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CHARX connect, Socket Outlet, rear protective cover screw connection, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.7 m, Locking actuator: 12 V, 4-position, Rear panel mounting, Generation 1, "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
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Manual emergency release of the locking actuator
- ✓ Integrated interlock during charging



Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 738477
GTIN	4046356738477
Weight per Piece (excluding packing)	760.000 g
Custom tariff number	85444290
Country of origin	Germany

Technical data

Product definition

Туре	rear protective cover screw connection
Application	For charging electric vehicles (EV) with alternating current (AC)

12/09/2021 Page 1 / 13



Technical data

Product definition

	Compatible with infrastructure charging plugs
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 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)

Electrical properties

Charging power (nominal operation)	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

12/09/2021 Page 2 / 13



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

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

12/09/2021 Page 3 / 13



Technical data

Locking actuator

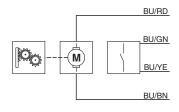
Ambient temperature (operation)	-30 °C 50 °C
Cable length	0.5 m
Cable structure	4 x 0.5 mm²
Lock recognition	available
Mechanical emergency release	available

Environmental Product Compliance

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

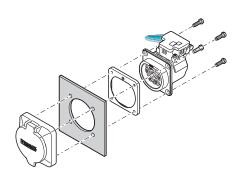
Drawings

Block diagram



Block diagram of the locking actuator

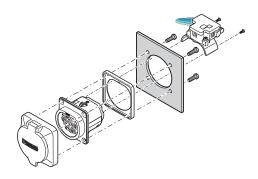
Schematic diagram



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.



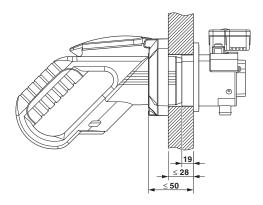
Schematic diagram



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).

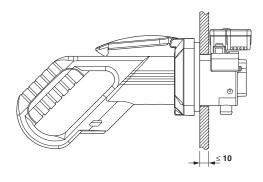
The screw connection for a protective cover from the accessories range (EV-T2SC) only supports rear mounting. The panel thickness must not exceed 10 mm. The sealing frame that is slid on from the front must contact the housing panel flush with the flat side and must completely surround the infrastructure socket outlet.

Schematic diagram



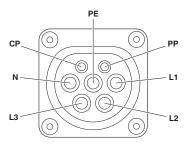
Panel thickness for rear mounting (max. 50 mm, with Phoenix Contact protective cover, max. 22 mm)

Schematic diagram



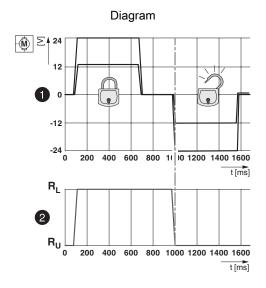
Panel thickness for front mounting (in mm)

Connection diagram

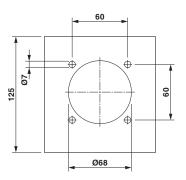


Pin assignment of Infrastructure Socket Outlet





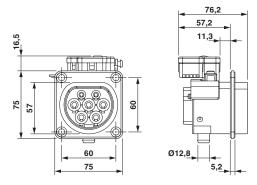
Dimensional drawing



Hole image

Locking states of the locking actuator

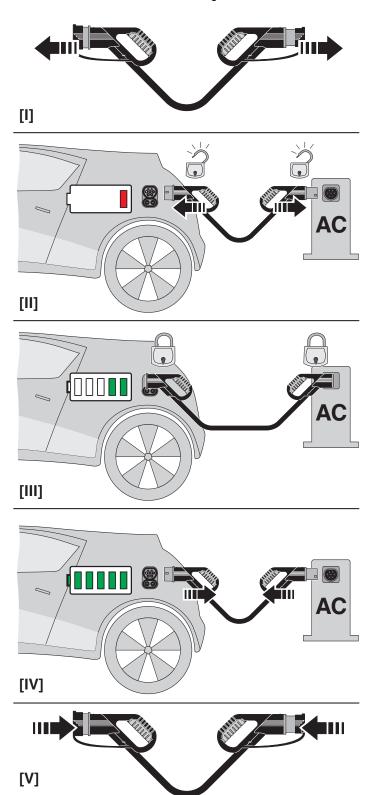
Dimensional drawing



Dimensional drawing



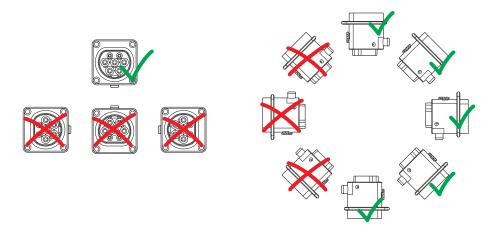
Schematic diagram



12/09/2021 Page 7 / 13

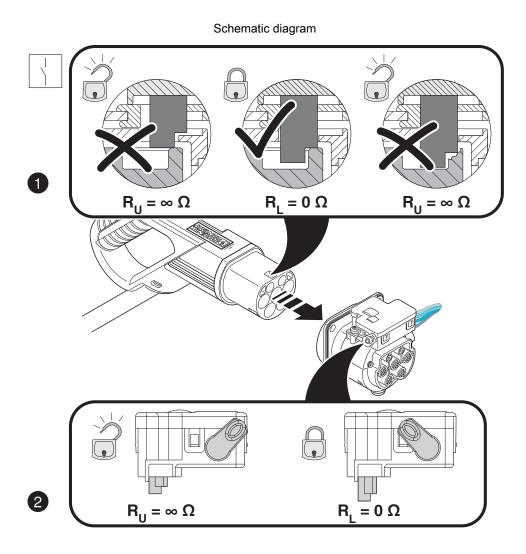


Schematic diagram



Installation positions





Detection of the Infrastructure Plug

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

12/09/2021 Page 9 / 13



Classifications

eCl@ss

eCl@ss 9.0	27144706	
ETIM		
ETIM 3.0	EC002061	
ETIM 4.0	EC002061	
ETIM 6.0	EC002898	

EC002898

ETIM 7.0 UNSPSC

UNSPSC 6.01	30211923
UNSPSC 7.0901	39121522
UNSPSC 11	39121522
UNSPSC 12.01	39121522
UNSPSC 13.2	39121522
UNSPSC 18.0	39121522
UNSPSC 19.0	39121522
UNSPSC 20.0	39121522
UNSPSC 21.0	39121522

Accessories

Accessories

AC charging controller

AC charging controller - EM-CP-PP-ETH - 2902802



EV charge control is used to charge electrical vehicles on the 3-phase AC mains power supply according to IEC 61851-1 Mode 3. All necessary control functions are integrated. Additional functions are available for various charging applications.

AC charging controller - EV-CC-AC1-M3-CBC-SER-HS - 1622452



The EV-CC-AC1-M3-CBC-SER-HS charging controller with housing for DIN rail mounting is used for charging electric vehicles at 3-phase AC networks according to IEC 61851-1, Mode 3. All charging functions, comprehensive configuration settings as well as a locking controller are already integrated.

12/09/2021 Page 10 / 13



Accessories

AC charging controller - EV-CC-AC1-M3-CBC-SER-PCB - 1622453



The EV-CC-AC1-M3-CBC-SER-PCB charging controller as PCB is used for charging electric vehicles at 3-phase AC networks according to IEC 61851-1, Mode 3. All charging functions, comprehensive configuration settings as well as a locking controller are already integrated.

AC charging controller - EV-CC-AC1-M3-CBC-SER-PCB-XC-25 - 1627743



The EV-CC-AC1-M3-CBC-SER-PCB charging controller as PCB is used for charging electric vehicles at 3-phase AC networks according to IEC 61851-1, Mode 3. All charging functions, comprehensive configuration settings as well as a locking controller are already integrated.

AC charging controller - EV-CC-AC1-M3-CBC-SER-PCB-MSTB - 1627353



The EV-CC-AC1-M3-CBC-SER-PCB-MSTB charging controller as a PCB for charging electric vehicles according to IEC 61851-1, Mode 3, Case B (Socket Outlet) or C (Vehicle Connector). Connection via PCB connector on header.

Adhesive label

Label - EV-LABEL-C-SO - 1315521



CHARX connect, Label, for AC charging cables and infrastructure charging sockets, DIN EN 17186, Marking C for AC type 2 infrastructure charging plugs and type 2 infrastructure charging sockets

Locking actuator

Locking - EV-T2M3S-E-LOCK12V - 1624129



CHARX connect, Locking, For attaching to infrastructure charging sockets, Type 2, GB/T, IEC 61851-1, length: 0.5 m, Locking actuator: 12 V, 4-position, Can be positioned flexibly, Generation 1

12/09/2021 Page 11 / 13



Accessories

Locking - EV-T2M3S-E-LOCK24V - 1622317



CHARX connect, Locking, For attaching to infrastructure charging sockets, Type 2, GB/T, IEC 61851-1, length: 0.5 m, Locking actuator: 24 V, 4-position, Can be positioned flexibly, Generation 1

Panel mounting frame for Socket Outlet

Panel mounting frames - EV-T2SF - 1405218



CHARX connect, Panel mounting frames, For attaching to infrastructure charging sockets, Type 2, IEC 62196-2, Front mounting, M5 thread, Generation 1, Without logo

Protective cover for Socket Outlet

Protective covers - EV-T2SC - 1405217



CHARX connect, Protective covers, self-closing, rear protective cover screw connection, For attaching to infrastructure charging sockets, Type 2, IEC 62196-2, Front mounting, M5 thread, Generation 1, Embossed PHOENIX CONTACT logo

Protective covers - EV-GBSCO - 1623415



CHARX connect, Protective covers, self-opening, rear protective cover screw connection, For attaching to infrastructure charging sockets, GB/T, Type 2, GB/T 20234.2, IEC 62196-2, Front mounting, Generation 1, Adhered "PHOENIX CONTACT" sticker



Accessories

Protective covers - EV-GBSC - 1623416



CHARX connect, Protective covers, self-closing, rear protective cover screw connection, For attaching to infrastructure charging sockets, GB/T, Type 2, GB/T 20234.2, IEC 62196-2, Front mounting, Generation 1, Adhered "PHOENIX CONTACT" sticker

Protective covers - EV-GBSC-D6,5MM - 1623888



CHARX connect, Protective covers, self-closing, rear protective cover screw connection, For attaching to infrastructure charging sockets, GB/T, Type 2, GB/T 20234.2, IEC 62196-2, Front mounting, Generation 1, Adhered "PHOENIX CONTACT" sticker

Seal

Seal - EV-T2M3S-DRAINAGE-GASKET - 1621668

CHARX connect, Seal, For the discharge nozzle below the infrastructure charging socket if there is no drainage tube present, Type 2, IEC 62196-2, Generation 1

Seal - EV-T2M3S-E-LOCK-GASKET - 1621465

CHARX connect, Seal, For the mounting surface of the locking actuator above the infrastructure charging socket when there is no locking actuator present, Type 2, IEC 62196-2, Generation 1

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