

# EV-T2M3SE24-3AC20A-0,7M2,5E14 - Infrastructure charging socket



1627986

<https://www.phoenixcontact.com/us/products/1627986>

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CHARX connect, Type 2, Infrastructure charging socket, 20 A , 480 V AC, Gen 1, Single-core wires connected at one end, length: 0.7 m, locking actuator: 24 V, 4-pos., Rear panel mounting, housing: black, optimized insertion and withdrawal forces, for charging electric vehicles (EV) with alternating current (AC), PHOENIX CONTACT logo, IEC 62196-2

## 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	1627986
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	XWBADC
GTIN	4055626370002
Weight per piece (including packing)	501 g
Weight per piece (excluding packing)	501 g
Country of origin	DE

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## Technical data

### Product properties

Product type	Infrastructure charging socket
Product family	CHARX connect
Type	Gen 1
Design	optimized insertion and withdrawal forces
Charging standard	Type 2
Charging mode	Mode 3, Case B
Affixed logo	PHOENIX CONTACT logo
Customer variations	On request

### Electrical properties

Type of signal transmission	Pulse width modulation
Note on the connection method	Crimp connection, cannot be disconnected

#### Pin assignment (Power contacts)

Number	5 (L1, L2, L3, N, PE)
Rated voltage	480 V AC
Rated current	20 A

#### Pin assignment (Signal contacts)

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

#### Locking actuator

Locking actuator	24 V, 4-pos.
	Top center position
Possible power supply range at the motor	22 V ... 26 V
Maximum voltage for locking detection	30 V
Typical motor current for locking	0.05 A
Reverse current of the motor	max. 0.5 A
Max. dwell time with reverse current	1 s
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
Cable length	0.5 m
Cable structure	4 x 0.5 mm <sup>2</sup>
Bending radius	min. 15 mm

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External cable diameter	1.60 mm ±0.02 mm
Cable weight	7.00 kg/km
Cable resistance	≤ 37.1 Ω/m
Single wire, color	BU/RD, BU/GN, BU/YE, BU/BN

## Dimensions

### Infrastructure charging socket

Width	75 mm
Height	96 mm
Depth	76.2 mm

### Bore dimensions

Width	60 mm
Height	60 mm

## Material specifications

Color (Housing)	black (9005)
Material (Housing)	Plastic
Material (Contact surface)	Silver

## Cable/line

Cable length	0.7 m (AC cables)
	0.5 m (Locking actuator cables)
Cable type	Single-core wires connected at one end
Cable structure	5 x 2.5 mm <sup>2</sup> + 2 x 0.5 mm <sup>2</sup>

## Mechanical properties

### Mechanical data

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

## 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
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## Mounting

Mounting type Infrastructure charging socket	Rear panel mounting (0 to 90 degree frontal inclination possible)
Mounting type Protective cover	front (available separately)
Mounting hole diameter	7.00 mm (ø)

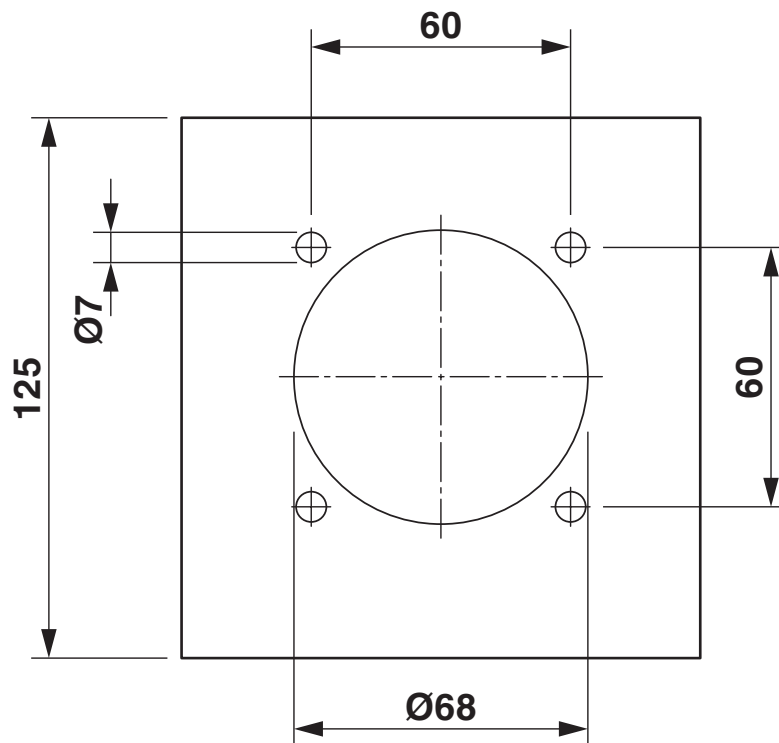
# EV-T2M3SE24-3AC20A-0,7M2,5E14 - Infrastructure charging socket

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## Drawings

Dimensional drawing



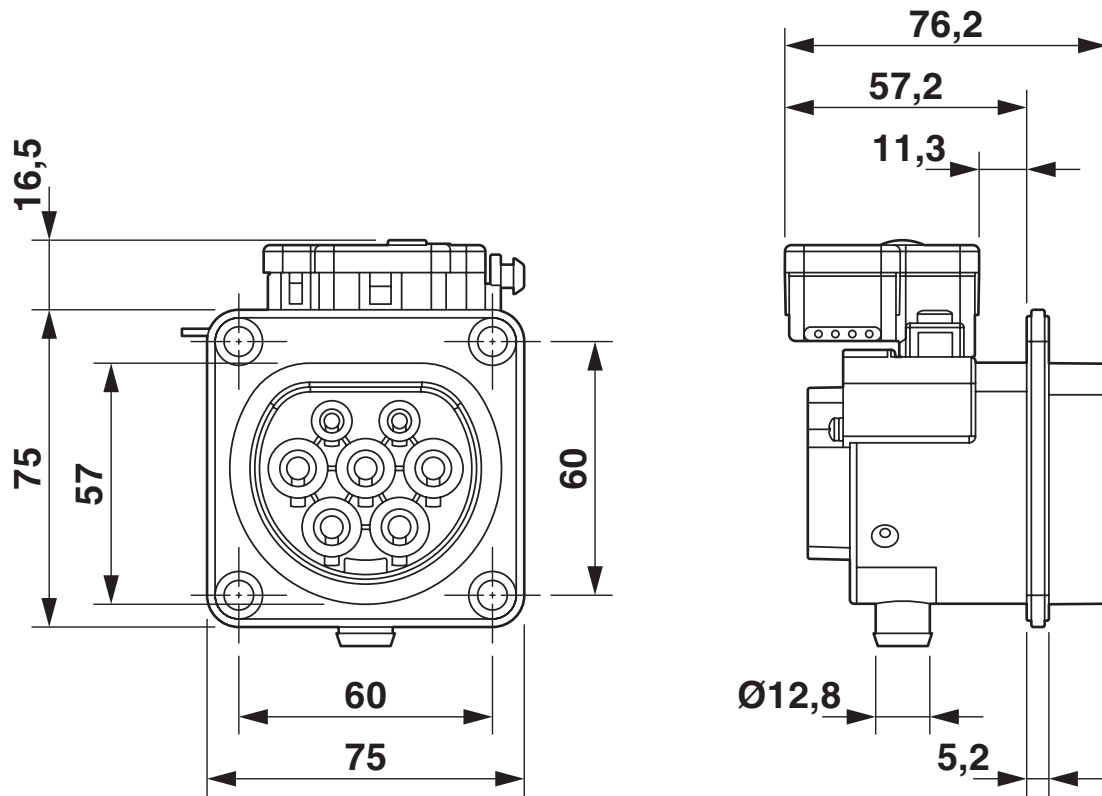
Hole image

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Dimensional drawing



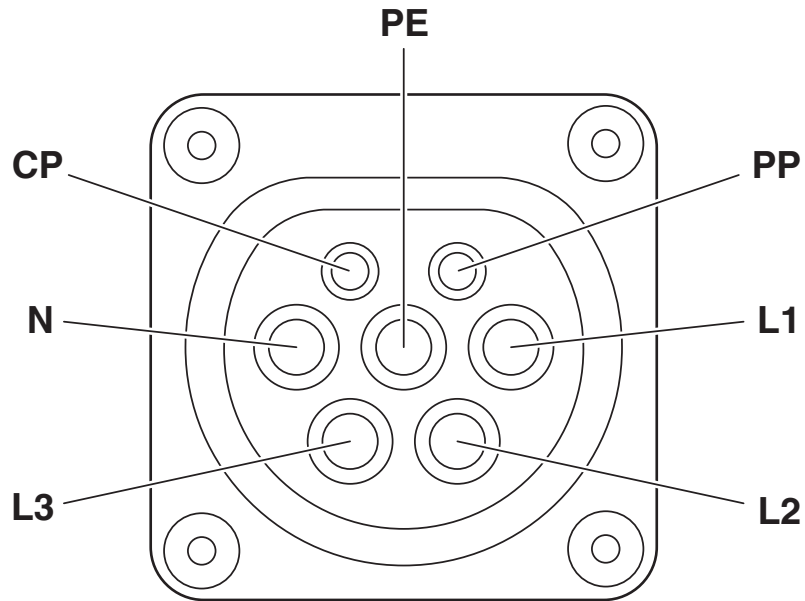
Dimensional drawing

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Connection diagram



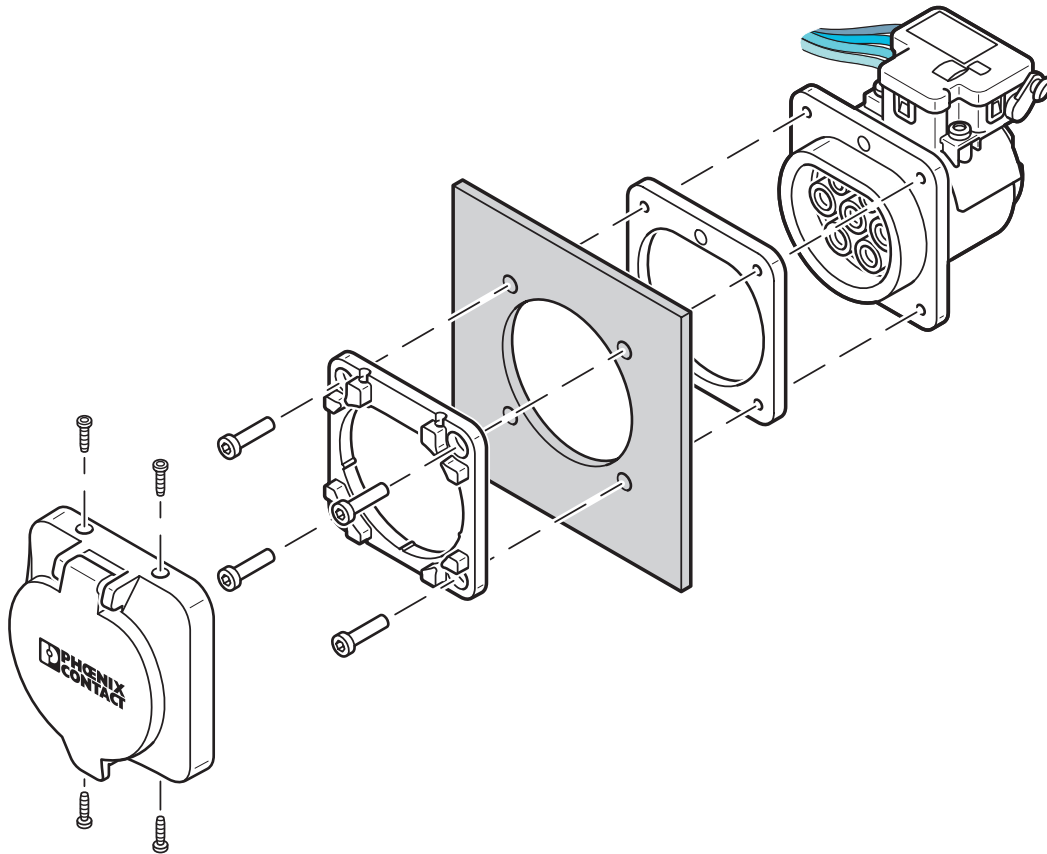
Pin assignment of infrastructure charging socket

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Schematic diagram



## 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.

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Schematic diagram

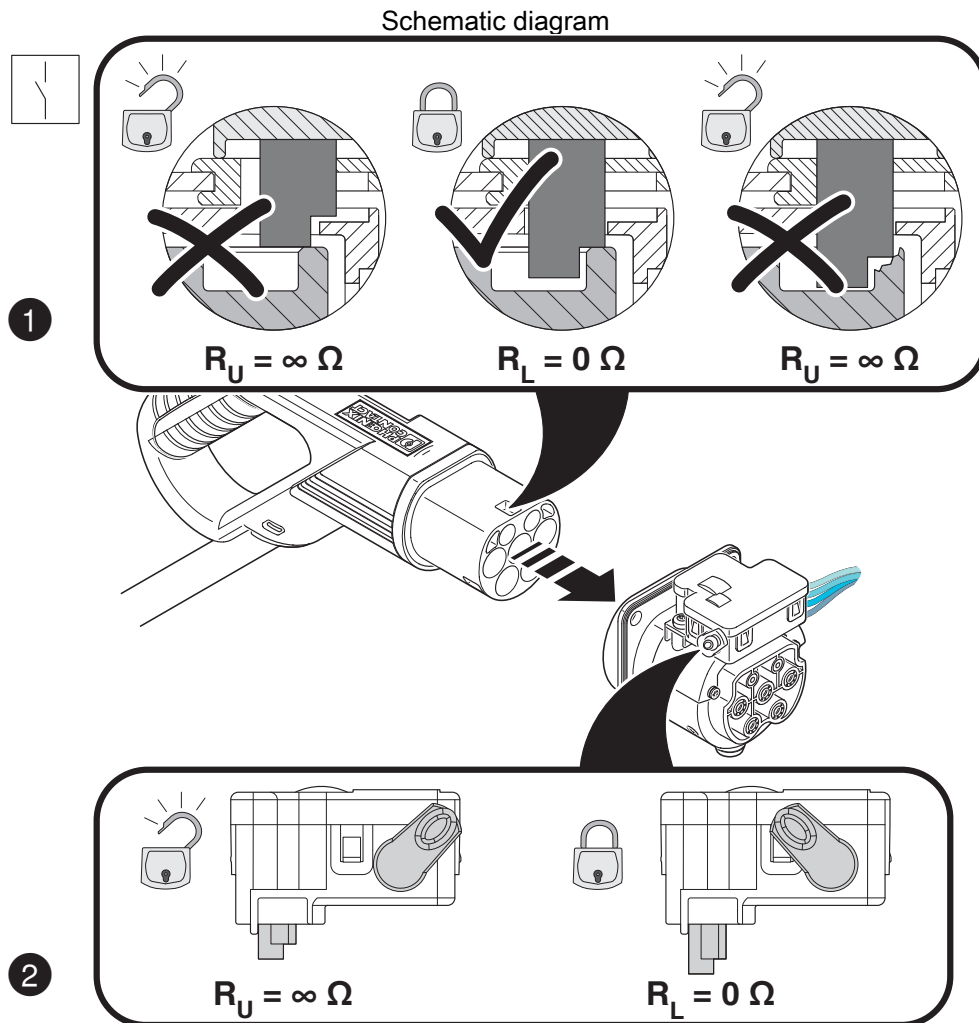


Operating instructions

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Detection of the Infrastructure Plug

## Schematic diagram



Installation positions

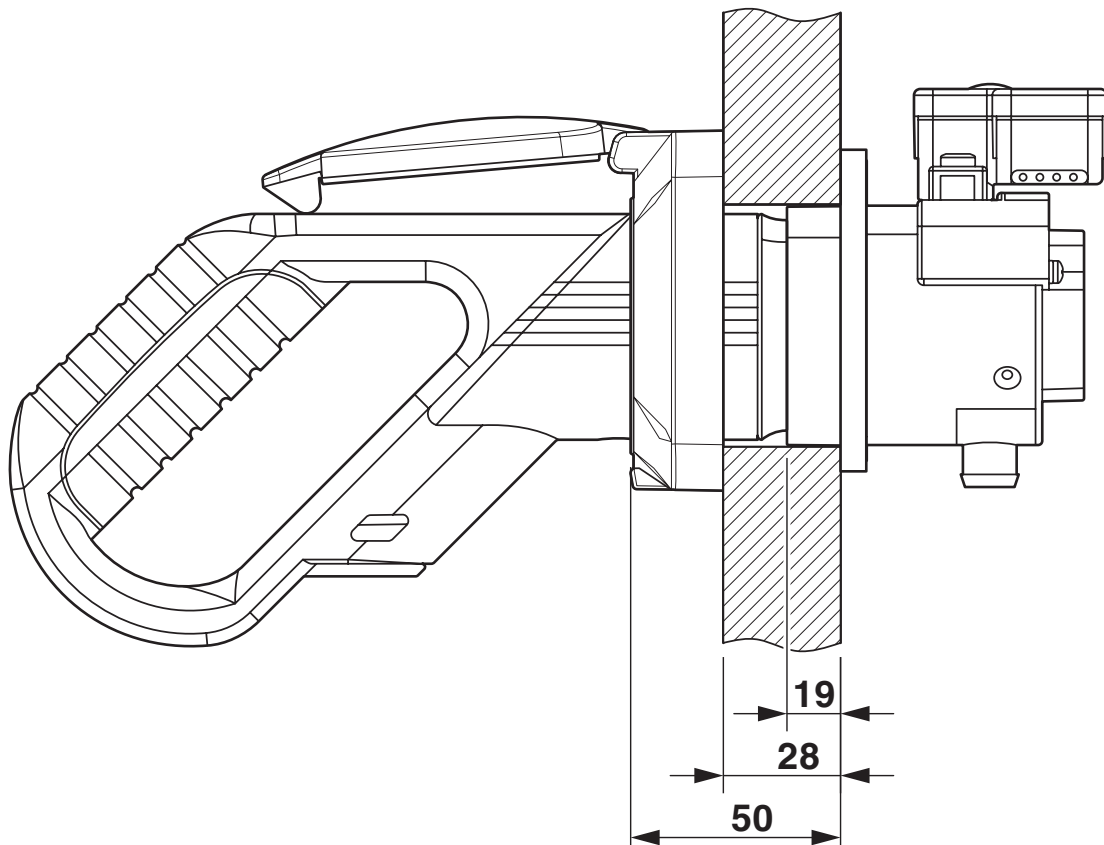
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Schematic diagram

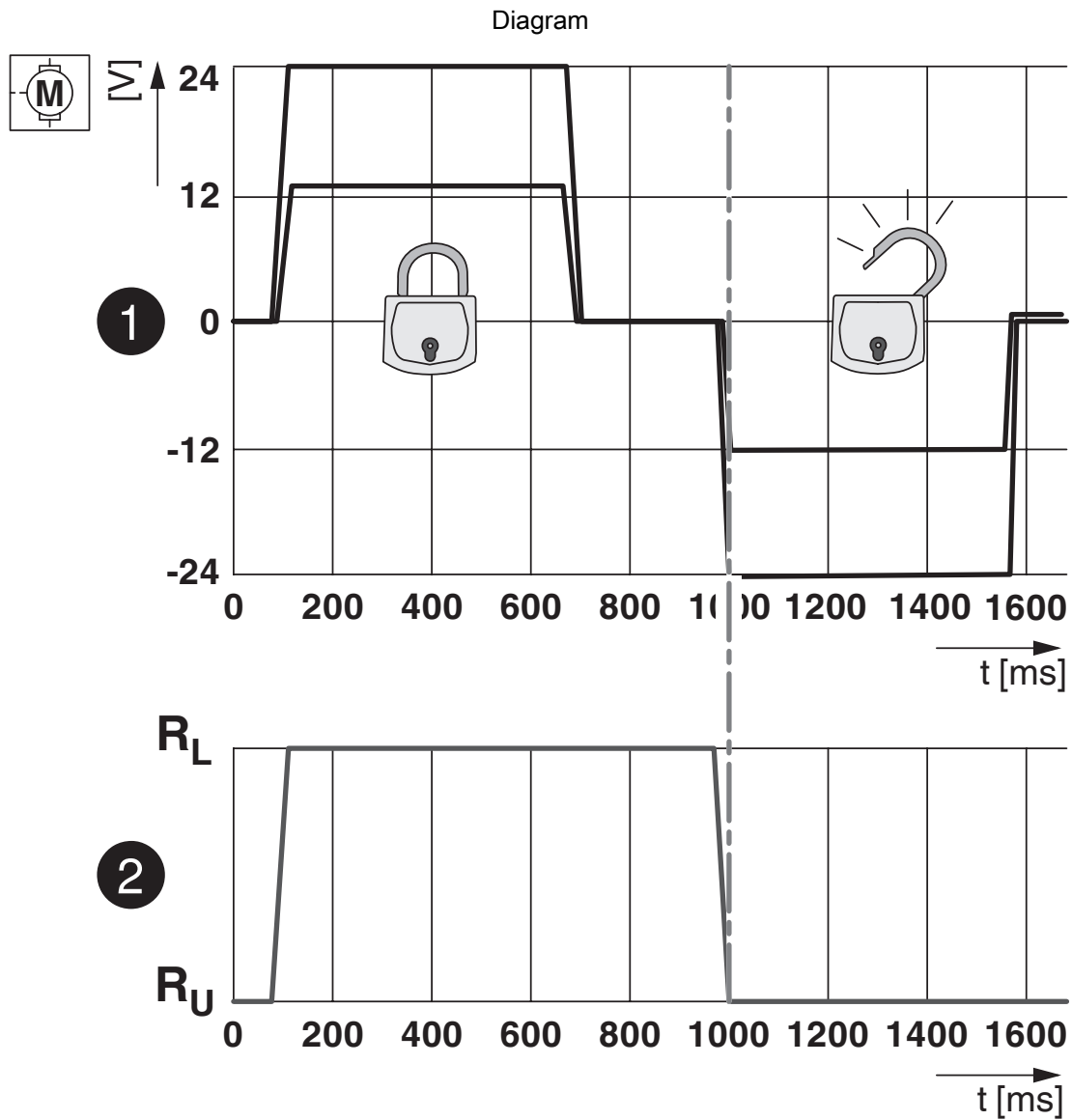


Panel thickness for rear mounting (max. 50 mm, with Phoenix Contact protective cover, max. 22 mm)

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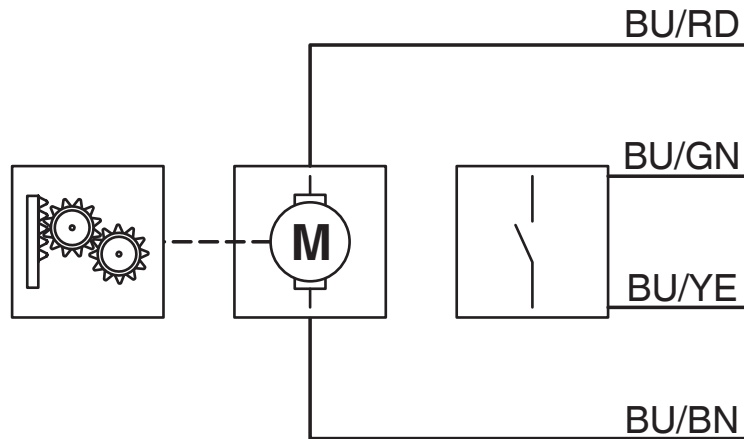
Locking states of the locking actuator

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Block diagram



Block diagram of the locking actuator

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## Classifications

### UNSPSC

UNSPSC 21.0	39121522
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

### China RoHS

Environment friendly use period (EFUP)	EFUP-10
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
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