

# Socket Outlet - EV-T2M3SE12-3AC20A-0,7M2,5E14 - 1627985

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CHARX connect, Socket Outlet, front protective cover screw connection, Optimized insertion and withdrawal forces, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.7 m, Locking actuator: 12 V, 4-position, Rear panel mounting, Generation 1 Easy Mount, "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
- ✔ Quick and easy front mounting of an optional protective cover
- ✔ Manual emergency release of the locking actuator
- ✔ Integrated interlock during charging



## Key Commercial Data

Packing unit	1
GTIN	
GTIN	4055626369792
Custom tariff number	85444290

## Technical data

### Product definition

Type	front protective cover screw connection
	Optimized insertion and withdrawal forces
Application	For charging electric vehicles (EV) with alternating current (AC)

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## Technical data

### Product definition

	Compatible with infrastructure charging plugs
Affixed logo	"PHOENIX CONTACT" logo
Design	Generation 1 Easy Mount
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

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## Technical data

### Mechanical properties

Insertion/withdrawal cycles	> 10000
Insertion force	< 100 N (Optimized)
Withdrawal force	< 100 N (Optimized)

### Mounting

Possible mounting positions	Rear panel mounting
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 possible on the front
Max. wall thickness	max. 50 mm (Rear panel mounting, normative maximum specification for infrastructure plug)
	max. 22 mm (Rear panel mounting, normative maximum specification for infrastructure plug when using the protective cover (Order No. 1627635) with fastening frame (Order No. 1627637))
Mounting hole diameter	7.00 mm (ø)

### Design

Design line	Generation 1 Easy Mount
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
Cable length	0.5 m

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## Technical data

### Locking actuator

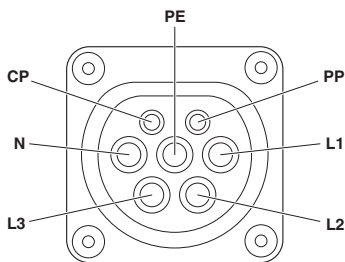
Cable structure	4 x 0.5 mm <sup>2</sup>
Lock recognition	available
Mechanical emergency release	available

### Environmental Product Compliance

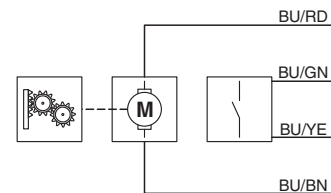
China RoHS	Environmentally Friendly Use Period = 10;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Connection diagram



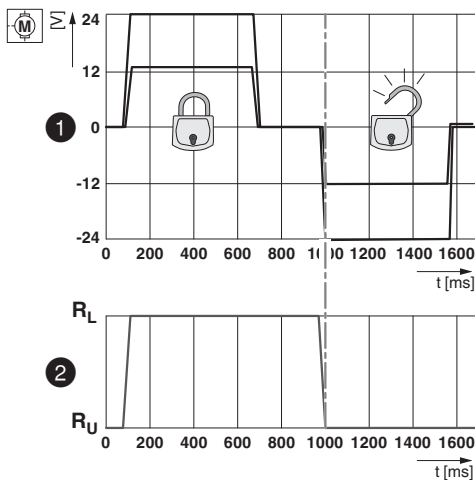
Block diagram



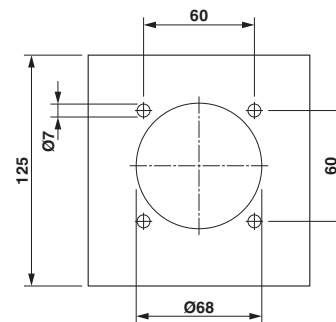
Block diagram of the locking actuator

### Pin assignment of Infrastructure Socket Outlet

Diagram



Dimensional drawing

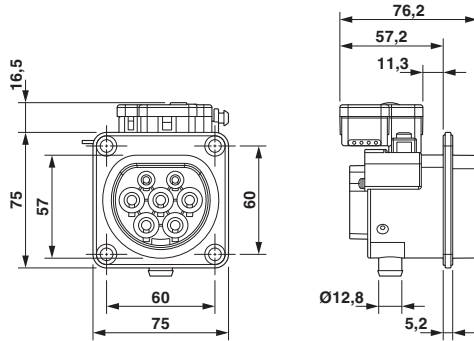


Hole image

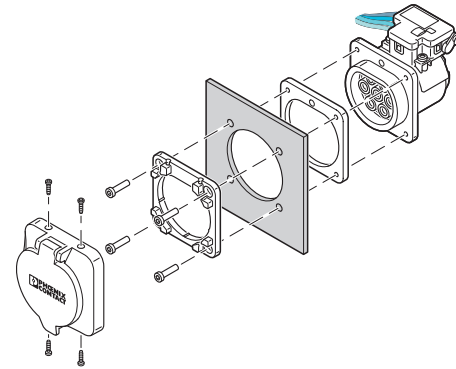
### Locking states of the locking actuator

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Dimensional drawing



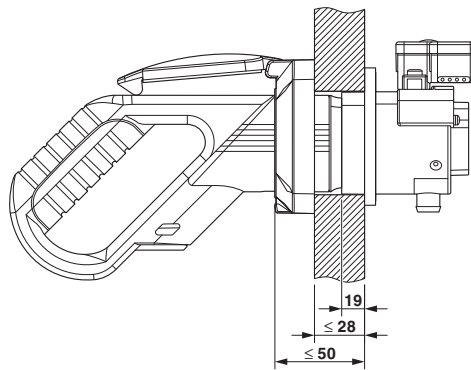
Schematic diagram



Dimensional drawing

Rear mounting with front protective cover screw connection  
The screw connection for a protective cover (EV-T2SC-EM) from the accessories range only supports front mounting with a corresponding fixing frame (EV-T2SF-EM). 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.

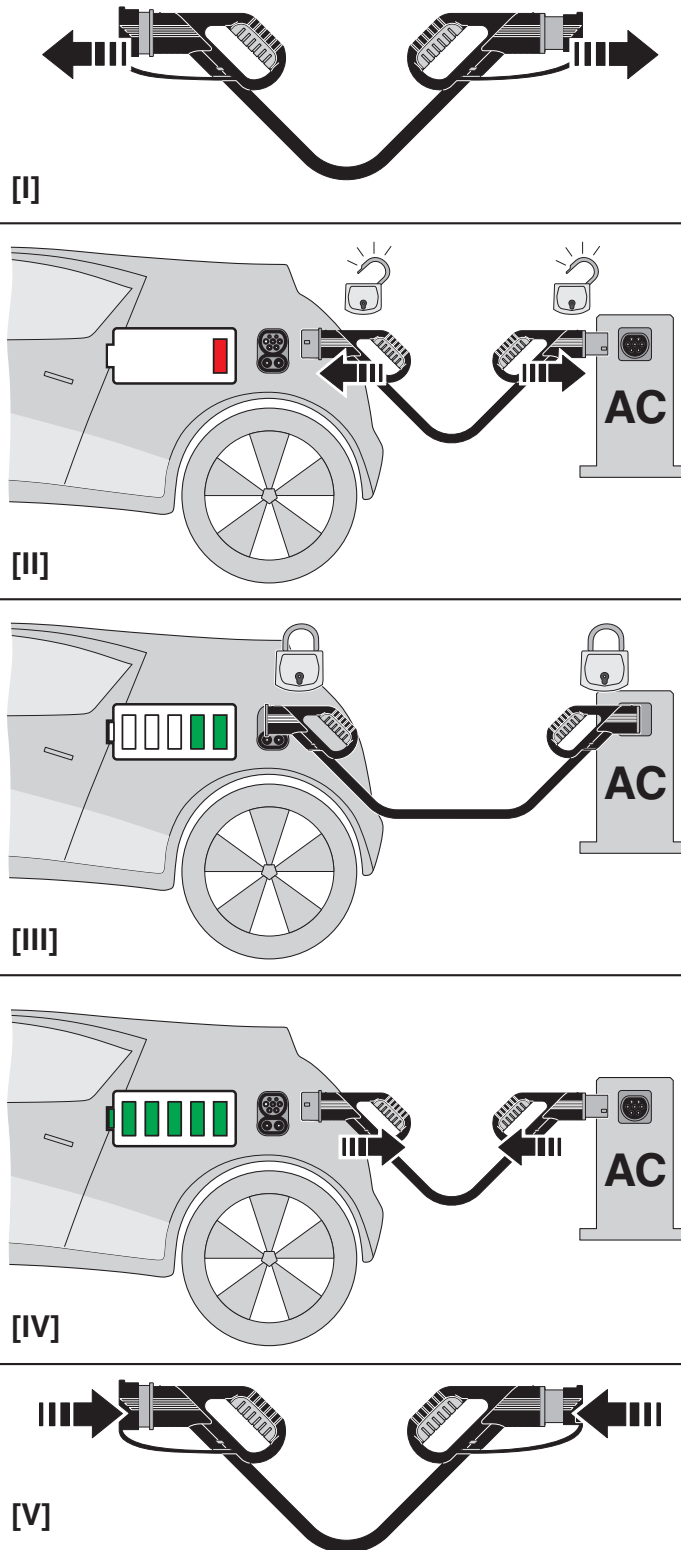
Schematic diagram



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

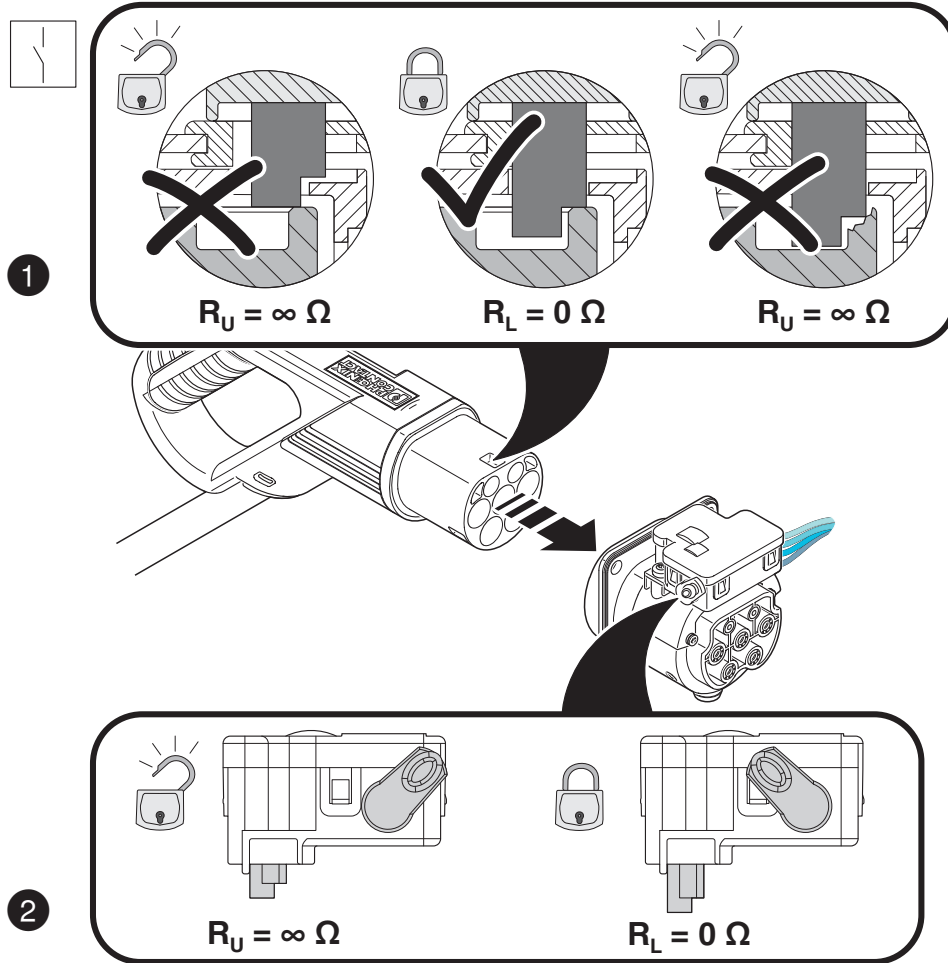
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Schematic diagram



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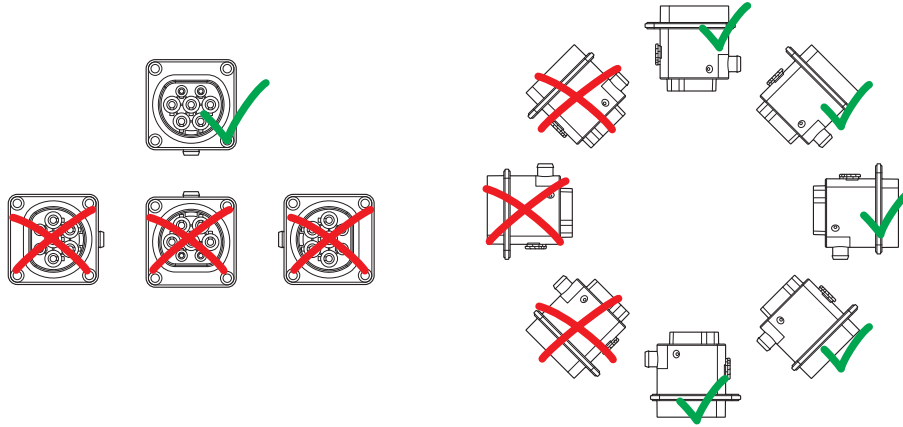
Schematic diagram



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