

EV-T2M3SE12-3AC20A-0,7M2,5E14 - Infrastructure charging socket



1627985

<https://www.phoenixcontact.com/us/products/1627985>

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CHARX connect, Type 2, Infrastructure charging socket, 20 A , 480 V AC, length: 0.7 m, locking actuator: 12 V, 4-pos., Rear panel mounting, housing: black, gray, 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	1627985
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	XWBADC
GTIN	4055626369792
Weight per piece (including packing)	540 g
Weight per piece (excluding packing)	436 g
Country of origin	DE

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Technical data

Product properties

Product type	Infrastructure charging socket
Product family	CHARX connect
Application	for charging electric vehicles (EV) with alternating current (AC) compatible with infrastructure charging plugs
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 (Leistungskontakte)

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

Pin assignment (Signalkontakte)

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

Locking actuator

Locking actuator	12 V, 4-pos.
	Top center position
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
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 ²

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Dimensions

Dimensional drawing	
Max. wall thickness	max. 50.00 mm (Rear panel mounting, normative maximum specification for infrastructure plug)
	max. 22.00 mm (Rear panel mounting, normative maximum specification for infrastructure plug when using the protective cover (Item No. 1627635) with fastening frame (Item No. 1627637))
Bore dimensions	60 mm x 60 mm

Material specifications

Color (Housing)	black (9005)
Color (Handle area)	gray (7042)
Color (Mating face)	black (9005)
Color (Protective cap)	black (9005)
Color (Cable)	black (9005)

Cable/line

Cable length	0.7 m (AC cables)
	0.5 m (Locking actuator cables)
Cable structure	5 x 2.5 mm ² + 2 x 0.5 mm ²

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)

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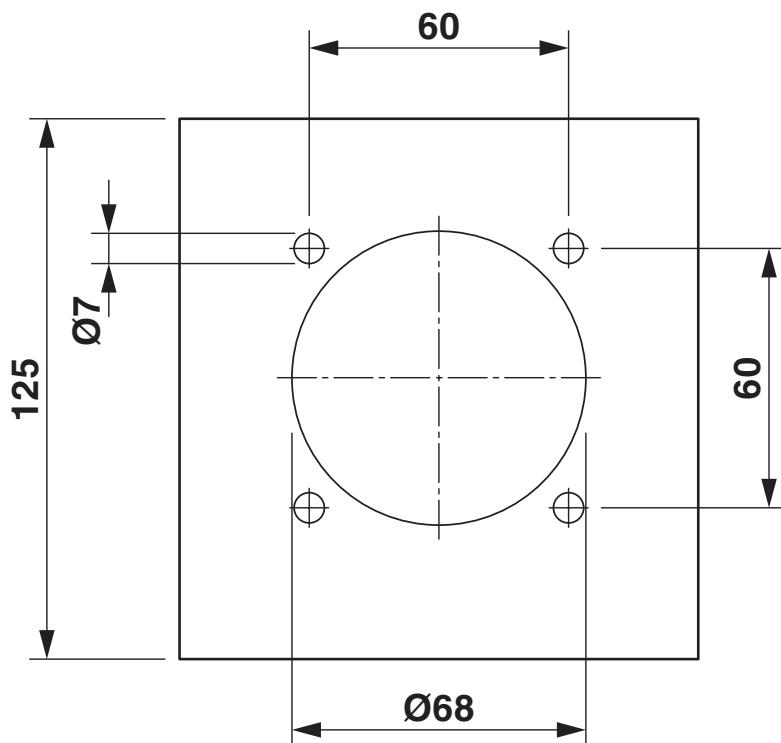


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Drawings

Dimensional drawing



Hole image

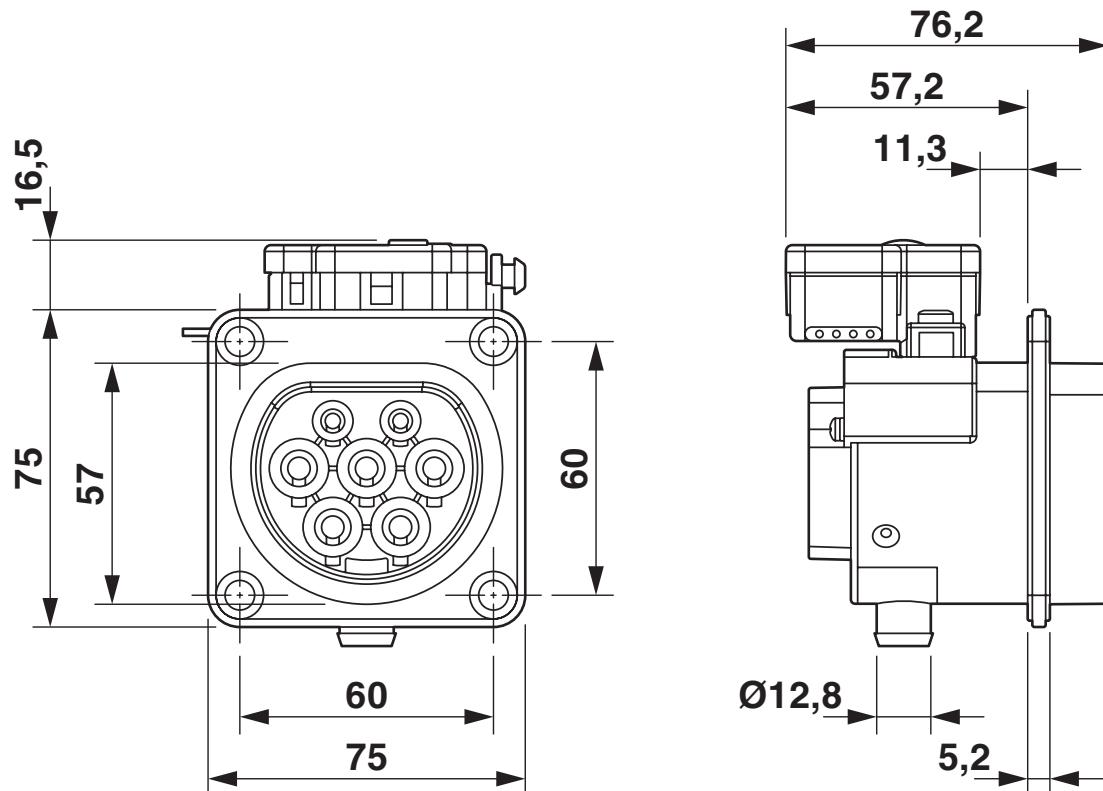
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Dimensional drawing



Dimensional drawing

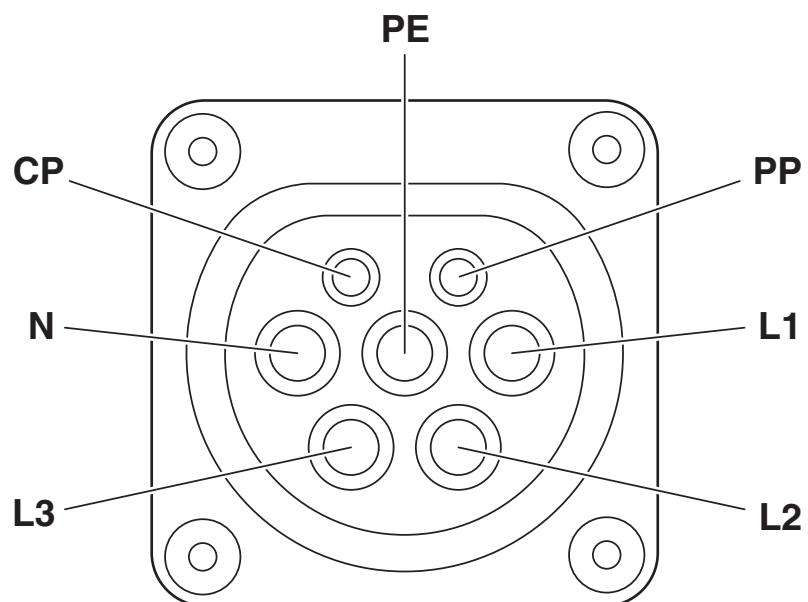
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Connection diagram



Pin assignment of infrastructure charging socket

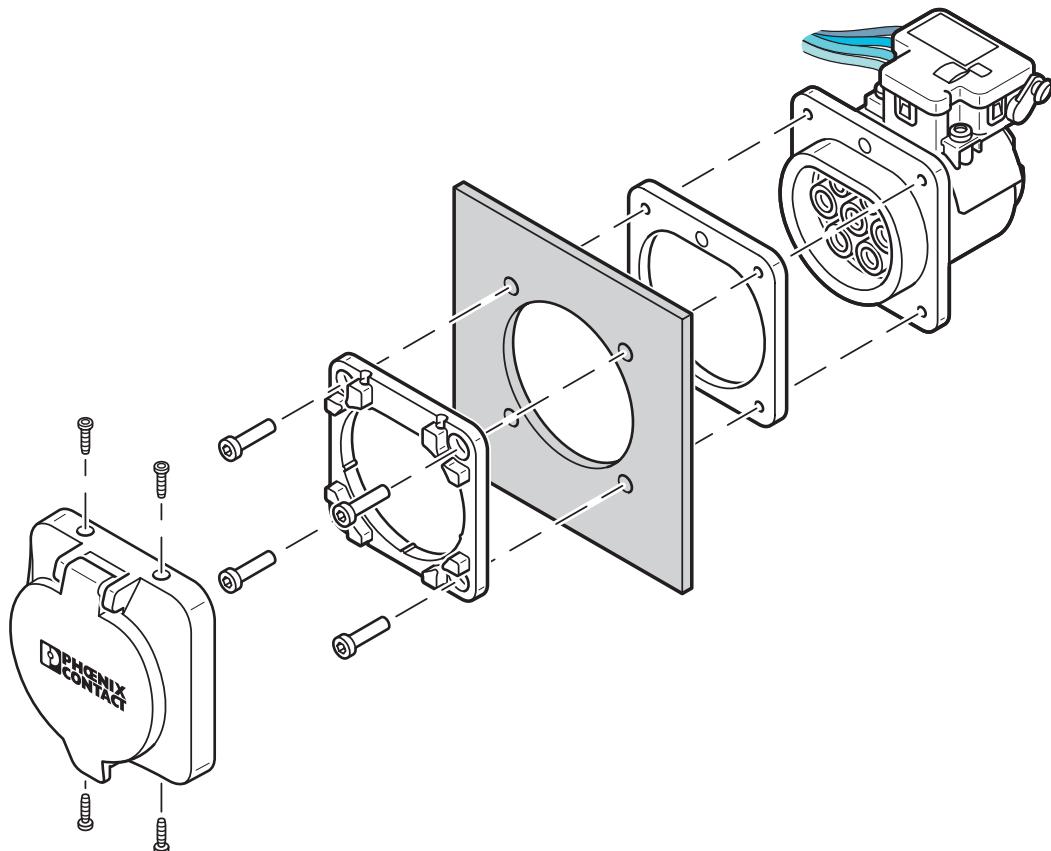
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Schematic diagram



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.

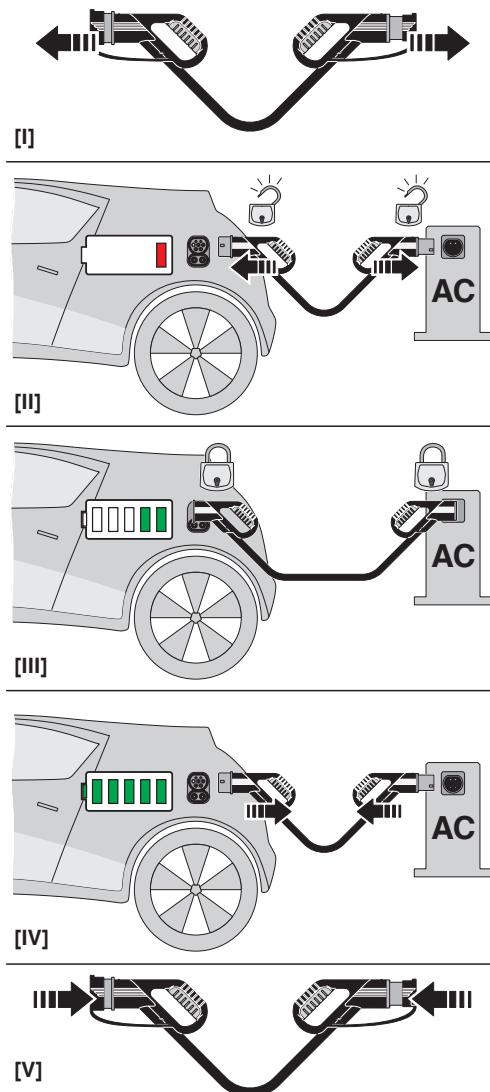
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Schematic diagram



Operating instructions

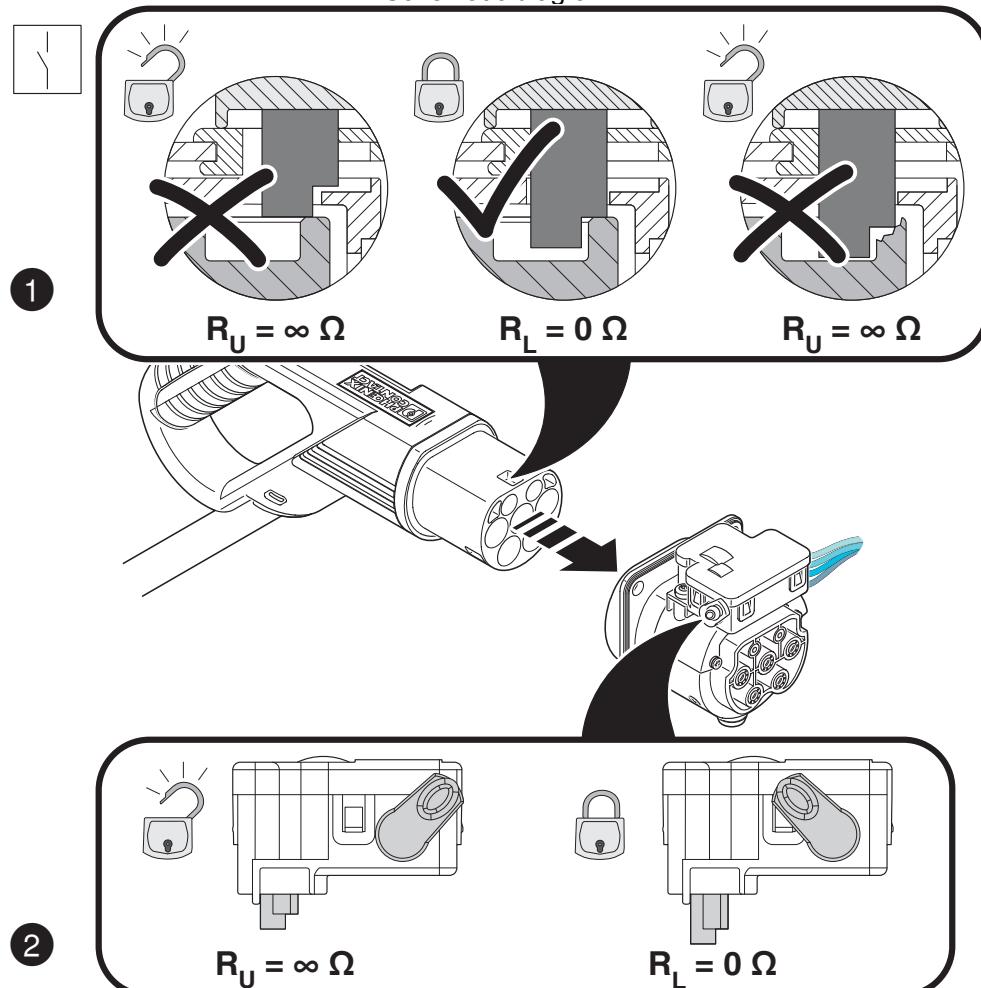
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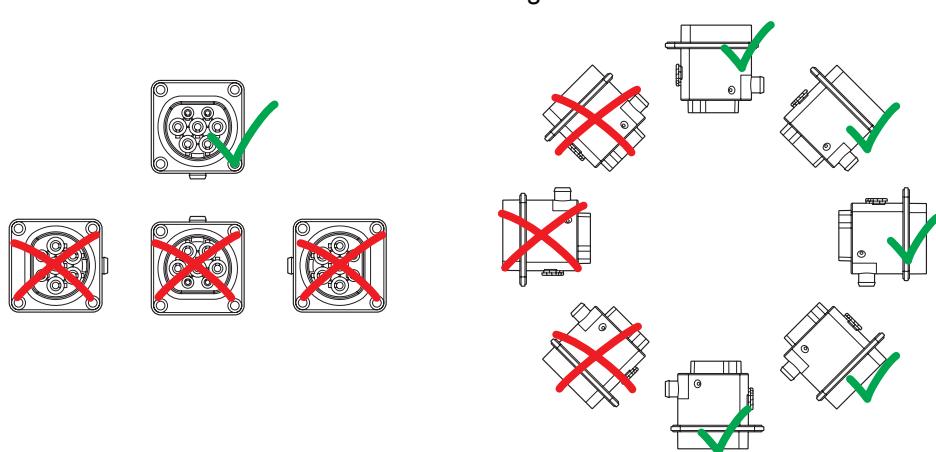
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Schematic diagram



Detection of the Infrastructure Plug

Schematic diagram



Installation positions

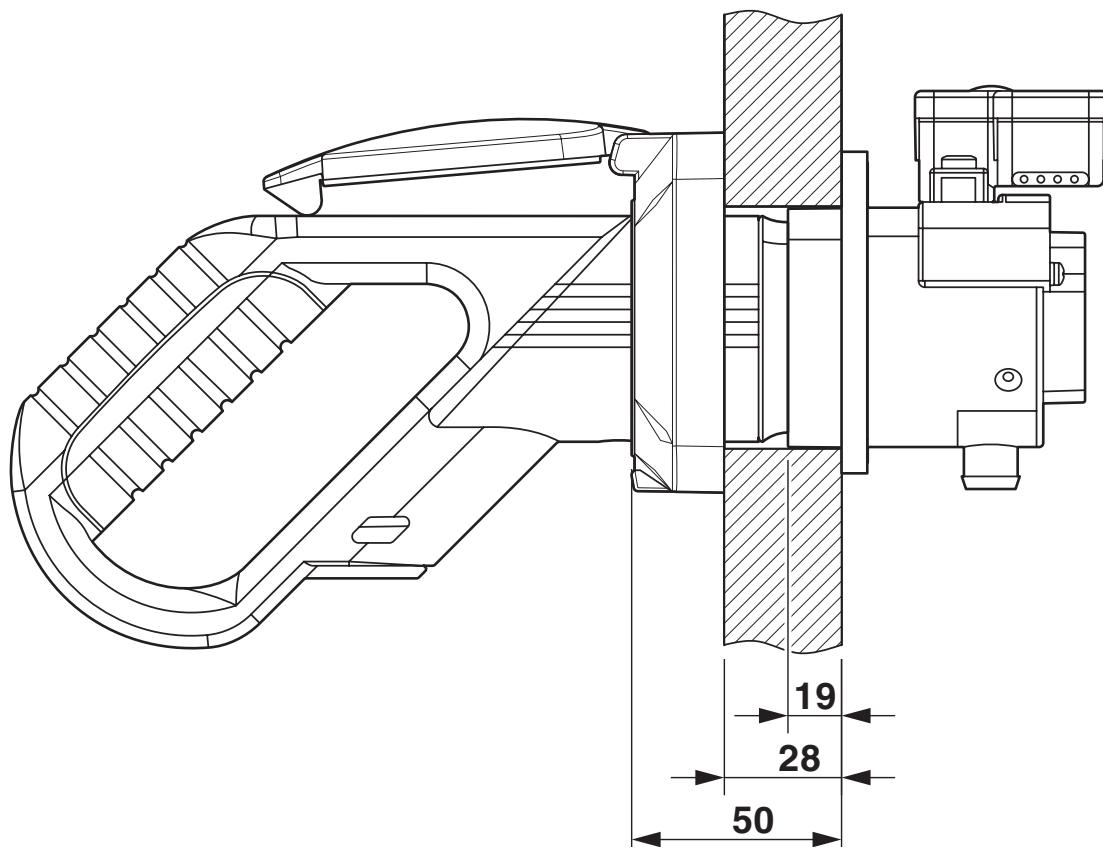
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Schematic diagram



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

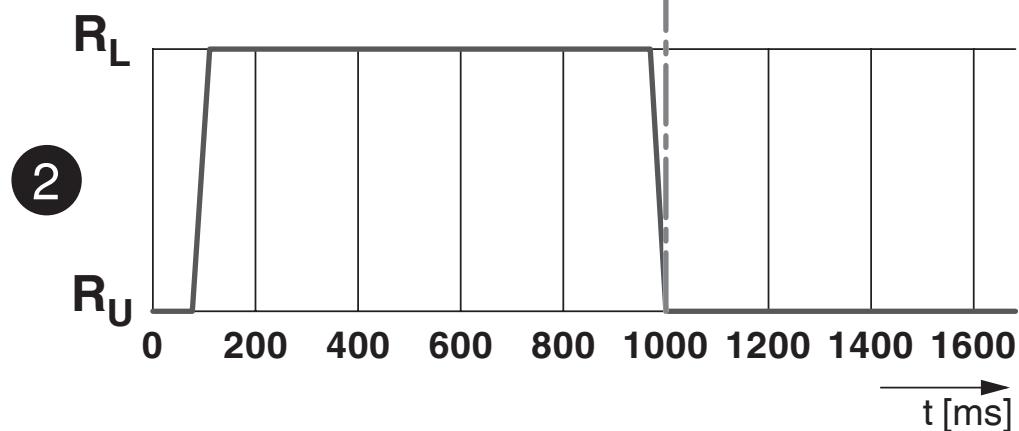
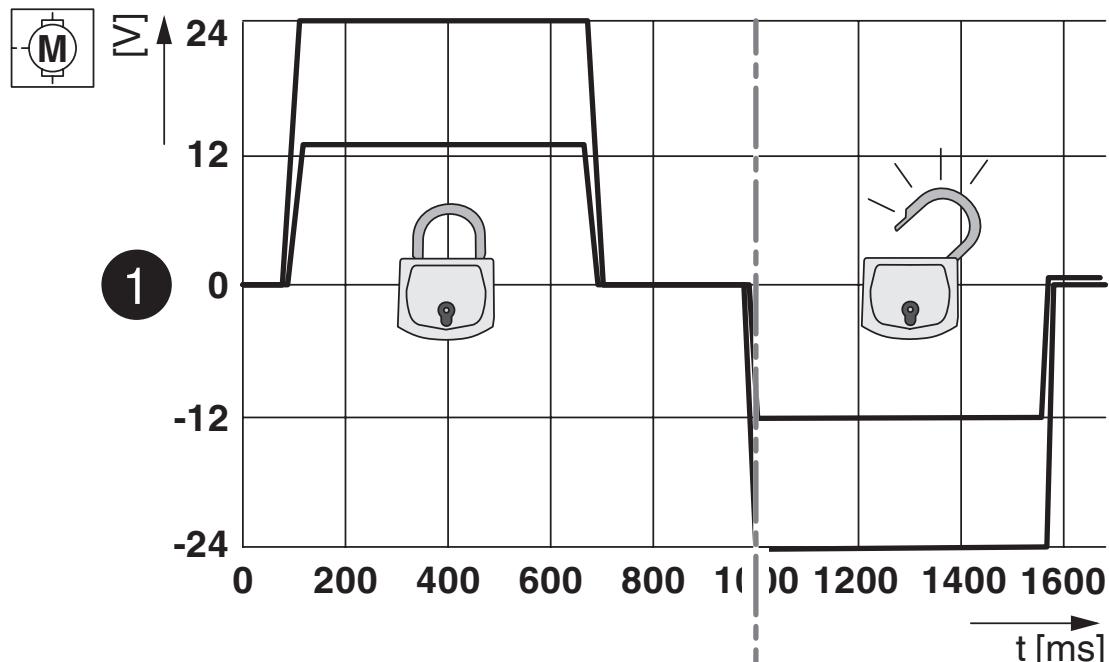
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Diagram



Locking states of the locking actuator

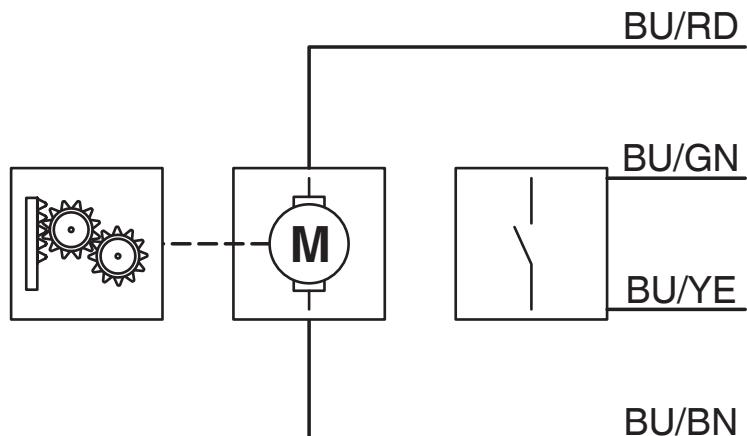
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Block diagram



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.
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EU REACH SVHC

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