

# Socket Outlet - EV-T2M3SE12-3AC20A-0,7M2,5E10 - 1405213

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## 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 738361
GTIN	4046356738361
Custom tariff number	85444290
Country of origin	Germany

## Technical data

### Product definition

Type	rear protective cover screw connection
Application	For charging electric vehicles (EV) with alternating current (AC)
	Compatible with infrastructure charging plugs

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## Technical data

### Product definition

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 2.5 mm <sup>2</sup> + 2x 0.5 mm <sup>2</sup>
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	13.8 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	20 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

Insertion/withdrawal cycles	> 10000
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## Technical data

### Mechanical properties

Insertion force	< 100 N
Withdrawal force	< 100 N

### Mounting

Possible mounting positions	Rear panel mounting
	Front mounting only possible when the locking actuator is removed (see EV-T2M3SE...E00 versions)
Restrictions to mounting position	Only 0 to 90 degree frontal inclination possible, see figure
Mounting position of the locking actuator	Top center
Screw connection of a protective cover	Only rear mounting possible
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
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### Locking actuator

Number of positions of the connectors	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

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## Technical data

### Locking actuator

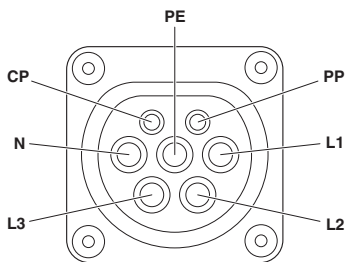
Cable length	0.5 m
Cable structure	4 x 0.5 mm <sup>2</sup>
Lock recognition	available
Mechanical emergency release	available

### Environmental Product Compliance

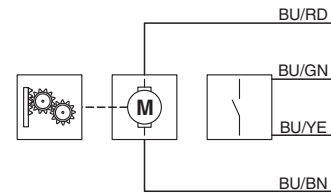
China RoHS	Environmentally Friendly Use Period = 10;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Connection diagram



Block diagram

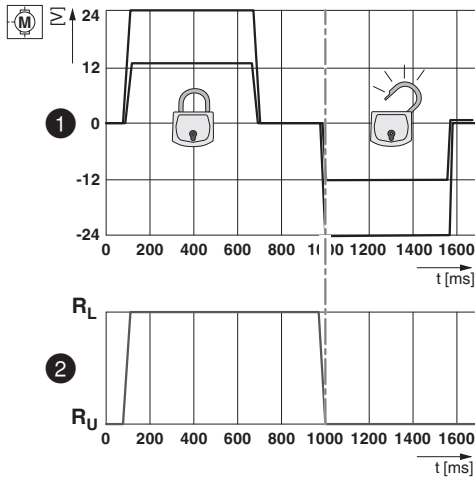


Block diagram of the locking actuator

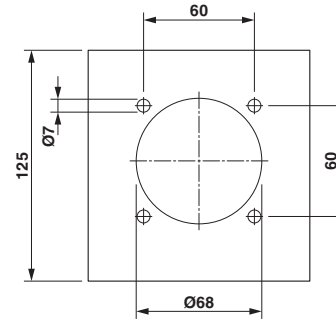
Pin assignment of Infrastructure Socket Outlet

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Diagram



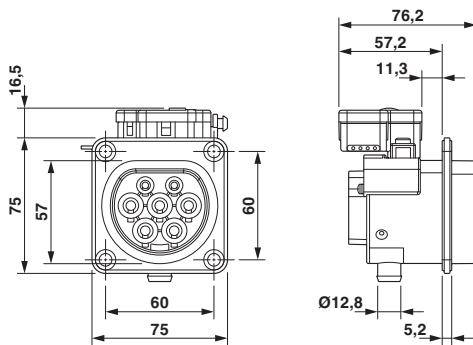
Dimensional drawing



Hole image

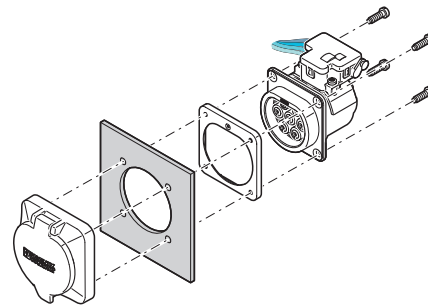
Locking states of the locking actuator

Dimensional drawing



Dimensional drawing

Schematic diagram

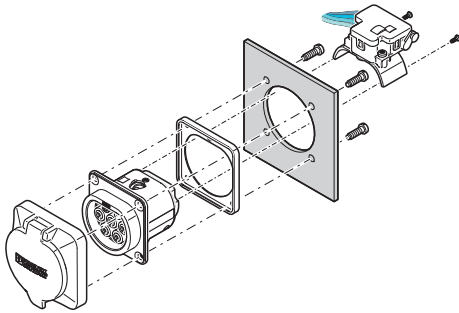


Rear mounting with rear protective cover screw connection

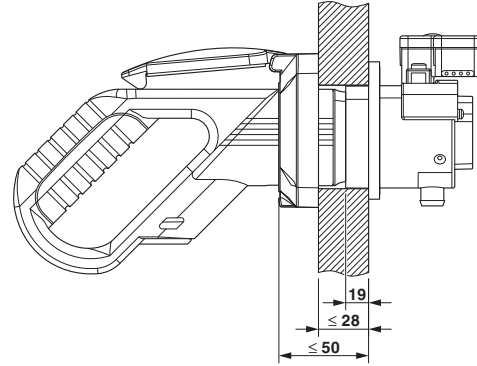
The screw connection for a protective cover from the accessories range (EV-T2SC) only supports rear mounting. The panel thickness must not exceed 5 mm. The sealing frame that is slid on from the rear must contact the housing panel flush with the flat side and must completely surround the infrastructure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

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Schematic diagram



Schematic diagram



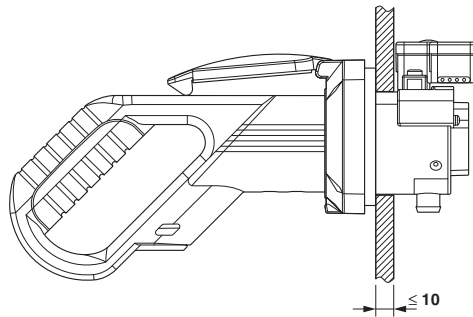
## Front mounting with rear protective cover screw connection

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.

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

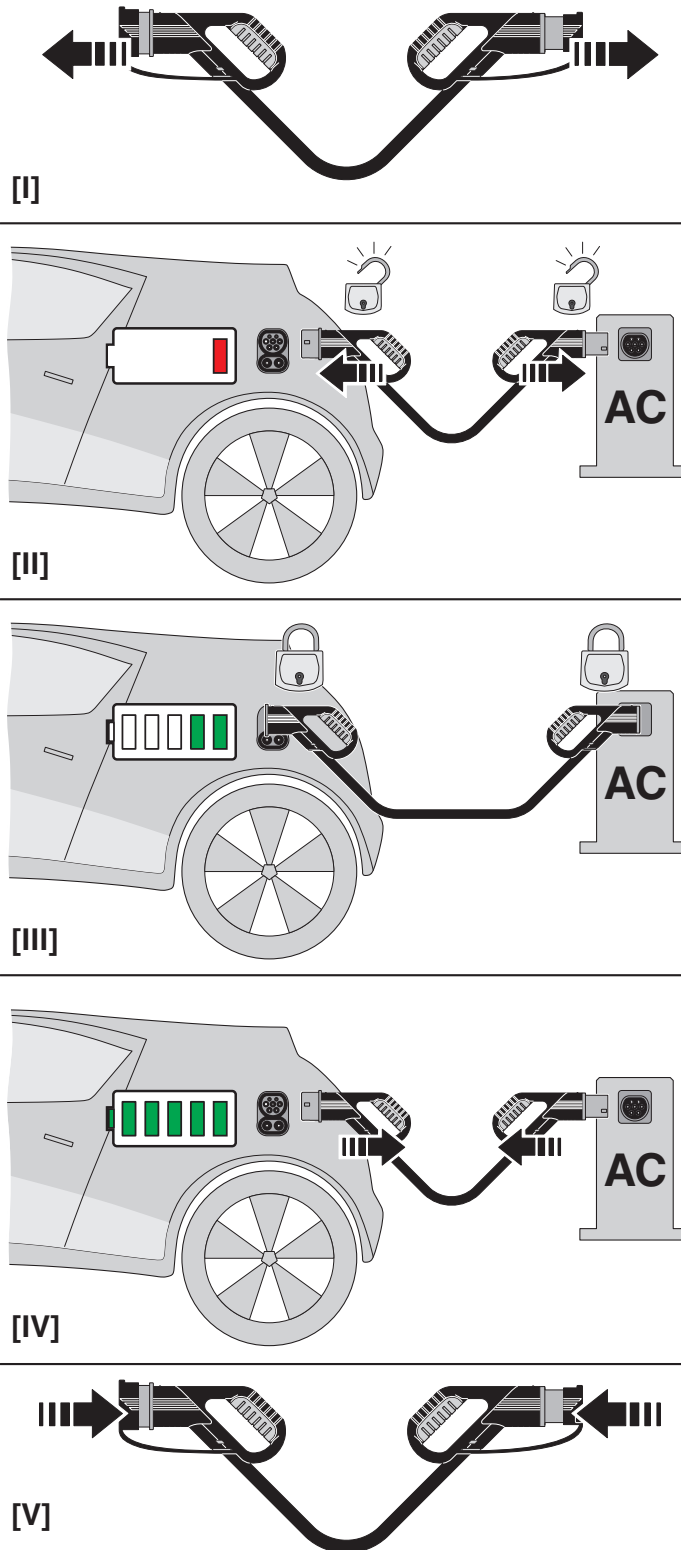
Schematic diagram



Panel thickness for front mounting (in mm)

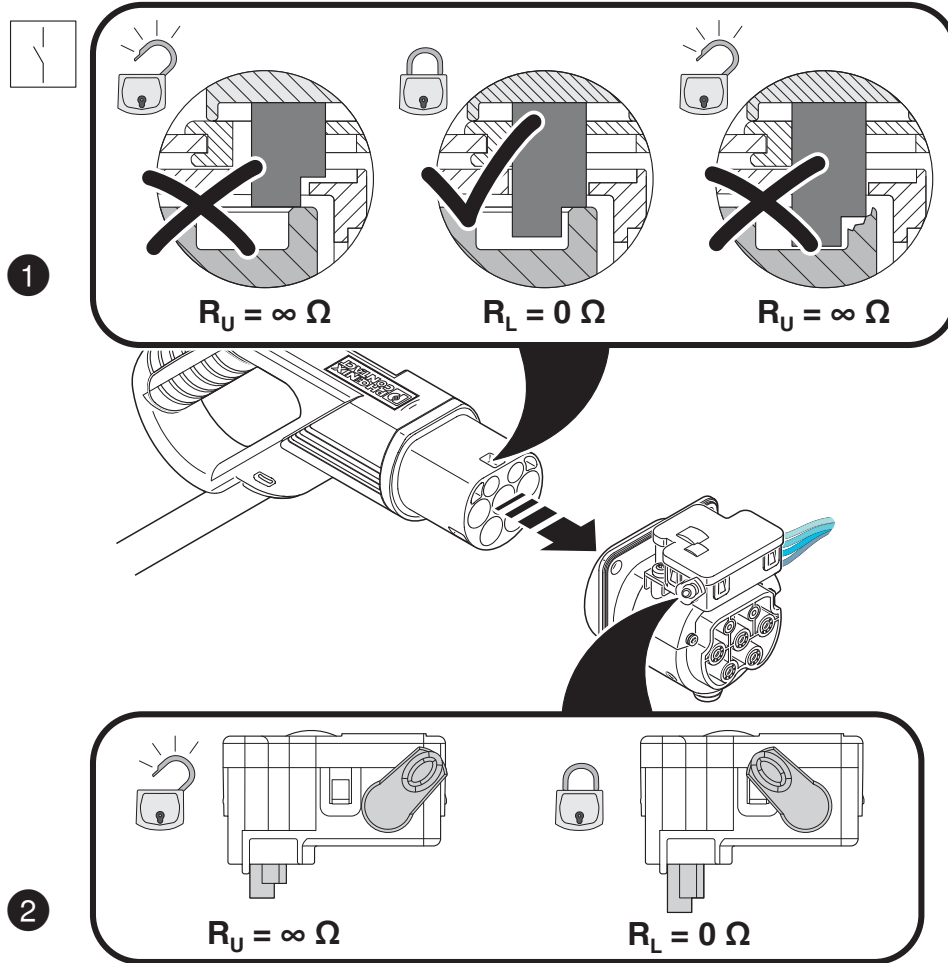
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Schematic diagram



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Schematic diagram

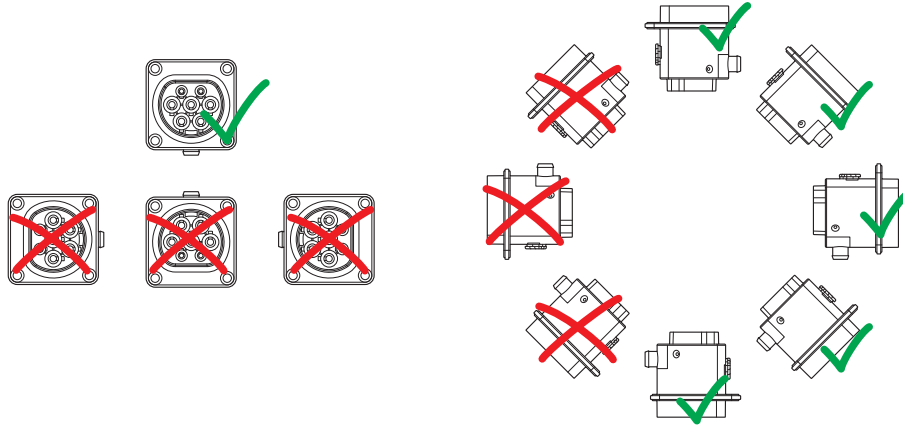


Detection of the Infrastructure Plug



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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

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### Classifications

#### UNSPSC

UNSPSC 18.0	39121522
UNSPSC 19.0	39121522
UNSPSC 20.0	39121522
UNSPSC 21.0	39121522