



GARO Castra

Installation manual



Manual 380238

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GARO[®]

TABLE OF CONTENT	2
INFORMATION	3
Warnings	3
Note	3
INSTALLATION	4
INSTALLATION OF ACCESSORIES	4
USER INSTRUCTIONS	4
Basic LED indications	4
Technical data	5
GARANTIVILLKOR / WARRANTY CONDITIONS	11
WARRANTY FORM / GARANTIFORMULÄR	12

INFORMATION

Castra campingstation is a combined socket outlet and EVSE charging station. Each station contain two electric outlets and two type 2 EV outlets.











To add more comfort, each Castra is prepared to supply drinking water. Water taps are available as accessory.

IP44 and IK10 housing means that Castra can handle the rough environment a public equipment is exposed to.









Castra is equipped with dual pole incoming terminal block, and it mean that power cables are easy to daisy-chain with another Castra campingstation.

With a separate assembling kit, two Castra can install together "back to back". You will in this way have electrical and drinking water supply for four separate equipage.

Warnings

-  Electrical installation is only allowed by professional electrician and must follow local country regulation. If any questions, contact your local electrical authority.
-  Dielectric Voltage Withstand Test is not allowed on Castra campingstation.
-  Castra campingstation must be grounded according to local country regulation.
-  Castra campingstations Type 2 outlets as designed exclusively for charging electric vehicles.
-  Ventilation signal from EV is not supported.
-  Adapters for charging connectors are not allowed to be used.
-  Cord extension sets for charging cable is not allowed to be used.
-  Do not use private power generators as a power source for Castra. Fluctuating voltage can har both an EV:s battery and the EV:s internal electronics.
-  Do not operate Castra in temperatures outside its operating range – see technical specifications.
-  Warranty is not valid if Castra's hardware or software is modified by a non authorized person.

Note

-  Castra campingstation contains:
2x 216-6 outlets
2s Type 2 EV outlets
Castra left hand side outlets are connected to L1 and right hand side outlets are connected to L2. Each side can consume max 10A alt 16A depending on model.
-  The 216-6 outlet and the EV outlet at same side share same phase.
When less than 6A available current, the EV outlet will paus the charging process to prevent overload.
-  216-6 outlets should use for caravans/tents etc.
-  EV outlets should use for electric vehicle.
-  Each side have individual energy meter that register the total consumption (kWh) for each side of Castra.
-  Both 216-6 and EV outlets are individually protected to RCBO:s.
-  Both EV outlets have individual DC-fault monitoring devices.
-  Castra campingstation are delivered with RFID-readers on both sides. By logging in to Castra webinterface with a mobile/tablet/computer, RFID authorization can be activated for the EV outlets. The registration of RFID-tags RFID and settings are also handled in the webinterface. At delivery, the functions is deactivated.

INSTALLATION

1. Open the front door and remove the protection cover.
2. Cut a round hole in the gasket for the incoming cable. Make sure the gasket fits tight around the cable to prevent dirt, dust and bugs to enter the top housing part.
3. Install Castra on a pole dia 60mm or on a ground foundation pic2. Pole or ground foundation is not included.
4. Install the incoming cable, pic 3 and 4.

Note: 3-wire system, add a jumper between L1 and L2 on the terminal block.

When several Castra campingstations are connected to same distribution board, phase-rotation is recommended to even out the load between the phases.

Example:

- 1st Castra: L1, L2, L3
- 2nd Castra: L3, L1, L3
- 3rd Castra: L2, L3, L1

And so on...

5. Fix the protection cover.
6. Turn on the power and wait a few minutes for Castra to start up properly.
7. Test Castra both side outlets with a test instrument.
8. Fill in the warranty form, sign with name, date and company name in order for the warranty to be valid. Give the signed warranty form to the owner of the site.

INSTALLATION OF ACCESSORIES

Two Castra campingstations can be installed "back to back" (use GARO art no 353918)

Water taps installation, (GARO art no 352711)

USER INSTRUCTIONS

Connect the charging cable to the EV outlet.

If RFID authorization is activated, hold a valid RFID-tag in front of the RFID-reader at same side as the charging cable in use.

The charging process is activated if the EV is ready for charging. See your EV manual.

When charging is complete, follow the instruction in your EV manual.

Basic LED indications



Solid green light: ready for charging



Flashing green light: Castra waiting for start signal from electric vehicle.



Shifting blue light intensity: charging

Other LED indications: see User manual at www.garoemobility.com/support

Error codes:



Fixed yellow light: reconnect the charging cable.



Fixed white light: EV outlets not activated, contact serviceperson.



No light: Contact service person



Fixed red light: Reset RCBO




Slow red blink: Modbus problem with energymeters, contact service person



Red blink: RFID tag not valid

Technical data

Specifications

Product type:	All Castra CLS1 modeller
Standards:	IEC 61851-1 and IEC TS 61439-7
	
Installation:	Ground/Pole
Rated Voltage:	230V/400V 50Hz
Installation systems:	TT-, TN- och IT-systems
Charging Type:	Mode 3
Protection Class:	IP44
Mechanical Impact Resistsans:	IK10
Temperature Range:	-25°C – +40°C
Storage temperature:	-35°C – +55°C
Weight:	22,5 - 24,5 kg depending on model
EMC Classification:	2014/30/EU
Installation environment:	Indoor / Outdoor
Location type:	Non-restricted Access
Charging method	AC Charging
Rated current withstand	10kA
Rated short-time withstand current	10kA
Rated conditional short-circuit current of an assembly	10kA
Short-circuit protective device type	Type C
Rated impulse withstand voltage	4kV
Rated insulation voltage	230/400V
Rated current of each circuit	10-16A depending on model
Rated diversity factor	RDF=1
Pollution degree:	3
EMC environmental condition	A and B

Software update

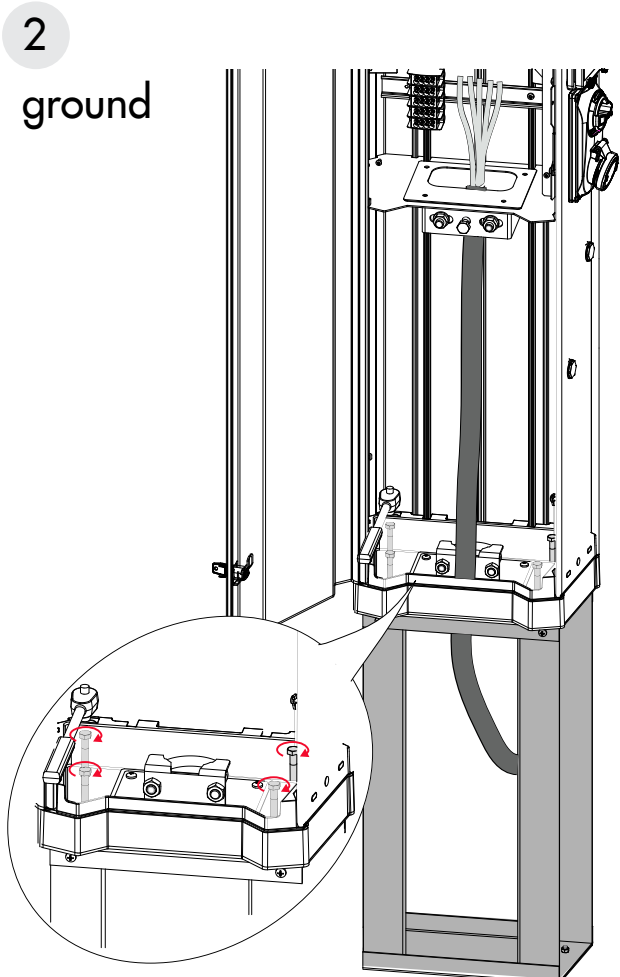
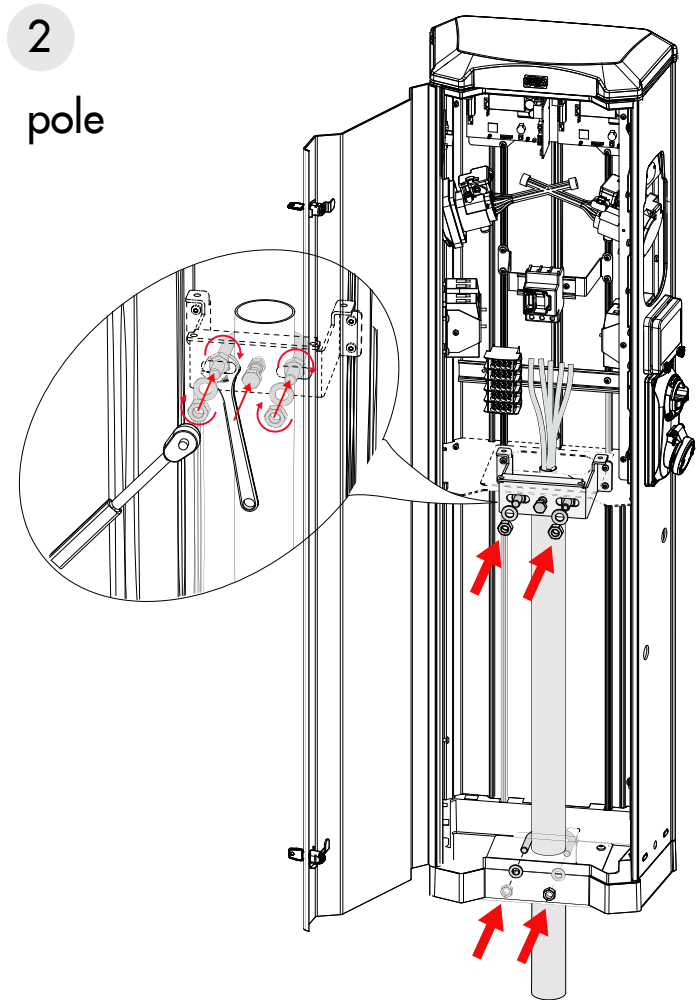
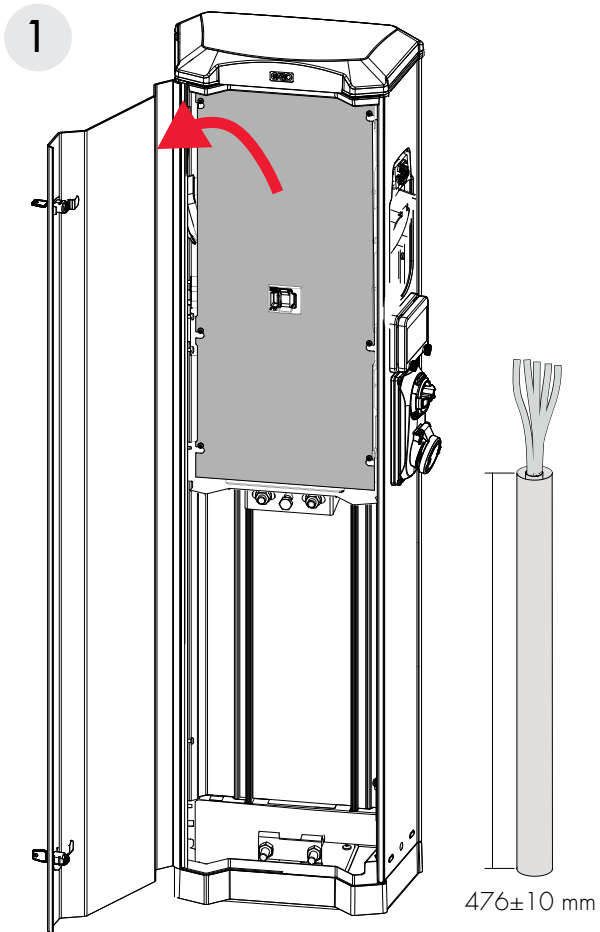
See user manual on www.garoemobility.se/support

Service / Maintenance

See user manual on www.garoemobility.com/support

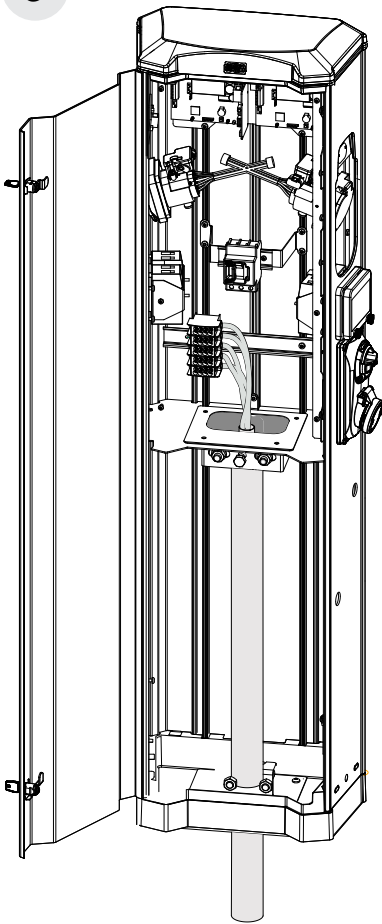
Troubleshooting / Support

See user manual on www.garoemobility.com/support

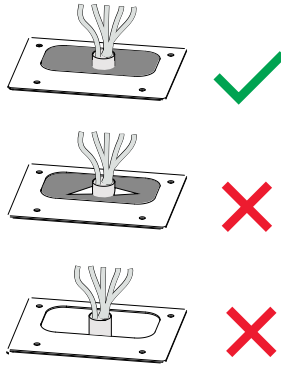
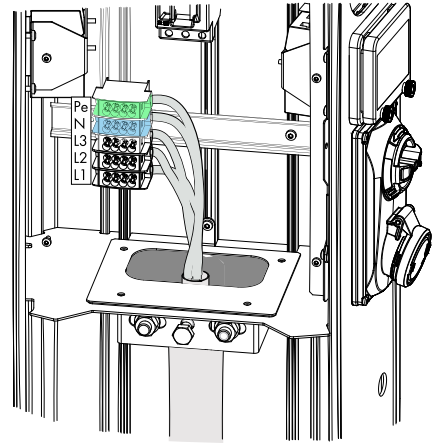


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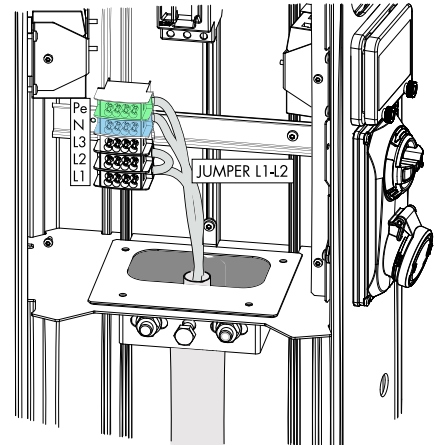
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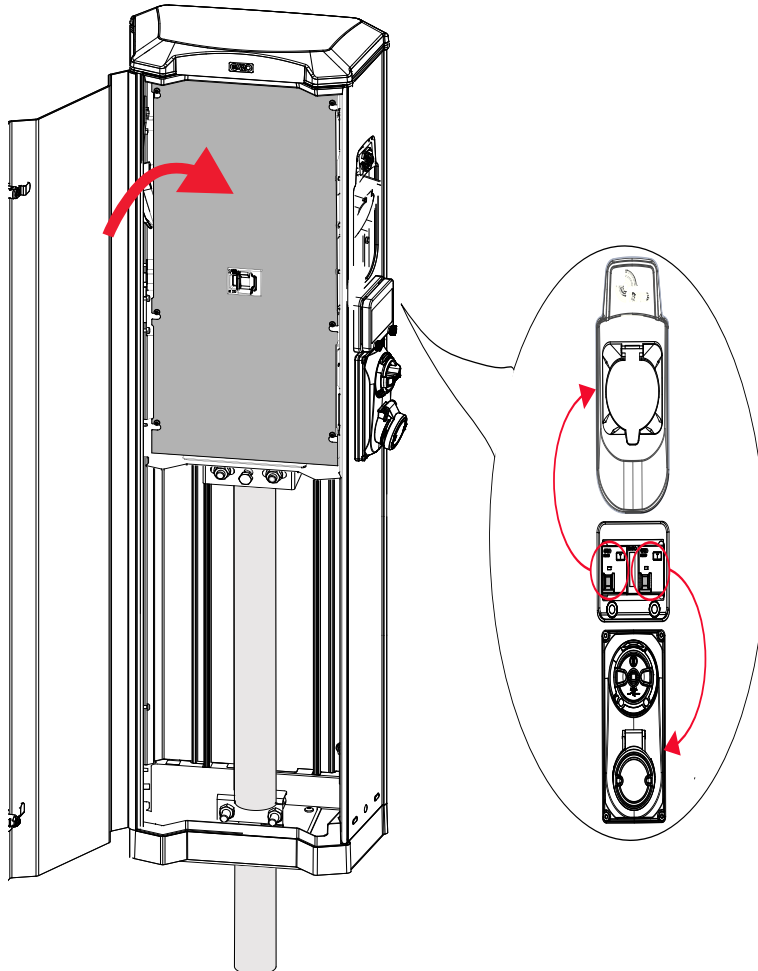
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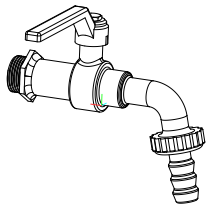


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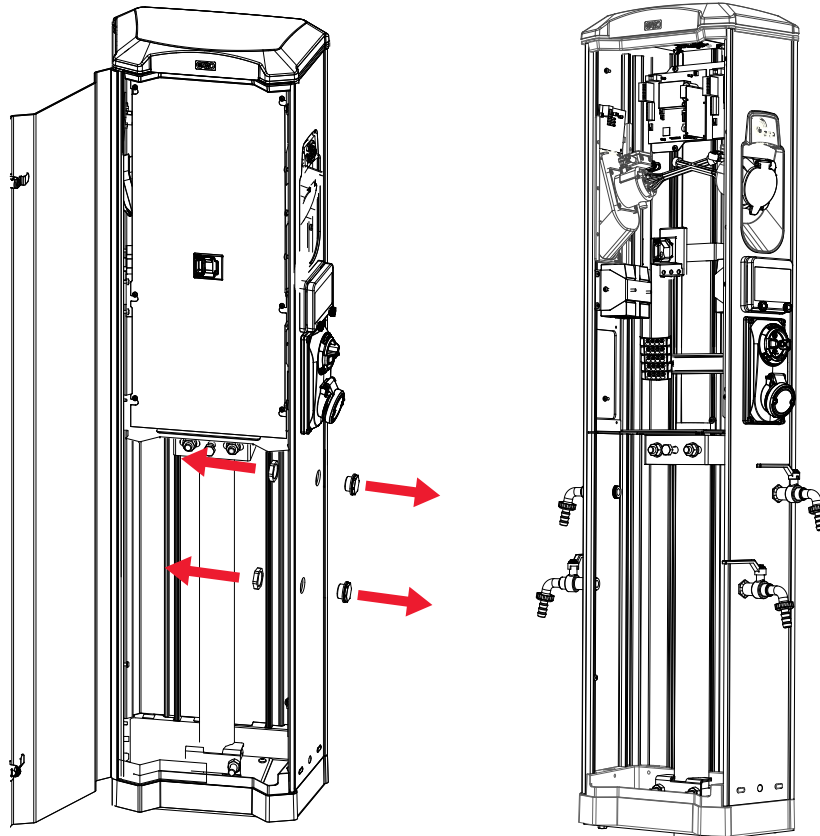


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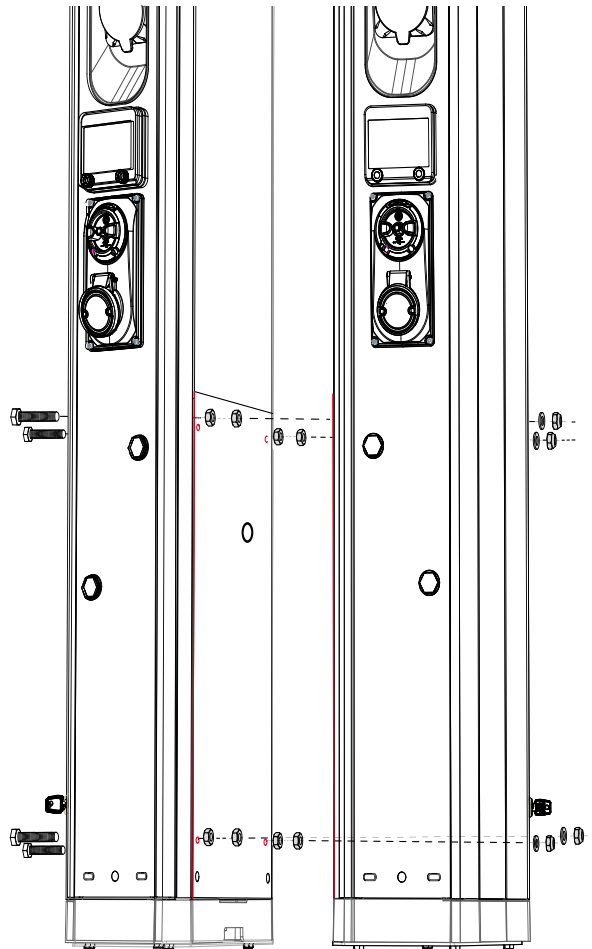
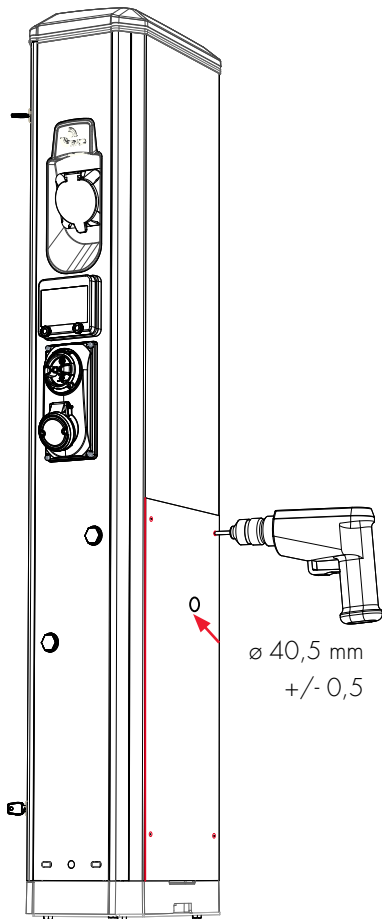
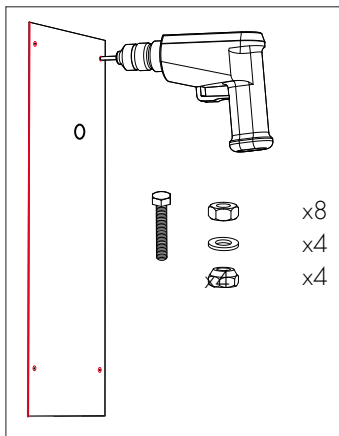
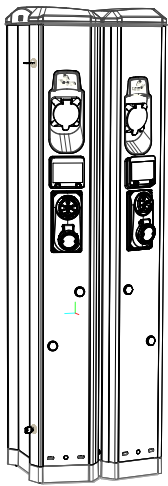


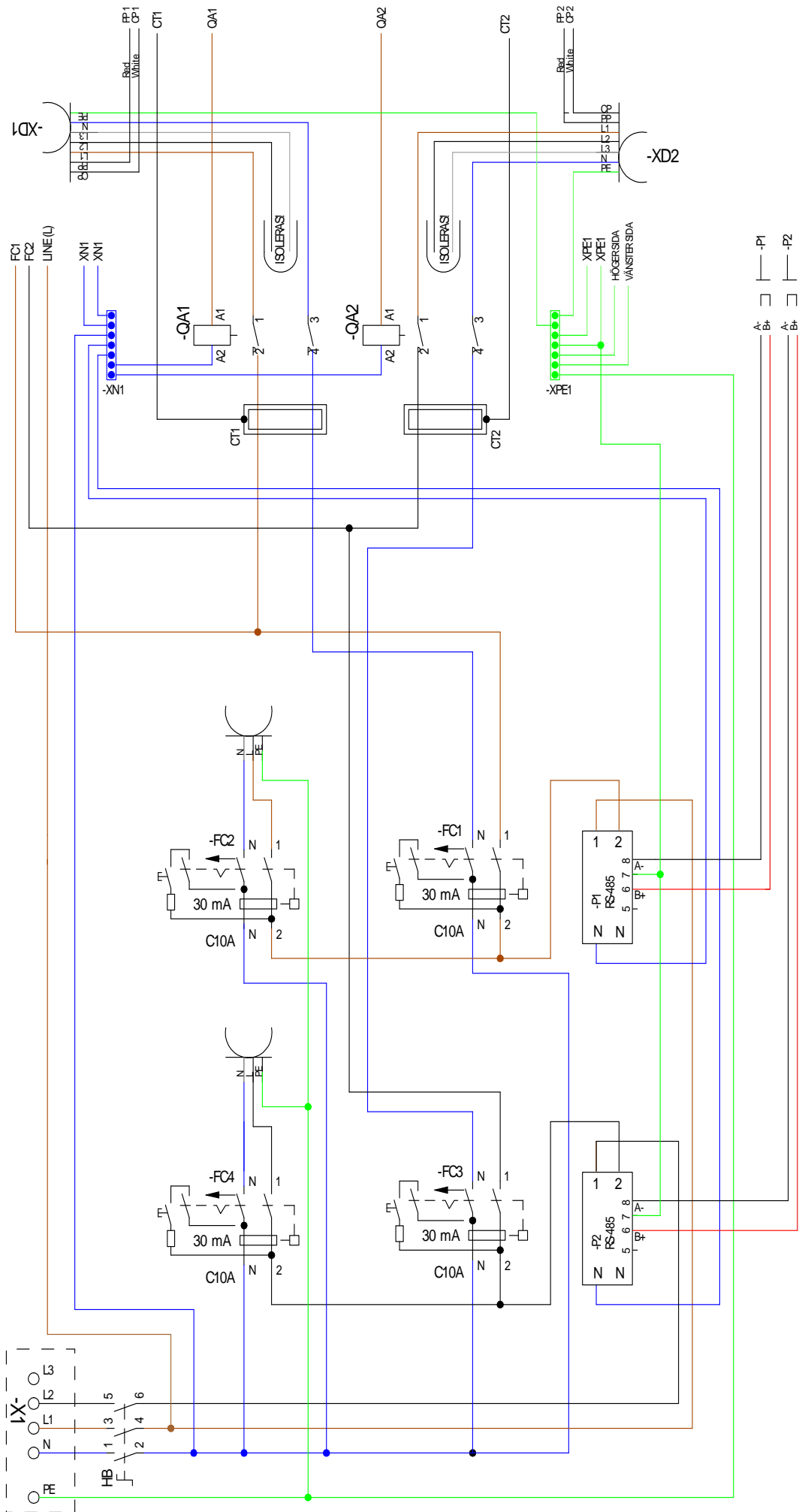


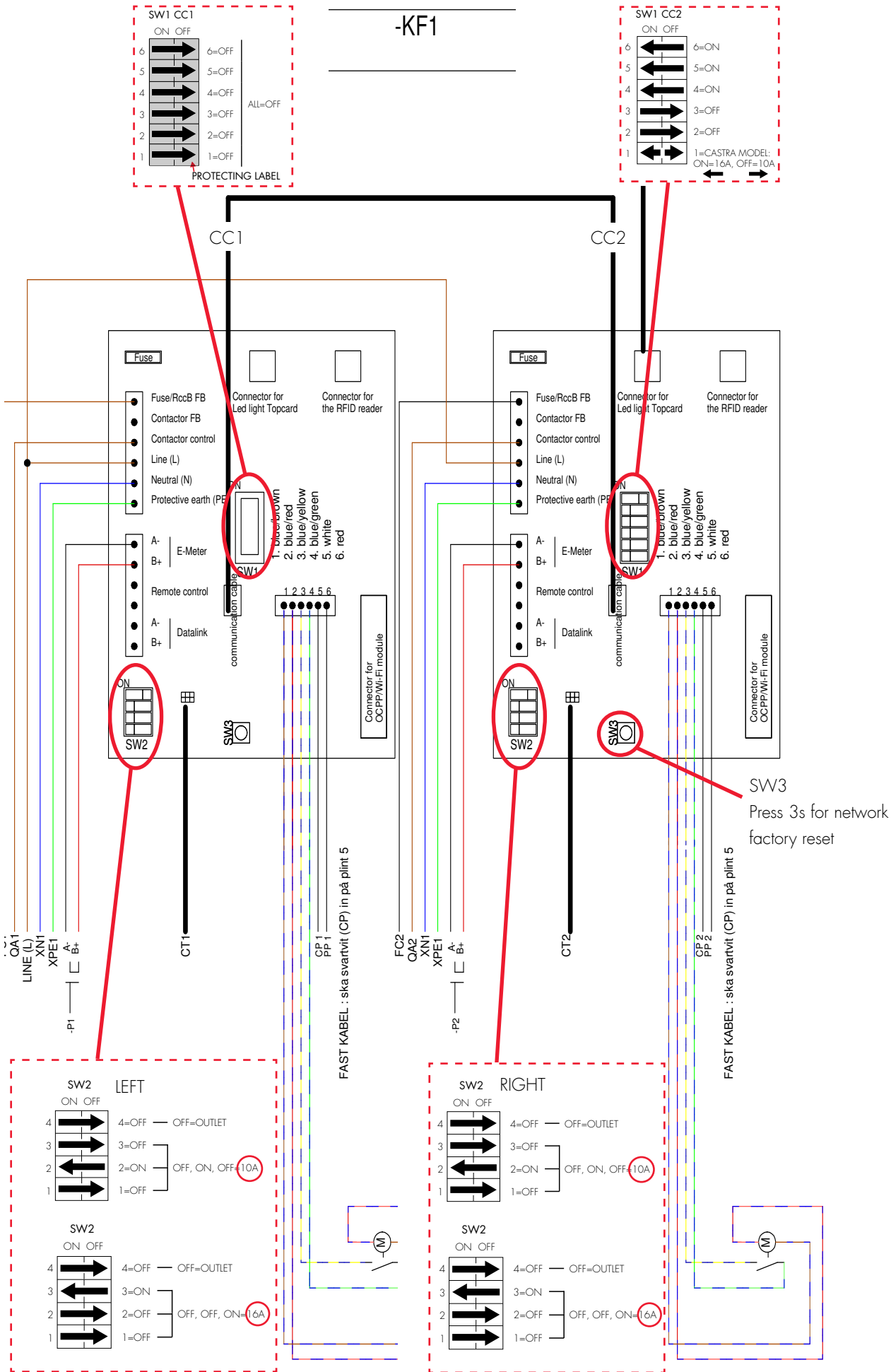
Option: Art no 352711, E2449844



Option: Art no 353918







GARANTIVILLKOR / WARRANTY CONDITIONS

SVERIGE/SWEDEN

Garantivillkor enl ALEM 09.

OBS! Fullständigt ifylld garantiblankett krävs

Garantin gäller ej om produkten varit utsatt för ett isolationstest, sk meggning.

1. The product benefits from manufacturer's warranty. The applicable warranty period must be stated in purchase documents from your supplier.
2. The product must be installed by a certified installer / contractor.
3. Proper installation, storage and operation conditions must be obtained.
4. Warranties apply only to products installed in their original installation location.
5. Installation, use, care, and maintenance must be normal and in accordance with instructions.
6. Warranty requires a dated, fully filled in Warranty form by an certified installer/contractor. If the original installation date cannot be verified, then the warranty period begins ninety (90) days from the date of product manufacture (as indicated by the model and serial number).
7. Warranty does not cover damage occurred by incorrect use of equipment, use of any nonoriginal spareparts, lack of maintenance or faults caused by disassembly of the product or unauthorized persons intervention.
8. Warranty does not cover software or update thereof.
9. Warranty does not cover aesthetic deficiencies caused by negligent manipulation or accidents (breaks or damage to the carcass).
10. Warranty does not cover damage caused by external overvoltage from either grid or car/charging object.
11. Warranty does not cover damage caused by force major like for example but not limited to: floods, winds, fires, lightning, accidents, sabotage, military conflicts, terrorism, vulcanos, earthquakes or corrosive environments.

WARRANTY FORM / GARANTIFORMULÄR

Model: _____

M no: _____

ELECTRICAL INSTALLATION DATA

Group fuse (A)/Grupsäkring (A) _____

Supply cable dimension/Kabelarea: _____

FUNCTION TEST

Testbox / EV (model) _____

Date/Datum: _____

Sign Installer/Sign installatör: _____

Company Name/Företagsnamn: _____

Owner / Customer Name/Ägare/Kundens
namn: _____

Installation adress: _____