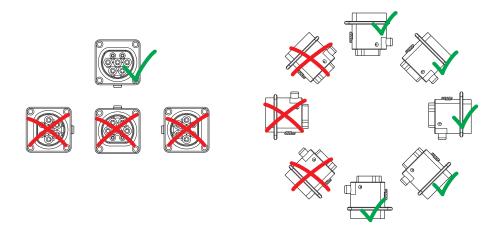
## Schematic diagram



Detection of the Infrastructure Plug



## Schematic diagram



Installation positions

## Classifications

## eCl@ss

| eCl@ss 10.0.1 | 27144706 |
|---------------|----------|
| eCl@ss 11.0   | 27144706 |
| eCl@ss 4.0    | 27140800 |
| eCl@ss 4.1    | 27140800 |
| eCl@ss 5.0    | 27143400 |
| eCl@ss 5.1    | 27143400 |
| eCl@ss 6.0    | 27143400 |
| eCl@ss 7.0    | 27449001 |
| eCl@ss 9.0    | 27144706 |

## **ETIM**

| ETIM 3.0 | EC002061 |
|----------|----------|
| ETIM 4.0 | EC002061 |
| ETIM 6.0 | EC002898 |
| ETIM 7.0 | EC002898 |

## **UNSPSC**

| UNSPSC 6.01   | 30211923 |
|---------------|----------|
| UNSPSC 7.0901 | 39121522 |
| UNSPSC 11     | 39121522 |
| UNSPSC 12.01  | 39121522 |
| UNSPSC 13.2   | 39121522 |



# Classifications

## **UNSPSC**

| UNSPSC 18.0 | 39121522 |
|-------------|----------|
| UNSPSC 19.0 | 39121522 |
| UNSPSC 20.0 | 39121522 |
| UNSPSC 21.0 | 39121522 |

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