# EV-T2M3SE12-3AC32A-0,7M6,0E10 - Infrastructure charging socket

1405214

https://www.phoenixcontact.com/gb/products/1405214

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CHARX connect basic, Infrastructure charging socket, square, for charging electric vehicles (EV) with alternating current (AC), Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.7 m, locking actuator: 12 V, 4-pos., Rear panel mounting, housing: black, PHOENIX CONTACT logo

## Product description

Infrastructure charging socket 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

- Complete product range
- Uniform, space-saving installation space
- Available with your logo on request - for consistent branding of your charging station
- Integrated interlock during charging
- Manual emergency release of the locking actuator
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001

## Commercial data

| | |
|---|---|
| Item number | 1405214 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | XWBADC |
| Product key | XWBADC |
| Catalog page | Page 36 (C-7-2019) |
| GTIN | 4046356738477 |
| Weight per piece (including packing) | 652.94 g |
| Weight per piece (excluding packing) | 564 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |

# Technical data

## Product properties

| | |
|---|---|
| Product type | Infrastructure charging socket |
| Product family | CHARX connect basic |
| Application | for charging electric vehicles (EV) with alternating current (AC) |
| | compatible with infrastructure charging plugs |
| Design (Infrastructure charging socket) | square |
| Affixed logo | PHOENIX CONTACT logo |
| Charging standard | Type 2 |
| Charging mode | Mode 3, Case B |

## Electrical properties

| | |
|---|---|
| Type of signal transmission | Pulse width modulation |
| Note on the connection method | Crimp connection, cannot be disconnected |
| Type of charging current | AC 3-phase |
| Charging power | 26.6 kW |
| Charging current | 32 A |

### Power contact

| | |
|---|---|
| Number | 5 (L1, L2, L3, N, PE) |
| Rated voltage | 480 V AC |
| Rated current | 32 A |

### Signal contact

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

### Locking actuator

| | |
|---|---|
| Operating voltage | 12 V |
| Note number of positions | 4-pos. |
| Position of the locking actuator | top center |

### Locking actuator

| | |
|---|---|
| Operating voltage | 12 V |
| Note number of positions | 4-pos. |
| Position of the locking actuator | top center |
| 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 |
| Lock recognition | available |
| Mechanical emergency release | available |
| Ambient temperature (operation) | -30 °C ... 50 °C |

## Material specifications

| | |
|---|---|
| Color (Housing) | black (9005) |
| Material (Housing) | Plastic |
| Material (Contact surface) | Silver |
| Flammability rating according to UL 94 | V0 () |

## Cable/line

| | |
|---|---|
| Cable length | 0.7 m ±5 mm |
| Cable type | Single wires |
| Cable structure | 5x 6.0 mm² + 2x 0.5 mm² |
| Single wire, cross section | 6.00 mm² |

Single-core wires for AC

| | |
|---|---|
| Cable length | 0.7 m ±5 mm |

Single-core wires for locking actuator

| | |
|---|---|
| Cable length | 0.5 m |
| Cable structure | 4 x 0.5 mm² |

## Mechanical properties

Mechanical data

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

## Environmental and real-life conditions

Ambient conditions

| | |
|---|---|
| Degree of protection (Infrastructure charging socket) | IP44 |
| Degree of protection (Protective cover) | IP54 (see accessories) |
| Ambient temperature (operation) | -30 °C ... 50 °C |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C |
| Altitude | 5000 m (above sea level) |

## Standards and regulations

Standards

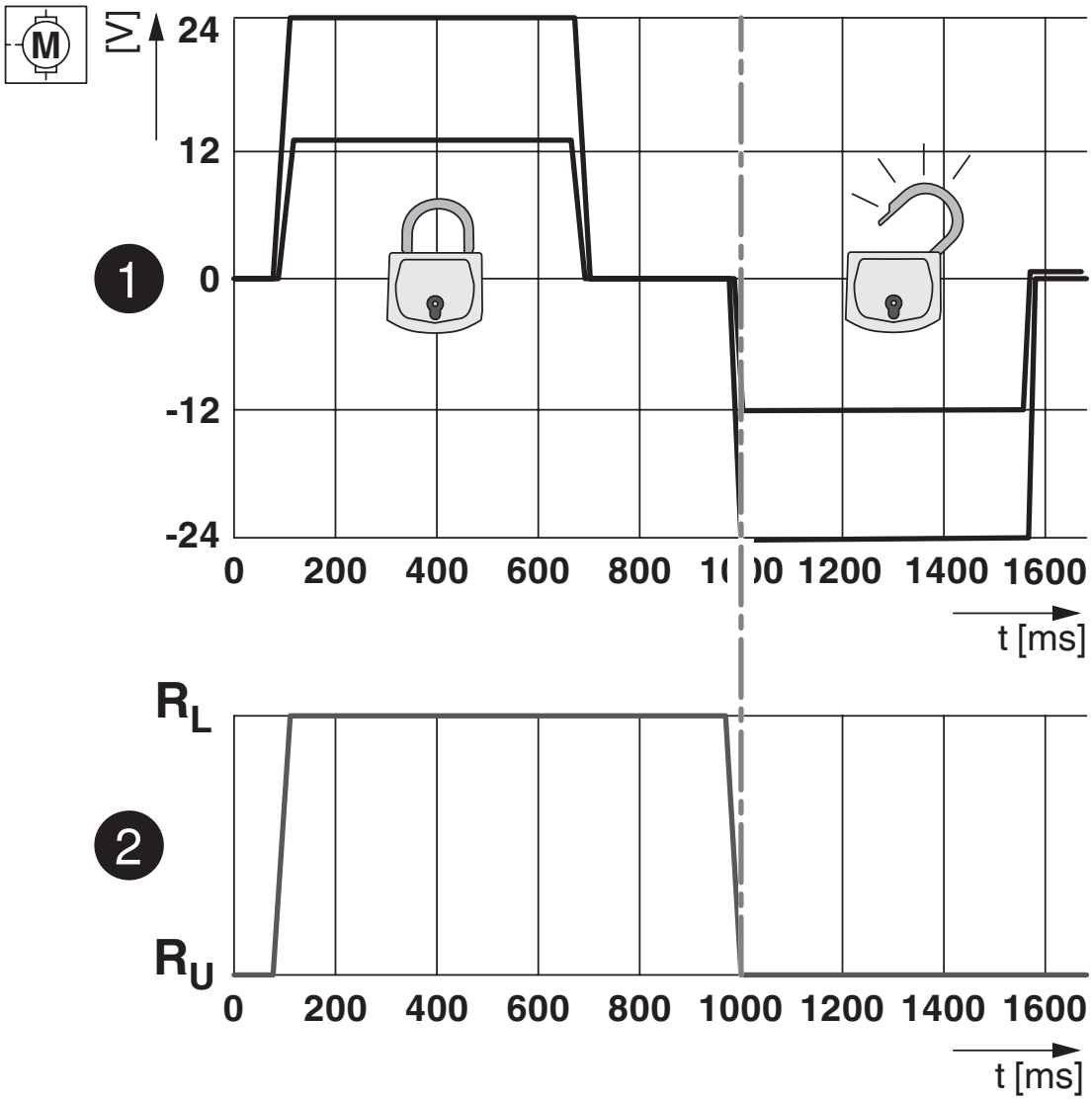
| | |
|---|---|
| Standards/regulations | IEC 62196-2 |

## Mounting

| | |
|---|---|
| Mounting type Infrastructure charging socket | Rear panel mounting (0 to 90 degree frontal inclination possible) |
| | Front mounting (only possible when the locking actuator is removed (see EV-T2M3SE…E00 versions)) |
| Mounting type Protective cover | Rear panel mounting (available separately) |
| Max. wall thickness | max. 50.00 mm (Rear panel mounting, normative maximum specification for infrastructure plug) |
| | max. 28.00 mm (Rear mounting, normative maximum specification for infrastructure plug when using protective cover 1405217) |
| | max. 10.00 mm (Front mounting, when using the locking mechanism) |
| Mounting hole diameter | 7.00 mm (ø) |

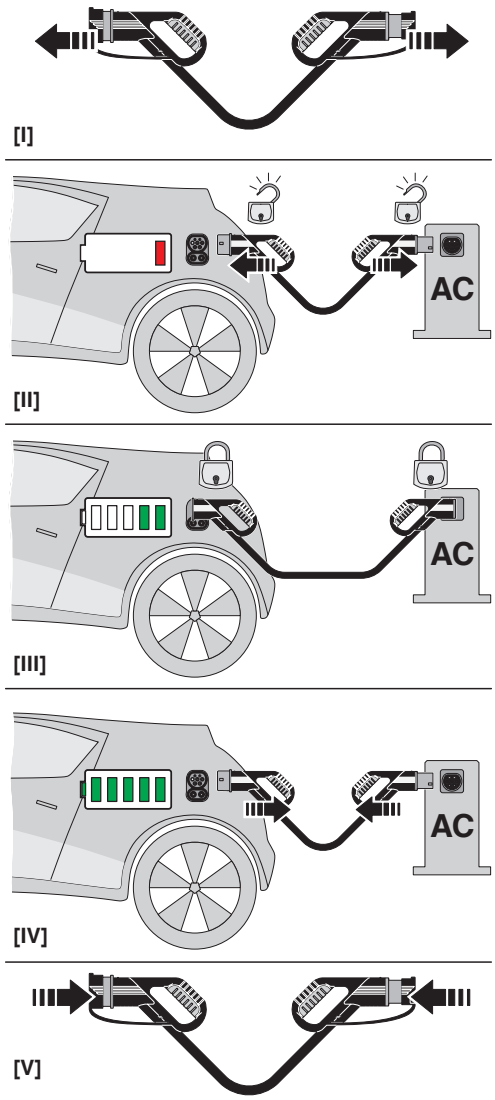
## Drawings

Diagram



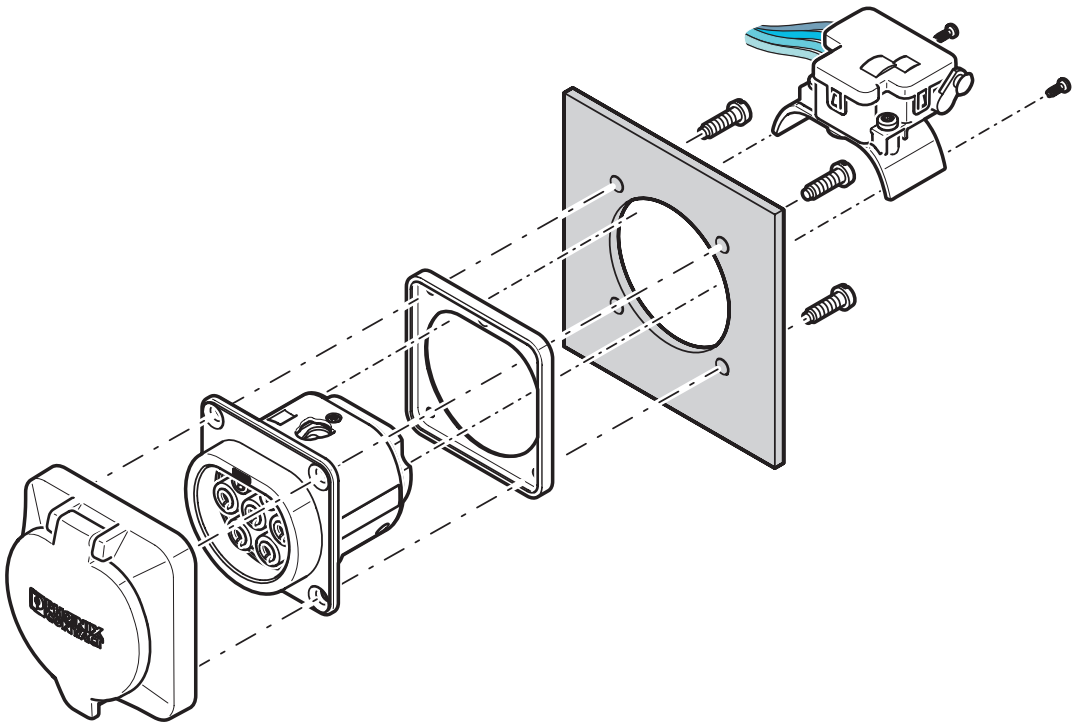

Locking states of the locking actuator

Schematic diagram



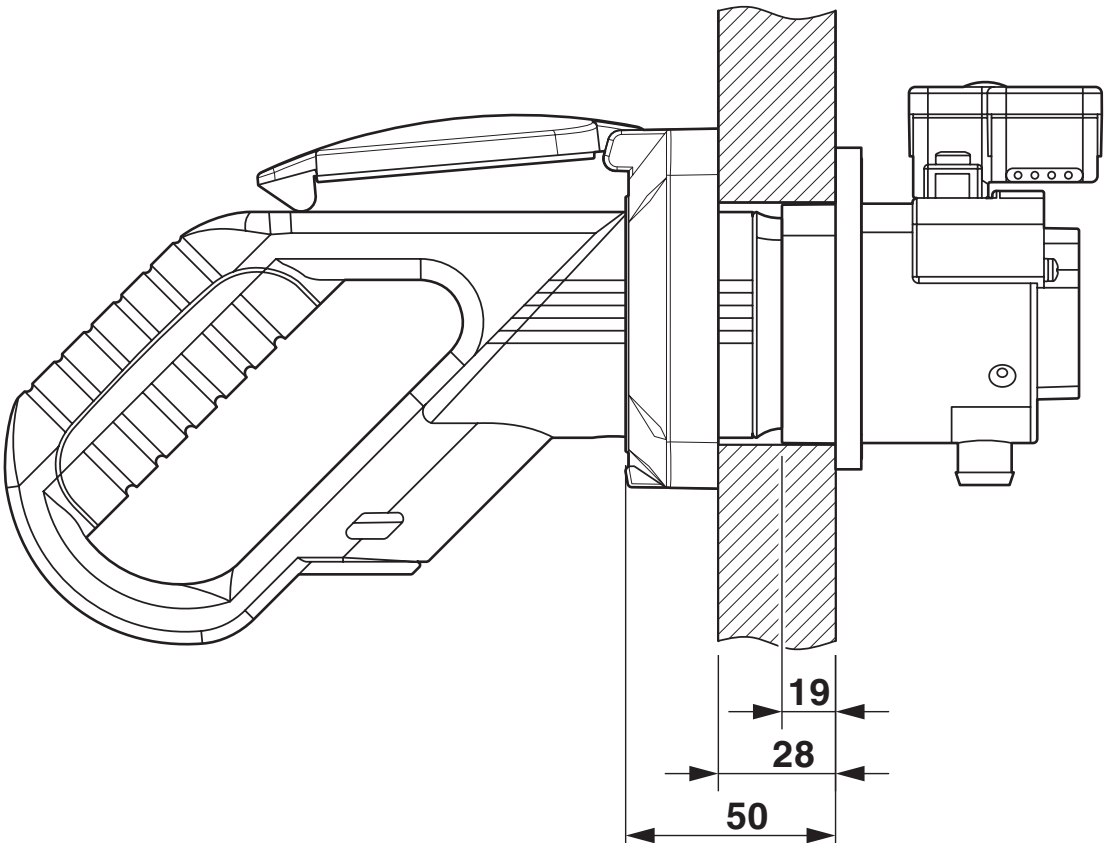

Operating instructions

Schematic diagram



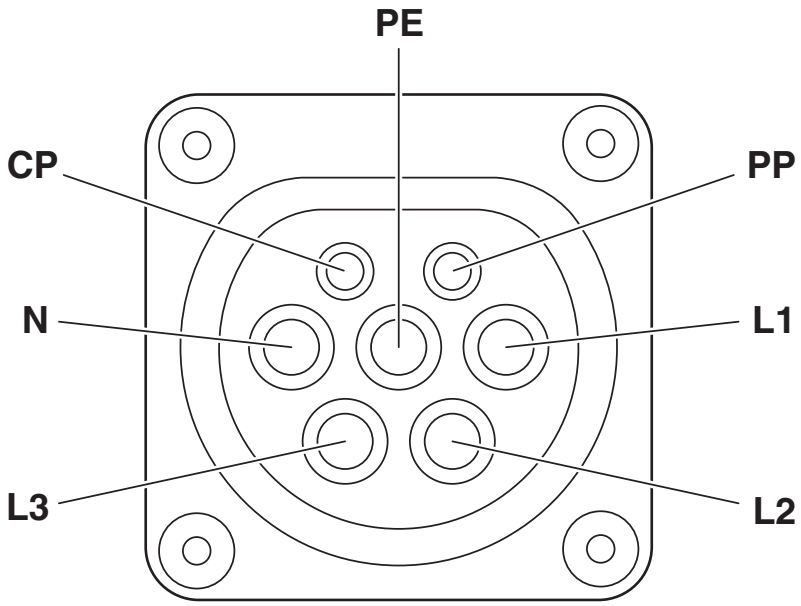
Front mounting with rear protective cover screw connection
Front mounting is only possible when the locking actuator is removed. We recommend using an infrastructure socket outlet without pre-assembled locking actuator (EV-T2M3SE-...E0..., e.g., 1621729).
The screw connection for a protective cover from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



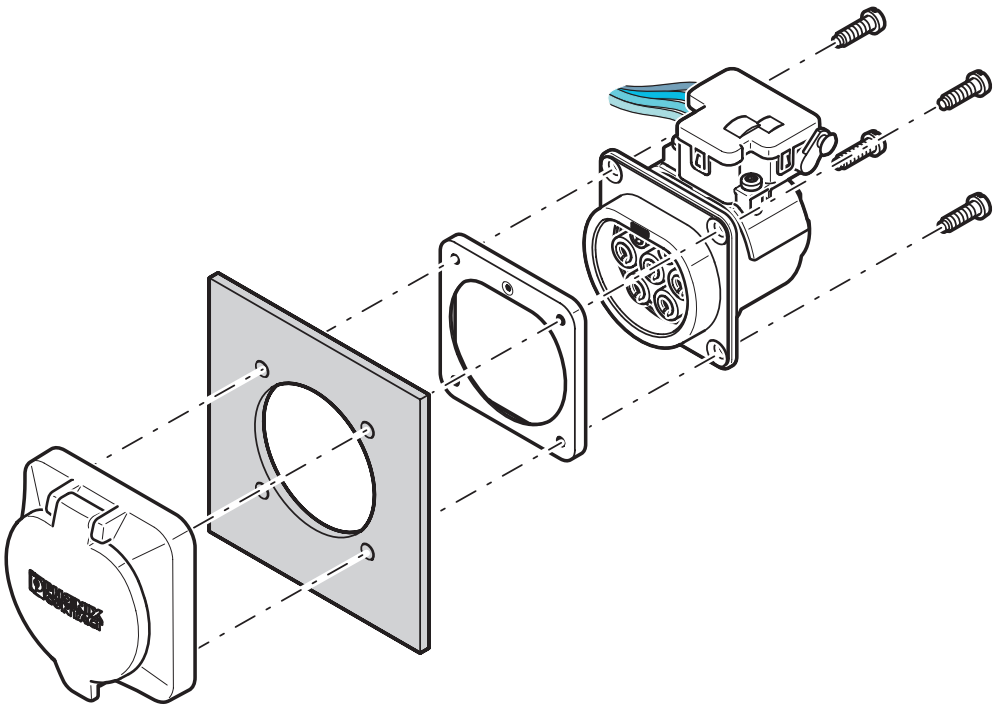

Panel thickness for rear mounting (max. 50 mm, with Phoenix Contact protective cover, max. 22 mm)

Connection diagram



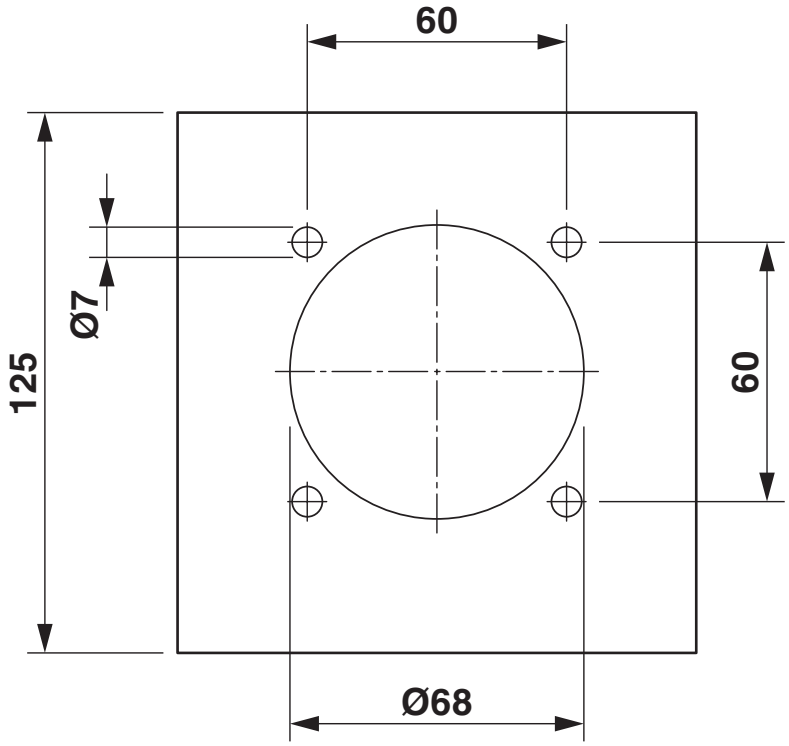

Pin assignment of infrastructure charging socket

Schematic diagram



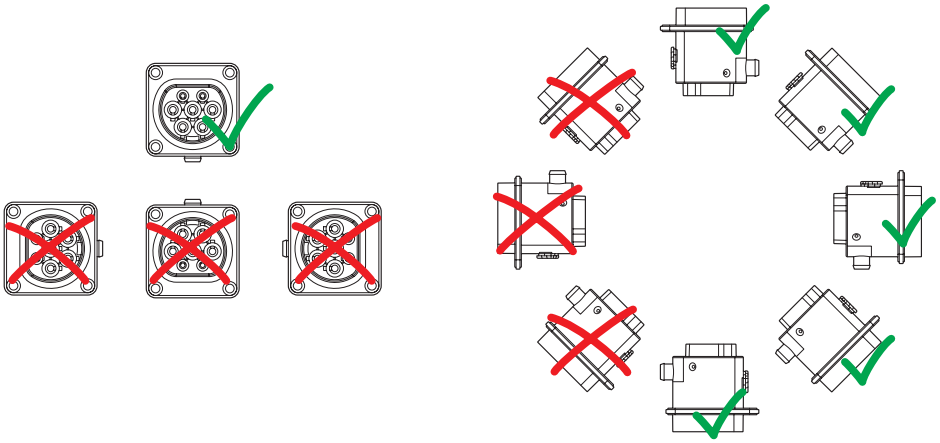
Rear mounting with rear protective cover screw connection
The screw connection for a protective cover from the accessories range (EV-T2SC) only supports rear mounting. The panel thickness must not exceed 5 mm. The sealing frame that is slid on from the rear must contact the housing panel flush with the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

Dimensional drawing



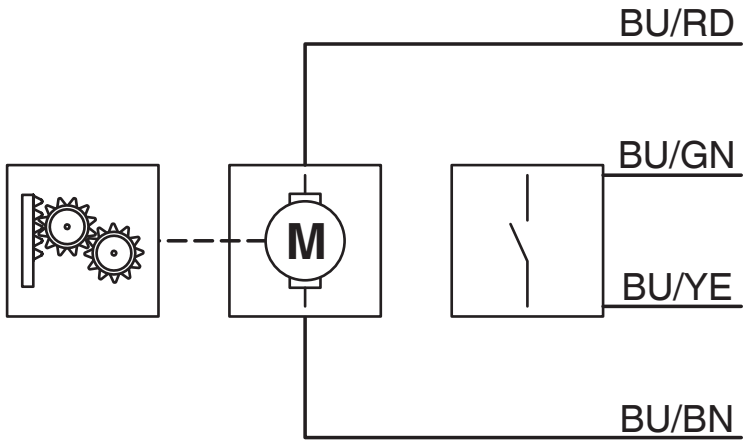

Hole image

Schematic diagram



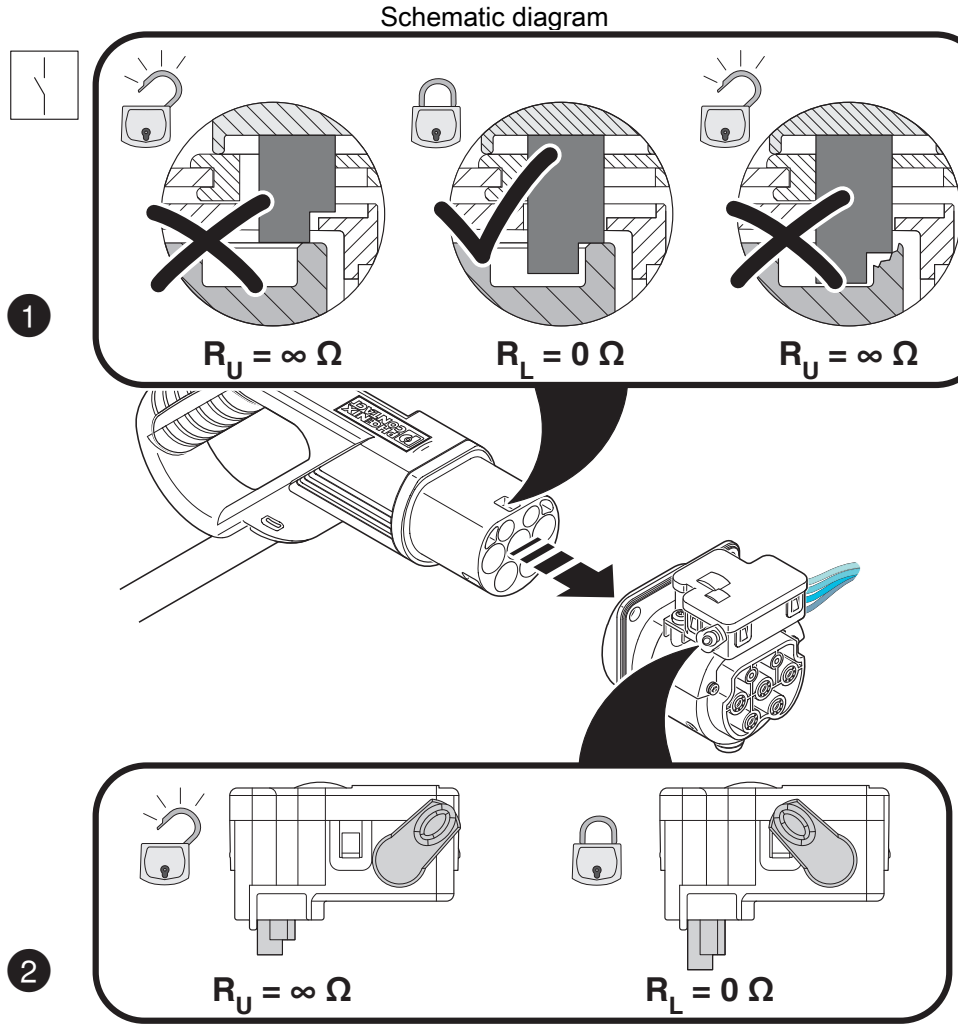
Installation positions

Block diagram



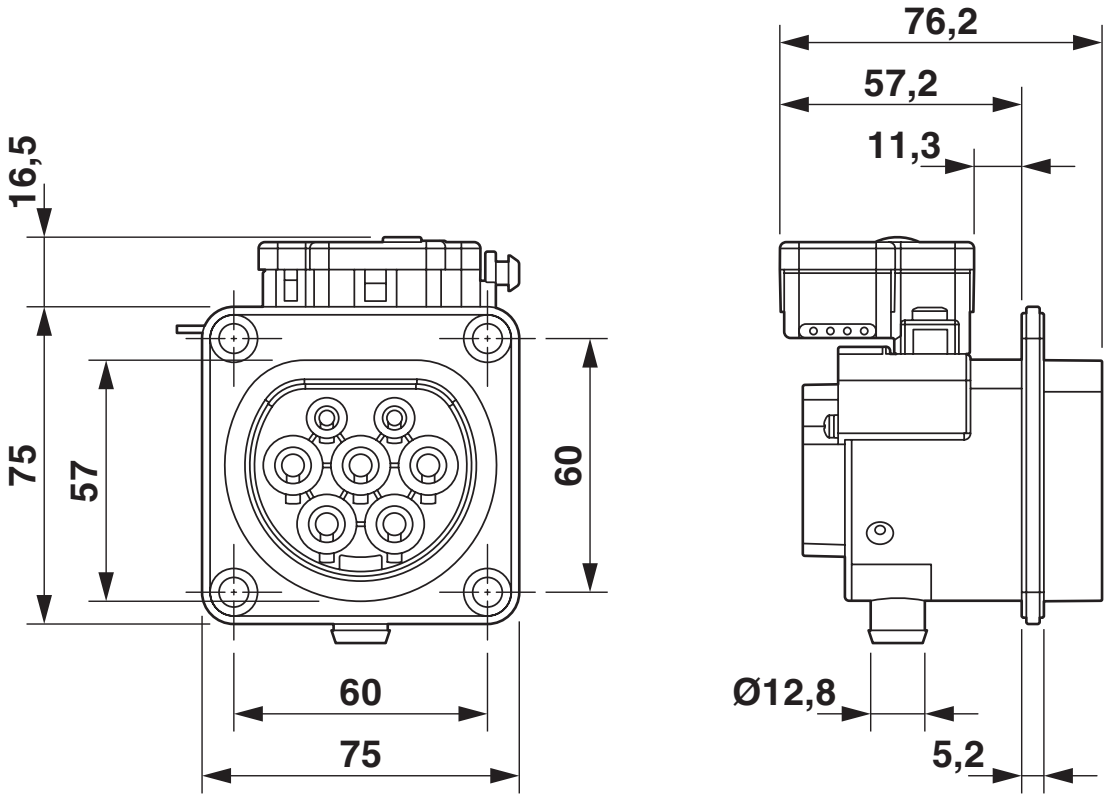

Block diagram of the locking actuator

Schematic diagram



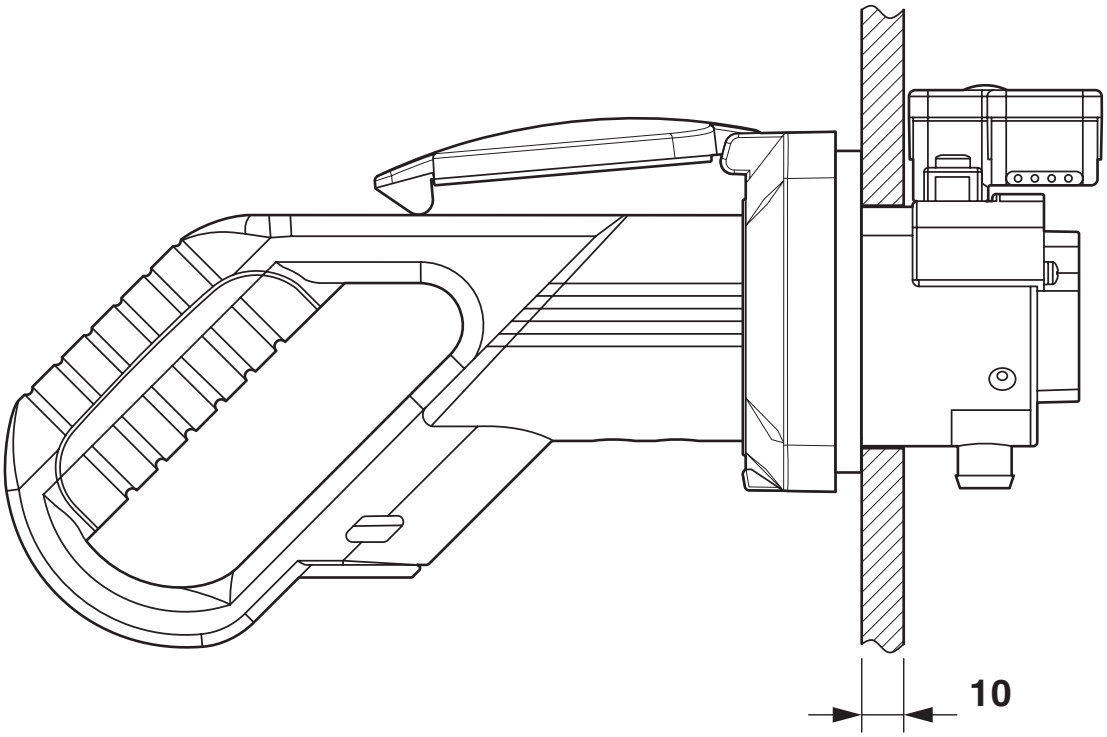

Detection of the Infrastructure Plug

Dimensional drawing




Dimensional drawing

Schematic diagram




Panel thickness for front mounting (in mm)

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-11.0 | 27144706 |
| ECLASS-12.0 | 27144706 |
| ECLASS-13.0 | 27144706 |

### ETIM

| | |
|---|---|
| ETIM 8.0 | EC002898 |

### UNSPSC

| | |
|---|---|
| UNSPSC 21.0 | 39121800 |

## Environmental product compliance

| | |
|---|---|
| REACh SVHC | Lead 7439-92-1 |

| | |
|---|---|
| China RoHS | Environmentally Friendly Use Period = 10; |
| | For information on hazardous substances, refer to the manufacturer’s declaration available under “Downloads” |

## Accessories

### EV-LABEL-C-SO - Label

1315521

https://www.phoenixcontact.com/gb/products/1315521

CHARX connect, Label, Accessories, for AC type 2 infrastructure charging socket and for AC type 2 infrastructure charging plug, DIN EN 17186

### EV-T2SC - Protective cover

1405217

https://www.phoenixcontact.com/gb/products/1405217

CHARX connect basic, Protective cover, square, Accessories, with self-locking mechanism, for attaching to infrastructure charging sockets, Type 2, IEC 62196-2, Front mounting, M5 thread, housing: black, Embossed PHOENIX CONTACT logo

## EV-T2SF - Panel mounting frames

1405218

https://www.phoenixcontact.com/gb/products/1405218

CHARX connect basic, Panel mounting frames, Accessories, for attaching to infrastructure charging sockets, Type 2, IEC 62196-2, Front mounting, M5 thread, housing: black, Without logo

## EV-GBSCO - Protective cover

1623415

https://www.phoenixcontact.com/gb/products/1623415

CHARX connect basic, Protective cover, circular, Accessories, with self-opening mechanism, for attaching to infrastructure charging sockets, GB/T, Type 2, GB/T 20234.2, IEC 62196-2, Front mounting, housing: black, Adhered "PHOENIX CONTACT" sticker

## EV-GBSC - Protective cover

1623416

https://www.phoenixcontact.com/gb/products/1623416

CHARX connect basic, Protective cover, circular, Accessories, with self-locking mechanism, for attaching to infrastructure charging sockets, GB/T, Type 2, GB/T 20234.2, IEC 62196-2, Front mounting, housing: black, Adhered "PHOENIX CONTACT" sticker

## EV-GBSC-D6,5MM - Protective cover

1623888

https://www.phoenixcontact.com/gb/products/1623888

CHARX connect basic, Protective cover, circular, Accessories, with self-locking mechanism, for attaching to infrastructure charging sockets, GB/T, Type 2, GB/T 20234.2, IEC 62196-2, Front mounting, housing: black, Adhered "PHOENIX CONTACT" sticker

## EV-T2M3S-E-LOCK12V - Locking

1624129

https://www.phoenixcontact.com/gb/products/1624129

CHARX connect modular, Locking, Accessories, for attaching to infrastructure charging sockets, Type 2, GB/T, IEC 61851-1, Single wires, length: 0.5 m, locking actuator: 12 V, 4-pos.

## EV-T2M3S-E-LOCK24V - Locking

1622317

https://www.phoenixcontact.com/gb/products/1622317

CHARX connect modular, Locking, Accessories, with single-core wires, without holder, for locking infrastructure charging sockets when plug is inserted, Type 2, GB/T, IEC 61851-1, Single wires, length: 0.5 m, locking actuator: 24 V, 4-pos.

## EV-T2M3S-DRAINAGE-GASKET - Seal

1621668

https://www.phoenixcontact.com/gb/products/1621668

CHARX connect basic, Seal, For the discharge nozzle below the infrastructure charging socket if there is no drainage tube present, Type 2, IEC 62196-2

## EV-T2M3S-E-LOCK-GASKET - Seal

1621465

https://www.phoenixcontact.com/gb/products/1621465

CHARX connect basic, Seal, For the mounting surface of the locking actuator above the infrastructure charging socket when there is no locking actuator present, Type 2, IEC 62196-2

# EV-T2M3SE12-3AC32A-0,7M6,0E10 - Infrastructure charging socket

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## EM-CP-PP-ETH - AC charging controller

2902802

https://www.phoenixcontact.com/gb/products/2902802

EV charge control is used to charge electrical vehicles on the 3-phase AC mains power supply according to IEC 61851-1 Mode 3. All necessary control functions are integrated. Additional functions are available for various charging applications.

## EV-CC-AC1-M3-CBC-SER-HS - AC charging controller

1622452

https://www.phoenixcontact.com/gb/products/1622452

The EV-CC-AC1-M3-CBC-SER-HS charging controller with housing for DIN rail mounting is used for charging electric vehicles at 3-phase AC networks according to IEC 61851-1, Mode 3. All charging functions, comprehensive configuration settings as well as a locking controller are already integrated.

## EV-CC-AC1-M3-CBC-SER-PCB - AC charging controller

1622453

https://www.phoenixcontact.com/gb/products/1622453

The EV-CC-AC1-M3-CBC-SER-PCB charging controller as PCB is used for charging electric vehicles at 3-phase AC networks according to IEC 61851-1, Mode 3. All charging functions, comprehensive configuration settings as well as a locking controller are already integrated.

## EV-CC-AC1-M3-CBC-SER-PCB-XC-25 - AC charging controller

1627743

https://www.phoenixcontact.com/gb/products/1627743

The EV-CC-AC1-M3-CBC-SER-PCB charging controller as PCB is used for charging electric vehicles at 3-phase AC networks according to IEC 61851-1, Mode 3. All charging functions, comprehensive configuration settings as well as a locking controller are already integrated.

# EV-T2M3SE12-3AC32A-0,7M6,0E10 - Infrastructure charging socket

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## EV-CC-AC1-M3-CBC-SER-PCB-MSTB - AC charging controller

1627353

https://www.phoenixcontact.com/gb/products/1627353

The EV-CC-AC1-M3-CBC-SER-PCB-MSTB charging controller as a PCB for charging electric vehicles according to IEC 61851-1, Mode 3, Case B (Socket Outlet) or C (Vehicle Connector). Connection via PCB connector on header.



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