Set - EV-T2M3SO12-3P-BL-SET - 1268358

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CHARX connect, Set, Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection, rear protective cover screw connection, with LED status indicator within the protective cover, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 3-position, Rear panel mounting, M5 thread, Basic with LED cover, “PHOENIX CONTACT” logo

Product Description

Infrastructure Socket Outlet with protective cover, 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

- Charging status intuitively visible at a glance with color LED indicator
- Protected against overheating with precise temperature measurement
- Flexible mounting and easy maintenance with plug-in cables
- Available with your logo on request – for consistent branding of your charging station
- Waterproof and dirtproof due to fully molded contacts
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Uniform, space-saving installation space

RoHS

Key Commercial Data

Packing unit	1
GTIN	4 063151 419653
GTIN	4063151419653
Custom tariff number	85366990

Technical data

Product definition

Type	Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection

Set - EV-T2M3SO12-3P-BL-SET - 1268358

Technical data

Product definition

	rear protective cover screw connection
	with LED status indicator within the protective cover
	can be reconnected
Application	For charging electric vehicles (EV) with alternating current (AC)
	Compatible with infrastructure charging plugs
Affixed logo	“PHOENIX CONTACT” logo
Design	Basic with LED cover
Standards/regulations	IEC 62196-2
Charging standard	Type 2
Charging mode	Mode 3, Case B
Note on the connection method	Connection via spade connector, separable

Dimensions

Height	112.54 mm
Width	75 mm
Depth	87.95 mm (with attachable cap for strain relief and touch protection, see accessories)
	73.35 mm (without attachable cap for strain relief and touch protection, see accessories)
Bore dimensions	60 mm x 60 mm
Type of conductor	without cable

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)

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

Set - EV-T2M3SO12-3P-BL-SET - 1268358

Technical data

Electrical properties

Note on the connection method	Connection via spade connector, separable

Mechanical properties

Insertion/withdrawal cycles	> 10000
Insertion force	< 100 N
Withdrawal force	< 100 N

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 position
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)
Mounting hole diameter	7.00 mm (ø)
Required mounting screws	M5 thread
Screws included in the scope of delivery	none

Design

Design line	Basic with LED cover
Housing color	black

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	3
Operating voltage	12 V (Typical power supply at the motor)
Possible power supply range at the motor	9 V ... 15.5 V
Operating current	< 1.8 A
Typical motor current for locking	250 mA Average run current
Reverse current of the motor	max. 2.4 A (Stall current)
Max. dwell time with reverse current	4 s
Recommended triggering time	200 ms ... 10 s (t_{on}, typical)
Pause time after entry or exit path	8x (t_{on}, typical)

Set - EV-T2M3SO12-3P-BL-SET - 1268358

Technical data

Locking actuator

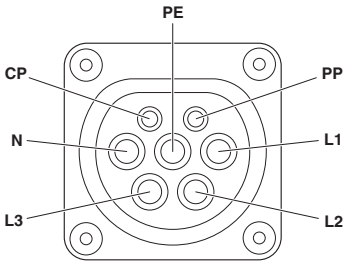
Service life insertion cycles	> 10000 load cycles
Ambient temperature (operation)	-30 °C ... 50 °C
Cable length	0.5 m
Cable structure	3 x 0.5 mm²
Lock recognition	available
Mechanical emergency release	available
Lock setting	LOCK (Lever in horizontal position)
	UNLOCK (Lever in vertical position)

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”

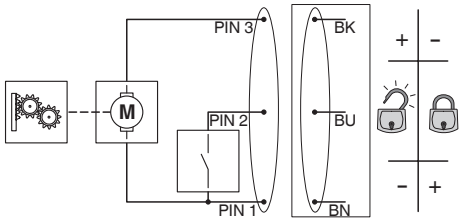
Drawings

Connection diagram



Pin assignment of Infrastructure Socket Outlet

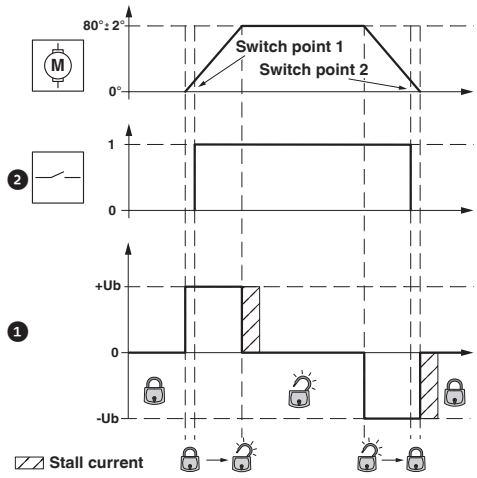
Block diagram



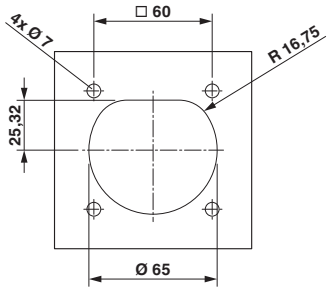
Block diagram of the locking actuator

Set - EV-T2M3SO12-3P-BL-SET - 1268358

Diagram



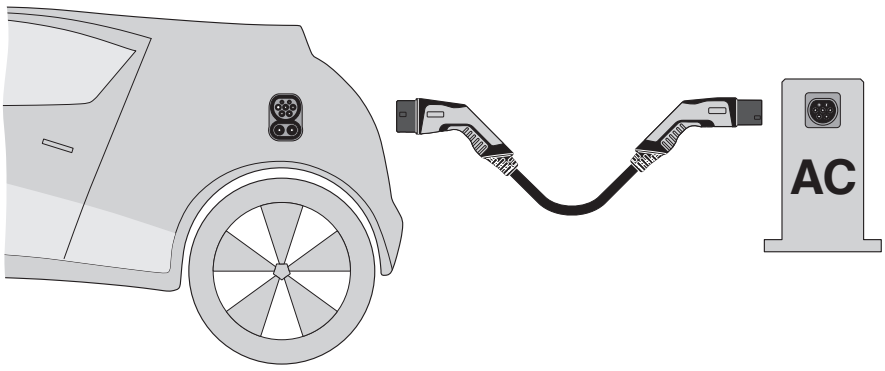
Schematic diagram



Hole image

Locking states of the locking actuator

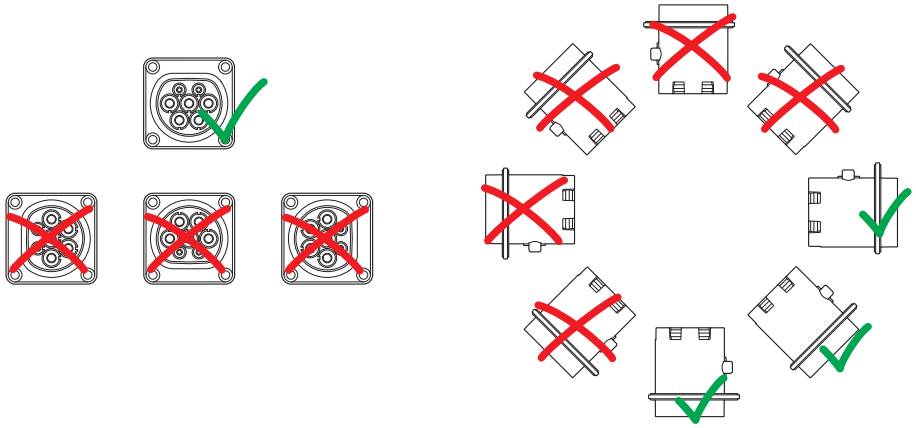
Schematic diagram



Operating instructions

Set - EV-T2M3SO12-3P-BL-SET - 1268358

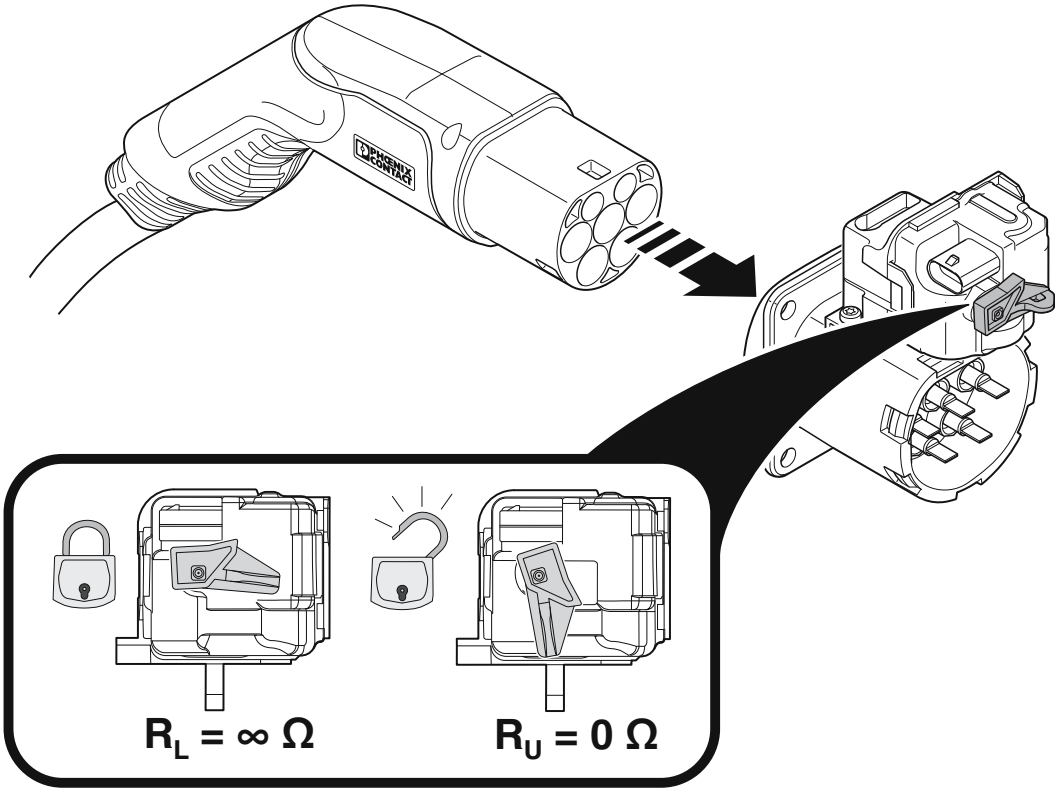
Schematic diagram



Installation positions

Set - EV-T2M3SO12-3P-BL-SET - 1268358

Schematic diagram



Position of the emergency unlocking lever on the locking actuator

Set - EV-T2M3SO12-3P-BL-SET - 1268358

Articles in set

Socket Outlet - EV-T2M3SO12-3P-B - 1164309

CHARX connect, Socket Outlet, rear protective cover screw connection, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 3-position, Rear panel mounting, M5 thread, Basic, “PHOENIX CONTACT” logo

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Protective covers - EV-T2SOC-P - 1164297

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, with LED status indicator within the protective cover, for attaching to infrastructure charging sockets, Type 2, IEC 62196-2, Front mounting, screwed on the back, M5 thread, Premium, Embossed PHOENIX CONTACT logo

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Strain relief - EV-T2M3SO-CAP - 1202424

CHARX connect, Strain relief, Touch protection, For generation 2.0 infrastructure charging socket, For plugging onto the rear of the infrastructure charging socket, Type 2, IEC 62196-2, Generation 2

Classifications

eCl@ss

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

ETIM

ETIM 7.0	EC002898

Accessories

Accessories

AC charging controller

Set - EV-T2M3SO12-3P-BL-SET - 1268358

Accessories

AC charging controller - CHARX SEC-1000 - 1139034

CHARX control modular, AC charging controller according to IEC 61851-1. Configurable charging controller. operating mode Stand-alone or client. interface: CHARX control modular system bus. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3000 - 1139022

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3050 - 1139018

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3100 - 1139012

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3150 - 1138965

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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Set - EV-T2M3SO12-3P-BL-SET - 1268358

Accessories

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.

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

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Arrester combination

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1 - 1180149

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1-R - 1180150

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Type 2 surge arrester - VAL-EV-T2 280/3+1 - 1180144

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Set - EV-T2M3SO12-3P-BL-SET - 1268358

Accessories

Type 2 surge arrester - VAL-EV-T2 280/3+1-R - 1180145

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Assembly tool

Tool - EV-T2M3SO-CAP-REMOVER - 1286836

CHARX connect, tool for opening the optional cap for attachment to the back of the Generation 2.0 Basic infrastructure charging socket with functions for strain relief and touch protection.

Cable set

Cable set - EV-T2M3SOW-1AC32A-0,3M6,0E - 1164343

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC20A-0,3M2,5E - 1164355

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,3M6,0E - 1164362

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Set - EV-T2M3SO12-3P-BL-SET - 1268358

Accessories

Cable set - EV-T2M3SOW-1AC32A-0,7M6,0E - 1164344

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.7 m, Generation 2

Cable set - EV-T2M3SOW-3AC20A-0,7M2,5E - 1164361

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,7M6,0E - 1164365

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Infrastructure socket outlet

Connector - EV-T2M3SL12-CONNECTOR - 1132718

CHARX connect, Connector, For controlling a 3-pos. locking actuator of an infrastructure charging socket, Single wires

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Protective cover for Socket Outlet

Protective covers - EV-T2SOC-B - 1164293

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, for attaching to infrastructure charging sockets, Type 2, Front mounting, screwed on the back, M5 thread, Basic, Embossed PHOENIX CONTACT logo

Set - EV-T2M3SO12-3P-BL-SET - 1268358

Accessories

Strain relief - EV-T2M3SO-CAP - 1202424

CHARX connect, Strain relief, Touch protection, For generation 2.0 infrastructure charging socket, For plugging onto the rear of the infrastructure charging socket, Type 2, IEC 62196-2, Generation 2

Set - EV-T2M3SO12-3P-B-SET - 1164420

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CHARX connect, Set, Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection, rear protective cover screw connection, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 3-position, Rear panel mounting, M5 thread, Basic, “PHOENIX CONTACT” logo

Product Description

Infrastructure Socket Outlet with protective cover, 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

- Protected against overheating with precise temperature measurement
- Flexible mounting and easy maintenance with plug-in cables
- Available with your logo on request – for consistent branding of your charging station
- Waterproof and dirtproof due to fully molded contacts
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Uniform, space-saving installation space

Key Commercial Data

Packing unit	1
GTIN	4 063151 177782
GTIN	4063151177782
Custom tariff number	85366990

Technical data

Product definition

Type	Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection
	rear protective cover screw connection
	can be reconnected
Application	For charging electric vehicles (EV) with alternating current (AC)
	Compatible with infrastructure charging plugs
Affixed logo	“PHOENIX CONTACT” logo

Set - EV-T2M3SO12-3P-B-SET - 1164420

Technical data

Product definition

Design	Basic
Standards/regulations	IEC 62196-2
Charging standard	Type 2
Charging mode	Mode 3, Case B
Note on the connection method	Connection via spade connector, separable

Dimensions

Height	112.54 mm
Width	75 mm
Depth	87.95 mm (with attachable cap for strain relief and touch protection, see accessories)
	73.35 mm (without attachable cap for strain relief and touch protection, see accessories)
Bore dimensions	60 mm x 60 mm
Type of conductor	without cable

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)

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	Connection via spade connector, separable

Mechanical properties

Insertion/withdrawal cycles	> 10000
Insertion force	< 100 N
Withdrawal force	< 100 N

Set - EV-T2M3SO12-3P-B-SET - 1164420

Technical data

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 position
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)
Mounting hole diameter	7.00 mm (ø)
Required mounting screws	M5 thread
Screws included in the scope of delivery	none

Design

Design line	Basic
Housing color	black

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	3
Operating voltage	12 V (Typical power supply at the motor)
Possible power supply range at the motor	9 V ... 15.5 V
Operating current	< 1.8 A
Typical motor current for locking	250 mA Average run current
Reverse current of the motor	max. 2.4 A (Stall current)
Max. dwell time with reverse current	4 s
Recommended triggering time	200 ms ... 10 s (t_{on}, typical)
Pause time after entry or exit path	8x (t_{on}, typical)
Service life insertion cycles	> 10000 load cycles
Ambient temperature (operation)	-30 °C ... 50 °C
Cable length	0.5 m
Cable structure	3 x 0.5 mm²
Lock recognition	available
Mechanical emergency release	available
Lock setting	LOCK (Lever in horizontal position)

Set - EV-T2M3SO12-3P-B-SET - 1164420

Technical data

Locking actuator

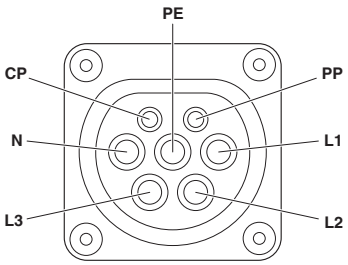
	UNLOCK (Lever in vertical position)

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”

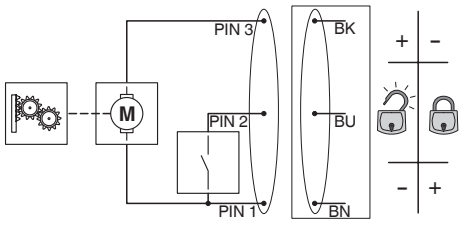
Drawings

Connection diagram



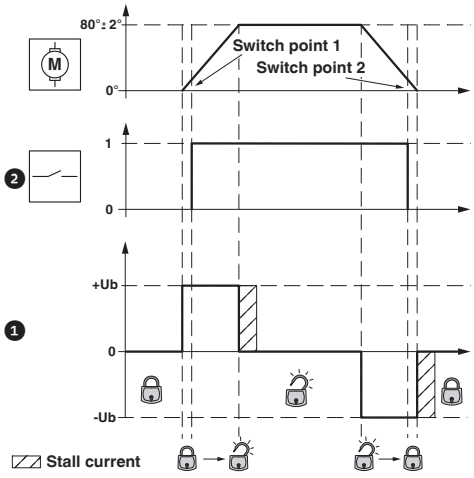
Pin assignment of Infrastructure Socket Outlet

Block diagram



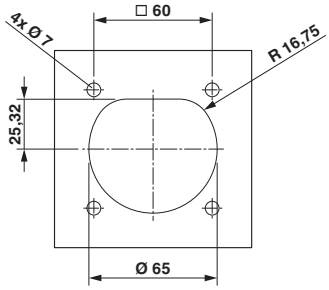
Block diagram of the locking actuator

Diagram



Locking states of the locking actuator

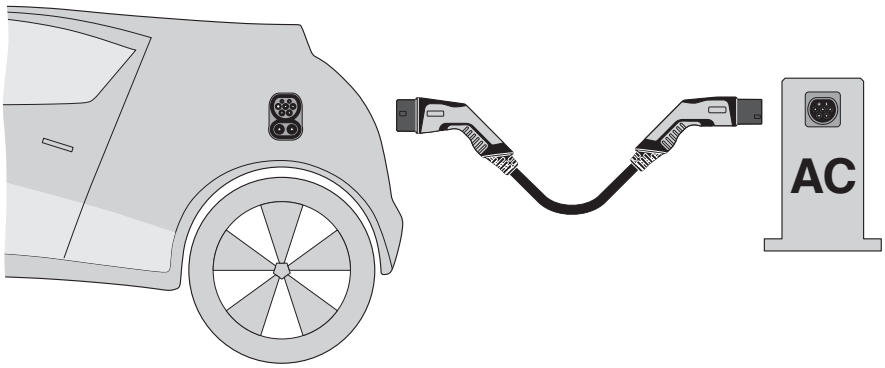
Schematic diagram



Hole image

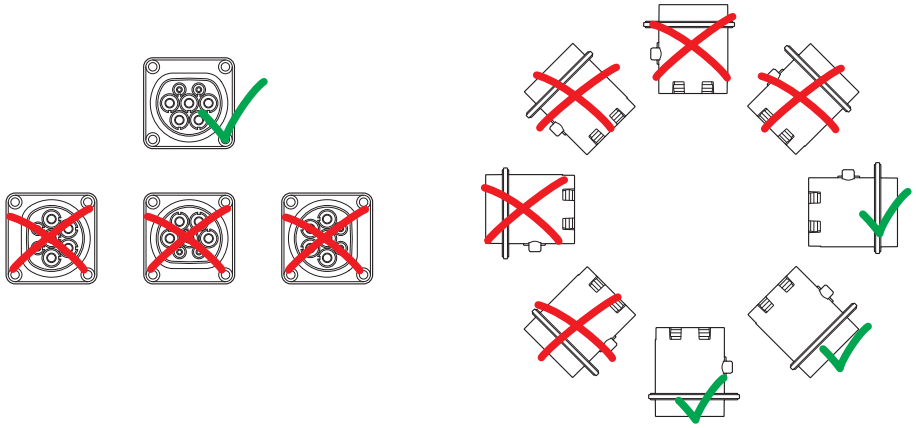
Set - EV-T2M3SO12-3P-B-SET - 1164420

Schematic diagram



Operating instructions

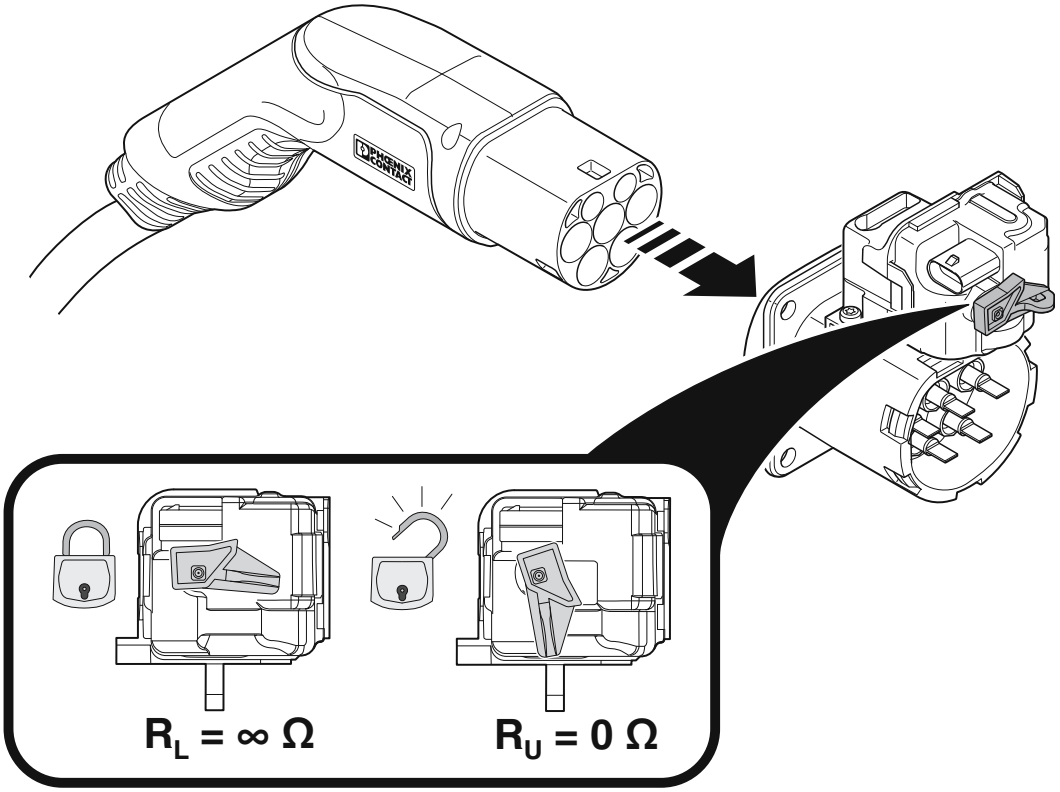
Schematic diagram



Installation positions

Set - EV-T2M3SO12-3P-B-SET - 1164420

Schematic diagram



Position of the emergency unlocking lever on the locking actuator

Set - EV-T2M3SO12-3P-B-SET - 1164420

Articles in set

Socket Outlet - EV-T2M3SO12-3P-B - 1164309

CHARX connect, Socket Outlet, rear protective cover screw connection, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 3-position, Rear panel mounting, M5 thread, Basic, “PHOENIX CONTACT” logo

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Protective covers - EV-T2SOC-B - 1164293

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, for attaching to infrastructure charging sockets, Type 2, Front mounting, screwed on the back, M5 thread, Basic, Embossed PHOENIX CONTACT logo

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Strain relief - EV-T2M3SO-CAP - 1202424

CHARX connect, Strain relief, Touch protection, For generation 2.0 infrastructure charging socket, For plugging onto the rear of the infrastructure charging socket, Type 2, IEC 62196-2, Generation 2

Classifications

eCl@ss

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

ETIM

ETIM 7.0	EC002898

Accessories

Accessories

AC charging controller

Set - EV-T2M3SO12-3P-B-SET - 1164420

Accessories

AC charging controller - CHARX SEC-1000 - 1139034

CHARX control modular, AC charging controller according to IEC 61851-1. Configurable charging controller. operating mode Stand-alone or client. interface: CHARX control modular system bus. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3000 - 1139022

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3050 - 1139018

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3100 - 1139012

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3150 - 1138965

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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Set - EV-T2M3SO12-3P-B-SET - 1164420

Accessories

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.

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

Arrester combination

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1 - 1180149

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1-R - 1180150

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Type 2 surge arrester - VAL-EV-T2 280/3+1 - 1180144

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Set - EV-T2M3SO12-3P-B-SET - 1164420

Accessories

Type 2 surge arrester - VAL-EV-T2 280/3+1-R - 1180145

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Assembly tool

Tool - EV-T2M3SO-CAP-REMOVER - 1286836

CHARX connect, tool for opening the optional cap for attachment to the back of the Generation 2.0 Basic infrastructure charging socket with functions for strain relief and touch protection.

Cable set

Cable set - EV-T2M3SOW-1AC32A-0,3M6,0E - 1164343

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC20A-0,3M2,5E - 1164355

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,3M6,0E - 1164362

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Set - EV-T2M3SO12-3P-B-SET - 1164420

Accessories

Cable set - EV-T2M3SOW-1AC32A-0,7M6,0E - 1164344

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.7 m, Generation 2

Cable set - EV-T2M3SOW-3AC20A-0,7M2,5E - 1164361

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,7M6,0E - 1164365

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Infrastructure socket outlet

Connector - EV-T2M3SL12-CONNECTOR - 1132718

CHARX connect, Connector, For controlling a 3-pos. locking actuator of an infrastructure charging socket, Single wires

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Protective cover for Socket Outlet

Protective covers - EV-T2SOC-B - 1164293

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, for attaching to infrastructure charging sockets, Type 2, Front mounting, screwed on the back, M5 thread, Basic, Embossed PHOENIX CONTACT logo

Set - EV-T2M3SO12-3P-B-SET - 1164420

Accessories

Strain relief - EV-T2M3SO-CAP - 1202424

CHARX connect, Strain relief, Touch protection, For generation 2.0 infrastructure charging socket, For plugging onto the rear of the infrastructure charging socket, Type 2, IEC 62196-2, Generation 2

Set - EV-T2M3SO12-3P-P-SET - 1164422

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CHARX connect, Set, Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection, rear protective cover screw connection, with temperature sensors, with LED status indicator within the protective cover, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 3-position, Rear panel mounting, M5 thread, Premium with LED cover, “PHOENIX CONTACT” logo

Product Description

Infrastructure Socket Outlet with protective cover, 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

- Charging status intuitively visible at a glance with color LED indicator
- Protected against overheating with precise temperature measurement
- Flexible mounting and easy maintenance with plug-in cables
- Available with your logo on request – for consistent branding of your charging station
- Waterproof and dirtproof due to fully molded contacts
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Uniform, space-saving installation space

RoHS

Key Commercial Data

Packing unit	1
GTIN	4 063151 177799
GTIN	4063151177799
Custom tariff number	85366990

Technical data

Product definition

Type	Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection

Set - EV-T2M3SO12-3P-P-SET - 1164422

Technical data

Product definition

	rear protective cover screw connection
	with temperature sensors
	with LED status indicator within the protective cover
	can be reconnected
Application	For charging electric vehicles (EV) with alternating current (AC)
	Compatible with infrastructure charging plugs
Affixed logo	“PHOENIX CONTACT” logo
Design	Premium with LED cover
Standards/regulations	IEC 62196-2
Charging standard	Type 2
Charging mode	Mode 3, Case B
Note on the connection method	Connection via spade connector, separable

Dimensions

Height	112.54 mm
Width	75 mm
Depth	87.95 mm (with attachable cap for strain relief and touch protection, see accessories)
	73.35 mm (without attachable cap for strain relief and touch protection, see accessories)
Bore dimensions	60 mm x 60 mm
Type of conductor	without cable

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)

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

Set - EV-T2M3SO12-3P-P-SET - 1164422

Technical data

Electrical properties

Type of signal transmission	Pulse width modulation
Note on the connection method	Connection via spade connector, separable

Mechanical properties

Insertion/withdrawal cycles	> 10000
Insertion force	< 100 N
Withdrawal force	< 100 N

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 position
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)
Mounting hole diameter	7.00 mm (ø)
Required mounting screws	M5 thread
Screws included in the scope of delivery	none

Design

Design line	Premium with LED cover
Housing color	black

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	3
Operating voltage	12 V (Typical power supply at the motor)
Possible power supply range at the motor	9 V ... 15.5 V
Operating current	< 1.8 A
Typical motor current for locking	250 mA Average run current
Reverse current of the motor	max. 2.4 A (Stall current)
Max. dwell time with reverse current	4 s
Recommended triggering time	200 ms ... 10 s (t_{on}, typical)

Set - EV-T2M3SO12-3P-P-SET - 1164422

Technical data

Locking actuator

Pause time after entry or exit path	8x (t_{on}, typical)
Service life insertion cycles	> 10000 load cycles
Ambient temperature (operation)	-30 °C ... 50 °C
Cable length	0.5 m
Cable structure	3 x 0.5 mm²
Lock recognition	available
Mechanical emergency release	available
Lock setting	LOCK (Lever in horizontal position)
	UNLOCK (Lever in vertical position)

Temperature monitoring, AC contacts

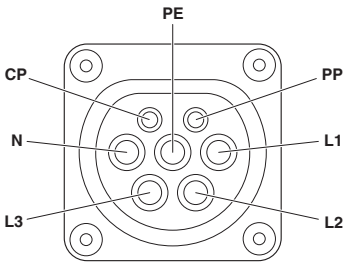
Type of sensor	PTC chain
Standards/regulations	DIN#EN 60738-1
Recommended measured current	≤ 1 mA (U_{max}= 24 V DC)
Resistance range	800 Ω ... 300 kΩ
Switch-off threshold	10.00 kΩ

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”

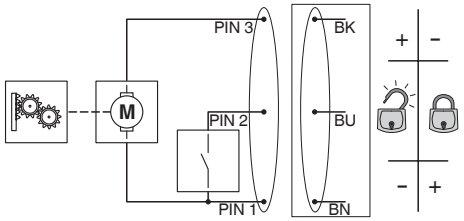
Drawings

Connection diagram



Pin assignment of Infrastructure Socket Outlet

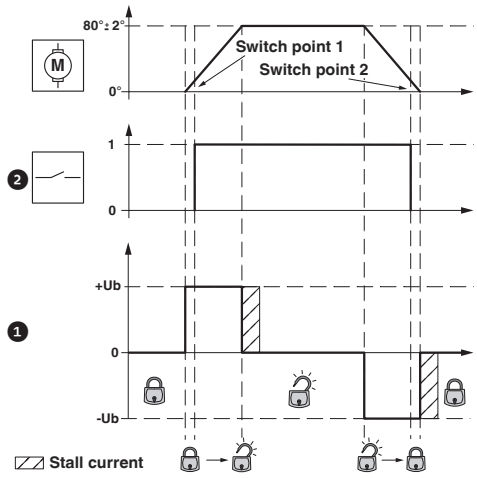
Block diagram



Block diagram of the locking actuator

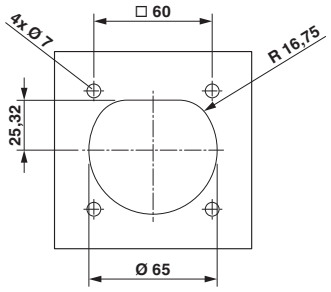
Set - EV-T2M3SO12-3P-P-SET - 1164422

Diagram



Locking states of the locking actuator

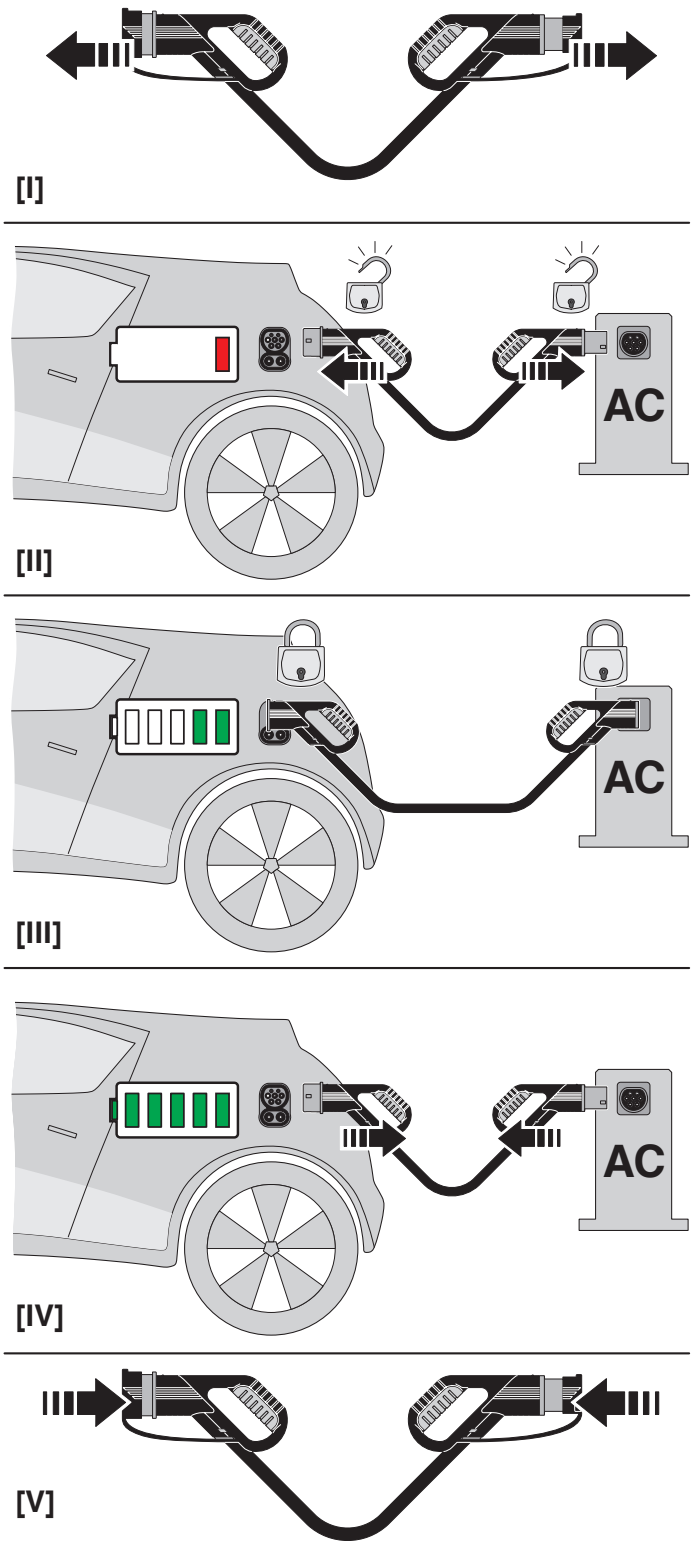
Schematic diagram



Hole image

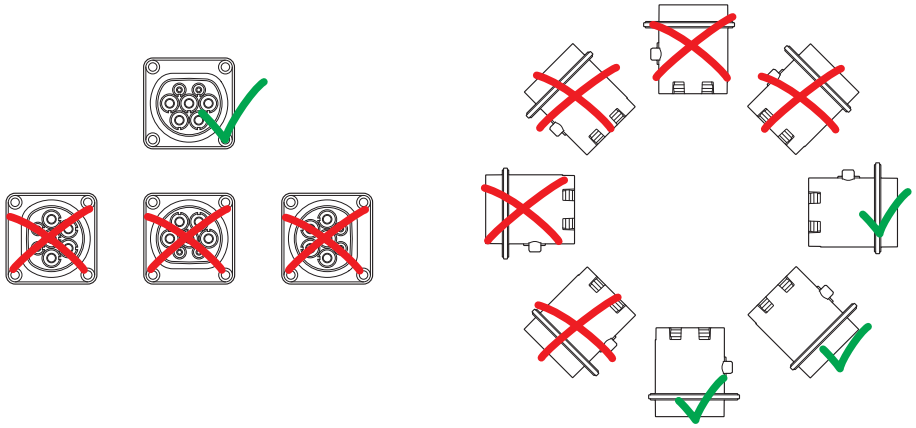
Set - EV-T2M3SO12-3P-P-SET - 1164422

Schematic diagram



Set - EV-T2M3SO12-3P-P-SET - 1164422

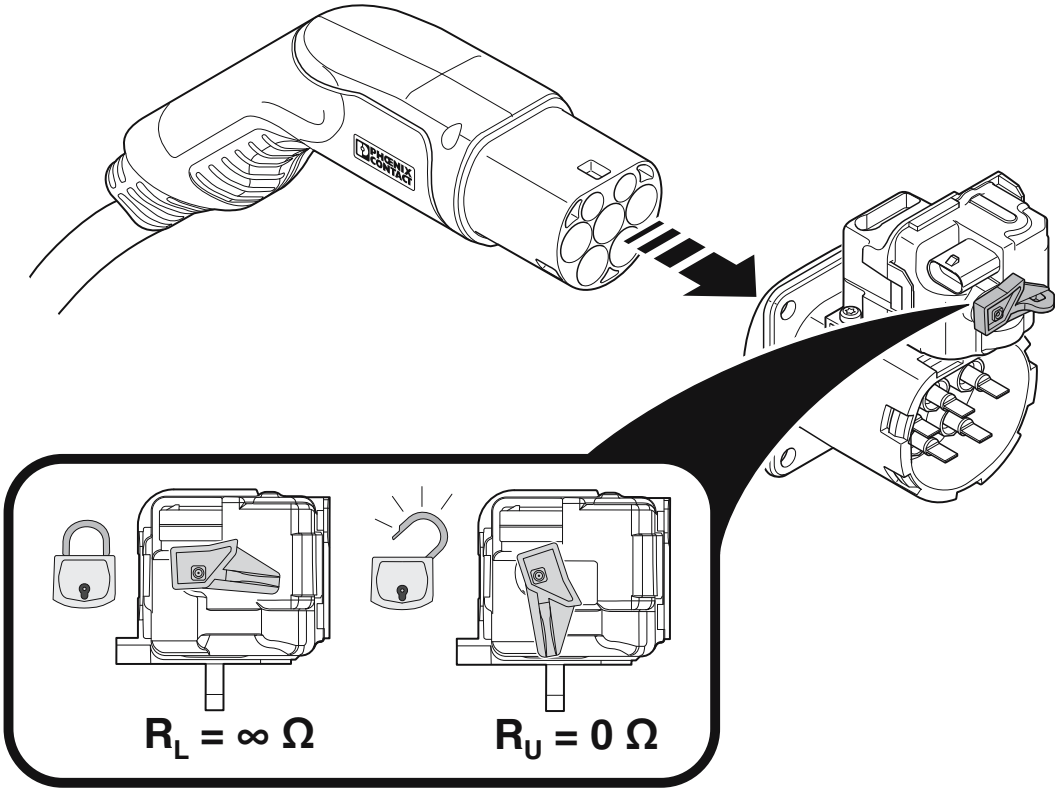
Schematic diagram



Installation positions

Set - EV-T2M3SO12-3P-P-SET - 1164422

Schematic diagram



Position of the emergency unlocking lever on the locking actuator

Set - EV-T2M3SO12-3P-P-SET - 1164422

Articles in set

Socket Outlet - EV-T2M3SO12-3P-P - 1164307

CHARX connect, Socket Outlet, rear protective cover screw connection, with temperature sensors, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 3-position, Rear panel mounting, M5 thread, Premium, “PHOENIX CONTACT” logo

Protective covers - EV-T2SOC-P - 1164297

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, with LED status indicator within the protective cover, for attaching to infrastructure charging sockets, Type 2, IEC 62196-2, Front mounting, screwed on the back, M5 thread, Premium, Embossed PHOENIX CONTACT logo

Classifications

eCl@ss

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

ETIM

ETIM 7.0	EC002898

Accessories

Accessories

AC charging controller

AC charging controller - CHARX SEC-1000 - 1139034

CHARX control modular, AC charging controller according to IEC 61851-1. Configurable charging controller. operating mode Stand-alone or client. interface: CHARX control modular system bus. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

Set - EV-T2M3SO12-3P-P-SET - 1164422

Accessories

AC charging controller - CHARX SEC-3000 - 1139022

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3050 - 1139018

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3100 - 1139012

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3150 - 1138965

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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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.

Adhesive label

Set - EV-T2M3SO12-3P-P-SET - 1164422

Accessories

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

Arrester combination

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1 - 1180149

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1-R - 1180150

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Type 2 surge arrester - VAL-EV-T2 280/3+1 - 1180144

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Type 2 surge arrester - VAL-EV-T2 280/3+1-R - 1180145

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Set - EV-T2M3SO12-3P-P-SET - 1164422

Accessories

Assembly tool

Tool - EV-T2M3SO-CAP-REMOVER - 1286836

CHARX connect, tool for opening the optional cap for attachment to the back of the Generation 2.0 Basic infrastructure charging socket with functions for strain relief and touch protection.

Cable set

Cable set - EV-T2M3SOW-1AC32A-0,3M6,0E - 1164343

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC20A-0,3M2,5E - 1164355

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,3M6,0E - 1164362

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-1AC32A-0,7M6,0E - 1164344

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.7 m, Generation 2

Set - EV-T2M3SO12-3P-P-SET - 1164422

Accessories

Cable set - EV-T2M3SOW-3AC20A-0,7M2,5E - 1164361

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,7M6,0E - 1164365

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Infrastructure socket outlet

Connector - EV-T2M3SL12-CONNECTOR - 1132718

CHARX connect, Connector, For controlling a 3-pos. locking actuator of an infrastructure charging socket, Single wires

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Protective cover for Socket Outlet

Protective covers - EV-T2SOC-P - 1164297

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, with LED status indicator within the protective cover, for attaching to infrastructure charging sockets, Type 2, IEC 62196-2, Front mounting, screwed on the back, M5 thread, Premium, Embossed PHOENIX CONTACT logo

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Strain relief - EV-T2M3SO-CAP - 1202424

CHARX connect, Strain relief, Touch protection, For generation 2.0 infrastructure charging socket, For plugging onto the rear of the infrastructure charging socket, Type 2, IEC 62196-2, Generation 2

Set - EV-T2M3SO12-3P-P-SET - 1164422

Accessories

Set - EV-T2M3SO12-4P-BL-SET - 1268355

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CHARX connect, Set, Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection, rear protective cover screw connection, with LED status indicator within the protective cover, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 4-position, Rear panel mounting, M5 thread, Basic with LED cover, “PHOENIX CONTACT” logo

Product Description

Infrastructure Socket Outlet with protective cover, 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

- Charging status intuitively visible at a glance with color LED indicator
- Protected against overheating with precise temperature measurement
- Flexible mounting and easy maintenance with plug-in cables
- Available with your logo on request – for consistent branding of your charging station
- Waterproof and dirtproof due to fully molded contacts
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Uniform, space-saving installation space

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	4 063151 419080
GTIN	4063151419080
Custom tariff number	85366990
Country of origin	Germany

Technical data

Product definition

Set - EV-T2M3SO12-4P-BL-SET - 1268355

Technical data

Product definition

Type	Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection
	rear protective cover screw connection
	with LED status indicator within the protective cover
	can be reconnected
Application	For charging electric vehicles (EV) with alternating current (AC)
	Compatible with infrastructure charging plugs
Affixed logo	“PHOENIX CONTACT” logo
Design	Basic with LED cover
Standards/regulations	IEC 62196-2
Charging standard	Type 2
Charging mode	Mode 3, Case B
Note on the connection method	Connection via spade connector, separable

Dimensions

Height	91.71 mm
Width	75 mm
Depth	87.95 mm (with attachable cap for strain relief and touch protection, see accessories)
	73.35 mm (without attachable cap for strain relief and touch protection, see accessories)
Bore dimensions	60 mm x 60 mm
Type of conductor	without cable

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

Set - EV-T2M3SO12-4P-BL-SET - 1268355

Technical data

Electrical properties

Rated voltage for signal contacts	30 V AC
Type of signal transmission	Pulse width modulation
Note on the connection method	Connection via spade connector, separable

Mechanical properties

Insertion/withdrawal cycles	> 10000
Insertion force	< 100 N
Withdrawal force	< 100 N

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 position
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)
Mounting hole diameter	7.00 mm (ø)
Required mounting screws	M5 thread
Screws included in the scope of delivery	none

Design

Design line	Basic with LED cover
Housing color	black

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

Set - EV-T2M3SO12-4P-BL-SET - 1268355

Technical data

Locking actuator

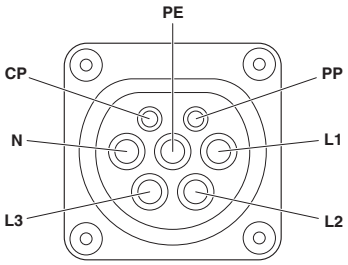
Recommended adaptation time	600 ms
Pause time after entry or exit path	3 s
Service life insertion cycles	> 10000 load cycles
Ambient temperature (operation)	-30 °C ... 50 °C
Cable length	0.5 m
Cable structure	4 x 0.5 mm²
Lock recognition	available
Mechanical emergency release	available

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”

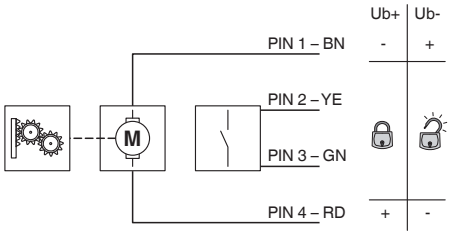
Drawings

Connection diagram



Pin assignment of Infrastructure Socket Outlet

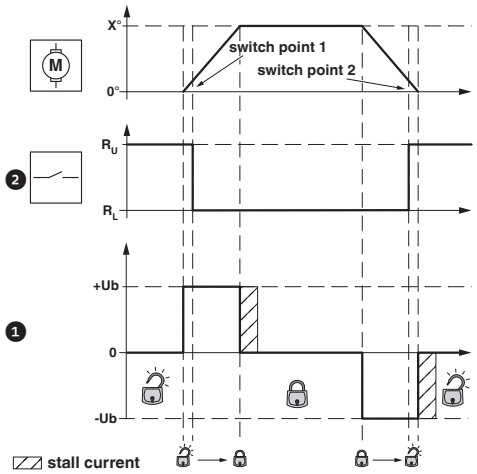
Block diagram



Block diagram of the locking actuator

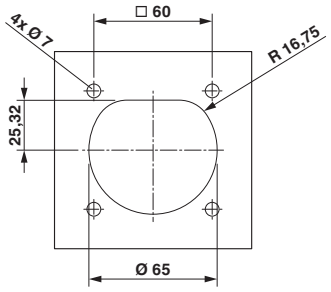
Set - EV-T2M3SO12-4P-BL-SET - 1268355

Schematic diagram



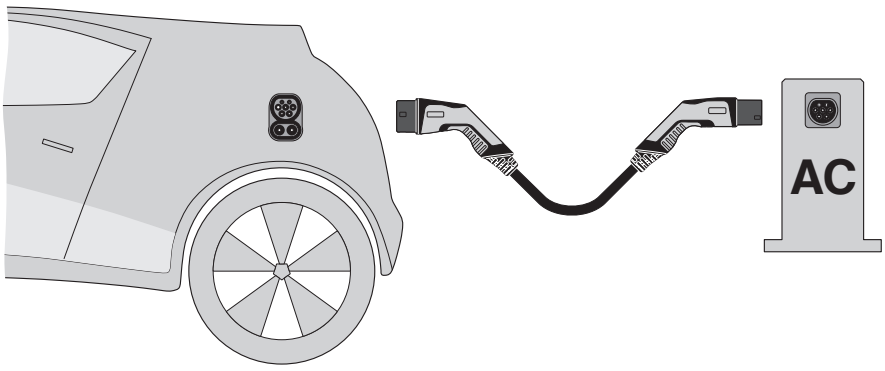
Locking states of the locking actuator

Schematic diagram



Hole image

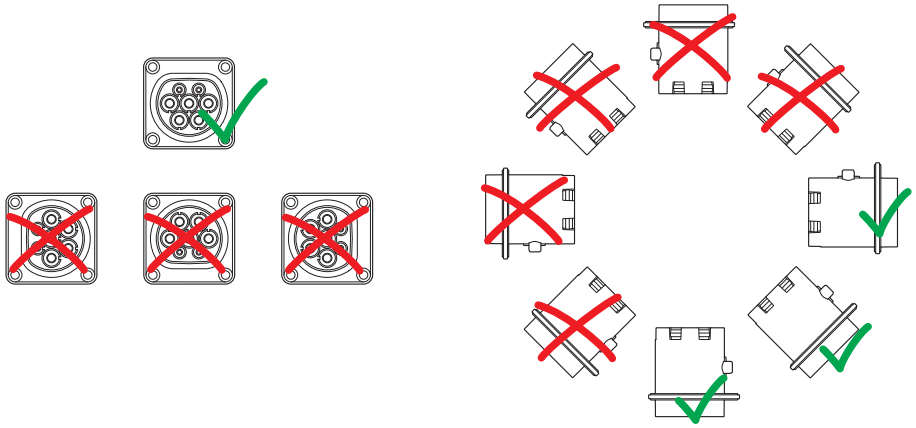
Schematic diagram



Operating instructions

Set - EV-T2M3SO12-4P-BL-SET - 1268355

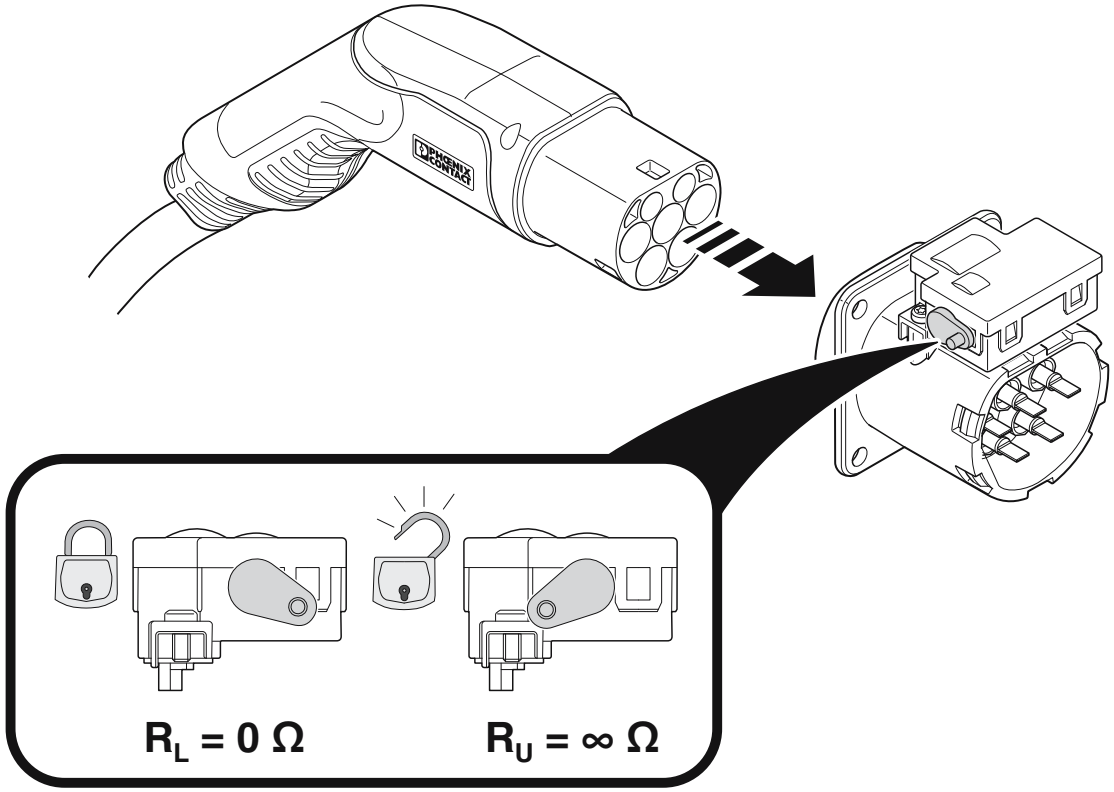
Schematic diagram



Installation positions

Set - EV-T2M3SO12-4P-BL-SET - 1268355

Schematic diagram



Position of the emergency unlocking lever on the locking actuator

Set - EV-T2M3SO12-4P-BL-SET - 1268355

Articles in set

Socket Outlet - EV-T2M3SO12-4P-B - 1164300

CHARX connect, Socket Outlet, rear protective cover screw connection, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 4-position, Rear panel mounting, Basic, “PHOENIX CONTACT” logo

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Protective covers - EV-T2SOC-P - 1164297

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, with LED status indicator within the protective cover, for attaching to infrastructure charging sockets, Type 2, IEC 62196-2, Front mounting, screwed on the back, M5 thread, Premium, Embossed PHOENIX CONTACT logo

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Strain relief - EV-T2M3SO-CAP - 1202424

CHARX connect, Strain relief, Touch protection, For generation 2.0 infrastructure charging socket, For plugging onto the rear of the infrastructure charging socket, Type 2, IEC 62196-2, Generation 2

Classifications

eCl@ss

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

ETIM

ETIM 7.0	EC002898

Accessories

Accessories

AC charging controller

Set - EV-T2M3SO12-4P-BL-SET - 1268355

Accessories

AC charging controller - CHARX SEC-1000 - 1139034

CHARX control modular, AC charging controller according to IEC 61851-1. Configurable charging controller. operating mode Stand-alone or client. interface: CHARX control modular system bus. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3000 - 1139022

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

---

AC charging controller - CHARX SEC-3050 - 1139018

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

---

AC charging controller - CHARX SEC-3100 - 1139012

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

---

AC charging controller - CHARX SEC-3150 - 1138965

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

---

Set - EV-T2M3SO12-4P-BL-SET - 1268355

Accessories

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.

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

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Arrester combination

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1 - 1180149

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1-R - 1180150

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Type 2 surge arrester - VAL-EV-T2 280/3+1 - 1180144

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Set - EV-T2M3SO12-4P-BL-SET - 1268355

Accessories

Type 2 surge arrester - VAL-EV-T2 280/3+1-R - 1180145

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Assembly tool

Tool - EV-T2M3SO-CAP-REMOVER - 1286836

CHARX connect, tool for opening the optional cap for attachment to the back of the Generation 2.0 Basic infrastructure charging socket with functions for strain relief and touch protection.

Cable set

Cable set - EV-T2M3SOW-1AC32A-0,3M6,0E - 1164343

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC20A-0,3M2,5E - 1164355

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,3M6,0E - 1164362

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Set - EV-T2M3SO12-4P-BL-SET - 1268355

Accessories

Cable set - EV-T2M3SOW-1AC32A-0,7M6,0E - 1164344

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.7 m, Generation 2

Cable set - EV-T2M3SOW-3AC20A-0,7M2,5E - 1164361

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,7M6,0E - 1164365

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Protective cover for Socket Outlet

Protective covers - EV-T2SOC-B - 1164293

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, for attaching to infrastructure charging sockets, Type 2, Front mounting, screwed on the back, M5 thread, Basic, Embossed PHOENIX CONTACT logo

Strain relief - EV-T2M3SO-CAP - 1202424

CHARX connect, Strain relief, Touch protection, For generation 2.0 infrastructure charging socket, For plugging onto the rear of the infrastructure charging socket, Type 2, IEC 62196-2, Generation 2

Set - EV-T2M3SO12-4P-B-SET - 1164417

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CHARX connect, Set, Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection, rear protective cover screw connection, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 4-position, Rear panel mounting, M5 thread, Basic, “PHOENIX CONTACT” logo

Product Description

Infrastructure Socket Outlet with protective cover, 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

- Protected against overheating with precise temperature measurement
- Flexible mounting and easy maintenance with plug-in cables
- Available with your logo on request – for consistent branding of your charging station
- Waterproof and dirtproof due to fully molded contacts
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Uniform, space-saving installation space

Key Commercial Data

Packing unit	1 pc
GTIN	4 063151 176075
GTIN	4063151176075
Weight per Piece (excluding packing)	540.000 g
Custom tariff number	85366990
Country of origin	Germany

Technical data

Product definition

Type	Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection
	rear protective cover screw connection
	can be reconnected
Application	For charging electric vehicles (EV) with alternating current (AC)

Set - EV-T2M3SO12-4P-B-SET - 1164417

Technical data

Product definition

	Compatible with infrastructure charging plugs
Affixed logo	“PHOENIX CONTACT” logo
Design	Basic
Standards/regulations	IEC 62196-2
Charging standard	Type 2
Charging mode	Mode 3, Case B
Note on the connection method	Connection via spade connector, separable

Dimensions

Height	91.71 mm
Width	75 mm
Depth	87.95 mm (with attachable cap for strain relief and touch protection, see accessories)
	73.35 mm (without attachable cap for strain relief and touch protection, see accessories)
Bore dimensions	60 mm x 60 mm
Type of conductor	without cable

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	Connection via spade connector, separable

Mechanical properties

Insertion/withdrawal cycles	> 10000

Set - EV-T2M3SO12-4P-B-SET - 1164417

Technical data

Mechanical properties

Insertion force	< 100 N
Withdrawal force	< 100 N

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 position
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)
Mounting hole diameter	7.00 mm (ø)
Required mounting screws	M5 thread
Screws included in the scope of delivery	none

Design

Design line	Basic
Housing color	black

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
Ambient temperature (operation)	-30 °C ... 50 °C
Cable length	0.5 m
Cable structure	4 x 0.5 mm²

Set - EV-T2M3SO12-4P-B-SET - 1164417

Technical data

Locking actuator

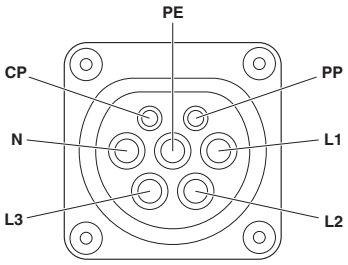
Lock recognition	available
Mechanical emergency release	available

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”

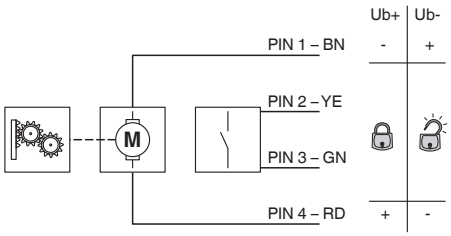
Drawings

Connection diagram



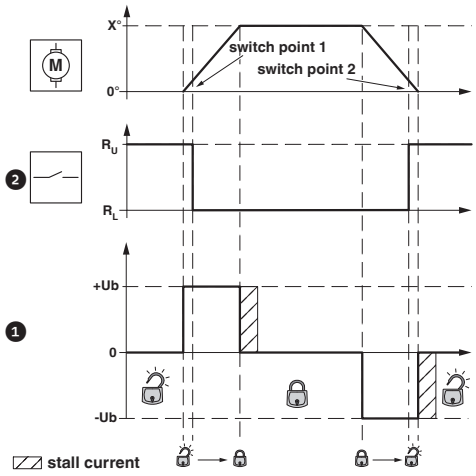
Pin assignment of Infrastructure Socket Outlet

Block diagram



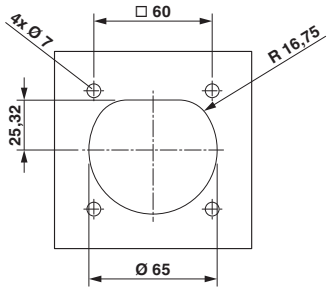
Block diagram of the locking actuator

Schematic diagram



Locking states of the locking actuator

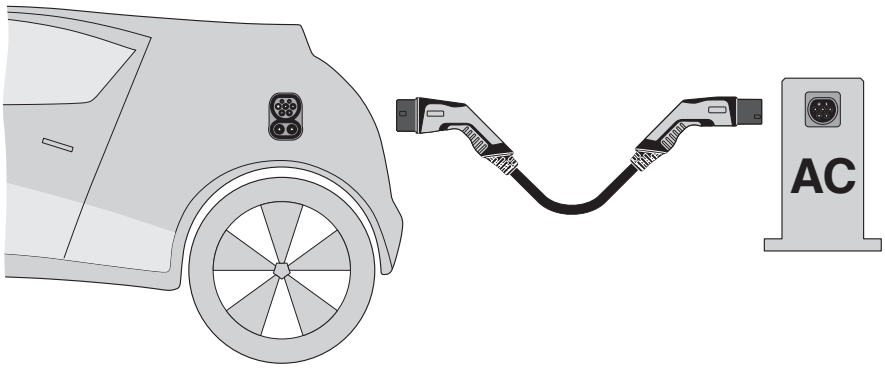
Schematic diagram



Hole image

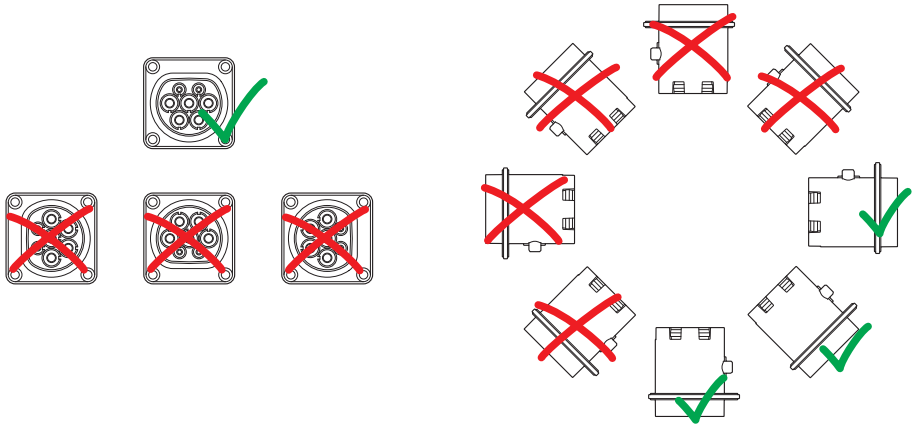
Set - EV-T2M3SO12-4P-B-SET - 1164417

Schematic diagram



Operating instructions

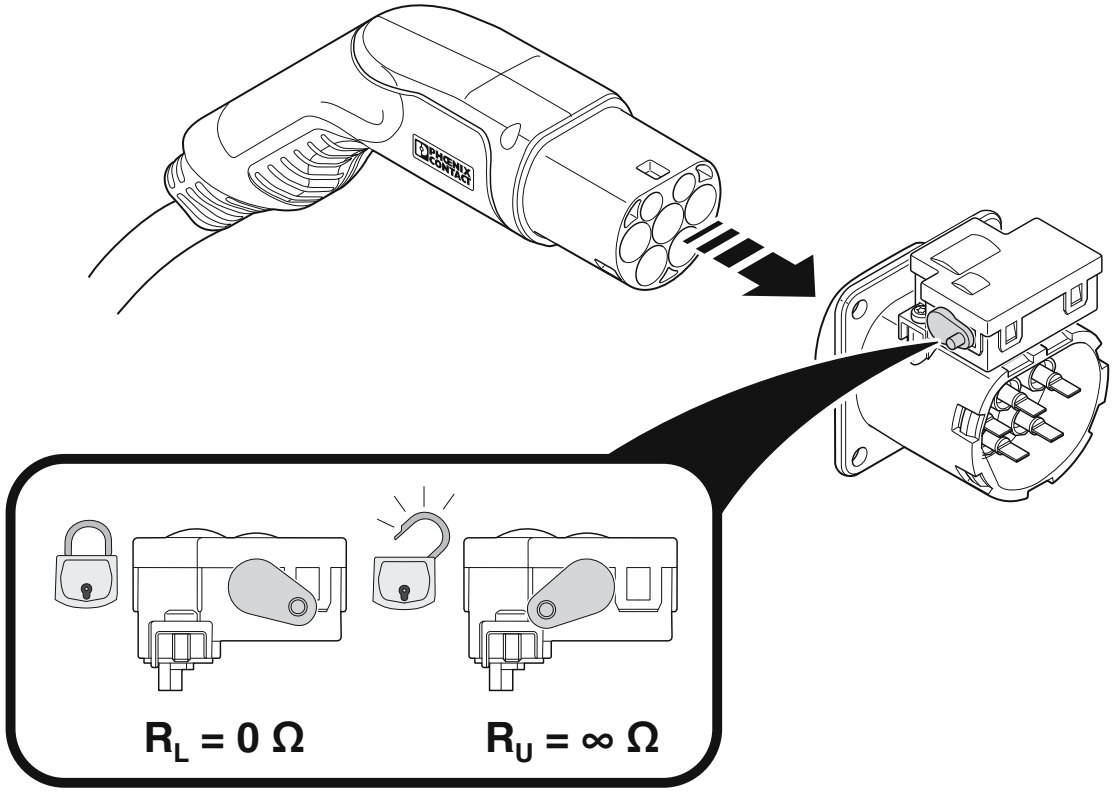
Schematic diagram



Installation positions

Set - EV-T2M3SO12-4P-B-SET - 1164417

Schematic diagram



Position of the emergency unlocking lever on the locking actuator

Set - EV-T2M3SO12-4P-B-SET - 1164417

Articles in set

Socket Outlet - EV-T2M3SO12-4P-B - 1164300

CHARX connect, Socket Outlet, rear protective cover screw connection, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 4-position, Rear panel mounting, Basic, “PHOENIX CONTACT” logo

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Protective covers - EV-T2SOC-B - 1164293

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, for attaching to infrastructure charging sockets, Type 2, Front mounting, screwed on the back, M5 thread, Basic, Embossed PHOENIX CONTACT logo

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Strain relief - EV-T2M3SO-CAP - 1202424

CHARX connect, Strain relief, Touch protection, For generation 2.0 infrastructure charging socket, For plugging onto the rear of the infrastructure charging socket, Type 2, IEC 62196-2, Generation 2

Classifications

eCl@ss

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

ETIM

ETIM 7.0	EC002898

Accessories

Accessories

AC charging controller

Set - EV-T2M3SO12-4P-B-SET - 1164417

Accessories

AC charging controller - CHARX SEC-1000 - 1139034

CHARX control modular, AC charging controller according to IEC 61851-1. Configurable charging controller. operating mode Stand-alone or client. interface: CHARX control modular system bus. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3000 - 1139022

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

---

AC charging controller - CHARX SEC-3050 - 1139018

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

---

AC charging controller - CHARX SEC-3100 - 1139012

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3150 - 1138965

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

---

Set - EV-T2M3SO12-4P-B-SET - 1164417

Accessories

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.

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

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Arrester combination

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1 - 1180149

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1-R - 1180150

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Type 2 surge arrester - VAL-EV-T2 280/3+1 - 1180144

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Set - EV-T2M3SO12-4P-B-SET - 1164417

Accessories

Type 2 surge arrester - VAL-EV-T2 280/3+1-R - 1180145

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Assembly tool

Tool - EV-T2M3SO-CAP-REMOVER - 1286836

CHARX connect, tool for opening the optional cap for attachment to the back of the Generation 2.0 Basic infrastructure charging socket with functions for strain relief and touch protection.

Cable set

Cable set - EV-T2M3SOW-1AC32A-0,3M6,0E - 1164343

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC20A-0,3M2,5E - 1164355

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,3M6,0E - 1164362

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Set - EV-T2M3SO12-4P-B-SET - 1164417

Accessories

Cable set - EV-T2M3SOW-1AC32A-0,7M6,0E - 1164344

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.7 m, Generation 2

Cable set - EV-T2M3SOW-3AC20A-0,7M2,5E - 1164361

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,7M6,0E - 1164365

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Protective cover for Socket Outlet

Protective covers - EV-T2SOC-B - 1164293

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, for attaching to infrastructure charging sockets, Type 2, Front mounting, screwed on the back, M5 thread, Basic, Embossed PHOENIX CONTACT logo

Strain relief - EV-T2M3SO-CAP - 1202424

CHARX connect, Strain relief, Touch protection, For generation 2.0 infrastructure charging socket, For plugging onto the rear of the infrastructure charging socket, Type 2, IEC 62196-2, Generation 2

Set - EV-T2M3SO12-4P-P-SET - 1164423

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CHARX connect, Set, Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection, rear protective cover screw connection, with temperature sensors, with LED status indicator within the protective cover, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 4-position, Rear panel mounting, M5 thread, Premium with LED cover, “PHOENIX CONTACT” logo

Product Description

Infrastructure Socket Outlet with protective cover, 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

- Charging status intuitively visible at a glance with color LED indicator
- Protected against overheating with precise temperature measurement
- Flexible mounting and easy maintenance with plug-in cables
- Available with your logo on request – for consistent branding of your charging station
- Waterproof and dirtproof due to fully molded contacts
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Uniform, space-saving installation space

RoHS

Key Commercial Data

Packing unit	1
GTIN	4 063151 177089
GTIN	4063151177089
Custom tariff number	85366990

Technical data

Product definition

Type	Combination of infrastructure charging socket, protective cover, and rear protective cap for strain relief and touch protection

Set - EV-T2M3SO12-4P-P-SET - 1164423

Technical data

Product definition

	rear protective cover screw connection
	with temperature sensors
	with LED status indicator within the protective cover
	can be reconnected
Application	For charging electric vehicles (EV) with alternating current (AC)
	Compatible with infrastructure charging plugs
Affixed logo	“PHOENIX CONTACT” logo
Design	Premium with LED cover
Standards/regulations	IEC 62196-2
Charging standard	Type 2
Charging mode	Mode 3, Case B
Note on the connection method	Connection via spade connector, separable

Dimensions

Height	91.71 mm
Width	75 mm
Depth	87.95 mm (with attachable cap for strain relief and touch protection, see accessories)
	73.35 mm (without attachable cap for strain relief and touch protection, see accessories)
Bore dimensions	60 mm x 60 mm
Type of conductor	without cable

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

Set - EV-T2M3SO12-4P-P-SET - 1164423

Technical data

Electrical properties

Type of signal transmission	Pulse width modulation
Note on the connection method	Connection via spade connector, separable

Mechanical properties

Insertion/withdrawal cycles	> 10000
Insertion force	< 100 N
Withdrawal force	< 100 N

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 position
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)
Mounting hole diameter	7.00 mm (ø)
Required mounting screws	M5 thread
Screws included in the scope of delivery	none

Design

Design line	Premium with LED cover
Housing color	black

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

Set - EV-T2M3SO12-4P-P-SET - 1164423

Technical data

Locking actuator

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
Cable structure	4 x 0.5 mm²
Lock recognition	available
Mechanical emergency release	available

Temperature monitoring, AC contacts

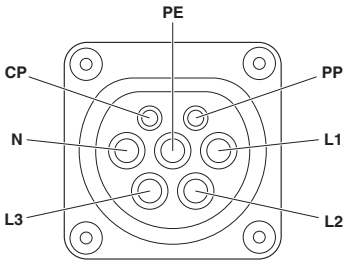
Type of sensor	PTC chain
Standards/regulations	DIN#EN 60738-1
Recommended measured current	≤ 1 mA (U_{max}= 24 V DC)
Resistance range	800 Ω ... 300 kΩ
Switch-off threshold	10.00 kΩ

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”

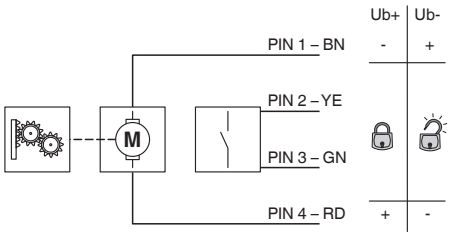
Drawings

Connection diagram



Pin assignment of Infrastructure Socket Outlet

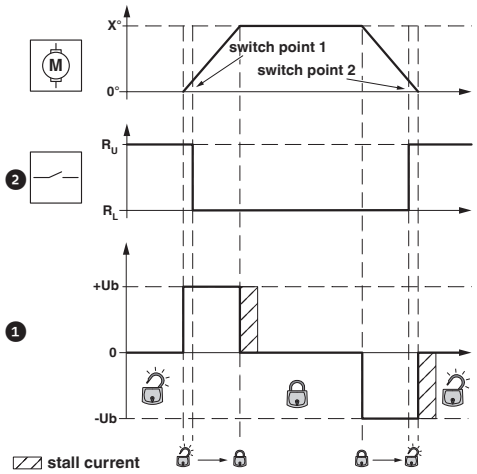
Block diagram



Block diagram of the locking actuator

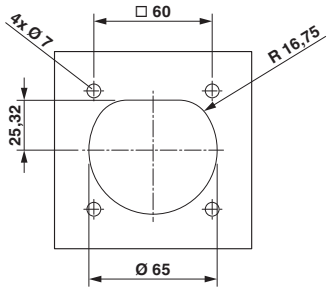
Set - EV-T2M3SO12-4P-P-SET - 1164423

Schematic diagram



Locking states of the locking actuator

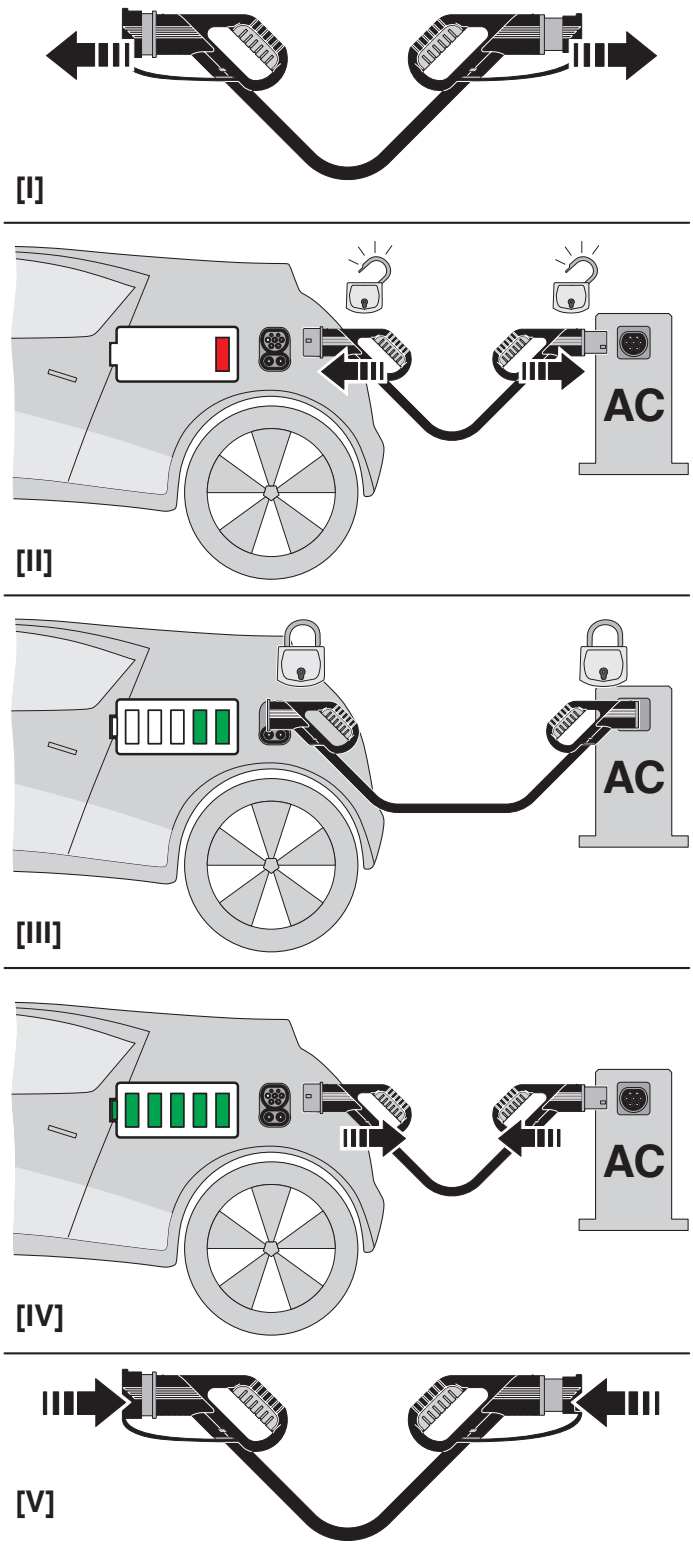
Schematic diagram



Hole image

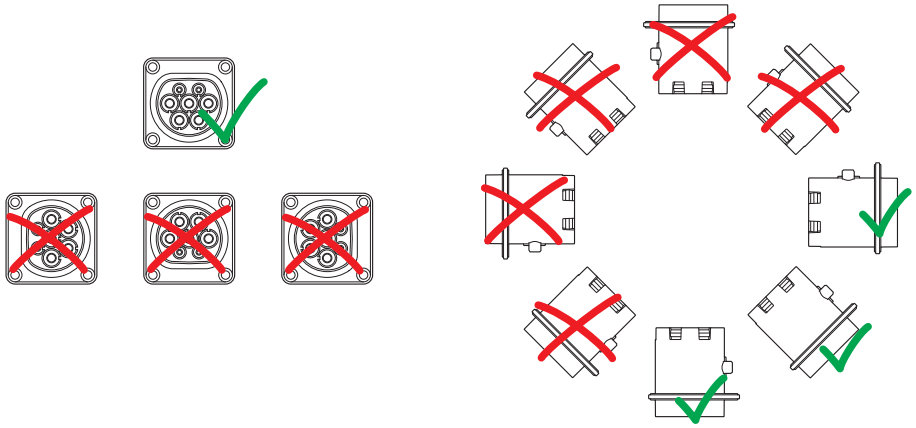
Set - EV-T2M3SO12-4P-P-SET - 1164423

Schematic diagram



Set - EV-T2M3SO12-4P-P-SET - 1164423

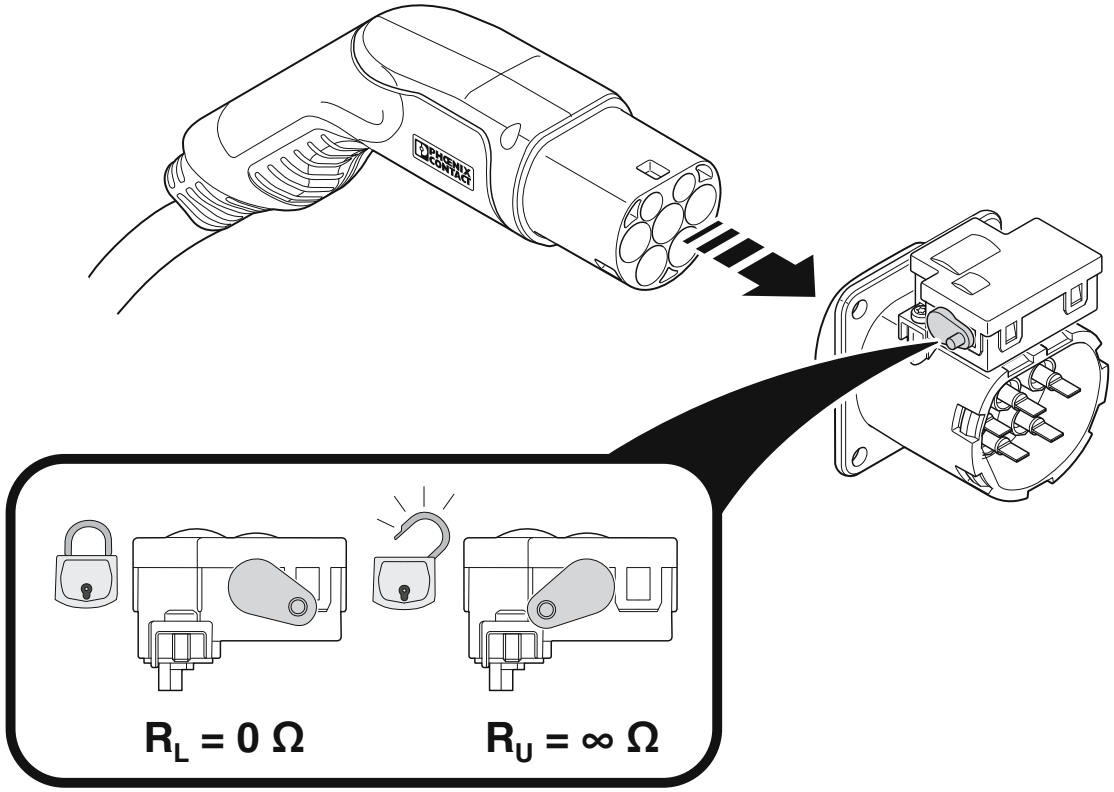
Schematic diagram



Installation positions

Set - EV-T2M3SO12-4P-P-SET - 1164423

Schematic diagram



Position of the emergency unlocking lever on the locking actuator

Set - EV-T2M3SO12-4P-P-SET - 1164423

Articles in set

Socket Outlet - EV-T2M3SO12-4P-P - 1164299

CHARX connect, Socket Outlet, rear protective cover screw connection, with temperature sensors, can be reconnected, For charging electric vehicles (EV) with alternating current (AC), Compatible with infrastructure charging plugs, Type 2, IEC 62196-2, 32 A / 480 V (AC), without cable, 4-position, Rear panel mounting, M5 thread, Premium, “PHOENIX CONTACT” logo

Protective covers - EV-T2SOC-P - 1164297

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, with LED status indicator within the protective cover, for attaching to infrastructure charging sockets, Type 2, IEC 62196-2, Front mounting, screwed on the back, M5 thread, Premium, Embossed PHOENIX CONTACT logo

Classifications

eCl@ss

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

ETIM

ETIM 7.0	EC002898

Accessories

Accessories

AC charging controller

AC charging controller - CHARX SEC-1000 - 1139034

CHARX control modular, AC charging controller according to IEC 61851-1. Configurable charging controller. operating mode Stand-alone or client. interface: CHARX control modular system bus. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

Set - EV-T2M3SO12-4P-P-SET - 1164423

Accessories

AC charging controller - CHARX SEC-3000 - 1139022

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3050 - 1139018

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3100 - 1139012

CHARX control modular, AC charging controller according to IEC 61851-1. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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AC charging controller - CHARX SEC-3150 - 1138965

CHARX control modular, AC charging controller according to IEC 61851-1, ISO/IEC 15118. Embedded Linux system. operating mode Stand-alone, server, or client. interface: Ethernet (2x), Cellular communication (4G/2G), CHARX control modular system bus, MICRO-USB type C. communication protocol: OCPP 1.6J, Modbus/TCP, MQTT. Connectable peripheral devices: Energy meter, RFID, DC residual current detection. DIN rail mounting

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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.

Adhesive label

Set - EV-T2M3SO12-4P-P-SET - 1164423

Accessories

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

Arrester combination

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1 - 1180149

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Lightning/surge arrester type 1/2 - VAL-EV-T1/T2 264/12.5/3+1-R - 1180150

CHARX protect: pluggable lightning current arrester/surge protective device, in accordance with Type 1/2 / Class I/II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Type 2 surge arrester - VAL-EV-T2 280/3+1 - 1180144

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE). Specifically designed for use in e-mobility.

Type 2 surge arrester - VAL-EV-T2 280/3+1-R - 1180145

CHARX protect: pluggable surge protective device, in accordance with Type 2 / Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact. Specifically designed for use in e-mobility.

Set - EV-T2M3SO12-4P-P-SET - 1164423

Accessories

Assembly tool

Tool - EV-T2M3SO-CAP-REMOVER - 1286836

CHARX connect, tool for opening the optional cap for attachment to the back of the Generation 2.0 Basic infrastructure charging socket with functions for strain relief and touch protection.

Cable set

Cable set - EV-T2M3SOW-1AC32A-0,3M6,0E - 1164343

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC20A-0,3M2,5E - 1164355

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,3M6,0E - 1164362

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.3 m, Generation 2

Cable set - EV-T2M3SOW-1AC32A-0,7M6,0E - 1164344

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 250 V (AC), Single wires, length: 0.7 m, Generation 2

Set - EV-T2M3SO12-4P-P-SET - 1164423

Accessories

Cable set - EV-T2M3SOW-3AC20A-0,7M2,5E - 1164361

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 20 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Cable set - EV-T2M3SOW-3AC32A-0,7M6,0E - 1164365

CHARX connect, Cable set, Cables with slip-on sleeves on one end, Only for connection to generation 2 infrastructure charging sockets from Phoenix Contact, Type 2, IEC 62196-2, 32 A / 480 V (AC), Single wires, length: 0.7 m, Generation 2

Protective cover for Socket Outlet

Protective covers - EV-T2SOC-P - 1164297

CHARX connect, Protective covers, self-closing, rear protective cover screw connection, with LED status indicator within the protective cover, for attaching to infrastructure charging sockets, Type 2, IEC 62196-2, Front mounting, screwed on the back, M5 thread, Premium, Embossed PHOENIX CONTACT logo

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Strain relief - EV-T2M3SO-CAP - 1202424

CHARX connect, Strain relief, Touch protection, For generation 2.0 infrastructure charging socket, For plugging onto the rear of the infrastructure charging socket, Type 2, IEC 62196-2, Generation 2
