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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

## RoHS

## Key Commercial Data

Packing unit	1
GTIN	4 055626 650821
GTIN	4055626650821
Custom tariff number	85444290

## Technical data

#### Product definition

Туре	rear protective cover screw connection
	Additional splash protection at the rear with single wire seals
Application	For charging electric vehicles (EV) with alternating current (AC)
	Compatible with infrastructure charging plugs

03/20/2021 Page 1 / 9



## 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	0.5 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)
	IP44 (On the rear)

## **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	Rear panel mounting
	Front mounting only possible when the locking actuator is removed (see EV-T2M3SEE00 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 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



## Technical data

## Locking actuator

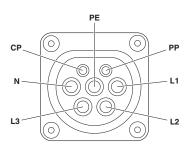
Ambient temperature (operation)	-30 °C 50 °C
Cable length	0.5 m
Cable structure	4 x 0.5 mm <sup>2</sup>
Lock recognition	available
Mechanical emergency release	available

## **Environmental Product Compliance**

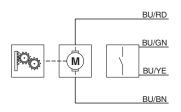
REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 10;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

#### Connection diagram



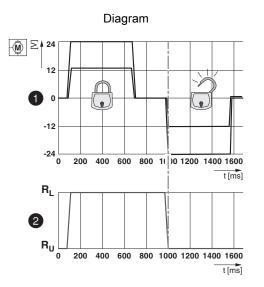




Block diagram of the locking actuator

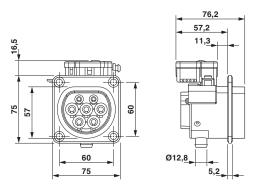
Pin assignment of Infrastructure Socket Outlet





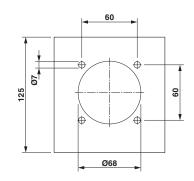
Locking states of the locking actuator

#### **Dimensional drawing**



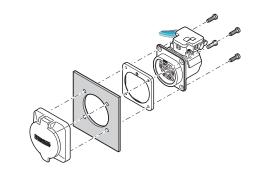
**Dimensional drawing** 

#### Dimensional drawing



Hole image

Schematic diagram

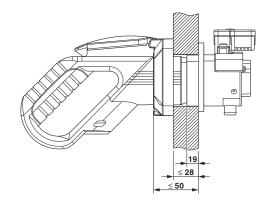


Rear mounting with rear protective cover screw connection The screw connection for a protective cover from the accessories range (EV-T2SC) only supports rear mounting. The panel thickness must not exceed 5 mm. The sealing frame that is slid on from the rear must contact the housing panel flush with the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



# Schematic diagram

Schematic diagram

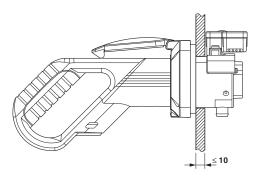


Front mounting with rear protective cover screw connection Front mounting is only possible when the locking actuator is removed. We recommend using an infrastructure socket outlet without pre-assembled locking actuator (EV-T2M3SE-...E0..., e.g., 1621729). The screw connection for a protective cover from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

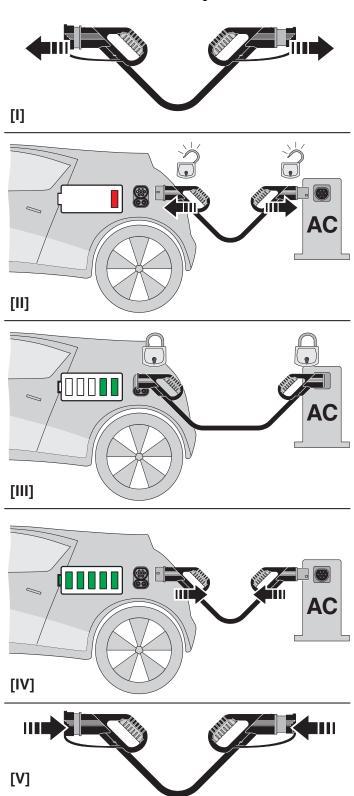
Panel thickness for rear mounting (max. 50 mm, with Phoenix Contact protective cover, max. 22 mm)

Schematic diagram



Panel thickness for front mounting (in mm)

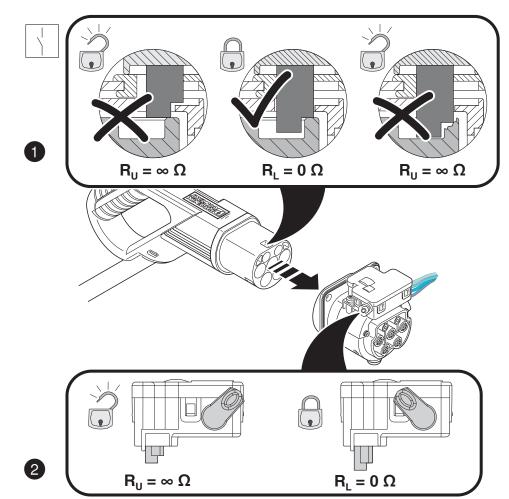




03/20/2021 Page 7 / 9

Schematic diagram

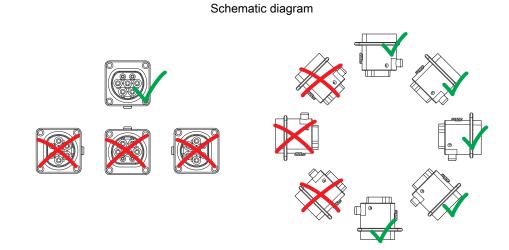




Schematic diagram

Detection of the Infrastructure Plug





#### Installation positions

## Classifications

## eCl@ss

eCl@ss 10.0.1	27144706
eCl@ss 11.0	27144706
eCl@ss 9.0	27144706

## ETIM

ETIM 6.0	EC002898
ETIM 7.0	EC002898

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