

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



CHARX connect, Infrastructure charging socket, for charging electric vehicles (EV) with alternating current (AC), Type 2, IEC 62196-2, 32 A / 480 V (AC), length: 1 m, locking actuator: 12 V, 4-pos., Rear panel mounting, 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                          | 1624043                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | EM01                           |
| Product key                          | XWBADC                         |
| GTIN                                 | 4055626228129                  |
| Weight per piece (including packing) | 760.2 g                        |
| Weight per piece (excluding packing) | 760.2 g                        |
| Customs tariff number                | 85444290                       |
| Country of origin                    | DE                             |

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

## Technical data

### Product properties

|                   |  |
|-------------------|--|
| Product type      | Infrastructure charging socket   |
| Product family    | CHARX connect  |
| Application       | for charging electric vehicles (EV) with alternating current (AC)<br>compatible with infrastructure charging plugs |
| 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          |

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

|                                 |                         |
|---------------------------------|-------------------------|
| Service life insertion cycles   | > 10000 load cycles     |
| Lock recognition                | available               |
| Mechanical emergency release    | available               |
| Ambient temperature (operation) | -30 °C ... 50 °C        |
| Cable length                    | 0.5 m                   |
| Cable structure                 | 4 x 0.5 mm <sup>2</sup> |

## Cable/line

|                 |   |
|-----------------|---|
| Cable length    | 1 m (AC cables)                                 |
|                 | 0.5 m (Locking actuator cables)                 |
| Cable structure | 5x 6.0 mm <sup>2</sup> + 2x 0.5 mm <sup>2</sup> |

## Mechanical properties

### Mechanical data

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

## Environmental and real-life conditions

### Ambient conditions

|   |                          |
|---|--------------------------|
| 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 (available separately)   |
| 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)   |

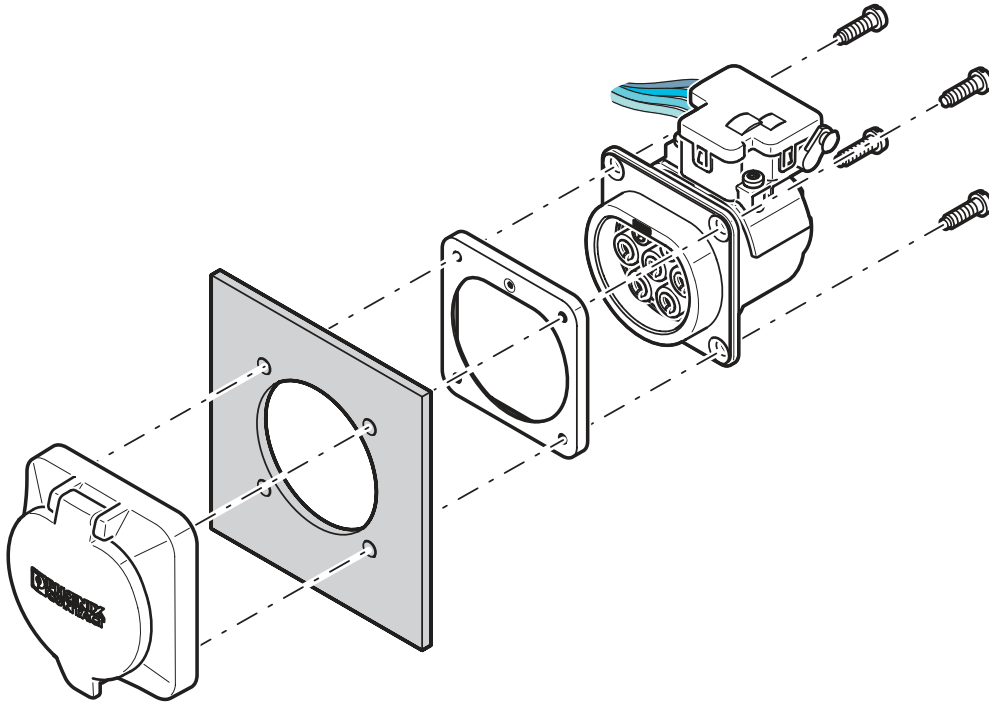
# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket

1624043

<https://www.phoenixcontact.com/us/products/1624043>

## Drawings

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.

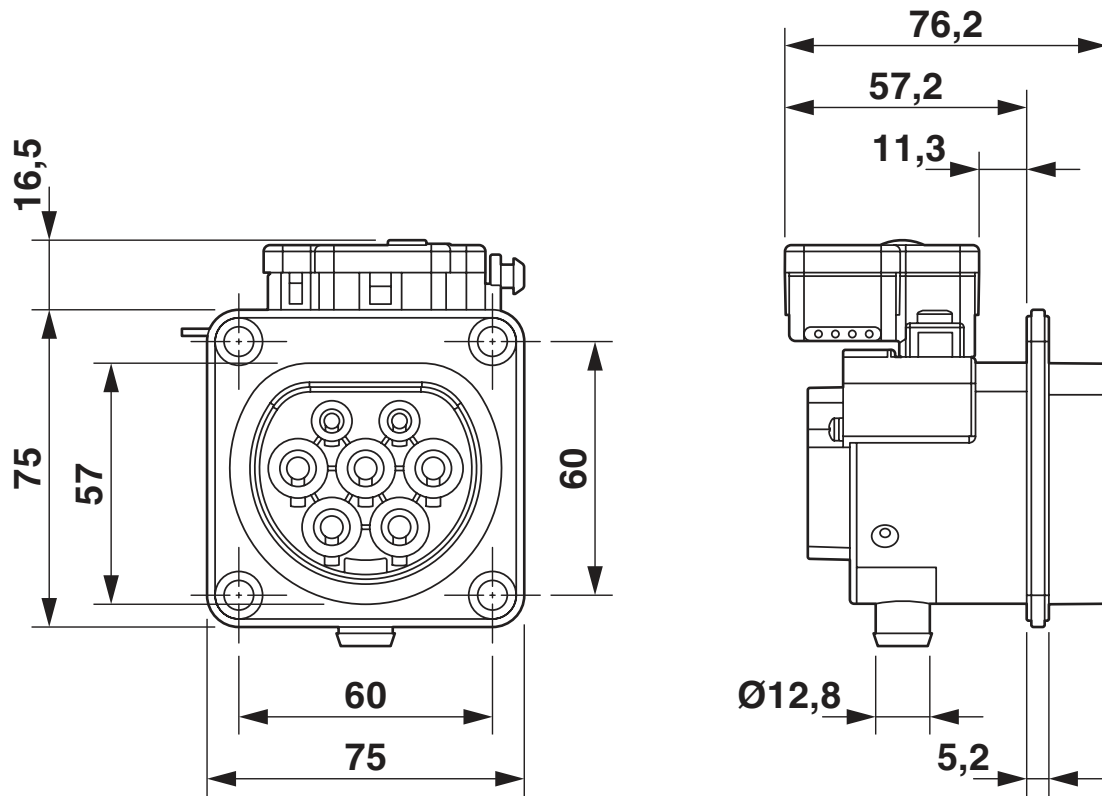
# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

Dimensional drawing



Dimensional drawing

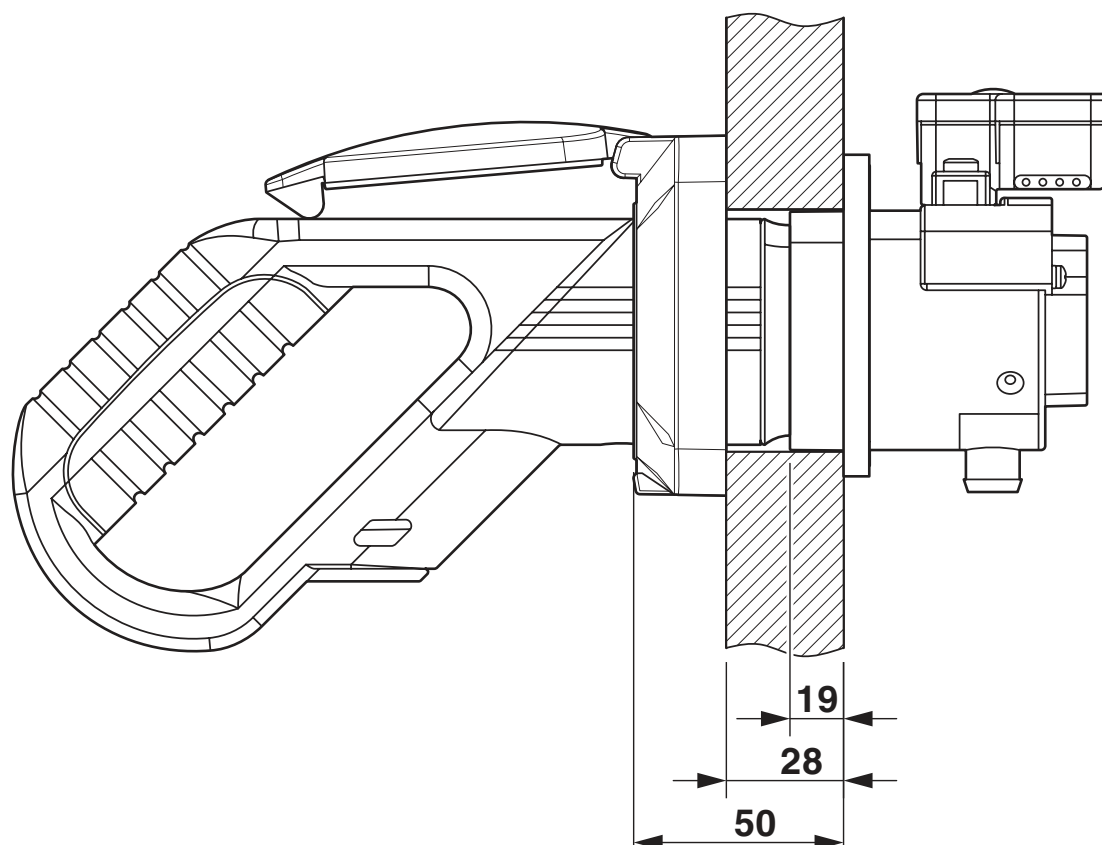
# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

Schematic diagram

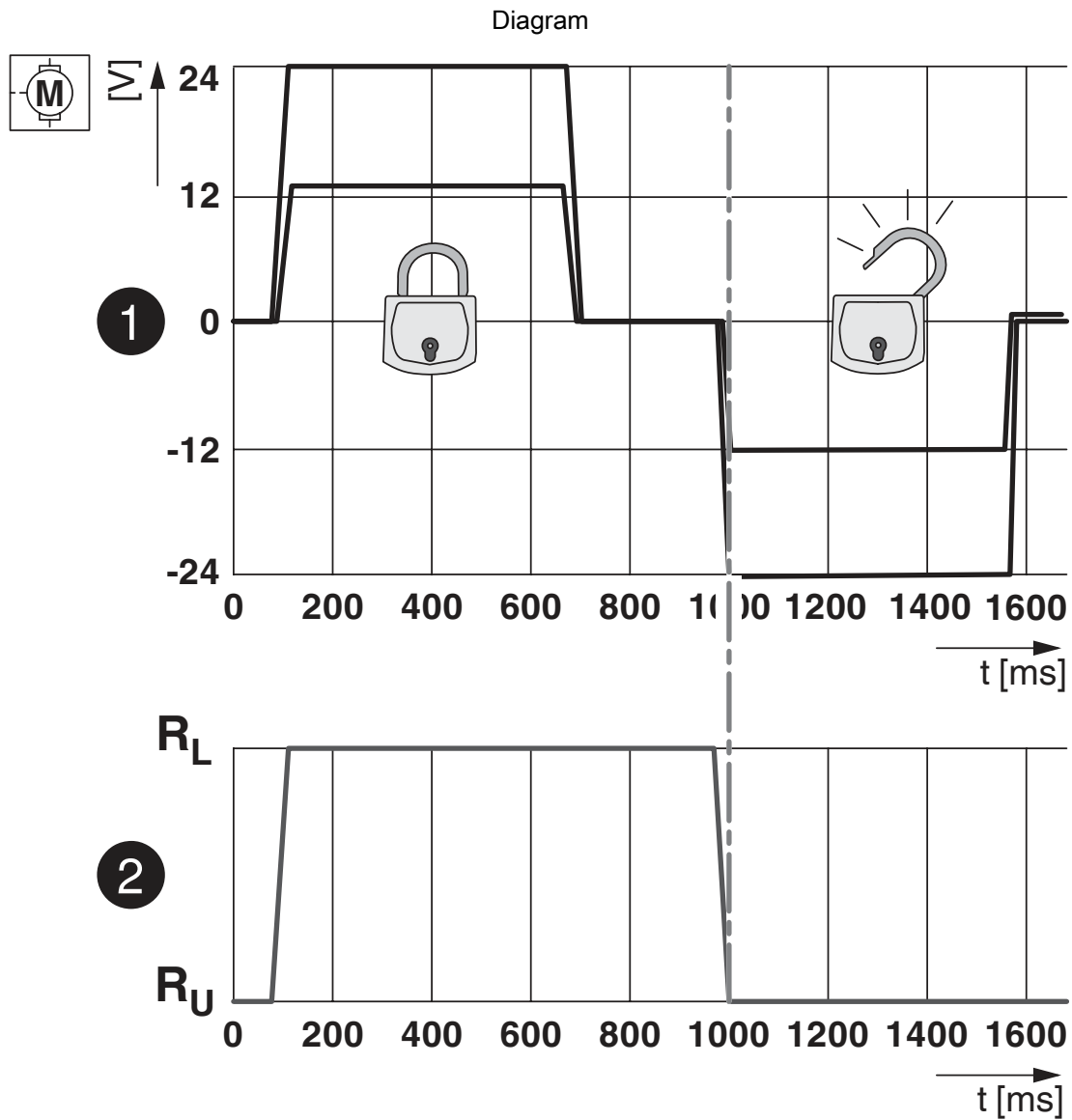


Panel thickness for rear mounting (max. 50 mm, with Phoenix Contact protective cover, max. 22 mm)

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket

1624043

<https://www.phoenixcontact.com/us/products/1624043>

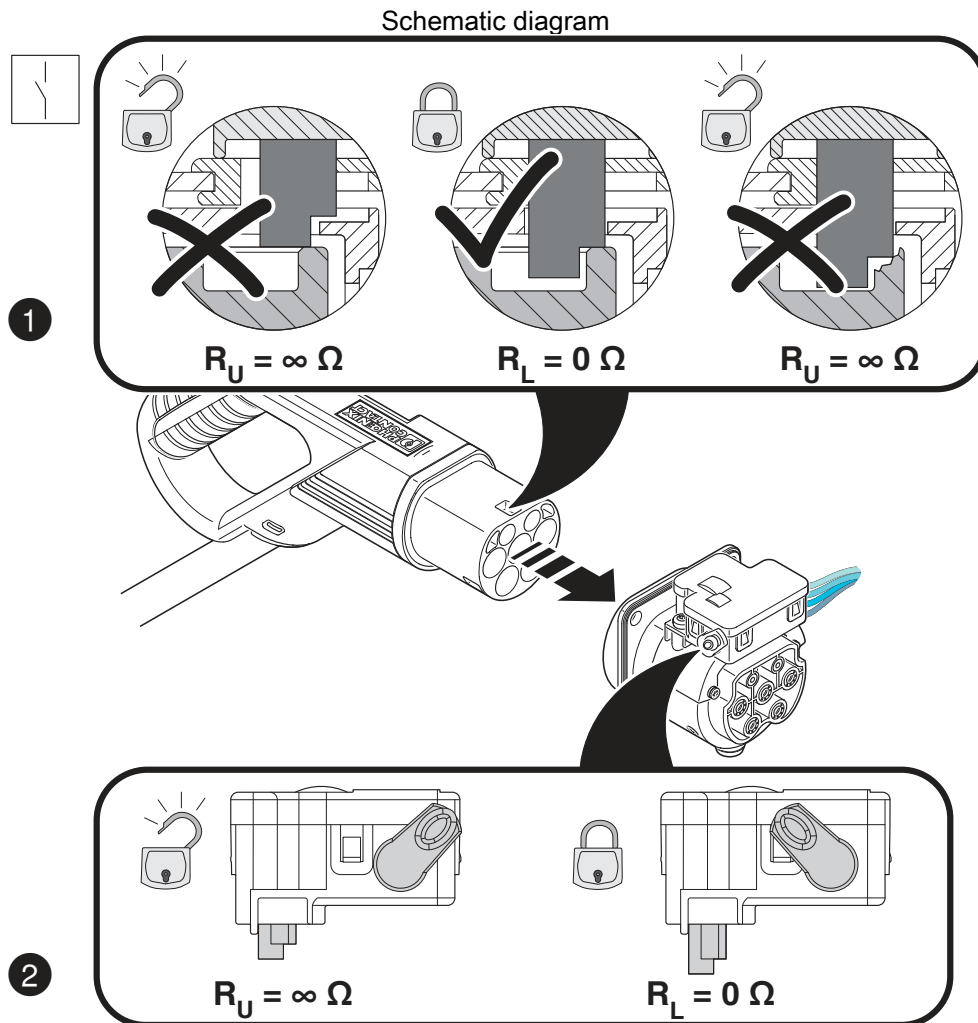


Locking states of the locking actuator

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket

1624043

<https://www.phoenixcontact.com/us/products/1624043>



Detection of the Infrastructure Plug

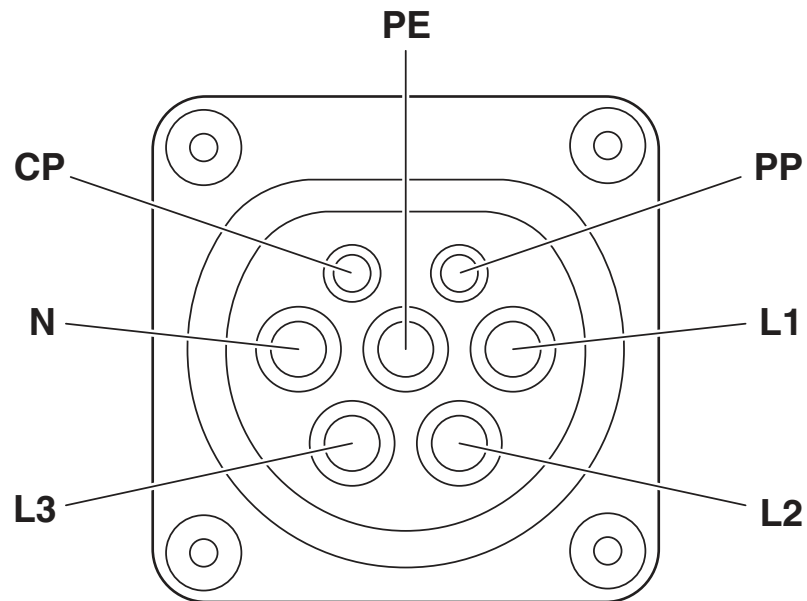


# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket

1624043

<https://www.phoenixcontact.com/us/products/1624043>

Connection diagram



Pin assignment of infrastructure charging socket

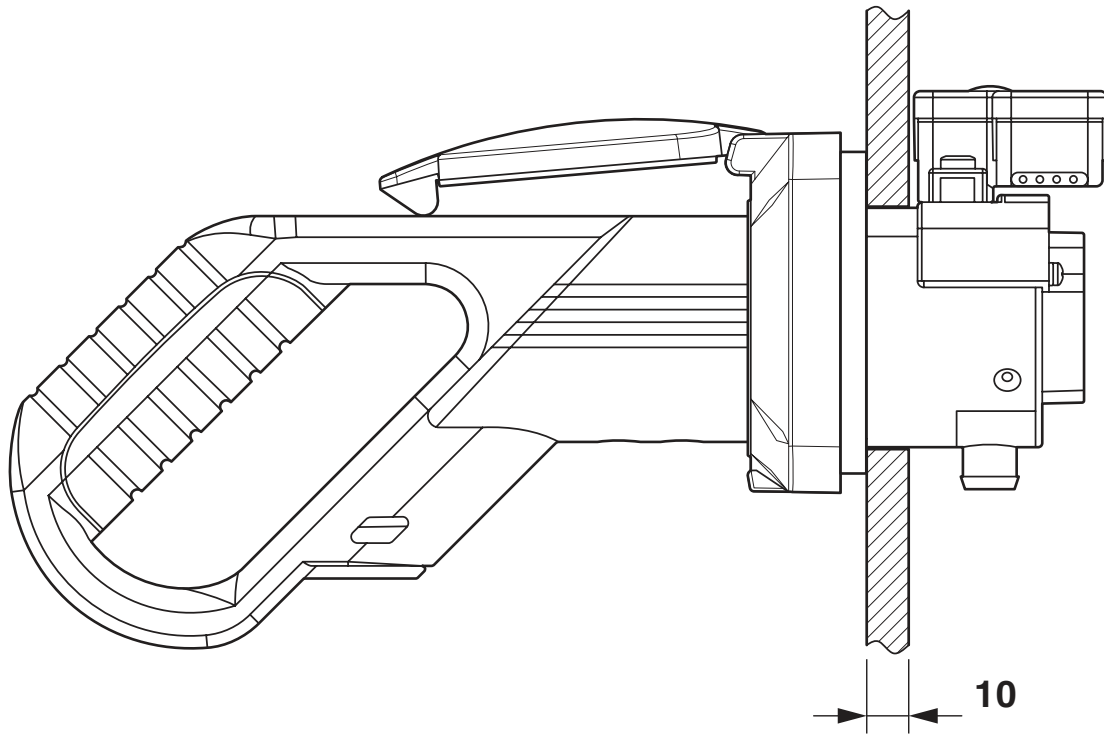
# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

Schematic diagram



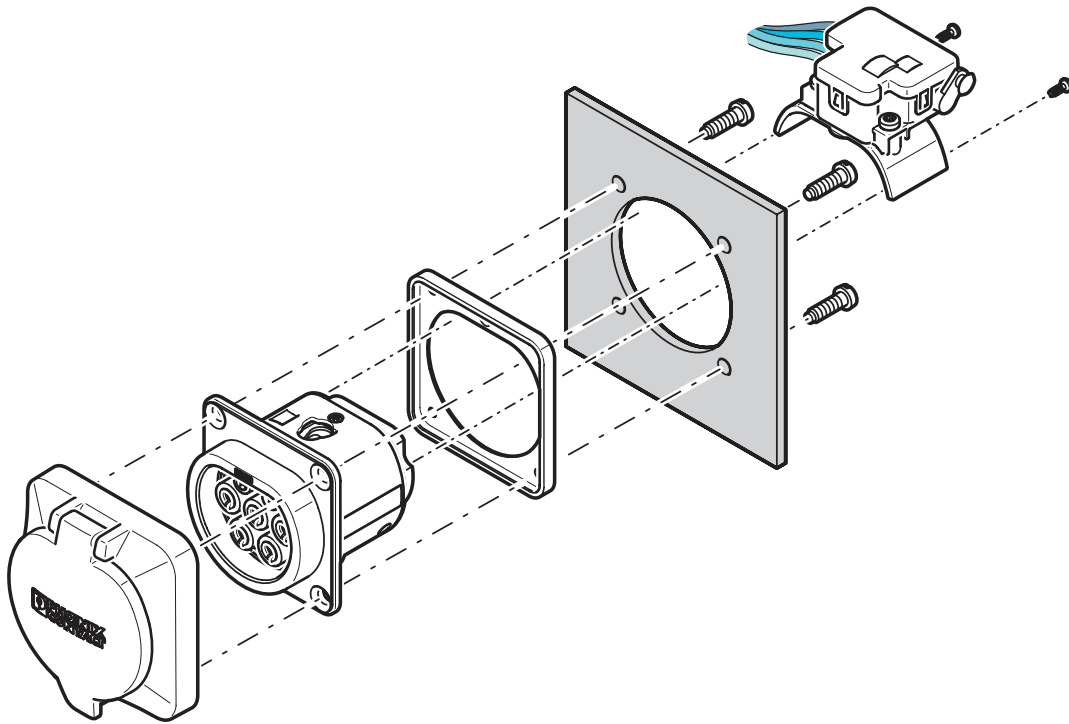
Panel thickness for front mounting (in mm)

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket

1624043

<https://www.phoenixcontact.com/us/products/1624043>

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).

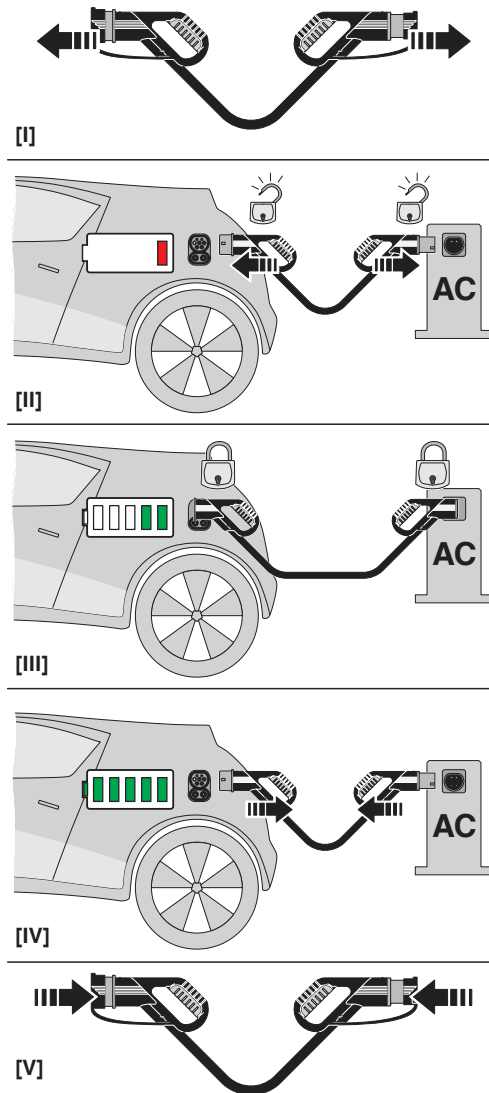
The screw connection for a protective cover from the accessories range (EV-T2SC) only supports rear mounting. The panel thickness must not exceed 10 mm. The sealing frame that is slid on from the front must contact the housing panel flush with the flat side and must completely surround the infrastructure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

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket

1624043

<https://www.phoenixcontact.com/us/products/1624043>

Schematic diagram



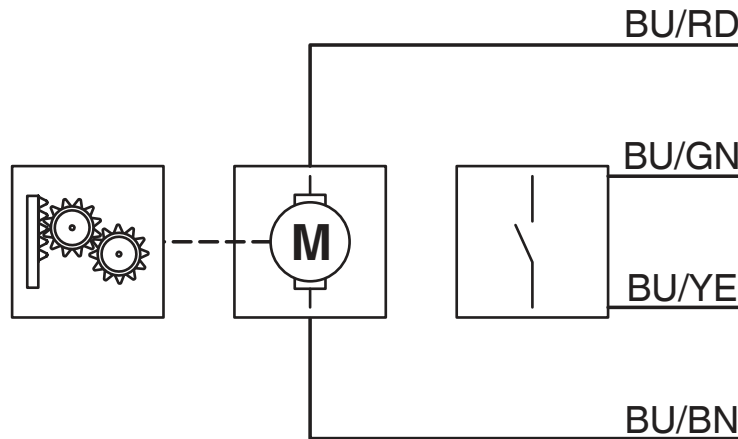
Operating instructions

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket

1624043

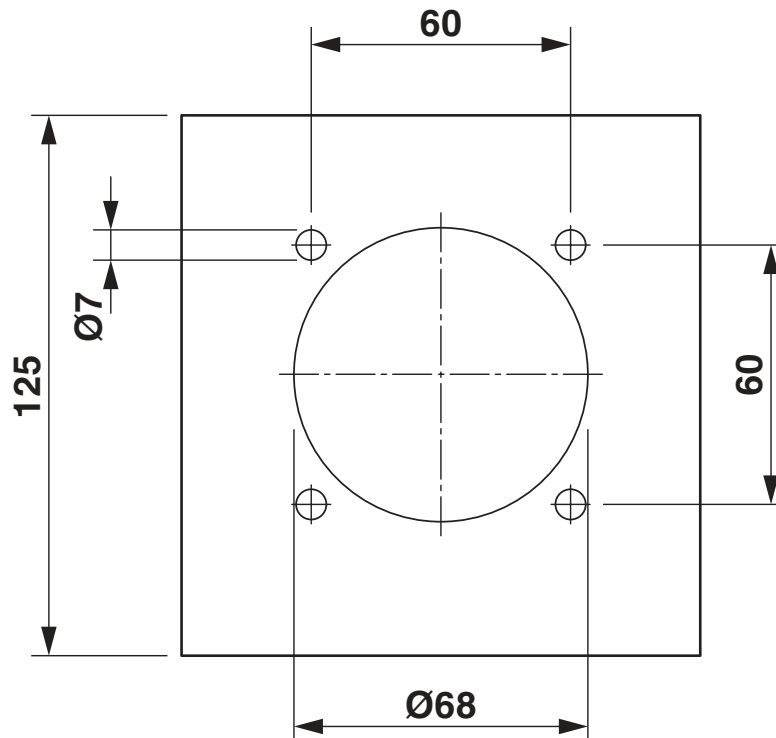
<https://www.phoenixcontact.com/us/products/1624043>

Block diagram



Block diagram of the locking actuator

Dimensional drawing



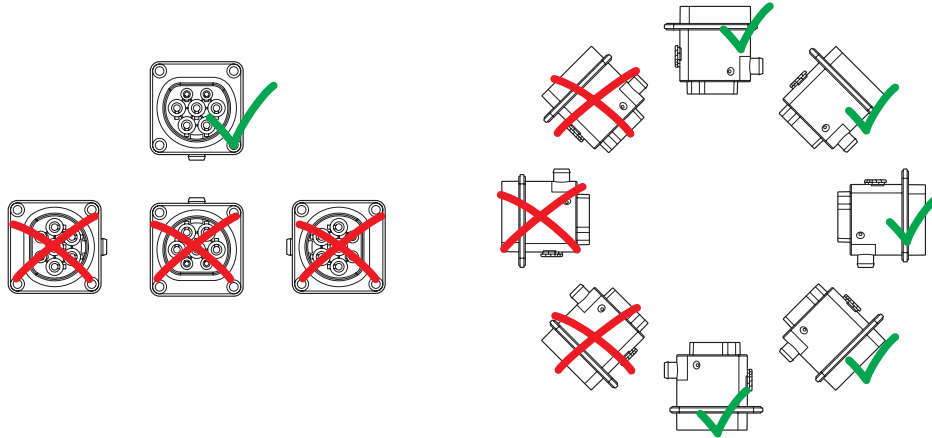
Hole image

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket

1624043

<https://www.phoenixcontact.com/us/products/1624043>

## Schematic diagram



## Installation positions

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27144706 |
|-------------|----------|

### ETIM

|          |          |
|----------|----------|
| ETIM 7.0 | EC002898 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121522 |
|-------------|----------|

# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

## Environmental product compliance

China RoHS

Environmentally Friendly Use Period = 10;

For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"



# EV-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

## Accessories

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

1315521

<https://www.phoenixcontact.com/us/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/us/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-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

## EV-T2SF - Panel mounting frames

1405218

<https://www.phoenixcontact.com/us/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/us/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-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

## EV-GBSC - Protective cover

1623416

<https://www.phoenixcontact.com/us/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/us/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-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

## EV-T2M3S-E-LOCK12V - Locking

1624129

<https://www.phoenixcontact.com/us/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/us/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-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

## EV-T2M3S-DRAINAGE-GASKET - Seal

1621668

<https://www.phoenixcontact.com/us/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/us/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-1,0M6,0E10 - Infrastructure charging socket

1624043

<https://www.phoenixcontact.com/us/products/1624043>

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

2902802

<https://www.phoenixcontact.com/us/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/us/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-T2M3SE12-3AC32A-1,0M6,0E10 - Infrastructure charging socket

1624043

<https://www.phoenixcontact.com/us/products/1624043>

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

1622453

<https://www.phoenixcontact.com/us/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/us/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-1,0M6,0E10 - Infrastructure charging socket



1624043

<https://www.phoenixcontact.com/us/products/1624043>

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

1627353

<https://www.phoenixcontact.com/us/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.

---

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)